EXHIBIT 9

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2014 April Curriculum Audit.pdf	3.14 MB	5/20/2014, 11:55:30 AM
2014 May Operational Efficiency Audit.pdf	2.95 MB	5/20/2014, 11:56:16 AM
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EXHIBIT 9A

A Curriculum Audit™

of the

Tucson Unified School District No. 1

Tucson, Arizona

First graders using "Math Through Reading"

International Curriculum Management Audit Center
Curriculum Management Systems, Inc.
5619 NW 86th Street, Suite 500
Johnston, IA 50131

April 2014

A Curriculum Audit™

of the

TUCSON UNIFIED SCHOOL DISTRICT NO. 1

Tucson, Arizona

Conducted Under the Auspices of
International Curriculum Management Audit Center
Curriculum Management Systems, Inc.
5619 NW 86th Street, Suite 500
Johnston, IA 50131

Date Audit Presented: April 2014

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Table of Contents

Table of Exhibits

Table of Photographs

A Curriculum Audit™

of the

Tucson Unified School District No. 1

Tucson, Arizona

I. INTRODUCTION

This document constitutes the final report of a Curriculum Audit™ of the Tucson Unified School District No. 1. The audit was commissioned by the Tucson Unified School District No. 1 Board of Education/Governing Authority within the scope of its policy-making authority. It was conducted during the time period of January 27-31, 2014. Document analysis was performed off site, as was the detailed analysis of findings and site visit data.

A Curriculum Audit™ is designed to reveal the extent to which officials and professional staff of a school district have developed and implemented a sound, valid, and operational system of curriculum management. Such a system, set within the framework of adopted board policies, enables the school district to make maximum use of its human and financial resources in the education of its students. When such a system is fully operational, it assures the district taxpayers that their fiscal support is optimized under the conditions in which the school district functions.

Background

The Tucson Unified School District is located in Pima County, Arizona. The Tucson Unified School District has served the Tucson community since 1867, and at the time of this Curriculum Audit™, enrollment was 49,300 students, making TUSD the second largest school district in Arizona.

The Tucson Unified School District operates 89 schools, with 61 elementary schools (Pk-grade 5), 19 middle schools (grade 6-8 and K-8), and nine high schools (grade 9-12). The district was established as "School District No. 1" in 1867—45 years before Arizona became a state—and assumed its current name in 1977. The district will celebrate its 150th anniversary in three years (2017).

Tucson's first school district has served the community with distinction for decades, and many national and international leaders have attended and graduated from its schools. Eight years ago, TUSD had more than 60,000 students and approximately 3,700 faculty members. District enrollment has declined over the last 10 years, and TUSD lost 1,700 to 2,000 students per year for the two or three years prior to 2014. There are many reasons for the change, including the population in general becoming more suburban and regional. Changes in school choice included increasing availability of Charter Schools and the authorization to cross district boundaries for school selection.

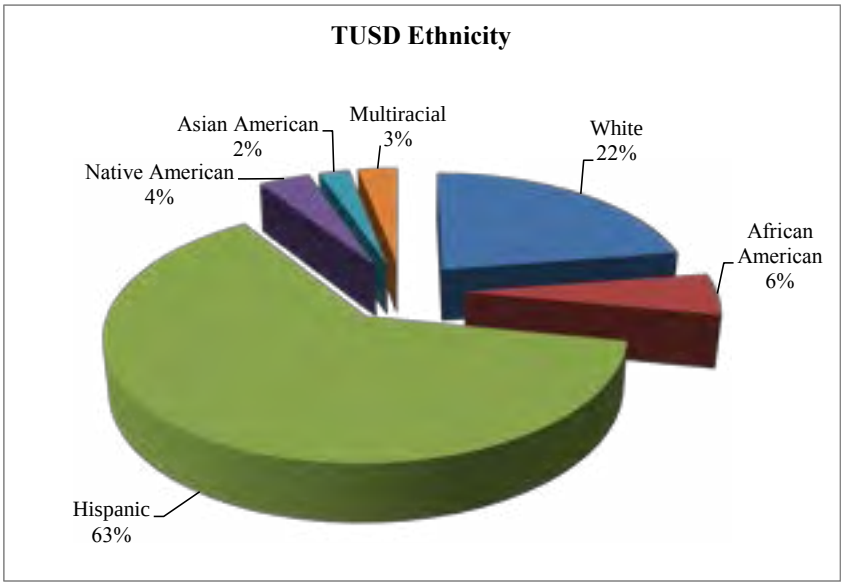
The Tucson Unified School District ranked ninth among 107 large school districts in the nation for its open enrollment policies and practices and scored 57 points, earning a B- rating on the Education Choice and Competition Index, which uses 13 criteria to gauge school districts. The rankings were released Wednesday, Jan. 8, 2014, by the Brown Center on Education Policy at the Brookings Institution.

The district boundaries encompass much of the City of Tucson, the city of South Tucson, and segments of Catalina Foothills and Tanque Verde. TUSD is currently under a federal desegregation order to help balance district schools in terms of race and ethnicity.

TUSD's demographics have changed over the past decade, and as of February 2014, the population was diverse, with approximately 22.5 percent White, 5.6 percent African-American, 62.7 percent Hispanic, 3.9 percent Native American, 2.3 percent Asian-American, and approximately three percent from two or more races.

Exhibit 0.1

Enrollment Diversity and Frequency
Tucson Unified School District
January 2014



TUSD's schools suffered controversy over desegregation efforts in the Tucson Unified School District that started with a lawsuit filed 40 years ago. In 1974, two families filed separate lawsuits against the district to address disparities in the education of African-American and Mexican-American students. In 1975, the lawsuits were consolidated, and following a 1977 trial, the court found that TUSD "had acted with segregative intent" in the past and failed to fix the problem. In 2005, the district asked the court to grant it unitary status—meaning that all of disparities in the district had been fixed. In 2007, preliminary findings showed the district was in unitary status, and in 2009, the court accepted what is called a post-unitary status plan. One of many elements of that plan was that the district expand its Mexican-American studies program. However, the Mexican American Legal Defense and Educational Fund (MALDEF), a nationwide Latino civil-rights group, appealed the court's decision and in 2011, the ninth U.S. Circuit Court of Appeals reversed the decision to give TUSD unitary status.

Meanwhile, the State of Arizona Department of Education sought to dismantle Mexican-American Studies, which began in 2006. Despite an independent audit commissioned by the Arizona Department of Education that found that the school district was not breaking the state law aimed at dismantling the program, the state schools' Superintendent, John Huppenthal, ignored the audit and issued a ruling against the district forcing them to halt the program and remove the course materials.

On Sept. 13, 2011, the U.S. District Court ordered that the post-unitary status plan remain in place, and a special master was appointed to help the district develop new ways to solve its equity problems.

Critics argued that if a federal court ruling said that the district must expand Mexican-American studies, the district must keep the Mexican American studies classes in place. Attorneys with MALDEF tried to have the classes reinstated, but the request was denied by the court's special master. MALDEF filed a motion for the court to reconsider, but that motion was also denied.

Since that time, the district has been working to help the court's special master develop another unitary status plan that will address the disparities that still exist for Latino students in graduation rates, provisions for English language learners, the district's GATE program for gifted students, Advanced Placement classes, special education placement, and other issues.

Governance and Leadership of Tucson Unified Schools

The current superintendent, Dr. H.T. Sanchez, was hired by the Tucson Schools' governing board in July 2013. Dr. Sanchez serves under the supervision of the five-member governing board, elected by the voters in the school system. The governing board sets policy for the district and approves the district's annual operating budget.

School board members serve four-year terms. Current members, and their term expiration dates, are as follows:

Adelita S. Grijalva, President	Term Expires: 12/31/2014
Kristel Ann Foster, Clerk	Term Expires: 12/31/2016
Michael Hicks, Member	Term Expires: 12/31/2014
Cam Juárez, Member	Term Expires: 12/31/2016
Mark Stegeman, Member	Term Expires: 12/31/2016

Financial Stability of the Tucson Unified Schools

The auditors reviewed the financial standing of the Tucson Unified School District and examined the Maintenance and Operations Fund annual financial reports for the past five years. The financial reports revealed the relationship between revenues and expenditures for TUSD from 2009-2013, as shown in Exhibit 0.2 below:

Exhibit 0.2

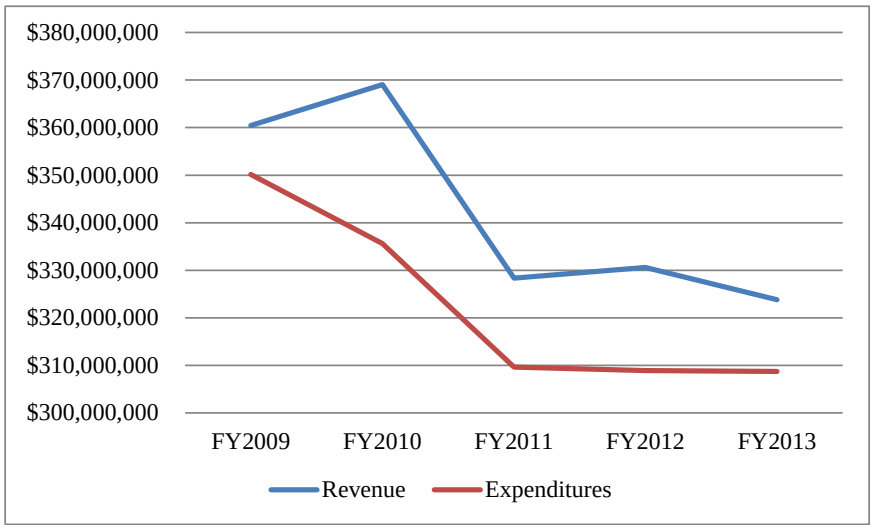
Annual Financial Reports of Revenues, Expenditures, and Fund Balances
Maintenance and Operations Fund (01)
Tucson Unified School District
January 2014

Fiscal Year	Revenue	Expenditures	Fund Balance
FY2009	$360,473,113	$350,164,939	$10,308,174
FY2010	369,056,881	335,626,237	33,430,644
FY2011	328,332,948	309,648,657	18,694,291
FY2012	330,622,932	308,923,209	21,699,723
FY2013	323,831,804	308,760,158	14,357,901

The graphic representation of the relationship between TUSD revenues and expenditures is demonstrated with the following Exhibit 0.3:

Exhibit 0.3

Graph of Relationship Between Revenues and Expenditures
Maintenance and Operations Fund (01)
Tucson Unified School District
January 2014



As shown in the exhibits above, the district has been prudent in keeping expenditures within available revenues within the M & O Fund. Solvency in the system has not been at risk for the past five years in the Maintenance and Operations Fund.

Academic Aspirations of the Tucson Unified Schools

The Tucson Unified School District has published a statement, entitled TUSD Vision for action and Core Values, and a slogan that calls for the following:

> **Delivering Excellence in Education Every Day**
> **Grow | Reach | Succeed**

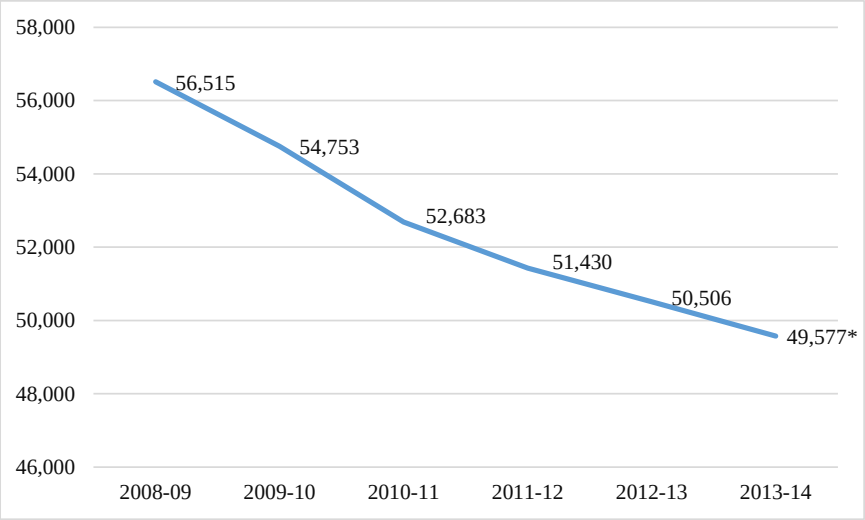
In the vision statement, the district stated its core values:

- **Student-Centeredness—**Making every decision with student success in mind
- **Caring—**acting with respect, dignity, and concern for all
- **Diversity—**Celebrating and accepting our differences as our strength
- **Collaboration**—Partnering to reach common goals
- **Innovation—**Embracing new ideas and challenging assumptions
- **Accountability—**Taking responsibility to do things right and to do the right thing

The actual enrollment pattern of the Tucson Unified School District is shown in Exhibit 0.4, below:

Exhibit 0.4

Total Enrollment
Tucson Unified Schools
2008-2014



In the graphic above, the pattern indicates that enrollment over the past five years has been declining gradually and is projected to continue decreasing through school year 2013-14.

A factor often associated with student demographics is the phenomenon of socioeconomic status of students. In the Tucson Unified School District, approximately 64.7 percent of TUSD students are eligible to receive free and reduced-price meals, indicating a high incidence of low income in the system.

Audit Background and Scope of Work

The Curriculum Audit™ is a process that was developed by Dr. Fenwick W. English and first implemented in 1979 in the Columbus Public Schools, Ohio. The audit is based upon generally-accepted concepts pertaining to effective instruction and curricular design and delivery, some of which have been popularly referred to as the "effective schools research."

A Curriculum Audit™ is an independent examination of three data sources: documents, interviews, and site visits. These are gathered and triangulated, or corroborated, to reveal the extent to which a school district is meeting its goals and objectives, whether they are internally or externally developed or imposed. A public report is issued as the final phase of the auditing process.

The audit's scope is centered on curriculum and instruction, and any aspect of operations of a school system that enhances or hinders its design and/or delivery. The audit is an intensive, focused, "postholed" look at how well a school system such as Tucson Unified School District No. 1 has been able to set valid directions for pupil accomplishment and well-being, concentrate its resources to accomplish those directions, and improve its performance, however contextually defined or measured, over time.

The Curriculum Audit™ does not examine any aspect of school system operations unless it pertains to the design and delivery of curriculum. For example, auditors would not examine the cafeteria function unless students were going hungry and, therefore, were not learning. It would not examine vehicle maintenance charts, unless buses continually broke down and children could not get to school to engage in the learning process. It would not be concerned with custodial matters, unless schools were observed to be unclean and unsafe for children to be taught.

The Curriculum Audit™ centers its focus on the main business of schools: teaching, curriculum, and learning. Its contingency focus is based upon data gathered during the audit that impinge negatively or positively on its primary focus. These data are reported along with the main findings of the audit.

In some cases, ancillary findings in a Curriculum Audit™ are so interconnected with the capability of a school system to attain its central objectives, that they become major, interactive forces, which, if not addressed, will severely compromise the ability of the school system to be successful with its students.

Curriculum Audits™ have been performed in hundreds of school systems in more than 28 states, the District of Columbia, and several other countries, including Canada, Saudi Arabia, New Zealand, Bangladesh, Malaysia, and Bermuda.

The methodology and assumptions of the Curriculum Audit™ have been reported in the national professional literature for more than a decade, and at a broad spectrum of national education association conventions and seminars, including the American Association of School Administrators (AASA), Association of Supervision and Curriculum Development (ASCD), National Association of Secondary School Principals (NASSP), Association for the Advancement of International Education (AAIE), American Educational Research Association (AERA), National School Boards Association (NSBA), and the National Governors Association (NGA).

This audit was conducted in accordance with a contract between Tucson Unified School District No. 1 and Curriculum Management Systems, Inc. All members of the team were certified by Curriculum Management Systems, Inc.

The names of the curriculum auditors in this audit included the following individuals:

- William K Poston Jr, EdD
- Holly J Kaptain, PhD
- Eve Proffitt, EdD
- Sarah McKenzie, PhD
- Jim Farrell, EdD
- Maureen Cotter, EdD
- Meredith Hairell, MEd
- Jean Stoddard, MA
- Susan N VanHoozer, MEd
- Zollie Stevenson, Jr, PhD
- James A Scott, PhD
- Diana Gilsinger, EdD
- Penny Gray, PhD
- Jeffrey Tuneberg, PhD
- Sue Shidaker, MEd
- Kay Coleman, MEd
- Stephanie Streeter, MEd
- Susan L Townsend, MA

Biographical information about the auditors is found in the appendix.

System Purpose for Conducting the Audit

According to information from the Tucson Unified School District, the system decided to undertake a Curriculum Audit™ "so that it will know what it knows" and so that it can use the information gathered from the Curriculum Audit™ to help craft the district's five-year strategic plan. The Curriculum Audit™ is hoped by system officials to "highlight or expose district curriculum deficiencies, gaps, and instructional efficiency." Moreover, the data from the Curriculum Audit™ is intended to be used for realigning the district's organization and addressing needs for curriculum development.

Approach of the Audit

The Curriculum Audit™ has established itself as a process of integrity and candor in assessing public school districts. It has been presented as evidence in state and federal litigation concerning matters of school finance, general resource managerial effectiveness, and school desegregation efforts in Kansas, Kentucky, New Jersey, and South Carolina. The audit served as an important data source in state-directed takeovers of school systems in New Jersey and Kentucky. The Curriculum Audit™ has become recognized internationally as an important, viable, and valid tool for the improvement of educational institutions and for the improvement of curriculum design and delivery.

The Curriculum Audit™ represents a "systems" approach to educational improvement; that is, it considers the system as a whole rather than a collection of separate, discrete parts. The interrelationships of system components and their impact on overall quality of the organization in accomplishing its purposes are examined in order to "close the loop" in curriculum and instructional improvement.

II. METHODOLOGY

The Model for the Curriculum Audit™

The model for the Curriculum Audit™ is shown in the schematic below. The model has been published widely in the national professional literature, including the best-selling book, *The Curriculum Management Audit: Improving School Quality* (1995, Frase, English, Poston).

A Schematic View of Curricular Quality Control

General quality control assumes that at least three elements must be present in any organizational and work-related situation for it to be functional and capable of being improved over time. These are: (1) a work standard, goal/objective, or operational mission; (2) work directed toward attaining the mission, standard, goal/objective; and (3) feedback (work measurement), which is related to or aligned with the standard, goal/objective, or mission.

When activities are repeated, there is a "learning curve," i.e., more of the work objectives are achieved within the existing cost parameters. As a result, the organization, or a subunit of an organization, becomes more "productive" at its essential short- or long-range work tasks.

Within the context of an educational system and its governance and operational structure, curricular quality control requires: (1) a written curriculum in some clear and translatable form for application by teachers in classroom or related instructional settings, (2) a taught curriculum, which is shaped by and interactive with the written one, and (3) a tested curriculum, which includes the tasks, concepts, and skills of pupil learning and which is linked to both the taught and written curricula. This model is applicable in any kind of educational work structure typically found in mass public educational systems, and is suitable for any kind of assessment strategy, from norm-referenced standardized tests to more authentic approaches.

The Curriculum Audit™ assumes that an educational system, as one kind of human work organization, must be responsive to the context in which it functions and in which it receives support for its continuing existence. In the case of public educational systems, the support comes in the form of tax monies from three levels: local, state, and federal.

In return for such support, mass public educational systems are supposed to exhibit characteristics of rationality, i.e., being responsive to the public will as it is expressed in legally constituted bodies such as Congress, state legislatures, and locally elected/appointed boards of education.

In the case of emerging national public school reforms, more and more this responsiveness is assuming a distinctive school-based management focus, which includes parents, teachers, and, in some cases, students. The

ability of schools to be responsive to public expectations, as legally expressed in law and policy, is crucial to their future survival as publicly-supported educational organizations. The Curriculum Audit™ is one method for ascertaining the extent to which a school system, or subunit thereof, has been responsive to expressed expectations and requirements in this context.

Standards for the Auditors

While a Curriculum Audit™ is not a financial audit, it is governed by some of the same principles. These are:

Technical Expertise

CMSi certified auditors must have actual experience in conducting the affairs of a school system at all levels audited. They must understand the tacit and contextual clues of sound curriculum management.

Members of the audit team represented key diverse areas of educational expertise and possessed many decades of experience in educational fields. Eleven (11) members of the 18-member audit team have doctoral degrees, and the other seven of the auditors have postgraduate degrees in educational disciplines. The audit team represented 13 states including Arizona (three members), Arkansas, California, Colorado, Iowa (two members), Kentucky, Maryland, Ohio, Oklahoma, Rhode Island, Texas (three members), Virginia, and Washington. All members of the audit team have valid licensure in curriculum management auditing from the National Curriculum Management Audit Center in Iowa.

The Principle of Independence

None of the Curriculum Audit™ Team members had any vested interest in the findings or recommendations of the Tucson Unified School District No. 1 Curriculum Audit™. None of the auditors has or had any working relationship with the individuals who occupied top or middle management positions in the Tucson Unified School District No. 1, nor with any of the past or current members of the Tucson Unified School District No. 1 Board of Education.

The Principle of Objectivity

Events and situations that comprise the data base for the Curriculum Audit™ are derived from documents, interviews, and site visits. Findings must be verifiable and grounded in the data base, though confidential interview data may not indicate the identity of such sources. Findings must be factually triangulated with two or more sources of data, except when a document is unusually authoritative such as a court judgment, a labor contract signed and approved by all parties to the agreement, approved meeting minutes, which connote the accuracy of the content, or any other document whose verification is self-evident.

Triangulation of documents takes place when the document is requested by the auditor and is subsequently furnished. Confirmation by a system representative that the document is in fact what was requested is a form of triangulation. A final form of triangulation occurs when the audit is sent to the superintendent in draft form. If the superintendent or his/her designee(s) does not provide evidence that the audit text is inaccurate, or documentation that indicates there are omissions or otherwise factual or content errors, the audit is assumed to be triangulated. The superintendent's review is not only a second source of triangulation, but is considered summative triangulation of the entirety of audit.

The Principle of Consistency

All CMSi-certified Curriculum Auditors have used the same standards and basic methods since the initial audit conducted by Dr. Fenwick English in 1979. Audits are not normative in the sense that one school system is compared to another. School systems, as the units of analysis, are compared to a set of standards and positive/negative discrepancies cited.

The Principle of Materiality

CMSi-certified auditors have broad implied and discretionary power to focus on and select those findings that they consider most important to describing how the curriculum management system is functioning in a school district, and how that system must improve, expand, delete, or reconfigure various functions to attain an optimum level of performance.

The Principle of Full Disclosure

Auditors must reveal all relevant information to the users of the audit, except in cases where such disclosure would compromise the identity of employees or patrons of the system. Confidentiality is respected in audit interviews.

In reporting data derived from site interviews, auditors may use some descriptive terms that lack a precise quantifiable definition. For example:

"Some school principals said that ... "

"Many teachers expressed concern that ... "

"There was widespread comment about ... "

The basis for these terms is the number of persons in a group or class of persons who were interviewed, as opposed to the total potential number of persons in a category. This is a particularly salient point when not all persons within a category are interviewed. "Many teachers said that...," represents only those interviewed by the auditors, or who may have responded to a survey, and not "many" of the total group whose views were not sampled, and, therefore, could not be disclosed during an audit.

In general these quantifications may be applied to the principle of full disclosure:

Descriptive Term	General Quantification Range
Some ... or a few ...	Less than a majority of the group interviewed and less than 30 percent
Many ...	Less than a majority, more than 30 percent of a group or class of people interviewed
A majority ...	More than 50 percent, less than 75 percent
Most ... or widespread	75-89 percent of a group or class of persons interviewed
Nearly all ...	90-99 percent of those interviewed in a specific class or group of persons
All or everyone ...	100 percent of all persons interviewed within a similar group, job, or class

It should be noted for purposes of full disclosure that some groups within a school district are almost always interviewed in toto. The reason is that the audit is focused on management and those people who have policy and managerial responsibilities for the overall performance of the system as a system. In all audits an attempt is made to interview every member of the board of education and all top administrative officers, all principals, and the executive board of the teachers' association or union. While teachers and parents are interviewed, they are considered in a status different from those who have system-wide responsibilities for a district's operations. Students are rarely interviewed unless the system has made a specific request in this regard.

During the site visit in Tucson, the auditors interviewed approximately 310 different individuals and groups, including teachers, principals, parents, community patrons, administrators, the Executive Board of the Tucson Education Association, school board members, support staff, students (secondary only), representatives of the School-Community Partnership Committee, and representatives of student services and community support groups for African-American, Asian/Pacific-American, Native-American, and Mexican-American students. In addition, open time was provided in the afternoon for unscheduled interviews with teachers, parents, and community representatives in two different central locations. Moreover, comprehensive surveys were conducted online for teachers, principals, and parents. Parent surveys were provided in English and Spanish. Bilingual auditors were available to conduct some interviews in Spanish for parents when needed.

Data Sources of the Curriculum Audit™

A Curriculum Audit™ uses a variety of data sources to determine if each of the three elements of curricular quality control is in place and connected one to the other. The audit process also inquires as to whether pupil learning has improved as the result of effective application of curricular quality control.

The major sources of data for the Tucson Unified School District No. 1 Curriculum Audit™ were:

Documents

Documents included written board policies, administrative regulations, curriculum guides, memoranda, budgets, state reports, accreditation documents, and any other source of information that would reveal elements of the written, taught, and tested curricula and linkages among these elements.

Interviews

Interviews were conducted by auditors to explain contextual variables that were operating in the school system at the time of the audit. Such contextual variables may shed light on the actions of various persons or parties, reveal interrelationships, and explain existing progress, tension, harmony/disharmony within the school system. Quotations cited in the audit from interviews are used as a source of triangulation and not as summative averages or means. Some persons, because of their position, knowledge, or credibility, may be quoted more than once in the audit, but they are not counted more than once because their inclusion is not part of a quantitative/ mathematical expression of interview data.

Site Visits

All building sites were toured by the CMSi audit team. Site visits reveal the actual context in which curriculum is designed and delivered in a school system. Contextual references are important as they indicate discrepancies in documents or unusual working conditions. Auditors attempted to observe briefly all classrooms, gymnasiums, labs, playgrounds, hallways, restrooms, offices, and maintenance areas to properly grasp accurate perceptions of conditions, activities, safety, instructional practices, and operational contexts.

Standards for the Curriculum Audit™

The CMSi Curriculum Audit™ used five standards against which to compare, verify, and comment upon the Tucson Unified School District No. 1's existing curricular management practices. These standards have been extrapolated from an extensive review of management principles and practices and have been applied in all previous Curriculum Audits™.

As a result, the standards reflect an ideal management system, but not an unattainable one. They describe working characteristics that any complex work organization should possess in being responsive and responsible to its clients.

A school system that is using its financial and human resources for the greatest benefit of its students is one that is able to establish clear objectives, examine alternatives, select and implement alternatives, measure results as they are applied against established objectives, and adjust its efforts so that it achieves a greater share of the objectives over time.

The five standards employed in the CMSi Curriculum Audit™ in Tucson Unified School District No. 1 were:

1. The school district demonstrates its control of resources, programs, and personnel.
2. The school district has established clear and valid objectives for students.
3. The school district demonstrates internal consistency and rational equity in its program development and implementation.
4. The school district uses the results from district-designed or -adopted assessments to adjust, improve, or terminate ineffective practices or programs.
5. The school district has improved productivity.

A finding within a Curriculum Audit™ is simply a description of the existing state, negative or positive, between an observed and triangulated condition or situation at the time of the CMSi audit and its comparison with one or more of the five audit standards.

Findings in the negative represent discrepancies below the standard. Findings in the positive reflect meeting or exceeding the standard. As such, audit findings are recorded on nominal and ordinal indices and not ratio or interval scales. As a general rule, audits do not issue commendations, because it is expected that a school district should be meeting every standard as a way of normally doing its business. Commendations are not given for good practice. On occasion, exemplary practices may be cited.

Unlike accreditation methodologies, audits do not have to reach a forced, summative judgment regarding the status of a school district or subunit being analyzed. Audits simply report the discrepancies and formulate recommendations to ameliorate them.

III. FINDINGS

STANDARD 1: The School District Demonstrates Its Control of Resources, Programs, and Personnel.

The governing board is elected by the community to plan, organize, implement, fund, and improve the quality of a well-managed educational program. It is one of the major premises of local educational control within any state's educational system. The critical premise involved is that, through the will of the electorate, a local board of education establishes local priorities within state laws and regulations. A school district's accountability and quality control rests with the school board and the public.

The board is responsible for the development of an effective policy framework, providing a focus for management, and establish accountability for administrative and instructional staffs, as well as for its own responsibilities. The board's policies establish the means for the district to make meaningful assessments and use student learning data as a critical factor in determining the system's success. Without the elements of quality control in place, the governing board may not reasonably expect satisfactory performance of the organization or accomplishment of its mission and goals.

Although educational program control and accountability are often shared among different components of a school district, ultimately, fundamental control of and responsibility for a district and its operations rest with the elected governing board and its only direct employee – the superintendent.

What the Auditors Expected to Find in the Tucson Unified School District No. 1:

A school system meeting CMSi Curriculum Audit™ Standard One is able to demonstrate its control of resources, programs, and personnel. Common indicators are:

- A curriculum that is centrally defined and adopted by the board of education;
- A clear set of policies that establish an operational framework for management that permits accountability;
- A clear set of policies that reflect state requirements and local program goals and the necessity to use achievement data to improve school system operations;
- A functional administrative structure that facilitates the design and delivery of the district's curriculum;
- A direct, uninterrupted line of authority from school board/superintendent and other central office officials to principals and classroom teachers;
- Organizational development efforts that are focused to improve system effectiveness;
- Documentation of school board and central office planning for the attainment of goals, objectives, and mission over time; and
- A clear mechanism to define and direct change and innovation within the school system to permit maximization of its resources on priority goals, objectives, and mission.

Overview of What the Auditors Found in the Tucson Unified School District No. 1:

This section is an overview of the findings that follow in the area of Standard One. Details follow within separate findings.

Standard One addresses the Tucson Unified School District's control and governance functions in curriculum management. The auditors found that the governing board's operations and activities provided an inadequate policy framework to guide the system in delivering high quality, equitable, and adequate student achievement. Moreover, the auditors found that current policies and regulations are inadequate to establish and direct a sound

curriculum management system and to provide a framework for quality control of the educational program and organizational operations. The auditors found the Tucson Unified School District's board policies, rules ,and regulations to be inadequate in both content and specificity to guide all necessary aspects of curriculum management and the educational programs. Several policies in the curriculum management areas of control, direction, connectivity and equity, feedback, and productivity were either weak or absent.

Planning was found to be underway with a system-wide strategic planning program, but district-wide and school-based planning was not of sufficient quality to lead the district toward the achievement of intended goals. The district leaders' concern about planning often having been conducted "in silos" and with inconsistent implementation and minimal integration was echoed by the audit team. Nevertheless, the planning process reviewed by the auditors included recent procedures as documented and explained in interviews and was found to have the minimum characteristics of quality planning.

Job descriptions were examined and compared to the district's organizational chart, but not all positions had a job description. There were several positions that were found to be missing a description of duties and responsibilities.

The TUSD organizational structure was found to be inadequate according to most audit criteria, and some essential and critical positions for quality control were missing. The TUSD 2013-2014 Organizational Chart, examined by the auditors, was revised by the superintendent on August 27, 2013, and the Office of Student Equity and Intervention 2013-2014 Organizational Chart was created on November 20, 2013. The auditors found that the organizational charts did not meet audit criteria for sound organizational management, included conflicting lines of authority, and were missing key functions in curriculum management quality control, as delineated in the narrative that follows.

Without departments and positions assigned to the basic elements of quality control, the system cannot expect to achieve acceptable levels of educational progress. These elements of progress require a unified, relevant, and high quality curriculum across the system; focus and connectivity with staffing, training, and materials; as well as a sound and functional assessment system that gives useful feedback to the board and superintendent in monitoring the system's operations.

Specific and comprehensive findings are provided below.

Finding 1.1: Board policies are inadequate to provide local curriculum management direction and to establish quality control of the educational program and organizational functions.

In order for policies to provide the necessary operational framework, they must be useful in controlling and directing decision making. Policies must reflect the expectations set by the board and focus the resources of the district toward specific goals. In order for policies to drive practice, they must be specific, easily referenced, and the first-source documents to provide individual and system guidance. Conversely, when policies are absent, outdated, vague, or ignored, there is not effective guidance for administrators or staff. The result may be that decision making is left to individual or special interest discretion. In such instances, there is a lack of coherence in systems, operations, and actions. Educational outcomes may be unpredictable and/or fragmented and may not reflect the intent of the board.

The auditors examined all policies, rules and regulations provided by the school district. They selected for further analysis those policies most directly related to curriculum management and organizational support and assessed them by comparing their content to 26 policy criteria that comprise the Curriculum Management Improvement Model (CMIM). This model serves as the basis for evaluating key documents in a CMSI Curriculum Management audit. Interviews were conducted with board members, administrators, and staff to identify the extent to which board policies are used in the district to guide decisions about educational programs and the curriculum.

The auditors found the Tucson Unified School District's board policies, rules and regulations to be inadequate in both content and specificity to guide all necessary aspects of curriculum management and the educational programs. Several policies in the curriculum management areas of control, direction, connectivity and equity, feedback, and productivity were either weak or absent.

Arizona statutes give school boards broad powers and wide discretion in exercising the powers granted by the legislature. The following statutes grant school boards the authority to manage the school district:

- *A.R.S. 15-341*: "The governing board shall Prescribe and enforce policies and procedures for the governance of the schools, not inconsistent with law or rules prescribed by the state board of education.
- *A.R.S. 15-321*: "The board shall prescribe rules for its own government. It shall hold a regular meeting at least once each month during the regular school year and may hold other meetings as often as called."
- *A.R.S. 15-323*: "Notwithstanding any other provision of law, a governing board member is eligible to vote on any budgetary, personnel or other question which comes before the board…"

The governing board, through its adopted policies, establishes its governance role in developing polices and directing the superintendent to develop such rules and regulations as are necessary. The following policies reference the role of the school board in establishing district policies:

- *Policy Code BBAA:* "The role of the Governing Board is to establish District wide policy and direction and otherwise to direct the affairs of the District in the manner specified by law, with day-to-day management of the District primarily being the responsibility of District Administration."
- *Policy Code BDAA:* "Generally, the role of the Governing Board is to establish District Policy. The daily operation of the District is the responsibility of the District Administration."
- *Policy Code BG* describes the process for the development, implementation, and review of board policies. *Policy Code BG* also includes the following statement, which reinforces the critical nature of school board policies: "Creating policy is a crucial school board role in our system of education governance. Like Congress, state legislatures, and city or county councils, school boards establish the direction and structure of their school district by adopting policies through the authority granted by state legislatures. School board policies have the force of law equal to statutes or ordinances."
- *Policy Code BG-E1* presents a flow chart of the policy development process in support *of Policy Code BG*.

Auditors obtained for review and analysis copies of 398 local board policies, rules, and regulations from the Tucson Unified School District's website. Exhibit 1.1.1 lists the 63 curriculum management system policies, rules, and regulations that were selected by auditors for analysis.

Exhibit 1.1.1

TUSD Board Policies and Administrative Regulations Reviewed by Audit Team
Tucson Unified School District
January 2014

Policy/ Regulation Number	Policy/Regulation Title	Date of Most Recent Adoption/ Revisions
A	District Mission, Vision and Values	Dec. 2013
ADF	Intercultural Proficiency	July 2013
ADF-R	Intercultural Proficiency	Nov. 2006
BBAA	Board Member Authority and Responsibilities	Dec. 2013
BDAA	Procedures for Governing Board Members	July 2012
BDFA	Stakeholder Input and Advisory Committees	June 2013
BG	Board Policy Process	Dec. 2013
BG-E1	Policy Development Process	Apr. 2013
CBCA	Delegated Authority	Oct. 2013
CF	Leadership Principles	June 2013

Exhibit 1.1.1 (continued)
TUSD Board Policies and Administrative Regulations Reviewed by Audit Team
Tucson Unified School District
January 2014

Policy/ Regulation Number	Policy/Regulation Title	Date of Most Recent Adoption/ Revisions
CF-R	Leadership Principles	July 2013
CFC	School Council	Oct. 2011
CG	School Improvement Models	Nov. 2011
CG-E1	Restart Model	Nov. 2011
CG-E2	Closure Model	Nov. 2011
CG-E3	Turnaround Model	Nov. 2011
CG-E4	Transformation Model	Nov. 2011
CH	Policy Implementation	Mar. 2012
DBC	Budget, Planning, Preparation and Schedules	May 2013
DD	Funding Proposals, Grants, and Special Projects	Apr. 2013
DDA	Funding Sources Outside the School System	Oct. 2012
DFG	Review and action of Impact to the District Based on Growth and Rezoning	Mar. 2013
EB	Environmental and Safety Program	June 2013
ECF	Energy Conservation	June 2008
EEA	Student Transportation in School Buses	Sept. 2012
FCB	Closing Schools	Apr. 2013
GA	Personnel Goals/Priority Objectives	July 2012
GBB	Staff Involvement in Decision Making	June 2013
GBB-R	Staff Involvement in Decision Making	July 2011
GBEB-R	Staff Conduct	Dec. 2004
GCAB	Filling Vacancies	Oct. 2010
GCH	Employee Orientation	Apr. 2013
GCI	Professional Staff Development	Apr. 2012
GCO	Evaluation of Certificated Staff Members	Nov. 2013
GCO-R	Evaluation of Certificated Teachers	Aug. 2012
GCO-R2	Administrator Evaluation Procedure	Dec. 2013
GCO-E3	TUSD Administrator Evaluation Instrument	Oct. 2013
GCO-E4	Placement Guide for Principal Evaluation Cycle	Oct. 2013
GCO-E5	Professional Growth Plan	Oct. 2013
IGA	Curriculum Development	July 2012
IGE	Curriculum Guides and Course Outlines	July 2012
IHAA	English Instruction	June 2012
IHB	Exceptional Education Programs	May 2008
IHBB	Gifted and Talented Education	Oct. 2012
IIB	Class Size	May 2013
IJ	Instructional Resources and Materials	Oct. 2011
IJJ	Textbook/Supplementary Materials Selection and Adoption	July 2012
IJNDB	Use of Technology Resources in Instruction	July 2012

Exhibit 1.1.1 (continued) TUSD Board Policies and Administrative Regulations Reviewed by Audit Team Tucson Unified School District January 2014		
Policy/ Regulation Number	**Policy/Regulation Title**	**Date of Most Recent Adoption/ Revisions**
IJNDB-R2	Laptop Usage	Oct. 2006
IKA	Grading/Assessment Systems	Mar. 2012
IKA-R	Grading/Assessment Systems	Aug. 2012
IKE	Promotion, Retention and Acceleration of Students	May 2013
IKE-R1	Promotion, Retention, Acceleration and Appeal	June 2013
IKF	Graduation Requirements	Jan. 2013
IKF-R	Graduation Requirements	June 2013
JB	Equal Educational Opportunities and Anti-Harassment	Aug. 2011
JFABD	Admission of Homeless Students	Mar. 2013
JFB	Enrollment and School Choice	Oct. 2012
JLD	Guidance and Counseling	Nov. 2012
JQ	Student Fees, Fines and Charges	Nov. 2011
KB	Parental Involvement in Education	June 2011
KBF	Interpreter and Translator Support Services for Students and Parents/Guardians	Mar. 2013
LCA	Administration of Student Surveys	Mar. 2013

Auditors analyzed the policies, rules, and regulations listed in Exhibit 1.1.1 for congruence with audit standards using 26 criteria, each with three defining characteristics. The auditors assessed the quality of the board policies, rules, and regulations by comparing the content to audit criteria for good curriculum management. The 26 criteria are organized into five categories—control, direction, connectivity and equity, feedback, and productivity—that mirror the five standards of the audit. Relevant policies, rules, and regulations were selected from those noted in Exhibit 1.1.1 for further study and review.

The auditors examined each relevant policy, rule, and regulation to determine if the audit criteria were met. For each criterion, a score of 0 to 3 points was given based on the characteristics of the policy, rule, or regulation. If a policy, rule, or regulation (or several considered together) met any of the defining characteristics, the policy, rule, or regulation was given the corresponding score (1-3). If a policy or regulation was considered too weak to meet the characteristics or if there was no policy, rule, or regulation regarding the criterion, a rating of 0 was given. To be considered adequate, 70 percent of the total possible points for a standard (set of criteria) had to be given. The criteria and results of this analysis are contained in Exhibits 1.1.2 through 1.1.7.

Exhibit 1.1.2

Auditors' Analysis of Board Policy and Administrative Regulations on Audit Standard One to Determine Quality and Degree of Adequacy
Tucson Unified School District
January 2014

Standard One—Provides for Control: Directs the superintendent or designee to oversee the development of board policy to ensure:		
Audit Criteria and Characteristics	**Relevant Policies and Regulations**	**Auditors' Rating**
1.1 A taught and assessed curriculum that is aligned to the district written curriculum		
• Requires the taught and assessed curriculum to be aligned to the district's written curriculum	IKF, IKF-R, JFB, IGA	0
• Addresses the alignment of the district's written curriculum with state and national standards for all subject areas and grades (includes electives)		0
• Directs the district's written curriculum documents to be more rigorous than state and national standards to facilitate deep alignment in all three dimensions with current and future high-stakes tests		0
1.2 Philosophical statements of the district instructional approach		
• Has a general philosophical statement of curriculum approach, such as standards-based, competency-based, outcome-based, etc.	A	0
• Directs adherence to mastery learning practices for all content areas and grades involved in local, state, and national accountability		0
• Directs adherence to mastery learning practices for all grade levels and content areas, including electives		0
1.3 Board adoption of the written curriculum		
• Requires the annual review of new or revised written curriculum prior to its adoption	IGA	0
• Directs the annual adoption of new or revised written curriculum for all grade levels and content areas		1
• Directs the periodic review of all curriculum on a planned cycle over several years		0
1.4 Accountability for the design and delivery of the district curriculum through roles and responsibilities		
• Directs job descriptions to include accountability for the design and delivery of the aligned curriculum	BG, CF, GA,GBEB-R, GCAB, GCO-R2	0
• Links professional appraisal processes with specific accountability functions in the job descriptions of central office administrators, building administrators, and regular classroom teachers		0
• Directs professional appraisal processes to evaluate all staff in terms of gains in student achievement		0
1.5 Long-range, system-wide planning		
• As part of the district planning process, policy requires that the superintendent and staff think collectively about the future and that the discussion take some tangible form (This allows for flexibility without prescribing a particular template)	BG, CG	0
• Requires the development of a system-wide, long-range plan that is updated annually; incorporates system-wide student achievement targets; and is evaluated using both formative and summative measures		0
• Expects school improvement plans to be congruent with the district long-range plan, to incorporate system-wide student achievement targets, and to be evaluated using both formative and summative measures		0

Exhibit 1.1.2 (continued) Auditors' Analysis of Board Policy and Administrative Regulations on Audit Standard One to Determine Quality and Degree of Adequacy Tucson Unified School District January 2014		
Standard One—Provides for Control: Directs the superintendent or designee to oversee the development of board policy to ensure:		
Audit Criteria and Characteristics	**Relevant Policies and Regulations**	**Auditors' Rating**
1.6 Functional decision-making structure		
• Expects an organizational chart that is annually reviewed, presented to the board, and approved by the superintendent	BDAA, BDFA, CFC, GBB	0
• Requires that job descriptions for each person listed on the organizational chart be present and updated regularly to ensure that all audit criteria, such as span of control, logical grouping of functions, etc., are met		0
• Directs and specifies the processes for the formation of decision-making bodies (e.g., cabinet, task forces, committees) in terms of their composition and decision-making responsibilities, to ensure consistency, non-duplication of tasks, and product requirements		1
Standard One Rating (number of points for the six criteria with a possibility of 18)		**2**
Percentage of Adequacy (points divided by the number of possible points—18)		**11%**
Note: One point was awarded for every characteristic met under each criterion for a maximum of three points. No points are awarded when policies fail to meet any characteristics.		

Exhibit 1.1.2 presents the auditors' ratings of the district policies, rules, and regulations related to Standard One, which provides for control. Auditors found that board policies lacked sufficient content, specificity, and direction to meet this audit criterion. At least 70 percent of the characteristics must be met for the policies to be considered adequate; the auditors found that two out of 18 (11 percent) of the criteria were met.

The following presents information about the auditors' ratings on Standard One:

Criterion 1.1: A taught and assessed curriculum that is aligned to the district written curriculum

Four polices vaguely reference a taught and assessed curriculum that is aligned to district written curriculum. *Policy Code IFK-R* states that "…students shall have successfully completed the subject-area course requirement incorporating the standards and competencies adopted by the State Board of Education" in order to graduate. *Policy Code IKF* requires that all students shall complete graduation requirements, which include a minimum of 23 credits. In the descriptions of each course, no reference is made to the written and taught curriculum associated with each course other than that "students shall demonstrate competencies of grade level standards in reading, science, social studies, and mathematics adopted by the State Board of Education." *Policy Code JFB* describes enrollment and school choice, with a description of magnet schools, pipeline schools, and open enrollment, but no mention is made of curriculum within any of the school choice programs. *Policy Code IGA* requires that "all curriculum changes be approved by the Governing Board." No policy references were found that would require alignment of the district's curriculum with national standards or high-stakes assessments. There is no policy requiring the district's curriculum to be more rigorous than state and national standards or requiring that district assessments be aligned with the district's adopted curriculum. No points were awarded for this criterion.

Criterion 1.2: Philosophical statements of the district instructional approach

Policy Code A states that the District Mission Statement "…in partnership with parents and the greater community, is to assure each pre-K through 12th grade students receives an engaging, rigorous and comprehensive education." No policy statement was found requiring a specific curriculum approach or mastery learning practices to be employed at all grade levels and for all content areas including electives. No points were awarded for this criterion.

Criterion 1.3: Board adoption of the written curriculum

References to the board's role in adopting academic standards and considering new programs were found in *Policy Code IGA*. *Policy Code IGA* states, "…the school system continually develop and modify its curriculum to meet changing needs" and "All curriculum changes shall be approved by the Governing Board." There was no clear policy expectation for a planned curriculum review. One point was awarded for this criterion.

Criterion 1.4: Accountability for the design and delivery of the district curriculum through roles and responsibilities

Auditors found no policies that directly required job descriptions to include accountability for the design and delivery of curriculum. *Policy Code GCAB* requires that "An outline of job responsibilities be developed and maintained by the Superintendent or designee through position descriptions." *Policy Code GBEB-R* states that staff "Perform in accordance with the employee's current job description, performance goals, and authorized directives from supervisory authority." *Policy Code CF* describes Leadership Principles of the District. Among these is the principle that "All Administrators/Managers/Supervisors/Lead Staff **will** make student achievement, safety, and welfare their highest priority." *Policy Code CF* also states that "Principals duties include, but are not limited to, the following: …[being] responsible for the operation of the educational program of the school." *Policy Code GA* states that "An employee appraisal program (evaluation)… will contribute to the continuous improvement of staff performance." The Administrative Evaluation Procedure presented in *Policy Code GCO-R2* does not include any discussion or requirements that administrators' evaluations include accountability of the design or delivery of the district curriculum. No points were awarded this criterion.

Criterion 1.5: Long-range, system-wide planning

No specific polices were identified that require long-range planning across the district. Although the district has a Mission Statement, that statement does not embrace district planning as one of the district goals. *Policy Code BG* encourages the participation of community in the policy development process but does not require public participation as part of the planning process. Likewise, *Policy Code CG* describes four School Improvement Models; however, the four models do not require planning, either long-or short-range, as part of the implementation process. No points were awarded for this criterion.

Criterion 1.6: Functional decision-making structure

Policies establishing an expectation that the superintendent will develop an organizational chart depicting lines of authority or job descriptions were not identified. Decision-making bodies are identified in *Policy Code CFC,* which authorizes the establishment of School Councils: "School Councils shall be responsible for making recommendations to the superintendent for submission of the school's 301 Plan goals, if applicable; the selection of the school administration; and the allocation of discretionary budget of the school's curriculum. Also, *Policy Code GBB* encourages employees to participate in school management through the suggestion of ideas for increased economy of operation and improvement of service." One point was awarded this criterion.

Exhibit 1.1.3

Auditors' Analysis of Board Policy and Administrative Regulations on Audit Standard Two to Determine Quality and Degree of Adequacy Tucson Unified School District January 2014

Standard Two—Provides for Direction: Directs the superintendent or designee to oversee the development of board policy to ensure:		
Audit Criteria and Characteristics	**Relevant Policies and Regulations**	**Auditors' Rating**
2.1 Written curriculum with aligned, criterion-referenced formative assessments for all subject areas at all grade levels		
• Requires enough specificity so that all teachers can consistently describe how students will demonstrate mastery of the intended objective	IGA, IGE	0
• Requires formative assessment instruments that align to specific curriculum objectives		0
• Directs that suggestions be provided to teachers for differentiating curriculum to meet students' needs as diagnosed by formative assessments		0
2.2 Periodic review/update of the curriculum and aligned resources and assessments		
• Requires the development of procedures to both formatively and summatively review the written curriculum for all grade levels and content areas	IGA, IGE	0
• Requires the annual review of test banks, benchmark assessments, and other assessment instruments for alignment with the district or state accountability system		0
• Evaluates assessment instruments for alignment to the district curriculum in all three dimensions: content, context, and cognitive type		0
2.3 Textbook/resource alignment to curriculum and assessment		
• Requires textbooks/resources to be regularly reviewed and the resource revision/ adoption cycle to align with the curriculum revision cycle	IJ, IJJ, IJNDB	0
• Directs review of all new instructional resource materials for content, context, and cognitive type alignment to the district curriculum and assessment		0
• Directs district staff to identify discrete areas where alignment is missing and provide teachers with supplementary materials to address gaps in alignment (missing content, inadequate contexts, etc.)		0
2.4 Content area emphasis		
• Directs the yearly identification of subject areas that require additional emphasis based on a review of assessment results		0
• Within subject areas, requires identification by administration of specific objectives, contexts, cognitive types, and instructional practices to receive budgetary support		0
• Requires focused professional development and coaching to support the instructional delivery of the identified priorities within the content areas		0
2.5 Program integration and alignment to the district's written curriculum		
• Directs that all subject-related (e.g., reading, Title I) and school-wide (e.g., tutoring, DARE, AVID) programs be reviewed for alignment to the written and assessed curriculum	IHAA	0
• Requires written procedures for both formative and summative evaluation of all new subject-related and school-wide programs before submission to the board for approval		0
• Directs administrative staff to prepare annual recommendations for subject-related and school-wide program revision, expansion, or termination based on student achievement		1
Standard Two Rating (number of points for the five criteria with a possibility of 15)		**1**
Percentage of Adequacy (points divided by the number of possible points—15)		**7%**
Note: One point was awarded for every characteristic met under each criterion for a maximum of three points. No points are awarded when policies fail to meet any characteristics.		

Exhibit 1.1.3 presents the auditors' ratings of the district policies, rules, and administrative regulations related to Standard Two, which provides for direction. Auditors found that board policies lacked sufficient content, specificity, and direction to meet this audit criterion. At least 70 percent of the characteristics must be met for the policies to be considered adequate; the auditors found that one out of 15 (seven percent) of the criteria was met.

The following presents information about the auditors' ratings on Standard Two:

Criterion 2.1: Written curriculum with aligned, criterion-referenced formative assessment for all subject areas at all grade levels

No policies were presented to auditors that require formative assessment aligned to specific curriculum objectives. Also, policies were absent in the area of differentiation that is linked to formative assessment techniques. No points were awarded for the criterion.

Criterion 2.2: Periodic review/update of the curriculum and aligned resources and assessments

Auditors found two district policies that required review of the district curriculum, resources, and assessments on a periodic basis. *Policy Code IGA* authorizes the superintendent to "develop the curriculum for the school system and to organize committees to review curriculum." *Policy Code IGE* requires the curriculum guides be developed for "the various subject areas." Also, "These guides shall present at least a minimal outline for instruction…and…suggest a variety of possibilities for instruction, patterns of individualization, variations of approaches, and materials." No requirement is made for a periodic review of curriculum or the alignment of curriculum and assessment. No points were awarded this criterion.

Criterion 2.3: Textbooks/resource alignment to curriculum and assessment

Auditors found three policies that address textbooks and resources. *Policy Code IJ* requires that district shall furnish all textbooks and supplies for students in grades K-8, and textbooks and other printed material for student in grades 9-12. *Policy Code IJJ* requires that the board will have final approval and adopt all new textbooks and supplementary course books. *Policy Code IJNDB* describes the use of technology resources in instruction, but is basically an acceptable use policy covering staff and student use of district technology equipment, software, and networks. No policy requires the alignment of textbooks or resources to curriculum or assessment. No points were awarded this criterion.

Criterion 2.4: Content area emphasis

Auditors did not find any policies containing characteristics associated with this criterion. Specifically, no policy statements were found requiring professional development in support of curriculum delivery. No policy requires the identification of subject areas that need additional emphasis and budgetary support. No points were awarded this criterion.

Criterion 2.5: Program integration and alignment to the district's written curriculum

While no policy specifically directs that all subject-related programs be reviewed for alignment, *Policy Code IHAA* does require that "The superintendent shall issue Administrative Regulations containing procedures for the identification, assessment, placement, reassessment, and reclassification of ELLs and develop and implement procedures for continuous and appropriate assessment of the effectiveness of all educational programs and activities governed by the policy." However, this policy is limited to those students in ELL programming only. One point was awarded this criterion.

Exhibit 1.1.4

Auditors' Analysis of Board Policy and Administrative Regulations on Audit Standard Three to Determine Quality and Degree of Adequacy Tucson Unified School District January 2014

Standard Three—Provides for Connectivity and Equity: Directs the superintendent or designee to oversee the development of board policy to ensure:		
Audit Criteria and Characteristics	**Relevant Policies and Regulations**	**Auditors' Rating**
3.1 Predictability of written curriculum from one grade and/or instructional level to another		
• Requires the vertical articulation and horizontal coordination of the curriculum within schools		0
• Requires vertical articulation across grade levels and horizontal coordination among schools at a given level for all content areas		0
• Directs the identification of prerequisite skills and their placement in the written curriculum at the appropriate grade/instructional level		0
3.2 Training for staff in the delivery of the curriculum		
• Directs the development and implementation of a district professional development plan, focused on effective curriculum delivery, that is congruent with the district long-range plan and annual goal priorities	GA, GBEB-R, GCH, GCI	0
• Requires a process whereby staff are coached over time in the implementation of professional development initiatives		0
• Directs the regular evaluation of the impact of professional development on student achievement, using both formative and summative measures		0
3.3 Delivery of the adopted district curriculum		
• Requires all staff to deliver the curriculum as approved by the board	GCO, GCO-R, IIB	0
• Requires building principals and all central office staff with curriculum responsibilities to review disaggregated assessment results and identify areas where curriculum delivery may be ineffective		0
• Requires an annual report for the board regarding the status of curriculum delivery		0
3.4 Monitoring the delivery of the district curriculum		
• Directs building principals to develop and implement a plan to monitor the delivery of the district curriculum on a weekly basis	CF	0
• Directs central office curricular staff to assist the principal in monitoring the delivery of the district curriculum		0
• Requires periodic school and classroom data-gathering reports from administrators detailing the status of the delivery of the curriculum across the district, with recommendations for the creation of professional development activities or curricular revisions		0
3.5 Equitable student access to the curriculum, instructional resources, and learning environment		
• Requires equal student access to the curriculum, appropriate instructional materials for a variety of learning levels and modes, and appropriate facilities to support the learning environment necessary to deliver the district curriculum	ADF, EEA, IHAA, IHB, IHBB, JB, JFABD, JQ, KBF	1
• Directs the development of procedures for fast-tracking students who lack sufficient prerequisite skills for courses such as AP, honors, etc., but need more challenging content		0
• Requires an annual review of equity data (such as access, racial isolation, rigor), the subsequent reporting to the board of those data, and the development of a plan for correcting equity issues		0
Standard Three Rating (number of points for the five criteria with a possibility of 15)		**1**
Percentage of Adequacy (points divided by the number of possible points—15)		**7%**
Note: One point was awarded for every characteristic met under each criterion for a maximum of three points. No points are awarded when policies fail to meet any characteristics.		

Exhibit 1.1.4 presents the auditors' ratings of the district policies, rules, and regulations related to Standard Three, which provides for connectivity and equity. Auditors found that board policies lacked sufficient content, specificity, and direction to meet this audit criterion. At least 70 percent of the characteristics must be met for the policies to be considered adequate; the auditors found that one out of 15 (seven percent) of the criteria was met.

The following presents information about the auditors' ratings on Standard Three:

Criterion 3.1: Predictability of written curriculum from one grade and/or instructional level to another

Auditors found no policies that addressed articulation and coordination of the curriculum. No points were awarded this criterion.

Criterion 3.2: Training for staff in the delivery of the curriculum

References to professional development were found in several board policies. *Policy Code GCI* encourages participation in professional meetings and approved in-services for the purpose of professional growth. *Policy Code GA* establishes personnel services goals, which include an employee appraisal system that will "contribute to the continuous improvement of staff performance and in-service programs that will improve rate of staff performance and retention." *Policy Code GCH* requires that all new employees attend an employee orientation that includes information about the District's Mission, Vision, Values, and Goals. Finally, *Policy Code GBEB-R* expects that employees will "Strive to acquire knowledge of new developments in the employee's field of work." No polices were found that require either coaching of employees over time, or regular evaluation of the impact of professional development. Existing policy also does not expect that professional development focus on effective curriculum delivery or be congruent with district plans or goals. No points were awarded this criterion.

Criterion 3.3: Delivery of the adopted district curriculum

Auditors found no policies that required delivery of the approved curriculum or use of assessment results to identify areas in which curriculum delivery may be ineffective. Three polices mention instruction. *Policy Code IIB* states that instructional delivery shall be "flexible to accommodate student groupings," *Policy Code GCO-R* identifies Instructional Strategies as "specific, concrete and targeted toward the unique needs of the students," and *Policy Code GCO* describes the staff evaluation process to include "Student learning is the primary focus of the teachers' professional time." None of the three cited policies above required delivery of the adopted curriculum. No points were awarded this criterion.

Criterion 3.4: Monitoring the delivery of the district curriculum

Policy Code CF states, "A principal is responsible for the supervision, evaluation, and support of the school staff members." Also, "A principal will maintain school records and prepare reports." Additionally the principal will keep the superintendent informed of the conditions and needs of the school. No policy was found that specifically required principals to monitor the delivery of curriculum on a weekly basis or use the data to monitor the status of curriculum delivery across the district. No points were awarded this criterion.

Criterion 3.5: Equitable student access to the curriculum, instructional resources, and learning environment

Several policies were found that establish a clear expectation that students could not be denied access to the district's educational programs. *Policy Code KBF* states, "TUSD is committed to ensuring communication with Limited English Students and their families shall receive services in a language they understand." *Policy Code JQ* states, "No student will be denied an education as a result of inability to pay supplementary charges." *Policy Code JB* states, "The right of each student to fully participate in classroom instruction shall not be abridged or impaired because of race, color, religion, sex, sexual orientation, age, national origin, and disability, or any other reason not related to the student's individual capabilities." *Policy Code JFABD* includes several procedures to ensure that Homeless Students will not be denied access to education, in compliance with Arizona State Laws and Arizona Administrative Codes. *Policy Code IHBB* requires that Gifted and Talented students shall be "provided with appropriate instruction and/or special ancillary services from first grade through high school."

No policy references were found requiring review of equity data or developing procedures for fast-tracking students who lack sufficient skills for courses such as AP or honors. One point was awarded for this criterion.

Exhibit 1.1.5

Auditors' Analysis of Board Policy and Administrative Regulations on Audit Standard Four to Determine Quality and Degree of Adequacy Tucson Unified School District January 2014

Standard Four—Provides for Feedback: Directs the superintendent or designee to oversee the development of board policy to ensure:		
Audit Criteria and Characteristics	**Relevant Policies and Regulation**	**Auditors' Rating**
4.1 A student assessment process		
• Requires the development and implementation of a district student assessment process that goes beyond the state accountability assessment system and includes both formative and summative measures	IKA, IKA-R, IKAB, IKE	0
• Requires the development and implementation of a district student assessment process that is differentiated to address variations in student achievement (both above and below grade level) and includes both formative and summative assessment measures		0
• Requires assessment instruments to be more rigorous in content, context, and cognitive type than external, high stakes assessments		0
4.2 A program assessment process		
• Directs the development and implementation of a district program evaluation process		0
• Requires each proposed program to have an evaluation process (The process includes both formative and summative evaluations) before that program is adopted and implemented		0
• Directs the program assessment process to link with district planning initiatives, including site improvement plans and the strategic/long-range plan		0
4.3 Use of data from assessments to determine program and curriculum effectiveness and efficiency		
• Requires the disaggregation of assessment data at the school, classroom, student subgroup, and student level to determine program and curriculum effectiveness and efficiency	IKE, IKA	0
• Requires classroom teachers to track and document individual student mastery in core content areas		1
• Requires the development of modifications to the curriculum and/or programs as needed in response to disaggregated assessment data to bring about effectiveness and efficiency		0
4.4 Reports to the board about program effectiveness		
• Requires yearly reports to the board regarding program effectiveness for all new programs for the first three years of operation		0
• Requires reports to the board every three years for long-term programs		0
• Requires summative reports to the board every five years for all content areas before any curriculum revisions or major materials acquisition, with the reports delivered prior to the curricular adoption cycle		0
Standard Four Rating (number of points for the four criteria with a possibility of 12)		**1**
Percentage of Adequacy (points divided by the number of possible points—12)		**8%**
Note: One point was awarded for every characteristic met under each criterion for a maximum of three points. No points are awarded when policies fail to meet any characteristics.		

Exhibit 1.1.5 presents the auditors' ratings of the district policies, rules, and regulations related to Standard Four, which provides for feedback. Auditors found that board policies lacked sufficient content, specificity, and

direction to meet this audit criterion. At least 70 percent of the characteristics must be met for the policies to be considered adequate; the auditors found that one out of 12 (8 percent) of the criteria was met.

The following presents information about the auditors' ratings on Standard Four:

Criterion 4.1: A student assessment process

No policy references were found requiring district assessments to go beyond that which is required for state accountability, or establishing a system that is differentiated or more rigorous than external high stakes assessments. Four policies were found that require procedures to determine student competencies on state mandated curriculum (*Policy Codes IKA, IKA-R, IKE-R,* and *IKE)*; however, these polices mainly deal with student grading and student report cards. No points were awarded this criterion.

Criterion 4.2: A program assessment process

No polices were presented to auditors that direct the development of a district program evaluation process or link new programs to district planning initiatives, improvement plans, or long-range planning. No points were awarded this criterion.

Criterion 4.3: Use of data from assessments to determine program and curriculum effectiveness and efficiency

Policy Code IKE states that student shall "Progress through the grades by demonstrating growth in learning and by meeting or exceeding the grade-level standards established by the State and District." *Policy Code IKA* requires teachers to "Balance the need for on-going assessment for instructional purposes with reporting student progress/achievement by giving a grade." There is no expectation in policy that staff disaggregate data at the school, classroom, or sub-group level for the purpose of determining curriculum effectiveness or for differentiation or modification of curriculum or programs. One point was awarded this criterion.

Criterion 4.4: Reports to the board about program effectiveness

Policy is silent on this criterion. No points were awarded this criterion.

Exhibit 1.1.6

Auditors' Analysis of Board Policy and Administrative Regulations on Audit Standard Five to Determine Quality and Degree of Adequacy Tucson Unified School District January 2014

Standard Five—Provides for Productivity: Directs the superintendent or designee to oversee the development of board policy to ensure:		
Audit Criteria and Characteristics	**Relevant Policies and Regulations**	**Auditors' Rating**
5.1 Program-centered budgeting		
• Directs development of a budget process that requires program evaluation, identification of specific measurable program goals before the budget process begins, and documented costs to ensure that expenditures are aligned within revenues and cost-benefit analysis is facilitated	DBC, DD, DDA, FCB	0
• Requires adherence to a program-centered budgeting process that includes incremental budgeting based on different program types, delivery, and quality for all curriculum areas (The process provides evidence of tangible connections between allocations and anticipated program outcomes or accomplishments.)		0
• Directs full implementation of a program-centered budgeting process that includes incremental funding possibilities, a process for evaluating options, and the use of program evaluation data linked to budget allocations (This process enables program budget decisions to be based upon documented results and performance.)		0

Exhibit 1.1.6 (continued)
Auditors' Analysis of Board Policy and Administrative Regulations on
Audit Standard Five to Determine Quality and Degree of Adequacy
Tucson Unified School District
January 2014

Standard Five—Provides for Productivity:
Directs the superintendent or designee to oversee the development of board policy to ensure:

Audit Criteria and Characteristics	Relevant Policies and Regulations	Auditors' Rating
5.2 Resource allocation tied to curriculum priorities		
• Requires a budget that allocates resources according to documented needs, assessment data, and established district curriculum and program goals and priorities	BBAA, DBC	0
• Requires a budget that may be multi-year in nature, provides ongoing support for curriculum and program priorities, and connects costs with program expectations and data-based needs		0
• Directs a budget that provides resources needed to achieve system priorities over time and demonstrates the need for resources based on measurable results and/or performance of programs and activities		0
5.3 Environment to support curriculum delivery		
• Directs facilities that enable teachers to work in an environment that supports adequate delivery of the curriculum	DFG, EB, ECF	0
• Directs consideration of multi-year facilities planning efforts to adequately support the district curriculum and program priorities		0
• Directs facilities planning linked to future curriculum and instructional trends and to the teaching-learning environment incorporated in the documented system mission and vision statements		0
5.4 Support systems focused on curriculum design and delivery		
• Provides a clear connection between district support services and the achievement of the district curriculum design and delivery, and evidence of optimization within the system		0
• Requires formative and summative evaluation practices for each support service to provide data for improving these services and documented evidence of improvement over time		0
• Requires periodic reports to the board with recommendations for continuing, revising, and/or developing new support services to enhance fulfillment of the mission, including needs-based data		0
5.5 Data-driven decisions for the purpose of increasing student learning		
• Directs the development of specific requirements for data analysis that lead to improved student learning for the core curriculum areas and electives		0
• Directs the development of specific requirements for data analysis that lead to improved student learning for all curriculum areas and grade levels (including electives)		0
• Directs the development of specific requirements for data analysis that lead to improved student learning for all operations of the district		0

Exhibit 1.1.6 (continued) Auditors' Analysis of Board Policy and Administrative Regulations on Audit Standard Five to Determine Quality and Degree of Adequacy Tucson Unified School District January 2014		
Standard Five—Provides for Productivity: Directs the superintendent or designee to oversee the development of board policy to ensure:		
Audit Criteria and Characteristics	**Relevant Policies and Regulations**	**Auditors' Rating**
5.6 Change processes for long-term institutionalization of district priority goals		
• Requires the identification of strategies, grounded in documented assessment of program success or efficacy, to be used by the district to ensure long-term institutionalization of change		0
• Directs the development of school improvement plans that address the use of specific change strategies at the building level to ensure the institutionalization of change and improved results or performance		0
• Directs that all district, department, and program plans incorporate procedures for change strategies to ensure the institutionalization of change for improvement and include procedures with formative and summative practices that provide data about change implementation and effectiveness		0
Standard Five Rating (number of points for the six criteria with a possibility of 18)		**0**
Percentage of Adequacy (points divided by the number of possible points—18)		**0%**
Note: One point was awarded for every characteristic met under each criterion for a maximum of three points. No points are awarded when policies fail to meet any characteristics.		

Exhibit 1.1.6 presents the auditors' ratings of the district policies, rules, and regulations related to Standard Five, which provides for productivity. Auditors found that board policies lacked sufficient content, specificity, and direction to meet this audit criterion. At least 70 percent of the characteristics must be met for the policies to be considered adequate; the auditors found that none of the 18 criteria were met.

The following presents information about the auditors' ratings on Standard Five:

Criterion 5.1: Program-centered budgeting

Four policies were presented to auditors regarding budgeting processes. *Policy Code DBC* requires that the superintendent "Prepare and disseminate a budget preparation schedule…for the school year." *Policy Code DD* requires that the board be kept informed of possible sources of state and federal and other funds for support of the schools. *Policy Code DDA* permits the district to submit proposals to private foundations and other sources of financial aid. *Policy Code FCB* permits the board to close schools based, in part, on operational costs. No polices address program–centered budgeting. No points were awarded this criterion.

Criterion 5.2: Resource allocation tied to curriculum priorities

Policy Code DBC requires that the "Superintendent prepare and disseminate a budget preparation schedule to accomplish all required budgetary actions for the following school year." *Policy Code BBAA* gives the Board the authority to develop and approve policy to promote the "cost-efficient and equitable operation of the District." Policy expectations requiring development of multi-year budgets based on documented needs were not found. No points were awarded this criterion.

Criterion 5.3: Environment to support curriculum delivery

Policy Code EB establishes procedures to protect the safety of all students, employees, visitors, and other present on school property through the creation of a plan to address maintenance, safety, reports of defects in buildings and grounds, and misuse of facilities. *Policy DFG* permits the district to review and take action on proposed rezoning or other land transfers that may impact schools or school facilities. *Policy Code ECF* establishes objectives and guidelines for energy conservation procedures to save utility costs while maintaining

a healthy and comfortable learning environment. No polices address overall facilities planning to address future instructional trends. No points were awarded this criterion.

Criterion 5.4: Support systems focused on curriculum design and delivery

References connecting other support services—such as transportation, technology, or nursing services—to student learning were not found. No policy statements were found that would require the evaluation of support services or periodic reports to the board. No points were awarded for this criterion.

Criterion 5.5: Data-driven decisions for the purpose of increasing student learning

No policy statements were noted that referenced the use of data analysis to improve student learning. No points were awarded for this criterion.

Criterion 5.6: Change processes for long-term institutionalization of district priority goals

No policies referenced change or implementing change processes. No points were awarded this criterion.

Exhibit 1.1.7 shows the percentage of adequacy of board policies, rules, and regulations for each of the five standards and an overall adequacy percentage for all five standards.

Exhibit 1.1.7

Summary Ratings of the Auditors' Analysis of Board Policy and Administrative Regulations to Determine Quality and Degree of Adequacy Tucson Unified School District January 2014

Standard	Number of Criteria	Number of Possible Points	Points Given	Percentage of Points Relative to 70% Standard for Adequacy
One	6	18	2	11
Two	5	15	1	7
Three	5	15	1	7
Four	4	12	1	8
Five	6	18	0	0
Overall Rating For all Criteria	**26**	**78**	**5**	**6%**

As can be noted, district policies, rules, and regulations scored five out of a possible 78 points. Scores for each of the five categories are as follows: Control—2 of 18, Direction—1 of 15, Connectivity and Equity—1 of 15, Feedback—1 of 12, and Productivity—0 of 18. To be considered adequate, an overall score of 57 points, or 70 percent, is required. With an overall score of five points, or six percent, the policies, rules, and regulations of the Tucson Unified School District do not meet the audit standard for effective governance and are considered inadequate.

In summary, the auditors compared governing policies, rules, and regulations to audit criteria for quality in the areas of control, direction, connectivity and equity, feedback, and productivity. It was determined that board policies, rules, and regulations are inadequate to direct the superintendent and staff for effective management of curriculum and other district functions. More specifically, no board policies or administrative regulations clearly require specificity or similar curriculum requirements that would help teachers identify student mastery of critical learner objectives aligned with accountability measures. Policies related to assessment and curriculum contain no direction for formative assessment instruments, denying teachers access to information about student progress in mastery of learner objectives on a frequent basis (see Recommendation 1).

Finding 1.2: Some planning documents meet audit criteria to direct student achievement improvement efforts; however, they are not consistently used or implemented and require updated needs assessments, increased coordination with budget planning, and expanded informational contents to optimize the potential for attaining desired outcomes. District leaders report that they are initiating a new process that will unify several plans, integrate the priorities for improvements, and expand the inclusivity of planning participation.

Quality planning is a critical component of governance and management leadership in school districts intent on meeting goals for successful student learning and achievement as well as for effective operations across the system. The planning function typically involves a variety of stakeholders in developing goals, strategies, and recommended actions that speak to current data as well as future informational projections. The finalized documents include clear goals, implementation actions and targeted dates for accomplishment, responsible persons for ongoing monitoring and implementation roles, and identification of resources needed and how they are to be attained, as well as information about methods for determining and reporting progress. Plans can be presented in a variety of formats for multi-year coverage, but clarity of procedures for updating and modifying of goals, actions, and other contents are typically spelled out in the plan documents to ensure common organizational understanding of plan monitoring and ongoing modifications in response to current data. Quality plans resulting from such a process are formally recommended by the superintendent, approved by the governing board, and subsequently implemented with collaboration across the system.

To obtain a comprehensive understanding of the planning functions and documents in the Tucson Unified School District, the auditors reviewed state and local expectations for planning as identified in directives from the Arizona Department of Education, local school board policies, and a relevant federal court order. The team reviewed all planning documents provided by the district staff and interviewed board members, district administrators, principals, several teachers and other school-based staff, and parents and community members who opted to participate in the auditors' group interviews.

The auditors found that current board policies do not provide adequate direction for expected planning processes or plan contents. Planning in the district in the last few years has been fragmented. Various offices have developed program or activity specific plans that relate to a federal, state or local mandate but those plans did not connect to a comprehensive district plan. The planning process that has been taking place over the last few months was also reviewed by the auditors and was found to have the minimum characteristics of quality planning..

The audit team found that primary plans have been those required by the state or by a federal court: the district's Continuous Improvement Plan (CIP), schools improvement plans, a Unitary Status Plan (referred to as a desegregation plan), and the TUSD Information Technology Plan. Auditors' review determined that the district's Continuous Improvement Plan and the sample of 10 schools' improvement plans contained the characteristics to be considered adequate for driving improvement actions; nevertheless, these plans have not been consistently used at all levels of the organization, thus limiting their potential impact. A document that provides guidance to the Continuous Improvement Plan, Title I, and related plans is the Support Plan Protocol for Struggling Schools (2013-14). The document lays out expectations for plan preparation, data-based actions, clearly identified responsible persons, and timelines, with the goal of creating more consistency among plans and collaboration on content quality and implementation strategies.

The technology plan met the criteria to be considered adequate as a departmental plan, though there is considerable updating needed based on current needs and status of projects. Another plan that met audit expectations is the facilities master plan, which is specifically addressed in Finding 5.2. Overall, the auditors observed a significant need for the projected modifications of planning processes and products to attain organizational cohesion and improve overall efficiency and effectiveness.

In February 2014, a month after the auditors' site visit, the district's new strategic planning process moved forward. Auditors learned of several preliminary input sessions involving internal and community stakeholders. The new district administrative leaders have established two transitional plans to be considered and integrated into the resulting strategic plan, which is intended to unify district, department, and school goals and priorities

for comprehensive long-term planning. These plans are identified as the Instructional Leadership Plan and the Business Leadership Plan and are intended to provide some fundamental information for the planning process. Most of the former district and school-based processes leading to the various plans currently available were more limited in participation, inconsistent in procedures, and isolated in many planned actions.

Documents currently available indicate that historically much of the district's planning has been undertaken in the context of the Continuous Improvements Plans (CIP) required for districts and schools to qualify for Title I and other grant funds. That plan requirement focuses on one year at a time. The auditors noted that the document currently titled a "strategic plan" is actually a comprehensive facilities and resource plan that addresses general program needs in the context of pursuing decisions about school closures and mergers over the past three years but is not a comprehensive system-wide strategic plan. The other plans address specific areas of district operations, such as The TUSD Information Technology Plan, the facilities master plan, and the Unitary Status Plan—also referred to as the "desegregation plan" (see Findings 3.5 and 5.9).

As noted earlier, planning previously has occurred by units in relative isolation and with only general and minimal integration among contents. An exception was the process used in determining school closures and mergers during the past three years, which relied on facilities data and resulted in the facilities Strategic Plan that provided for those decisions (see Finding 5.2). Based on existing information about the currently developing process, the auditors found this emerging process to be an improvement in inclusive participation and comprehensive coverage.

Lacking a comprehensive district strategic plan, the auditors opted to evaluate the current District Continuous Improvement Plan (CIP) using audit criteria for quality district plans. The school district had obtained permission from the Arizona Department of Education to continue the existing actions in the CIP until the completion of the new strategic planning process. According to the DOE website,

> USD will conduct a comprehensive needs assessment in the following areas: Teaching and Learning, Curriculum Alignment, District Operations, and Efficiency. Once this is done, all portions of the LEA plan will be evaluated against the identified priorities and revisions will be made. TUSD central leadership will ensure implementation of revisions via the allocation of resources. Progress on the use of resources to help improve student achievement will be monitored throughout the year and evaluated at the end of the year. TUSD central leadership will ensure that a continuous improvement process is put into place.

The auditors' review resulted in their rating the district CIP as adequate in quality to provide direction for improving student achievement. The missing element was delineation of budgetary and other resources needed for plan implementation, a component absent in all the school plans as well. However, interviews suggested that the CIP was not used as the central guiding plan for decisions across departments.

The auditors found that, for the most part, the schools' Continuous Improvement Plans in the sample were congruent with the stated district priority of improving student achievement for students. The plans as a collection met the expectations for quality school plans; however, some in the sample of 10 plans lacked a few characteristics used as audit criteria to determine plan quality. The plans were inconsistent in structure, though most contained the highlights of Arizona DOE requirements. All school plans lacked clarity on the resources needed for action steps. In a few instances, the planned percentages of improvement appeared unrealistic for the one-year time frame, and evaluation methods for actions other than those linked to student assessments were absent.

Direction for Planning

The Arizona Department of Education outlines the requirements for Continuous Improvement Plans and provides the technological source (Arizona Local Education Agency Tracker system, or ALEAT) for updating and reporting plan contents and progress as new data emerge. Districts and schools are encouraged by the DOE to update their plan information monthly, though most plans appear to be updated once or twice during a year. As required for all local education agencies seeking funds from Titles I, II, III and technology support grants, the school district has prepared and updated a District Continuous Improvement Plan (DCIP) as described

above, along with the TUSD Technology Plan. Similarly, most of the schools in the sample reviewed by auditors have developed campus-based Continuous Improvement Plans; some have submitted updated plan reports on ALEAT.

The district leaders required development of the transitional Instructional and Business Leadership Teams' Plans, which will feed into the strategic planning process that began in February and result in a comprehensive plan. The Unitary Status Plan is directed and its contents identified by the federal courts, though most determination of how the plan implementation will be organized locally rests with the district (see Finding 3.5). The leadership intent reported to auditors is to also incorporate components of all existing district plans and the Unitary Status Plan in the district's new strategic plan.

Board policies address some aspects of local district planning but include no specific policy directing the planning process or requirements for planning document contents:

- *Board Policy DBC: Budget Planning, Preparation and Schedules* simply requires the superintendent to prepare an annual schedule to address required budget preparation work.
- *Board Policy IGE: Curriculum Guides and Course Outlines* requires curriculum guides and course outlines but does not require a curriculum management plan or a related program assessment plan.
- *Board Policy IGA: Curriculum Development* recognizes the need for ongoing development of curriculum and program evaluation and includes expected components of planning. However, the policy does not require a documented plan.
- *Board Policy IJJ: Text/Supplementary Materials Selection and Adoption*, per state law, requires board approval and adoption of textbooks, supplemental course books, E-books, and software for courses. The policy provides guidelines for preparation of recommendations for such adoptions but does not require a planned curriculum and resource adoption plan.
- Although Section F of the policies is titled "Facility Planning and Development," there is no requirement in those policies for a comprehensive, long-range facilities plan.

The TUSD board policies do not provide direction or specific expectations for comprehensive, long-range planning functions. General references are included, but there is a lack of clarity regarding planning processes and documented products to link ongoing work across the district to the district mission and goals and to continuously improve student learning and system operations.

The auditors also reviewed job descriptions as possible sources of direction or responsibility for planning functions and noted minimal direction in those documents:

- Superintendent—makes no mention of responsibility for oversight or direction of district planning.
- Deputy Superintendent of Operations—"Leads the Business Leadership Team to meet and support the Superintendent's goals and District's vision…. Ensures that a strategic and tactical planning process in each department is aligned to the District mission, vision, values and goals."
- Deputy Superintendent of Teaching and Learning—contains no functions of leading or monitoring planning.
- Executive Director, Innovation and School Improvement—"analyzes, evaluates and ensures that the goals and objectives of Tucson Unified School district are accomplished according to established priorities, time and funding limitations…."
- The Principal job description contains several components that either directly or implicitly indicate an expectation that they lead and/or oversee site-based planning functions.

Exhibit 1.2.1 lists the documents identified as plans and provided to the team for review.

Exhibit 1.2.1

Planning Documents Reviewed by Audit Team
Tucson Unified School District
January 2014

Document	Date
Tucson Unified School District Vision and Core Values	2012
Superintendent Goals	2012-13
Strategic Plan 2011-12	March 3, 2011
District Continuous Improvement Plan 2013-14	2013
School Continuous Improvement Plans 2013-14	(Various)
School Staff Development Plans & Calendars 2013-14	2013
Technology Plan 2012-15	June 12, 2012
Business Leadership Plan	December 10, 2013
Instructional Leadership Plan	December 10, 2013
Support Plan Protocol for Struggling Schools	2013-14
Communications Plan 2013-14	2013
Unitary Status Plan Review and Assessment Sub-plans: • Plan: Leadership plan to develop African American and Latino administrators (p. 26, COrd). • Plan: Academic and Behavioral Supports Assessment and Plan (p. 27 COrd). • Plan: Advance Learning Experiences and Recruitment Plan (p. 27, COrd). • Plan: Dropout Prevention and Retention Plan (p. 33, COrd). • Plan: Effectiveness: Any benchmarks or measures of effectiveness for the Unity Status Plan and supporting documents. • Plan: Intentional Equal Access Plan • Plan: Intentional Student Advocacy Plan • Plan: Magnet School Plan (p. 9, COrd). • Plan: Reports from any internal or external compliance monitoring source dealing with the Unitary Status Plan. • Plan: Restorative School Culture and Climate Plan • Plan: School Master Plan (not the PowerPoint). • Plan: Staff Recruitment action Plan and related personnel plans that address race and gender imbalances on the TUSD staff. • Plan: Student Assignment Plan. • Plan: Task Force "comprehensive plan for significantly improving the academic performance of African American students" (p. 38, COrd). • Plan: Special Education IDEA plan • Plan: ELL plan for district	2012

The auditors were provided no district staff development plan, no curriculum management plan, no student assessment and program evaluation plan, nor other departmental plans except for the TUSD technology plan, the strategic plan and master plans for facilities, and a communications plan.

The Audit Approach to Analyzing Planning and Plans

The auditors reviewed the TUSD planning documents provided and interviewed district leaders and other personnel to understand the planning processes for the resulting plans. Three levels of analysis were used: (1) the district's overall planning process and how it has been implemented within the organization, (2) a review of

the district plan or plans auditors selected to represent the district's primary planning document(s) at this time, and (3) the planning process for departmental and/or schools' continuous improvement.

Using audit criteria, the following exhibit summarizes the auditors' analysis of the TUSD planning processes in the two recently developed plans and in the strategic planning process launched in February 2014. For the planning quality to be considered adequate, six of the eight characteristics must be rated as adequate. Any characteristics indicated as partially adequate are considered inadequate for the purpose of this analysis, but auditors provide that information to assist in clarification.

Exhibit 1.2.2

Characteristics of Quality Planning Criteria—
Design, Deployment, and Delivery
Tucson Unified School District
January 2014

There is evidence that…	Auditors' Rating	
	Adequate	**Inadequate**
1. Policy Expectations: The governing board has placed into policy the expectation that the superintendent and staff collectively discuss the future and that this thinking should take some tangible form without prescribing a particular template, allowing for flexibility as needed.		X
2. Vision/Direction: Leadership has implicit or explicit vision of the general direction in which the organization is going for improvement purposes. That vision emerges from having considered future changes in the organizational context.	X	
3. Data-driven: Data influence the planning and system directions/initiatives.	X	
4. Budget Timing: Budget planning for change is done in concert with other planning, with goals and actions from those plans driving the budget planning.		X
5. Day-to-Day Decisions: Leadership makes day-to-day decisions regarding the implicit or explicit direction of the system and facilitates movement toward the planned direction.	X	
6. Emergent/Fluid Planning: Leadership is able to adjust discrepancies between current status and desired status, facilitates movement toward the desired status, and is fluid in planning efforts (emergent in nature).	X	
7. Deliberate Articulated actions: Staff are involved in a purposeful way through such efforts as school/unit improvement planning, professional development councils, and district task forces that are congruent with the articulated direction of the system or system initiatives.	X	
8. Aligned Professional Development: Professional development endeavors are aligned to system planning goals and initiatives.	X	
Total	**6**	**2**
Percentage of Adequacy	**75%**	

After combining information about the current strategic planning process and the process of developing the transitional leadership plans, auditors evaluated the district's planning efforts. The planning process as recently used and currently in place gave evidence of six of the eight characteristics (75 percent) and is considered adequate in quality. The following comments are intended to clarify the auditors' analysis summarized in Exhibit 1.2.2.

Policy Expectations: The primary weakness in policies is that there is no local clarification of the process intended or what plans are to be undertaken within the school system. In spite of the policy weakness, the current

district leadership teams have developed a planning process that informed the development of transitional plans and the current strategic planning procedures.

Vision/Direction: The TUSD leaders have clarified a vision for the general direction of the district improvement purposes and have considered a variety of anticipated changes in establishing the vision and the continuous improvement intent. As the process unfolds, there is clear intent of integrating future plans and creating cohesive goals and actions to support the vision and focus direction for the system and its components.

Data-driven: As the new planning process unfolds, auditors learned that a variety of data are either being used or are clearly expected to be used to inform the decisions. Examples identified were student performance data, human resource information on recruitment and hiring, school enrollment and related facilities data, technology inventory and needs assessment information, and financial and budgetary informational updates.

Budget Timing: Budget planning has not always been conducted in the context of other plan development. Auditors could not identify any clear and specific plans for coordinating the planning work with budget planning; however, this characteristic may be met as the initial steps in the planning process progress.

Day-to-Day Decisions: Auditors identified a current focus on leadership's use of the transitional Business Leadership and Instructional Leadership Teams' plans in ongoing decisions. The Superintendent's Goals, the BLT Plan, and the ILT Plan are already serving to focus discussions in meetings and setting the practices that will follow the new strategic plan implementation. The expressed and publicized intent is that the eventual strategic plan will drive daily and annual decisions and "focus all work across the school district."

Emergent/Fluid Planning: The efforts of the new leadership team are already addressing the need to merge current plans with future plans and identify ways to track data as well as plan progress so that the resulting strategic plan becomes "a living, breathing, and active document." The expectation of periodic progress reports has also been announced.

Deliberate Articulated act**ions:** Based on the written and orally stated information provided to auditors, the intent of the emerging planning process is to promote more focused and intentional actions at all levels of the district, from schools to the district administration. Establishing groups for ongoing review and input to plan modifications has been mentioned by the leadership as the new strategic planning model emerges.

Aligned Professional Development: The ILT plan, Section II: Planning and Student Performance specifically includes three initiatives for professional development to support the plan's work. The BLT, Section II: Personnel Focus, Initiative 9 includes specific and aligned professional development to enhance the strength of implementation. The district's CIP emphasizes training of principals and school teams in data use, along with the leadership academy and other staff development offerings.

Comments about planning that were offered in interviews included the following;

- "This new planning process will be much more inclusive than most planning of the past has been." (District Administrator)
- "It sounds as if the leaders really want all of our input on the new district plan." (Parent)
- "Integrating elements of many plans requires our understanding them during the planning process." (Building Administrator)
- "We've never lacked for vision, we lacked for the follow-through on the vision." (Teacher)
- "From the small details to the big vision, we are going in the right direction." (District Administrator)

TUSD Continuous Improvement Plan

The auditors reviewed the District Continuous Improvement Plan (2013-14) as the current comprehensive central plan since the document labeled "strategic plan" focused on facility planning. Auditors were told that the plan reflects the district's intended "continuing actions" and that the Department of Education approved this as an interim plan until the new strategic planning process is completed. The leadership teams' plan documents also reflect several congruent content areas and are referred to in the following analysis to identify

more specifically the plan contents beyond the compliance CIP document. With the absence of an adopted strategic plan, the CIP has only data and observations to guide its contents, which has led several district and school leaders to ignore it as "an isolated plan that is compliance only."

The following exhibit summarizes the auditors' analysis of the CIP and is followed by explanatory comments, with some of those comments referring to the leadership team plans that focus on some of the CIP strategies. To receive an overall adequate rating on characteristics of the district plan, six of the seven traits must receive an adequate rating. Partially present characteristics are noted, through an inadequate rating given for these characteristics.

Exhibit 1.2.3

Characteristics of District-wide Plan Quality
for Design, Deployment, and Delivery
Tucson Unified School District
January 2014

Characteristics	Auditors' Rating	
	Adequate	Inadequate
1. Reasonable and Clear: The plan is reasonable; it has a feasible number of goals and objectives for the resources (financial, time, people) available. Moreover, the goals and objectives are clear and measurable.	Partial	
2. Emergent/Fluid: The plan allows for emergent thinking, trends, and changes that impact the system both internally and externally.	X	
3. Change Strategies: The plan incorporates and focuses on those action strategies/interventions that are built around effective change strategies (e.g., capacity building of appropriate staff).	X	
4. Deployment Strategies: The plan clearly delineates strategies to be used to support deploying the steps and tasks outlined in the plan (e.g., orientation to the change, staff development on the proficiencies needed to bring about the change, communication regarding planned change).	X	
5. Integration of Goals and actions: All goals and actions in the plan are interrelated and congruent with one another.	X	
6. Evaluation Plan and Implementation: There is a written plan to evaluate whether the objectives of the plan have been met (not to evaluate whether or not the activities have taken place). Evaluation components of plans are actions to be implemented; plans are evaluated for their effects or results, and they are then modified as needed. There is both frequent formative evaluation and annual summative evaluation, so that plans are revised as needed.	X	
7. Monitoring: Systems are in place and are being implemented for assessing the status of activities, analyzing the results, and reporting the outcomes that take place as the plan is designed and implemented.	X	
Total	**6**	**1**
Percentage of Adequacy	**86%**	
Partial ratings are counted as inadequate.		

Because the auditors observed six of the seven (86 percent) characteristics to be adequately addressed in the TUSD Continuous Improvement Plan, they found the district's CIP to be adequate for driving improvement efforts in the school system. The audit team's following comments are intended to help clarify the ratings in Exhibit 1.2.3.

Reasonable and Clear: The goals identified in the state-directed Continuous Improvement Plan documents are simply worded as topics, or areas of organizational function: (1) Continuous Improvement; (2) LEA (Local Education Agency) Leadership; (3) Curriculum and Instructional Systems; (4) Supplemental Supports and

Interventions; (5) Data, Assessment, and Evaluation; and (6) Stakeholder Relations. Although these appear as "goals" and are broad and general as to what is intended, the strategies and action steps determined by the district are clear and, for the most part, measurable. However, no budgetary information is included to plan for resource support of the specific efforts.

Emergent/Fluid: The Arizona Local Education Agency Tracker system (ALEAT) used for reporting and tracking the CIP implementation provides a framework for including and reporting emerging information and allows for modifications as needed in response to that information. Ongoing use of information such as formative assessments, surveys, and other feedback provides open opportunities for modifications as needs are recognized. Additionally, specific expectations of the use of data to identify emerging needs for such modifications as interventions and staff mentoring are included in the CIP. While the characteristic is present, using the fluidity has not been consistently present.

Change Strategies: The plan includes such efforts as specific staff development related to action steps (e.g., The Leader in Me reform model training and support). Specific interventions responding to data-identified needs are also included in the plan.

Deployment Strategies: The plan clearly communicates how the actions are to be undertaken, including the persons responsible for leadership in the action steps. Professional development is included in the transitional plans and the district CIP and is expected to be identified in the future strategic planning document.

Integration of Goals and act**ions:** The goals, strategies, and action steps are clearly integrated and are congruent with each other. Since the goals are simply the topical areas of continuous improvement required by the state, the strategies and actions link with each other tightly as well as with the required goals/areas. Auditors also note linkage with the district's technology plan, the Business Leadership Team Plan, and the Instructional Leadership Team Plan.

Evaluation Plan and Implementation: The plan includes references to specific assessment and data sources, as well as to various staff meetings for ongoing progress review. The Department of Education's urging that ALEAT be used to record monthly updates provides a convenient resource for entering formative as well as summative information for making modifications driven by those data. The CIP also referred to three questions that led leaders in choosing the current CIP document and in developing the transitional leadership teams' plans to guide work until the strategic plan is completed: "1) What worked last year? 2) What needs to be improved? 3) What did not make the previous two lists and possibly needed to be abandoned?" Data sources used were student achievement data, grades assigned to TUSD schools, and some survey data.

Monitoring: As indicated in the previous paragraph, the plan addresses a variety of sources for progress review, and the Arizona DOE system provides the technological system for ongoing modifications. Auditors were told that the Director of Title I and the Director of School Improvement are the key monitors of this plan.

Auditors heard several comments related to the district's Continuous Improvement Plan or the lack of a district-wide strategic plan:

- "We have…the new ILT and BLT plans that are a driving force for the Strategic Plan and are aligned with USP." (District Administrator)
- "We need a five-year comprehensive plan." (District Administrator)
- "The CIP is a state requirement—not aligned to anything and has been a compliance document." (District Administrator)
- (Regarding the Continuous Improvement Plan) "To be honest, I don't know if we have one. We are not using it. It is more of compliance." (District Administrator)
- "We have to have a strategic plan to provide guidance on those things we don't agree on—Are we following the will of the community and going in a common direction." (District Administrator)
- "Our greatest challenge has been that we don't have a consistent and comprehensive district plan to focus our work." (Building Administrator)

Quality of School Plans

The third level of analysis considers the planning documents for various departments and those from school sites. The audit team had access to Continuous Improvement Plans (a total of over 95 documents) for all schools except the following: Sabino and Sahuaro High Schools, Collier and Gale Elementary Schools.

The review for quality of school and departmental plans included a random sampling of 10 school plans and the TUSD Information Technology Plan as a representative of departmental planning, even though it is a plan required for ongoing Title and other grant funding. The auditors assigned random numbers to the school plans provided by the district and selected a 10 percent sample of the plans for analysis in the audit. The schools for which plans were selected for review and analyzed as a sampling were:

- Elementary schools: Carrillo, Erickson, Kellond, Marshall, and Warren;
- K-8 magnet schools: Safford Magnet;
- Middle schools: Magee and Secrist; and
- High schools: Rincon and Tucson Magnet.

During this plan analysis, if the review of the sample plans produced an adequate combined rating on six of the seven characteristics, the plan quality was considered adequate. As in earlier exhibits, when a characteristic was deemed partially adequate, that was noted, but the overall rating for that characteristic was considered inadequate. To provide a summary of auditors' observations in analysis of the school plans, the following exhibit reports the number of adequate and inadequate ratings for the total sample of 10 plans and then the overall percentage of adequacy.

Exhibit 1.2.4

Characteristics of School Improvement Plan Quality
for Design, Deployment, and Delivery
Tucson Unified School District
January 2014

Characteristics	Auditors' Rating	
	Adequate	Inadequate
1. Congruence and Connectivity: Goals and actions are derived from, explicitly linked to, and congruent with the district plan's goals, objectives, and priorities.	10	0
2. Reasonable and Clear: The plan is reasonable; it has a feasible number of goals and objectives for the resources available (finances, time, people). The goals and objectives of the plan are clear and measurable.	0	10
3. Emergent/Fluid: The plan allows for emergent thinking, trends, and changes that impact the system both internally and externally.	10	0
4. Change Strategies: The plan incorporates and focuses on those action strategies/interventions that are built around effective change strategies (e.g., capacity building of appropriate staff).	10	0
5. Deployment Strategies: The plan clearly delineates strategies to be used to support deploying the steps and tasks outlined in the plan (e.g., orientation to the change, staff development on the proficiencies needed to bring about the change, communication regarding planned change).	8	2
6. Integration of Goals and actions: All goals and actions in the plan are interrelated and congruent with one another.	10	0

Exhibit 1.2.4 (continued) Characteristics of School Improvement Plan Quality for Design, Deployment, and Delivery Tucson Unified School District January 2014		
Characteristics	**Auditors' Rating**	
	Adequate	**Inadequate**
7. Evaluation Plan and Implementation: There is a written plan to evaluate whether the objectives of the plan have been met (not to evaluate whether or not the activities have taken place). Evaluation components of plans are actions to be implemented; plans are evaluated for their effects or results and modified as needed. There is both frequent formative evaluation and summative evaluation, so that plans are revised as needed.	8	2
8. Monitoring: Systems are in place and are being implemented for assessing the status of activities, analyzing the results, and reporting outcomes that take place as the plan is designed and implemented.	10	0
Total Ratings in Category	**66**	**14**
Percentage of Adequacy	**83%**	

The summary of allocated ratings in Exhibit 1.2.4 shows that 83 percent of the characteristics were rated as adequate, indicating that the overall quality of the school plans in the sample of 10 schools as adequate for design, deployment, and delivery.

Congruence and Connectivity: As directed by the Arizona Department of Education, all plans were driven by one goal, Improve Student Achievement. That goal and the strategies and action steps were found to be congruent with district plan goals and documented priorities.

Reasonable and Clear: In general, the plans were found to be reasonable and clear, but the component preventing a rating of adequate was the absence of any budgetary information in the plans. A few mentioned adding staff, contracting with external sources, or other steps that would require human and financial resources, but these were not clearly stated and included in any of the plans. Two plans contained anticipated improvement percentages that were questionable in their being reasonable for a single year accomplishment.

Emergent/Fluid: The plans varied in how the information related to emerging needs was to be gathered and by whom it might be used, but the overall rating was adequate since it was clear that the intent is to address emerging needs and trends and the relevant information from within the system as well as externally. The use of ALEAT provides the point of data reporting and revision reporting.

Change Strategies: All plans in the sample clearly incorporated change strategies responding to the needs assessment reflected in the data. The strategies varied from professional development to specific resources for interventions to changes in delivery of educational services.

Deployment Strategies: The two plans that were considered too weak in clarity regarding implementation of indicated strategies did not provide sufficient detail for some action steps. In the process of reviewing the 10 sample plans, the auditors noted a wide range in the number of action steps chosen for 2013-14 by the schools. The number of action items per plan ranged from seven to 27, with the greater numbers of action steps emerging from secondary school plans. Nevertheless, most plans were clear as to deployment strategies.

Integration of Goals and actions: All plans adequately provided clear relationships among the strategies and action steps, and internal congruence was evident in all documents.

Evaluation Plan and Implementation: The plans receiving inadequate ratings provided insufficient attention to formative and varied ongoing evaluation to support timely implementation. They also did not provide adequate information on how results would be assessed after professional development and identified only attendance/sign-in sheets as measurement.

Monitoring: All schools in the sample provided a variety of monitoring approaches that ranged from specific staff assigned to action steps, to Professional Learning Communities for monitoring, to grade-level or content-area teams taking the lead in monitoring.

During the many interviews, auditors heard several comments related to school plans. Among them were:

- "Improvement plans are compliance at this point." (District Administrator)
- "Our school plans don't seem to mean much." (Building Administrator)
- "If something is a compliance plan, people assume it doesn't really matter after it is submitted." (Building Administrator)
- "We're good in writing plans but weak in implementing them." (Building Administrator)

The TUSD Technology Plan

The auditors reviewed the district's technology plan as representative of a departmental plan at the district level. Since most of the information related to specific actions for 2013-14 and 2014-15 was not contained in the document provided, the auditors evaluated the plan in the context of the dates identified for which the information was complete (2012-13).

For the plan quality to be considered adequate, six of the eight characteristics must be rated as adequate. Any characteristics indicated as partially adequate are considered inadequate for the purpose of this analysis, but auditors provide that information to assist in clarification.

Exhibit 1.2.5

Characteristics of Department Plan Quality
for Design, Deployment, and Delivery: TUSD Technology Plan
Tucson Unified School District
January 2014

Characteristics	Auditors' Rating	
	Adequate	Inadequate
1. **Congruence and Connectivity:** Goals and actions are derived from, explicitly linked to, and congruent with the district plan's goals, objectives, and priorities.	X	
2. **Reasonable and Clear:** The plan is reasonable; it has a feasible number of goals and objectives for the resources available (finances, time, people). The goals and objectives of the plan are clear and measurable.	X	
3. **Emergent/Fluid:** The plan allows for emergent thinking, trends, and changes that impact the system both internally and externally.	X	
4. **Change Strategies:** The plan incorporates and focuses on those action strategies/interventions that are built around effective change strategies (e.g., capacity building of appropriate staff).	X	
5. **Deployment Strategies:** The plan clearly delineates strategies to be used to support deploying the steps and tasks outlined in the plan (e.g., orientation to the change, staff development on the proficiencies needed to bring about the change, communication regarding planned change).	X	
6. **Integration of Goals and actions:** All goals and actions in the plan are interrelated and congruent with one another.	X	

Exhibit 1.2.5 (continued) Characteristics of Department Plan Quality for Design, Deployment, and Delivery: TUSD Technology Plan Tucson Unified School District January 2014		
Characteristics	**Auditors' Rating**	
	Adequate	**Inadequate**
7. Evaluation Plan and Implementation: There is a written plan to evaluate whether the objectives of the plan have been met (not to evaluate whether or not the activities have taken place). Evaluation components of plans are actions to be implemented; plans are evaluated for their effects or results and modified as needed. There is both frequent formative evaluation and summative evaluation, so that plans are revised as needed.	X	
8. Monitoring: Systems are in place and are being implemented for assessing the status of activities, analyzing the results, and reporting outcomes that take place as the plan is designed and implemented.	Partial	
Total	**7**	**1**
Percentage of Adequacy	**87.5%**	
Partial ratings are counted as inadequate.		

The audit team found that 87.5 percent of the characteristics expected of a quality departmental plan are present in the TUSD Technology Plan. The following comments explain the ratings assigned by the auditors to the plan:

Congruence and Connectivity: The goals, strategies, and actions within the plan are linked to (and occasionally refer specifically to) the district priorities, the superintendent's goals, and expectations in the district's Continuous Improvement Plan. Even the information contained for various operational functions shows the relevance to such priorities as student achievement and curriculum management.

Reasonable and Clear: The plan is reasonable and clear. Although not all the budget information was available at the time the plan was drafted, the existing funds and anticipated new funds are referenced where needed for planning purposes. The options for contracted services and cost analysis and research are also clearly explained. Where flexibility of timing is anticipated, these needs are also identified.

Emergent/Fluid: Several clear references to information gathering that is expected to impact decisions within the plan implementation reflect an intent to allow emerging data and other information to influence the implementation. These references include a variety of sources such as staff and administrators, internal technology staff, and external technological expertise to contribute to each action step and its modification as needed during plan implementation.

Change Strategies: In addition to the previous comments about information gathering, the plan clearly acknowledges and prioritizes a wide range of training and capacity building for the system's many staff members, from office staff to classroom teachers and district management.

Deployment Strategies: Strategies and action steps are outlined clearly, staff development for enhancement of various proficiencies is expected, and the commitment to ongoing communication about the plan and the actions therein is addressed in several ways.

Integration of Goals and actions: The document's clear organization and explanation of the goals, actions, and related information result in a comprehensive picture of integrated work that considers the entire school system. Efforts in areas from instructional technology to heating systems and from copiers to student information systems represent a fully integrated approach to the plan.

Evaluation Plan and Implementation: The document focuses on accomplishment of the intended actions and identifies intended results; however, the means of evaluating progress or final results is not fully clear in the document.

Monitoring: In addition to the regular meetings with identified stakeholder groups for updating, the plan also includes information on how the progress will be managed and by whom.

Among the interview comments related to departmental planning or plans, auditors heard the following;

- "We were a jumble of independent contractors (in recent years)." (District Administrator)
- "We're happy that even the business end is becoming more involved in and knowledgeable about curriculum…ILT and BLT weekly meetings will really help." (Building Administrator)
- "Historically, the facility master plan was the only master plan in our district. We are making it part of the strategic plan for the district as a whole, using five things for input as we go along…Facility, program, finance, diversity, etc." (District Administrator)

Summary

The auditors reviewed over 100 documents related to planning in the Tucson Unified School District. They interviewed board members, district and school administrators, classroom teachers, and other staff about the planning processes and documents. They observed no clearly identified direction from the school board regarding expectations for planning processes and documents, which would ideally incorporate state expectations and extend beyond those to localized intentions. The team determined that the typical planning process leans heavily on the state requirements for LEA Continuous Improvement Plans and LEA technology plans; the improvement plans focus on one year at a time, thus minimizing the long-range views and goals that also need attention. However, the recently launched comprehensive strategic planning process and related information indicate that the current and future process incorporates the characteristics of quality planning.

The district currently lacks several anticipated planning documents: for example, curriculum management, staff development, and student assessment and program evaluation plans. Following their analysis, the audit team determined that based on audit expectations of characteristics within the district plan, the TUSD Continuous Improvement Plan is adequate to drive the intended ongoing efforts to improve student achievement. Of the seven characteristics expected, the auditors found six to be adequately present in the plan document. The lack of clear human resource needs and the absence of identification of budget or financial needs for the plan prevented an adequacy rating on the "Reasonable and Clear" characteristic. However, auditors acknowledge that the Business Leadership Plan, the Instructional Leadership Plan, and the Technology Plan are likely to enhance integrated support behind the CIP actions. Similarly, the court-ordered Unitary Status Plan is intended to feed into the new district-wide strategic plan.

Overall, the schools' Continuous Improvement Plans represented in the sample were rated adequate for mapping improvements in the one goal area directed by the state, Student Achievement. However, the quality would have been strengthened substantially with more supportive details in some plans and the inclusion of human and financial resource needs or allocations in all plans. The Support Plan Protocol for Struggling Schools provides a foundation for ongoing improvement of plans and their implementation.

The TUSD Technology Plan, reviewed as representative of a departmental plan, was also determined to be of adequate quality to drive the work of improving technological functions within the district.

As one administrator commented during interviews, "The planning problems are less with our plans and more with us and what we do or don't do with them."

Additional review and feedback related to specific plans are found in other sections of the audit report: See also Findings 2.1 (Curriculum/Instruction), 3.4 (Professional Development), 3.5 (Equity and the USP), 4.1 (Assessment and Program Evaluation), 5.1 (Budget), and 5.2 (Facilities and Operations).

Finding 1.3: The current Tucson Unified School District Administrative Organizational Chart does not meet audit criteria for sound organizational design and includes redundant and conflicting lines of authority. The organizational structure lacks crucial components, functions, and positions for effective organizational quality control.

Clarity of administrative role relationships is important to an organization in the productive grouping and management of its tasks and functions. A functional and accurate delineation of administrative relationships is generally depicted in graphic form and called an "Organizational Chart" or "Table of Organization." An organizational chart graphically depicts the line of authority and responsibilities from the Board of Education and Superintendent to site principals and classroom teachers for producing student learning.

Curriculum audit criteria require well-defined delineations of lines of responsibility and authorized authority, which is critical in guiding the design and delivery of a standard, functional curriculum and program of studies in the district. To serve as an effective guide in curriculum development, a school district's policy framework must be specific so decisions can be made by referencing relevant policies.

In order to analyze the adequacy of the Tucson Unified School District organizational chart, auditors requested, for review and analysis, copies of appropriate board policies, the Tucson Unified School District Organization Chart, district-provided job descriptions, and other documents communicating information about roles and areas of responsibility.

Several relevant documents were examined, including the following:

- 2013-2014 District Administrative Organizational Chart
- 2013-2014 Office of Student Equity and Intervention Organizational Chart
- Instructional Leadership Team Plan (illustrative schematic)
- Governing Board Policies and Regulations
    - *Policy GBEB-R: Regulation for Staff Conduct*

Auditors also interviewed all governing board members, all key members of the district and school administrative staff, and other individuals (support staff, teachers, parents, and community patrons) regarding the functions included in the organizational chart and job descriptions.

The auditors examined board policies relative to the administrative organizational chart, seeking to find the following topics among board policies or regulations:

- A policy requiring job descriptions that include accountability for the design and delivery of an aligned curriculum.
- Policy or regulation that requires professional appraisal processes that address specific accountability functions in job descriptions of all staff and relate to improvement of student achievement.
- Policy calling for an organizational chart that is annually reviewed and approved by the superintendent and presented to the board for its review.
- Policy specifications for decision-making bodies (e.g. cabinet, task forces, committees) regarding composition and decision-making responsibilities to ensure consistency, non-duplication of tasks, and measured results requirements.

The auditors were not presented with any Board policies or regulations addressing the above criteria (See Finding 1.1). However, one policy, *Policy GBEB-R, Regulation for Staff Conduct*, did require employees to adhere to job descriptions for their position. The auditors also examined job descriptions, which revealed that most position descriptions do not contain adequate information about the organizational chain of command (See Finding 1.4).

The TUSD 2013-2014 Organizational Chart, examined by the auditors, was revised by the superintendent on August 27, 2013, and the Office of Student Equity and Intervention 2013-2014 Organizational Chart was created on November 20, 2013. The auditors found that the organizational charts did not meet audit criteria for sound organizational management, included conflicting lines of authority, and were missing key functions in curriculum management quality control, as delineated in the narrative that follows.

The auditors reviewed the district's organization chart(s) and other documents and used the Curriculum Audit™ design principles to examine the organizational structure depicted in Exhibit 1.3.1a on the following page.

Also presented on the page following the next is a subsidiary organizational structure chart for the Department of Equity and Interventions, which is an expanded version of the unit shown in smaller scale on the chart displayed in Exhibit 1.3.1a. The subsidiary chart in Exhibit 1.3.1b is provided to illustrate the administrative structure in greater detail.

Findings with respect to the Tucson Unified School District Organizational Chart are directed toward the primary official district chart exhibited in Exhibit 1.3.1a.

Exhibit 1.3.1a

2013-14 TUSD Organizational Chart
Tucson Unified School District
January 2014

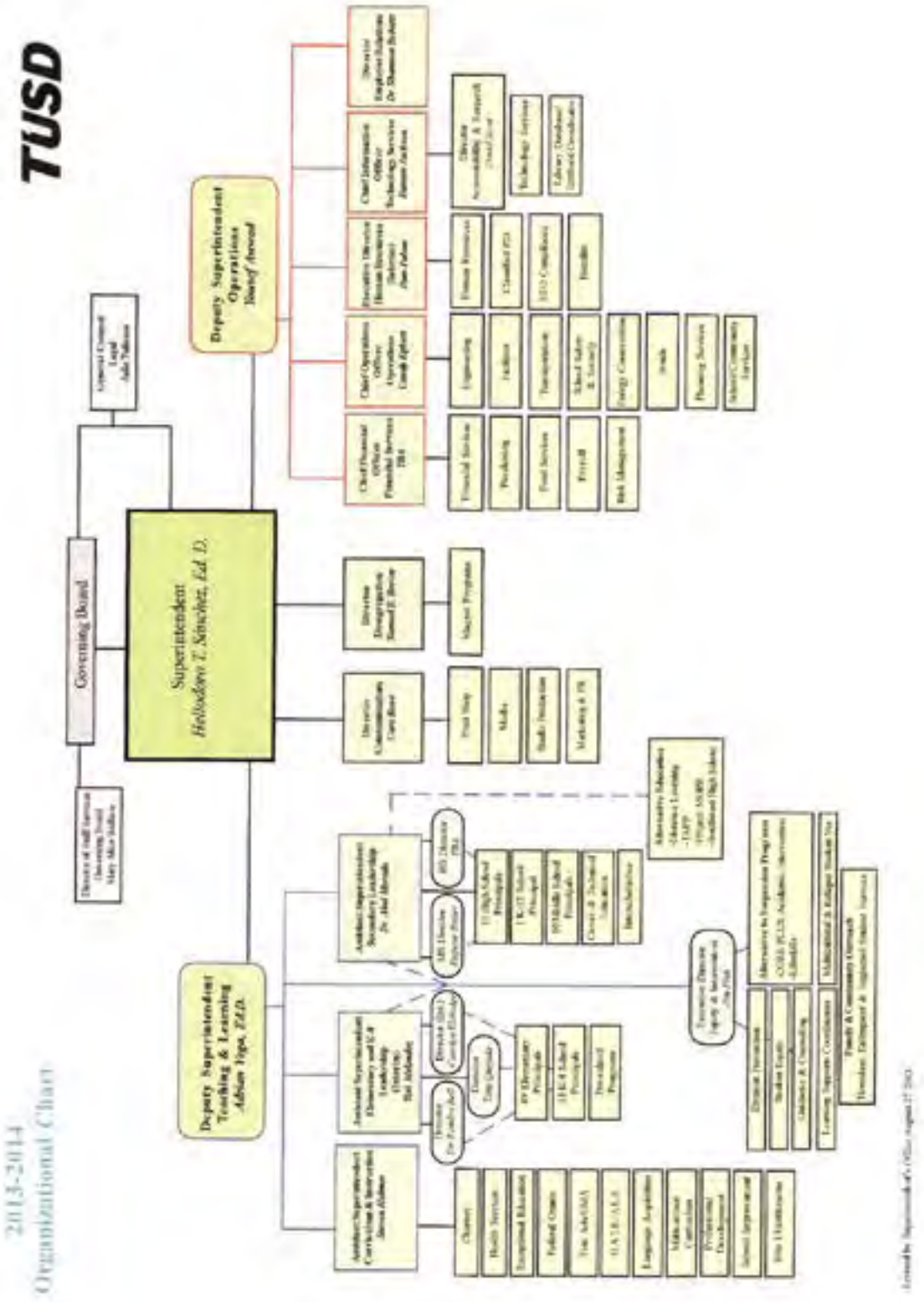
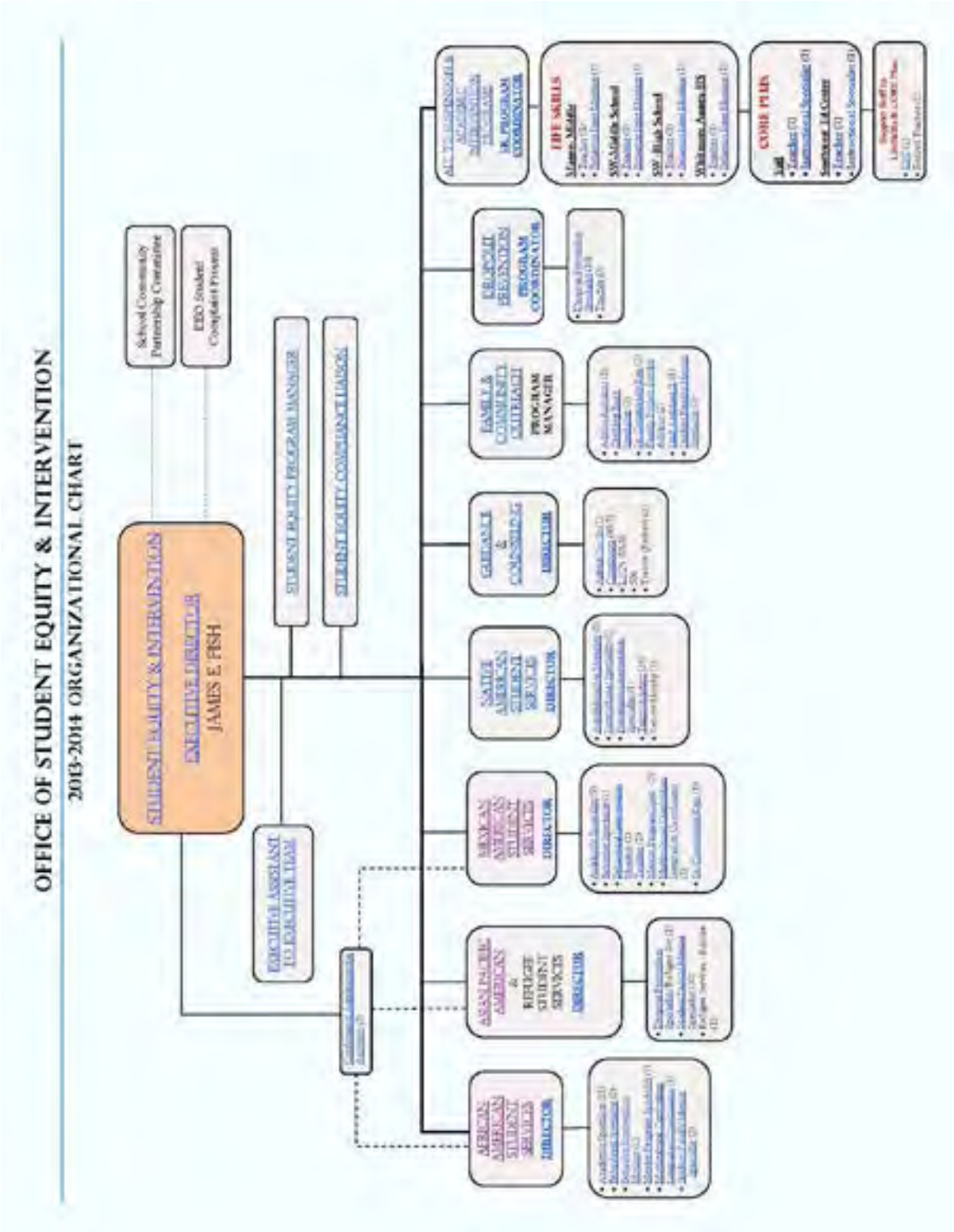


Exhibit 1.3.1b

2013-14 TUSD Organizational Chart
Tucson Unified School District
January 2014



The Principles of Sound Organizational Management used in the auditors' analysis are presented in Exhibit 1.3.2 below. The audit expectation is that all design principles listed will be met.

Exhibit 1.3.2

Curriculum Audit™ Principles of Sound Organizational Management

1. Span of Control	The span of control for effective day-to-day supervision requires direct responsibility for no more than 12 employees.
2. Chain of Command	No employee should have more than one supervisor to avoid being placed in a compromised decision-making situation.
3. Logical Grouping of Functions	Tasks of similar nature need to be grouped together. This keeps supervisory needs to a minimum (ensuring economy of scale).
4. Separation of Line and Staff	Line positions (principals and teachers) and staff positions (secretaries, custodians, etc.) need to be separate from curriculum design and program assessment functions. The administrators carrying out the primary mission of the district are not to be confused with those supporting it. Line administrators only report to line administrators.
5. Scalar Relationships	All positions shown at the same level need to have similar responsibilities, authority, and compensation.
6. Full Inclusion	All central functions that facilitate quality control need to be included in the organizational structure. All persons working within the district carrying out its essential line and staff functions should be depicted on the organizational chart.

The following exhibit (Exhibit 1.3.3) is the auditors' assessment of the district's current organizational chart based on the criteria presented in Exhibit 1.3.2.

Exhibit 1.3.3

Auditor's Ratings of Organizational Chart Criteria Compliance
Tucson Unified School District
January 2014

Criterion	Definition	Auditors' Rating
1. Span of Control	The span of control for effective day-to-day supervision requires direct responsibility for no more than 12 employees.	Partially Met
2. Chain of Command	No employee should have more than one supervisor to avoid being placed in a compromised decision-making situation.	Not Met
3. Logical Grouping of Functions	Tasks of similar nature need to be grouped together. This keeps supervisory needs to a minimum (ensuring economy of scale).	Not Met
4. Separation of Line and Staff	Line positions (principals and teachers) and staff positions (secretaries, custodians, etc.) need to be separate from curriculum design and program assessment functions. The administrators carrying out the primary mission of the district are not to be confused with those supporting it. Line administrators only report to line administrators.	Not Met
5. Scalar Relationships	All positions shown at the same level need to have similar responsibilities, authority, and compensation.	Not Met
6. Full Inclusion	All central functions that facilitate quality control need to be included in the organizational structure. All persons working within the district carrying out its essential line and staff functions should be depicted on the organizational chart.	Not Met

The Tucson Unified School District organizational charts achieved only one of six criteria for an adequacy score of 17 percent, which fails to meet curriculum auditing criteria, well below the minimum standard of 70 percent. Thus, the auditors found the TUSD organizational chart inadequate. To give details for the ratings in the above exhibit, the following narrative is provided from the auditors' review of the organizational chart data presented compared to the Curriculum Audit™ criteria:

1. Span of Control

This criterion was partially met. The Assistant Superintendent for Elementary and K-8 Leadership, along with three directors, is depicted supervising 49 elementary principals, 13 K-8 school principals, and an undesignated number of positions in preschool programs, for a total of greater than 62 administrators, hindering an appropriate span of control. Another instance of excessive supervisory responsibilities resides in the position of the Assistant Superintendent for Curriculum and Instruction, given that 11 departments with an unspecified number of administrative personnel are directly supervised by that position. Despite these two anomalies, most administrative spans of control appear to be within boundaries of propriety.

2. Chain of Command

This criterion was not met. This principle is controverted by the graphic depiction of organizational relationships. The chain of command is compromised with conflicting lines of authority at the implementation level. The Student Equity and Intervention Department functions under an Executive Director, who reports to the Superintendent, but positions in that division are often redundant and duplicative of positions in the core organizational chain of command. Services to students within schools appear to operate independently of the school principal's duties and supervisory responsibilities. External supervision (outside the school building) by district personnel destabilizes unity of command within a school unit.

Also, auditors learned that one or more previous superintendents moved to decentralize central, unifying functions and controls across the system, creating a fragmented organization that experiences complications in providing congruent, equitable, and uniform programs and services for students in all schools. Some teachers and principals were in agreement that cohesiveness within TUSD is somewhat scattered and incongruous.

The auditors found numerous instances where departments and functions operate and are managed separately and apart from a conventional configuration in which all positions serving school operations are in the chain of command down to the classroom in the school building. Auditors found that some disparate functions and positions are funded with external funds, which by definition are set apart from the normal district maintenance and operation fund—usually provided through federal sources.

School personnel report that such conflicting lines of authority are inconsistent and problematical. A few of the comments made to auditors that typify vexation with the disparate nature of decentralization and lack of consistency included the following:

- "Consistency [within] the district is lacking from site to site." (Teacher)
- "There are various managers whose functions are all reported in no cohesive way." (District Administrator)
- "[There are] too many redundant processes and issues where departments at the central-level are giving information that is inconsistent." (Principal)
- "I'd like to see the unitary status plan integrated into all curricula and all programs." (Community Member)
- "The Learning Support Coordinators are hired with the Student Equity department budget, but we are assigned responsibility to evaluate them." (Principal)
- "What are the Learning Support Coordinators supposed to do? I wish I knew." (Principal)
- "We have duplication of efforts and struggle with efficiency." (District Administrator)

- "Too many people/departments [are] involved in everything. Too many things get held up because they bounce from one department to the next, e.g., HR, finance, payroll, position control back to HR." (Principal)
- "The board discusses the lack of consistency across the district in curriculum, but honestly the board tends to micromanage a little bit so changes do not occur." (Board Member)
- "A big issue in this district is where decisions get made….are decisions made at district or at site? We have three different elementary [math] adoptions. We have 30 percent mobility and all these different math programs and adoptions do not make sense. We don't want to jump to multiple curricula." (Board Member)
- "The district is very fragmented. Everyone is working under someone's vision." (Teacher)
- "[There are] too many redundant processes and issues where departments at the central-level are giving information that is inconsistent." (Principal)
- "All areas (are) approaching [the] same issue [intervention, etc.], but not talking to each other." (District Administrator)
- "[We have] a lack of systematic practices, no process for quickly addressing lower-level 'common sense' issues, duplicated processes, i.e., multiple reporting mechanisms to various departments for addressing same issue." (Principal)

The auditors conducted a survey of teachers to ascertain their perspectives on organizational effectiveness. The comprehensive results of the survey are found elsewhere in this report, but in responding to the question, "What can be improved in TUSD?" teachers identified a major problem in TUSD with leadership. Seventy (70) teachers provided a response to that question, and 27 of them, or 38.5 percent, responded that leadership needs to be improved—at both the building level and the central office level.

The auditors found that much of the separateness and disruption of organizational harmony and congruity results from externally funded programs and services being treated as outside the conventional chain of command, creating conflicting and dissimilar services in the system's many school units. The result of such division of authority undermines the feasibility of leadership accountability at the school system and at the building level. District unity and congruity of authority start with unifying policies and regulations from the board and superintendent.

The auditors also examined the number of administrative staff in comparison with the number of teaching staff to determine how the Tucson Unified School District compared with other large school systems in the United States. The auditors found that the number of administrative staff in Full Time Equivalency (FTE) compared to the total number of personnel (FTE) in TUSD was below the national average. The comparisons of TUSD to other large systems are shown below in Exhibit 1.3.4:

Exhibit 1.3.4

Comparisons of Teaching and Administrative Staff Percentages
with Nine Large U.S. School Districts
Tucson Unified School District
January 2014

District	State	Total FTE	Teaching % of FTE	Admin* % of FTE
Albuquerque Public Schools	NM	13,304	49.2	5.0
Austin Independent School District	TX	11,323	52.0	4.9
Denver County School District 1	CO	9,226	47.2	4.3
Jefferson County School District R-1	CO	10,778	46.0	3.8
Milwaukee School District	WI	10,861	47.5	3.7
Averages		***11,098***	***48.4%***	***4.3%***

Exhibit 1.3.4 (continued)
Comparisons of Teaching and Administrative Staff Percentages
with Nine Large U.S. School Districts
Tucson Unified School District
January 2014

District	State	Total FTE	Teaching % of FTE	Admin* % of FTE
Lee County School District	FL	9,469	53.2	3.2
Tucson Unified School District 1	**AZ**	**6,141**	**42.1**	**2.5**
Mesa Unified School District	AZ	7,600	49.4	2.0
Long Beach Unified School District	CA	8,466	47.4	1.9
Fresno Unified School District	CA	7,320	53.6	1.9

*The administrative FTE data include both District and School-Based administration.
Note: FTE is not a head count of employees. In NCES data, it is "the amount of time required to perform an assignment stated as a proportion of a full-time position." FTE can be, for example, two half-time positions counted as 1 FTE.

Source: National Center for Educational Statistics (http://nces.ed.gov)

In the exhibit above, the Tucson Unified School District administrative staff percentage of total FTE is 2.5 percent, or approximately one administrator per 40 full time personnel. The auditors found that in comparison with other districts, the district administrator to employee ratio is moderately low.

Another difficulty with the organizational chart is that the chart doesn't properly separate a position from a function or set of responsibilities. For example, administrative positions (directors, principals, etc.) are depicted on the organizational chart in some instances, but functions are treated like positions in other instances (School Improvement, Student Equity, Marketing, Interscholastic activities, etc.). Moreover, the chain of command does not extend beyond principals. Assistant principals, teachers, and counselors are omitted. One position, the General Counsel, is jointly supervised by the governing board and the superintendent. Generally, such positions are not supervised by a group that is vested with authority only when it meets in official session as a governing body. In any case, shared supervision violates the principle of unity of command. Similar concerns accrue to the Director of Staff Services, depicted as supervised by the board, despite the board's lack of legal authority to supervise outside of officially convened public meetings.

In the chart, dotted lines found in the Teaching and Learning Division appear to present shared or duplicative supervision, which is also a violation of the principles of unity of command.

3. Logical Grouping of Functions

This criterion was not met. Most functions are grouped logically on the organizational chart, but there are some confusing collections of functions under some administrative positions. For example, Alternative Education as a function stands alone on the chart, connected by a dotted line to an assistant superintendent, but it logically needs to be with other direct school line relationships if the function includes provision of instruction to learners.

It is also unclear what some functions entail, such as the function noted on the chart as "energy conservation," which sounds like an activity, not an administrative position. Other functions are difficult to ascribe to positions due to their nebulous nomenclature, including Bonds, Language Acquisition, Benefits, and Media. Functions such as these—and there are many of them on the chart—are not clear enough to ascribe to a position, nor is a position indicated as responsible for supervision of the obscure and unknown positions within the functions.

The auditors found questionable the practice of assigning positions external to schools for helping teachers fast track their professional development and enhance student achievement, as shown in the following exhibit.

Exhibit 1.3.5

Goals of the Induction/Mentoring Program
Tucson Unified School District
January 2014

The TUSD Induction/Mentoring Program is designed to inspire, support and challenge participants to:

- accelerate their professional growth
- increase student learning and achievement

The auditors found that the system has approximately 33 positions identified as "Teacher Mentors" to help new teachers. The mentors are assigned district-wide in a decentralized pattern. The auditors used a survey of teachers to determine if the teacher mentor program was a popular resource for new teachers, who needed assistance with their classroom responsibilities.

The auditors' survey included 238 new teachers (who had taught in TUSD three years or less) who were asked whom they might turn to if they needed help with their classroom responsibilities. The auditors found that a large majority, 67.5 percent, stated they would go to another teacher, and 14 percent said they would go to their principal. Only 9.5 percent said they would turn to a specialist (teacher mentor or instructional coach). The auditors also found that the teacher mentors' work day was described as "conferring with teachers"; however, such conferences were found to be hindered because conferences normally would have to occur only when the teacher was free.

The auditors' survey also included a total of 1,193 teachers, who responded to the same question. Of the 1,193 teachers, 715, or 60 percent, said they would go to another teacher; 143 teachers, or 12 percent, said they would go to their principal; and 76 teachers, or 6.3 percent, stated that they would go to a curriculum specialist. A total of 178 teachers chose "other" to the same question, with a chance to identify their resource for help. Of the 178 teachers, only 23 (or 13 percent) said they would go to a teacher mentor, while 21 (or 12 percent) said they would go to the school office manager, and 60 teachers (or 34 percent) said they would contact an "outside person."

Auditors found over 55 positions identified as "Learning Support Coordinators," who were assigned to schools with low achievement, ostensibly to help struggling students achieve better performance on achievement measures. Despite the breadth and goals of this program, auditors found that achievement has not been improving, and in some cases achievement of cohort groups has been diminishing over time (see Findings 3.5 and 4.3).

Another significant shortcoming is the omission of assigned responsibility for two of the three functions that are essential for quality control in school institutions. Missing from the chart are Curriculum Design, a key function in developing and defining what learners are to be taught and to learn, and System Evaluation and Assessment, which is necessary for monitoring performance and results of all attributes of the system. It is not considered efficacious to expect improvement in learner performance or improvement in any other area of system performance without measurement and use of diagnostic and evaluative information gathered systematically across the system and judiciously defining expectations for learners, teachers, and other organizational personnel engaged in the main mission of the system—to deliver appropriate results in learning for all student clientele (see Finding 2.3).

4. Separation of Line and Staff

This criterion was not met. There are a number of instances where line and staff programs are intertwined, which undermines the line of authority and responsibility. Examples of this include placing Career and Technical Education under the Assistant Superintendent for Secondary Leadership position (this usually involves a curriculum design function and a professional development assignment), Federal Grants under the Assistant

Superintendent for Curriculum and Instruction (usually a financial intergovernmental function found in the operations support area), Title I school improvement and Title I Entitlements (found in this instance in separate locations from the financial services division despite their management functions with federal funding).

Professional development and staff training duties and responsibilities are scattered throughout the organizational chart, and one key curriculum design responsibility—textbook resources—is found under the accountability and research department. One department, reportedly with a supervisor involving 32 teachers assigned to mentor new teachers, was not included in the chart. This department raised serious questions about its efficacy and lack of accountability (see Finding 5.3). Magnet school supervision was found under an attorney within the Desegregation department, well separated from school leadership positions.

The auditors found it difficult to distinguish between line positions and staff positions, but principals commented that they frequently had to deal with many diverse staff positions with supervisory responsibilities.

5. Scalar Relationships

This criterion was not met. This principle is clearly violated in the current organizational chart. Numerous positions appear on equal vertical lines, disregarding extensive differences of scope, compensation, and significance of the positions. For example, the "Print Shop" is shown at a higher responsibility level than principals, Directors of Communication and Desegregation are shown at an equal level with Assistant Superintendents, and the Chief Information Officer is shown at the same level as the Chief Financial Officer.

There were a number of positions listed on the chart for which job titles were inconsistent with those listed in job descriptions and on the district's administrative pay scales presented to auditors. Most job descriptions did not meet audit criteria for adequacy, with a serious ineffectualness characterized by no clear definition of lines of authority and reporting requirements for supervision and evaluation (see Finding 1.4).

Position placements that appear at comparable levels on the chart frequently ignore consideration of degrees of responsibility, levels of compensation, and scope and authority. Positions that appear at the same level on the organizational chart are expected to receive similar compensation due to equal levels of responsibility.

6. Full Inclusion

This criterion was not met. The organizational chart is incomplete in that it does not depict full inclusion of all positions responsible for the implementation and delivery of the curriculum to students, as noted above under the Logical Grouping of Functions. Most importantly, the system lacks the critical components to help it obtain effective quality control in its teaching and learning operations.

The auditors found that a number of positions listed on the organization charts were actually activities or departmental functions, rather than administrative position titles (see above). Auditors also identified a lack of positions on the chart responsible for key administrative areas of leadership such as curriculum, instruction, and assessment.

Findings of the auditors indicate that the weaknesses experienced by schools and the system in meeting accountability standards and measures included the following (see Finding 3.2):

- Instruction observed in classrooms was characterized by teacher-centered large group activities in 38 percent of the classrooms visited, but only 17 percent of the classes focused on individual or small group activities.
- Forty-four (44) percent of the classrooms visited had individual students doing seatwork (textbook or worksheet), and 35 percent of student activities were large group activity, indicating little or no differentiation or individualization of instruction.
- Observations of classroom teaching activities revealed that 76 percent of the activities were of the low level knowledge/comprehension cognitive type, 17 percent were involved in application or analytical cognitive activities, and only one percent of classes were working at high levels in synthesis/evaluative cognitive types.

- Only 31 percent of classrooms were found to include teaching to a specific objective (see Finding 3.2).
- Preliminary results for the cohort group of students beginning in grade 5 through grade 8 show a decline in the percentage of students achieving a passing mark on the Arizona state tests, from 68 percent passing in grade 5, to 63 percent passing in grade 8 (see Finding 4.3).

Moreover, audit findings also indicate that TUSD dropout rates have been increasing despite millions of dollars invested in remedial and restorative instruction and services (see Finding 3.5).

The lack of curriculum management components in the district has not gone unnoticed by school district personnel, as described in their own words in the following quotations:

- "A tragedy is that we have no curriculum specialists…actually no curriculum department and minimal curriculum expertise now." (Teacher)
- "School-based curriculum decisions were not well-planned; rather, the experience was arbitrary and reactive. School-based administrators were not held accountable by the district." (Retired Teacher)
- "A weakness of the district is in the lack of coordination of the needed outcomes with the roles/responsibilities of the different departments to achieve effective and efficient results to maximize time and resources." (Principal)
- "There is a real inconsistency across sites in terms of the direction that schools receive." (Teacher)
- "Teachers basically get to decide what to teach." (Principal)
- "The district is very fragmented. Everyone is working under someone's vision." (Teacher)
- "We have over 55 people working on the Unitary Plan (for desegregation), but we still have racial disharmony and no agreement to educate all students." (District Administrator)

Auditors found that the district's Organization Chart failed to provide singular clarity and adequate crucial functions for adequate design and effective delivery of the district's educational programs and services. As a result, departments and individuals in the system operate in isolation from others, resulting in inconsistent and disparate implementation of instruction and learning in the district.

In summary, the auditors found that the organizational charts were inadequate and were missing crucially important functions and operations for effective quality control. Accountability is not achievable unless the required work is clearly defined (what specific objectives—content, context, and cognitive type—are students to master?); unless the instruction is appropriate (robust teaching strategies, differentiation, sequenced objectives taught to mastery, and aligned resources); and unless feedback on results is provided and used properly to plan and deliver instruction. The TUSD organizational chart was found by the auditors to be missing two of these three important quality control components, seriously eroding capabilities to design and deliver effective teaching and learning.

Finding 1.4: Job descriptions are inadequate in providing position control in the district. They are lacking in clear links to chain of command for both immediate supervisors and subordinates; statements of position qualifications are incomplete.

Job descriptions are the building blocks of an organization and, ideally, support the organizational chart (see Finding 1.3). They describe the tasks that must be completed in order for the organization to accomplish its mission and state the qualifications necessary to perform those tasks. They also document the relationship of one position to another and the responsibilities for design and delivery of the curriculum or support for those tasks. Properly written job descriptions provide each employee with clear direction as to his or her authority and responsibility. This direction is necessary for the organization to maintain constancy of purpose. Without good job descriptions, an organization's leaders cannot be sure that all mission-essential tasks are accounted for or that they have a sound basis for hiring or evaluating employees.

To assess the quality of the school system's job descriptions, auditors conducted interviews with employees and reviewed district policy, related documents, and job descriptions. The auditors' purpose was to determine the

extent to which job descriptions were consistent with the organizational chart and specified responsibilities for the design and delivery of curriculum. Auditors found the following board policies related to job descriptions.

- *Board Policy CF: Leadership Principles* states, "All Administrators/Managers/Supervisors/Lead Staff will
    - Make student achievement, safety, and welfare their highest priority.
    - Complete performance evaluations as required on all subordinates in a timely manner and place in official personnel files.
    - Act as a role model for professional conduct and attire."

    The policy further states, "The primary duty of a principal is to administer and supervise the instructional program.…A principal will be directly responsible to and will report to the Superintendent or designee and will keep the Superintendent or designee informed of the conditions and needs of the school. All duties, authority, and responsibilities of the principal will be delegated only by the Superintendent or designee."
- *Board Policy GA: Personnel Goals/Priority Objectives* states, "Duties of these staff members shall be outlined and assigned by the Superintendent."
- *Board Policy GBA: Equal Employment Opportunity* states, "Efforts will be made in recruitment and employment to ensure equal opportunity in employment for all qualified persons."
- *Board Policy GCAB: Filling of Vacancies* states, "an outline of job responsibilities shall be developed and maintained by the Superintendent or designee through position descriptions that reflect the purpose, duties and minimum requirements of each job. Each position description will be classified into a pay grade commensurate with the knowledge, abilities and duties required for this position. The position description is the basis for the screening, selection and training of the individual to fill a vacant position."

Auditors requested copies of all job descriptions and were provided access to over 500 job descriptions. Auditors selected and rated 108 job descriptions that were most closely related to curriculum management functions, were prominent on the organizational chart, or were related to positions included on the organizational chart. The dates on the 108 job descriptions ranged from June 2004 to January 2014.

When the selected job descriptions were compared to the district's organizational chart (see Exhibit 1.3.1a), no job descriptions were found for four of the 71 positions depicted on the chart. Positions depicted on the organizational chart for which no job descriptions were presented to auditors were: Coordinator of Distance Programs, Teenage Parent Program, Studio Production, and Marketing & PR. The organizational chart also included three director positions reporting to the Assistant Superintendent Elementary and K-8 Leadership, but these positions were listed only as "Director" and did not identify the area for which each director has responsibilities. In addition, there were 42 positions listed on the organizational chart that were actually depicted in terms of activities or departmental functions rather than position titles. Finally, positions missing from the organizational chart include Director Culturally Responsive Pedagogy (August 2013), Chief Negotiator and Labor Relations Director (April 2011), Assistant Principal (May 2011, February 2013, and January 2014), Director Instructional Technology (January 2014), and Assistant Director (March 2009).

The auditors rated each of the 108 selected job descriptions on four critical elements listed below.

- Qualifications: job descriptions should list the education, certification or licensure, experience, and knowledge, skills, and abilities required for the position;
- Immediate links to the chain of command: all employees should know their supervisor and whom they supervise, and no employee should have more than one supervisor;
- Functions, duties, and responsibilities; and
- Relationship to the curriculum (where relevant).

There were five possible ratings on each of the four elements. The possible ratings are shown in Exhibit 1.4.1.

Exhibit 1.4.1

Curriculum Management Audit Rating Indicators for Job Descriptions
Tucson Unified School District
January 2014

Rating	Explanation
Missing	No statement made.
Inadequate	A statement is made, but is incomplete and missing sufficient detail.
Adequate	A more or less complete statement usually missing curricular linkages or sufficient detail regarding curricular linkages/alignment.
Strong	A clear and complete statement, including linkages to curriculum where appropriate or, if not appropriate, otherwise quite complete.
Exemplary	A clear, complete statement with inclusive linkages to curriculum indicated in exemplary scope and depth.

For a job description to be considered adequate, each of the four criteria must be rated adequate or higher. The auditors' ratings of the 108 selected job descriptions are shown in Exhibit 1.4.2.

Exhibit 1.4.2

Auditors' Assessment of Job Descriptions Using Audit Indicators
Tucson Unified School District
January 2014

Position	Job Description Date	Qualifications	Links to Chain of Command	Responsibilities	Relationship to Curriculum
Assistant Director for Curriculum and Technology Integration	3/2009	A	I	S	S
Assistant Director – Exceptional Education – Central	3/2009	A	I	A	A
Assistant Principal	1/2014	A	I	A	A
Assistant Principal – Dual Elementary	5/2011	A	I	A	A
Assistant Principal - Elementary	5/2011	A	I	A	A
Assistant Principal – High School	5/2011	A	I	A	A
Assistant Principal – K-8 School	2/2013	A	I	A	A
Assistant Principal – Middle School	2/2013	A	I	A	A
Assistant Superintendent – Curriculum and Instruction	7/2013	A	I	S	S
Assistant Superintendent – Elementary and K-8 School Leadership	3/2013	A	I	A	A
Assistant Superintendent – High School Leadership	10/2011	A	I	A	A
Benefits Manager	6/2012	A	I	A	A
Bond and Architecture Program Manager	4/2009	I	I	A	A
Budget Manager	10/2012	A	I	A	A
Certified Teacher	6/2004	I	I	A	A
Chief Finance Officer	3/2009	A	I	A	A
Chief Human Resources Officer	10/2013	I	I	A	A

Exhibit 1.4.2 (continued)
Auditors' Assessment of Job Descriptions Using Audit Indicators
Tucson Unified School District
January 2014

Position	Job Description Date	Qualifications	Links to Chain of Command	Responsibilities	Relationship to Curriculum
Chief Information Officer	7/2013	I	I	A	A
Chief Negotiator and Labor Relations Director	4/2011	I	I	A	A
Chief Operations Officer	5/2010	I	I	A	A
Coordinator Career and Technical Education (CTE)	4/2013	A	I	A	A
Coordinator – Early Childhood Literacy Academy, a District Charter at Richey	11/2012	I	I	A	A
Coordinator, Language Acquisition	8/2008	I	I	A	A
Coordinator – Library Services	5/2007	A	I	A	A
Coordinator – New Teacher Induction	2/2013	A	I	A	A
Coordinator – Technology Integration	5/2007	A	I	S	S
Counselor Specialist; College and Career Readiness, Restorative Practices Advocate	9/2012	A	I	A	A
Deputy Superintendent	10/2011	A	I	I	I
Deputy Superintendent Operations	7/2013	I	I	A	A
Director Accountability Research	12/2013	I	I	A	A
Director – Advanced Learning Experiences (ALE)	3/2013	A	I	A	A
Director – African American Student Services	6/2012	A	I	A	A
Director of Alternative Middle School Programs	7/2011	I	I	A	A
Director – Asian Pacific American Student Services	6/2012	A	I	A	A
Director, Communications and Media Relations	7/2011	I	I	A	A
Director – Culturally Responsive Pedagogy	8/2013	I	I	A	A
Director – Desegregation	10/2011	A	A	A	M
Director of Elementary Schools	12/2009	A	I	A	A
Director Employee Relations	6/2004	I	I	A	A
Director – Financial Services	3/2013	A	I	A	A
Director – Fine Arts	12/2010	A	I	S	S
Director, Food Services	6/2004	A	I	A	A
Director – Grants, Partnerships, and Resource Management	10/2011	I	I	A	M
Director – Guidance, Counseling and Student Service, Prevention Programs	10/2010	I	I	A	A
Director of Health Services	7/2008	A	I	A	A
Director, Information Technology (IT) Infrastructure	5/2013	I	I	A	A
Director Instructional Technology	No date	I	I	S	S
Director of Interscholastics	6/2004	A	I	A	A

Exhibit 1.4.2 (continued)
Auditors' Assessment of Job Descriptions Using Audit Indicators
Tucson Unified School District
January 2014

Position	Job Description Date	Qualifications	Links to Chain of Command	Responsibilities	Relationship to Curriculum
Director – Language Acquisition	3/2012	A	I	A	A
Director of Magnet School Programs	1/2012	S	I	S	S
Director – Mexican American Student Services	6/2012	A	I	A	A
Director of Middle Schools	5/2010	A	I	S	S
Director Multicultural Curriculum	3/2013	I	I	A	A
Director – Native American Student Services	6/2012	A	I	A	A
Director – Professional Development	4/2013	A	I	A	A
Director – Purchasing Services	6/2012	A	I	A	A
Director of Risk Management	6/2004	I	I	A	A
Director – School Improvement	6/2011	A	I	S	S
Director – School Safety and Security	1/2010	I	I	A	A
Director of Secondary Schools	7/2012	I	I	A	A
Director – Student Assignment	12/2013	I	I	A	A
Director of Student Equity	3/2009	A	I	I	I
Director – Student Placement and Community Outreach	3/2013	A	I	A	A
Director of Transportation	8/2011	I	I	A	A
District Video Producer	7/2011	A	I	A	A
Educational Technology Integration Specialist	5/2012	I	I	A	A
EEO Compliance Officer, Investigator	2/2010	A	I	A	M
Energy Projects Manager	9/2006	A	I	A	A
Executive Director – Exceptional Education (Special Education)	7/2013	A	I	S	S
Executive Director, Human Resources	3/2013	I	I	A	A
Executive Director – Innovation and School Improvement	5/2012	A	I	A	A
Executive Director of Student Equity	3/2013	A	I	A	A
Family Center Coordinator	9/2012	I	I	A	M
General Counsel	No date	A	I	A	A
Human Resources Analyst	7/2011	A	I	A	A
Human Resources Analyst-Senior	8/2005	A	I	A	A
Human Resource Program Coordinator – Senior	5/2013	A	I	A	A
Instructional Data & Intervention Coordinator	3/2012	S	I	A	A
Learning Supports Coordinator	5/2013	A	I	A	A
Legal Counsel	No date	A	I	A	A
Magnet Site Coordinator (Site Based)	4/2013	I	I	A	A
Payroll Manager	11/2012	A	I	A	A
Planning and MIS Program Manager	4/2009	I	I	A	A

Exhibit 1.4.2 (continued)
Auditors' Assessment of Job Descriptions Using Audit Indicators
Tucson Unified School District
January 2014

Position	Job Description Date	Qualifications	Links to Chain of Command	Responsibilities	Relationship to Curriculum
Principal	1/2014	A	I	A	A
Principal – Dual Elementary	3/2013	A	I	A	A
Principal – Elementary	3/2013	A	I	A	A
Principal – High School	1/2013	A	I	A	A
Principal – K-8 School	2/2013	A	I	A	A
Principal – Mary Meredith K-12	3/2013	A	I	A	A
Principal – Middle School	2/2013	A	I	A	A
Print Shop Manager	5/2007	I	I	A	A
Professional Development Academic Trainer	2/2013	A	I	A	A
Program Coordinator	5/2013	A	I	I	I
Program Coordinator – Advancement Academics	5/2012	I	I	A	A
Program Coordinator – Exceptional Education	8/2007	A	I	A	A
Program Coordinator, Senior – Curriculum	3/2012	A	I	S	S
Program Coordinator, Senior – Professional Development	3/2011	A	I	A	A
Program Manager	11/2009	A	I	I	I
Project Coordinator for Grants	9/2012	A	I	A	A
Restorative Practices Specialist	2/2011	A	I	A	A
School Pride Mechanical Program Manager	4/2009	A	I	A	A
School Pride Appearance Program Manager	4/2009	A	I	A	A
Senior Program Coordinator	5/2013	A	I	A	A
Staff Development & Multicultural Curriculum Integration Specialist	5/2010	A	I	S	S
Superintendent	6/2004	I	I	I	I
Teacher/Coach (School Site)	2/2013	A	I	S	S
Teacher Mentor	2/2013	A	I	A	A
Technology Services (TS) Program Analyst	12/2011	I	I	A	A
Title I Director	8/2010	A	I	A	A
Inadequate (I)		**33 (31%)**	**107 (99%)**	**5 (5%)**	**5 (5%)**
Adequate (A)		**73 (68%)**	**1 (1%)**	**91 (84%)**	**87 (81%)**
Strong (S)		**2 (2%)**	**0 (0%)**	**12 (11%)**	**12 (11%)**
Exemplary (E)		**0 (0%)**	**0 (0%)**	**0 (0%)**	**0 (0%)**
Missing (M)		**0 (0%)**	**0 (0%)**	**0 (0%)**	**4 (4%)**
Total		**108**	**108**	**108**	**108**
Percent Exemplary, Strong, Adequate		**(69%)**	**(1%)**	**(97%)**	**(99%)**

Source: Job descriptions provided by Tucson Unified School District.

Of the 108 selected job descriptions, one received ratings of adequate or higher in all four critical elements (one percent). As this percentage is less than the required 70 percent, job descriptions were determined to be

inadequate to provide position control in the district. All but one of the 108 job descriptions received a rating of inadequate on at least one element. The critical element receiving the most ratings of inadequate was "links to chain of command," with 107 (99 percent) of the job descriptions rated as inadequate. The critical element receiving the second highest number of inadequate ratings was "qualifications," with 33 (31 percent) of the job descriptions rated as inadequate.

The ratings in Exhibit 1.4.2 are summarized as follows:

- **Qualifications:** Job descriptions need to include required education, certification or licensure, experience, and expected knowledge, skills, and abilities. Most of the rated job descriptions did not include knowledge, skills, and abilities in the Minimum Qualifications section of the job description. In addition, many job descriptions did not include certification or licensure requirements, or listed these only in the Preferred Qualifications section. Several job descriptions did not include experience requirements.
- **Links to Chain of Command:** Job descriptions must include the position's immediate supervisor and a list of subordinates under the position's direct supervision. The Director of Desegregation job description included a statement of direct report: "This position reports to the Superintendent of Tucson Unified School District." The remainder of the selected job descriptions contained either no statements of direct report or general statements of coordination, collaboration, support, assistance, partnership, or advisement, usually involving multiple other positions.

  Most job descriptions did not include a list of subordinates under the position's direct supervision. A few job descriptions did include specific job titles for their subordinates (e.g., Assistant Director Exceptional Education—Central, Coordinator Language Acquisition, Director Food Services, Director Language Acquisition, and Director Risk Management). Most job descriptions included general statements such as, "supervision and control of assigned staff" or "supervisory control of staff, which includes interviewing, selecting, training, directing and appraising work, handling employee complaints, disciplining staff, and providing for safety and security," or statements regarding supervision of department programs and projects. Such general statements are inadequate to accurately place positions on the organizational chart and appropriately inform staff as to their authority and responsibility in the chain of command.
- **Functions, Duties, and Responsibilities:** Most job descriptions were rated adequate for more or less complete statements, usually missing curricular linkages or sufficient detail regarding curricular linkages/ alignment. Twelve (12) or 11 percent, were rated strong; no job descriptions were rated exemplary. Two examples of job descriptions that were too generic to clearly delineate specific responsibilities for the position include Program Coordinator and Program Manager. These generic job descriptions remain in the job description data base in addition to positions with the same title, but with added specificity as to the department (e.g., Program Coordinator Advanced Academics and School Pride Appearance Program Manager).
- **Relationship to Curriculum:** Most job descriptions with curricular responsibilities included some reference to the curriculum or instructional program. Twelve (12) or 11 percent, of the job descriptions were rated strong for curricular linkages; no job descriptions were rated exemplary. Clear, complete statements with inclusive linkages to curriculum indicated in exemplary scope and depth were not found. Job descriptions for non-instructional or operations positions were rated as adequate, although statements of curricular connections were neither present nor required.

The following observations pertain to the 108 job descriptions rated in Exhibit 1.4.2.

- No employee should have more than one supervisor to avoid being placed in a compromised decision-making situation. Examples of job descriptions that violate this criterion include the Director African American Student Services. This job description states, "Under the supervision of the Deputy Superintendent and/or the Curriculum, Instruction, and Professional Development Department, the Director will participate in the evaluation of models that meet the academic needs of African American students." A similar statement appears in the job descriptions for Director Asian Pacific American

Student Services, Director Mexican American Student Services, and Director Native American Student Services.

- Several job descriptions overlapped with at least one other job description in supervisory responsibilities and/or essential functions. Auditors observed the following examples: First, the job descriptions for both the Coordinator Language Acquisition and Director Language Acquisition contain the same list of subordinates for supervision and evaluation. These two job descriptions also include the same stated purpose (summary) and contain several of the same essential functions. In addition, the Principal and Assistant Principal job descriptions contain nearly the same responsibilities, without inclusion of specifics for school grade span (e.g., elementary vs. high school). Lastly, the job descriptions for both the Director Student Assignment and the Director Student Placement and Community Outreach address responsibilities for "student assignment strategies," "open enrollment," and "movement between magnet and open enrollment schools."
- Some job descriptions are outdated and/or have been replaced with new job descriptions or title changes, yet remain accessible in the data base without regard to "active" or "inactive" status. Three examples include the following: (1) The Director Employee Relations position appears on the district organizational chart, yet the job description (June 2004) for this position was labeled "Old Version." No other updated version containing the same title was presented to auditors. Rather, a job description was provided for Chief Negotiator and Labor Relations Director (April 2011). (2) The job description for EEO Compliance Officer, dated February 2010, was presented to auditors along with three outdated versions dated January 2006, July 2006, and October 2008. (3) The Principal and Assistant Principal job descriptions were dated January 2014. However, six principal and five assistant principal job descriptions specific to the various grade spans were also presented (dated from May 2011 to March 2013).
- Auditors also reviewed several department organizational charts and noted that the Director of Information Systems position appears on the Information Technology department organizational chart, but no job description for this position was available for auditor review.

Auditors conducted interviews regarding job descriptions with district staff and board members. Representative comments regarding job descriptions follow:

- "Individual departments make up their own organizational chart. It should be in Human Resources." (District Administrator)
- "Position control of job descriptions is in finance. There's no formal process for job descriptions other than an informal memo." (District Administrator)
- "Position control is missing." (District Administrator)
- "There is no oversight on district on creating positions." (District Administrator)
- "I am convinced that we have overlap in assignment of responsibilities within departments." (District Administrator)

Summary

Job descriptions are inadequate in delineating qualifications and clear links to the chain of command. Only one job description included a clear statement of direct report. The remainder of the job descriptions contained either no statements or general statements. Most job descriptions did not list subordinates under the position's direct supervision. Nearly one-third of the job descriptions reviewed included qualifications that lacked adequate statements of education, certificate or licensure, and/or knowledge, skills, and abilities. In addition, auditors noted multiple instances of inconsistency of job descriptions with the organizational chart, overlap and redundancy of responsibilities, and outdated "inactive" job descriptions available within the same data base as "active" job descriptions. Statements addressing the relationship to the curriculum or instructional program were evident for most of the positions expected to have curricular linkages. None of the job descriptions were rated "exemplary" in any of the four critical elements.

STANDARD 2: The School District Has Established Clear and Valid Objectives for Students.

A school system meeting this audit standard has established a clear, valid, and measurable set of pupil standards for learning and has set the objectives into a workable framework for their attainment.

Unless objectives are clear and measurable, there cannot be a cohesive effort to improve pupil achievement in the dimensions in which measurement occurs. The lack of clarity and focus denies to a school system's educators the ability to concentrate scarce resources on priority targets. Instead, resources may be spread too thin and be ineffective in any direction. Objectives are, therefore, essential to attaining local quality control via the school board.

What the Auditors Expected to Find in the Tucson Unified School District No. 1:

Common indicators the CMSi auditors expected to find are:

- A clearly established, board-adopted system-wide set of goals and objectives for all programs and courses;
- Demonstration that the system is contextual and responsive to national, state, and other expectations as evidenced in local initiatives;
- Operations set within a framework that carries out the system's goals and objectives;
- Evidence of comprehensive, detailed, short- and long-range curriculum management planning;
- Knowledge, local validation, and use of current best practices and emerging curriculum trends;
- Written curriculum that addresses both current and future needs of students;
- Major programmatic initiatives designed to be cohesive;
- Provision of explicit direction for the superintendent and professional staff; and
- A framework that exists for systemic curricular change.

Overview of What the Auditors Found in the Tucson Unified School District No. 1:

This section is an overview of the findings that follow in the area of Standard Two. Details follow within separate findings.

In the areas under Standard Two, the auditors did not find a plan or governing document that directs all efforts involved in the design, development, implementation, monitoring, evaluation, and revision of curriculum. Most curriculum work is focused on delivery, although the availability and quality of written curriculum are inadequate. Current staffing at the central office to support curriculum development is also inadequate; the auditors did not find sufficient personnel who are tasked with developing curriculum, aligning it to assessments, and supporting district expectations for cognitively rigorous and culturally responsive instruction through strong curriculum design.

The auditors found that the scope of curriculum K-12 is inadequate in almost all content areas, particularly in science, social studies, and non-core areas. Curriculum work that has been completed recently was focused on developing guides for English language arts and mathematics that align with the Arizona Standards for College and Career Readiness. No guide was found to meet the audit criteria for minimum quality.

The samples of curriculum that auditors collected during classroom walkthroughs did not reflect high levels of rigor and were not strongly aligned to the content, context, and cognitive type of the *PARCC* assessments. The *ATI* assessment was also inadequately aligned to the *PARCC*.

Finding 2.1: The district lacks a comprehensive curriculum management plan to direct the development, implementation, evaluation, and modification of the district written curriculum. Current staffing at the district level is not adequate for curriculum design.

A school district with a strong curriculum management system has a written plan that facilitates the design and delivery of curriculum. The plan directs various stages of development and review and assigns responsibility for design and delivery among various district and school staff members. It provides processes for curriculum development, adoption, implementation, monitoring, evaluation, and revision for all courses of study. A comprehensive curriculum management plan outlines a strong directional focus for curriculum that aligns with district goals. The plan is designed to function with and support the district's strategic planning.

In order to effectively manage the design and delivery of curriculum in large and complex school systems, effective leaders devote adequate staffing and resources to the most crucial role of the school district's mission: defining, developing, implementing, monitoring, evaluating, and revising the written, taught, and assessed curricula. In carrying out these critical tasks, certain balances must be maintained among those tasks best kept at the central office and those best left to the discretion of individual schools. This balance is critical in assuring both consistency and quality in student learning, but also in supporting autonomy and flexibility at school sites to ensure that they can meet the unique needs of their students and neighborhood. The audit expectations regarding those functions of curriculum management that should be tightly held and those that should be loosely held are presented in Exhibit 2.1.1.

Exhibit 2.1.1

Tightly Held vs. Loosely Held Curriculum Management Functions and Components
Tucson Unified School District
January 2014

Tightly-held (Nonnegotiable) ***District Level***	**Loosely-held (Within the Boundaries of the Tightly-held but Negotiable by Teacher/Faculty)** ***School/Classroom Level***
Ends *(Curriculum and Aligned Assessments)*	**Means** *(Instruction and Programs)*
• Mission • Goals • Standards • Priorities • Curriculum—Outcomes/Student Expectations/ Objectives • Assessment—Aligned to curriculum, criterion-based, benchmark, formative, and diagnostic	• Differentiation of when which students get which standards/outcomes/student expectation/objectives • Processes, procedures • Instructional strategies • Resources, textbooks, etc. • Programs (e.g. SuccessMaker, etc.) • Groupings • Staffing • Informal assessments for diagnostic purposes

When functions that should be loosely held are instead held tightly, such as with curriculum resources or instructional strategies, teachers and school leaders lack the flexibility to make decisions in response to demonstrated student needs. Likewise, when curriculum objectives and assessments are not held tightly, there is no consistency in what students are learning or in the evaluation of that learning. This can result in students being inadequately prepared for external, high stakes assessments.

The auditors examined curriculum plan documents, board policies, administrative guidelines, job descriptions, survey results, and other relevant documents (see Appendix D) to determine the district's approach to comprehensive curriculum planning and the extent to which the functions associated with curriculum management are defined and directed. They also interviewed board members, administrators, principals, teachers, parents, and community members for their perceptions of curriculum planning and management in the district.

Overall, the auditors found that curriculum design and delivery has had inadequate direction at the district level. There is no written curriculum plan to coordinate the development, implementation, monitoring, evaluation, and revision of curriculum, and current policies and governing documents were also found to be inadequate in directing those efforts and in requiring a plan. Job descriptions for various district and campus administrators provided some expectations for curriculum development and delivery, but written direction for curriculum management was determined to be inadequate. The written curriculum that is available to teachers is limited and of inadequate quality (see Findings 2.2 and 2.3), and the delivery of curriculum district-wide is inconsistent and inadequately articulated and coordinated (see Finding 2.3).

Current efforts to address mandates set forth in the Unitary Status Plan (USP) have been implemented in isolation from the core district functions of curriculum design and delivery, and existing staffing in curriculum design, delivery, and assessment is insufficient to create a common written curriculum that addresses USP requirements and supports differentiating instruction for the linguistically, culturally, and economically diverse population in TUSD. Schools and teachers have been left with inadequate direction regarding the tightly held functions of curriculum standards and objectives and aligned assessments.

First, the auditors reviewed governing documents to determine what direction does exist for curriculum management efforts in the district. A few board policies were found that had rudimentary directives to curriculum management:

- *Board Policy IGA: Curriculum Development* states, "It is essential that the school system continually develop and modify its curriculum to meet changing needs. The Board authorizes the Superintendent to develop the curriculum for the school system and to organize committees to review the curriculum. All curriculum changes shall be approved by the Governing Board."
- *Board Policy IGE: Curriculum Guides and Course Outlines* requires, "Curriculum guides shall be developed for the various subject areas. These guides shall present at least a minimal outline for instruction and a basis for further development of the particular courses."

No board policy provided specific direction for the development, implementation, and monitoring of district curriculum, nor did the auditors find any policy that requires the development of a plan to direct curriculum management in the district.

Next, the auditors reviewed the *Tucson Unified School District Unitary Status Plan 2012-13* to determine any district direction for curriculum management and found the following directive relating to Pre-Advanced Placement and Advanced Placement courses: "Improve the quality of Pre-AP and AP courses by making these courses subject to audit by the College Board." This directive was specific and did not reference overall district-wide curriculum management or development. The USP also requires the district-wide development of culturally responsive curriculum and approaches.

The auditors examined job descriptions for administrators, principals, teachers, and other relevant positions to determine roles and responsibilities for curriculum management and found the following:

- The Deputy Superintendent for Teaching and Learning (Revised October 2011) is responsible for "developing, managing and controlling all components of teaching and learning, such as curriculum and instruction and professional development"
- The Assistant Superintendent for Curriculum and Instruction (Revised July 2013) is tasked with leadership of all curriculum-related activities including professional development. The job description states that this person "assists site and central administrators with guidance and direction in assessing, identifying, formulating, developing, implementing and evaluating curriculum and instruction activities to ensure compliance with district policy, and state and federal law."
- The Assistant Director for Curriculum and Technology Integration (Revised March 2009) "coordinates academic functions, including the curricular initiatives in the areas of math, literacy, science and social studies."

- The Senior Program Coordinator—Curriculum (Revised March 2012) "develops, creates, implements, coordinates, and evaluates District-wide curriculum and instruction programs to ensure compliance with district policy, and state and federal law" and "elicits input from all schools/departments on curriculum and resource needs and ensures alignment of curriculum and resources district-wide."
- Principals and Assistant Principals (Revised March 2013) provide "leadership and management of a school that is focused on student learning, achievement, relationships and communication, and efficient operations." In addition, the job description includes providing direction on curriculum and instruction, enforcing grade level standards, providing opportunity for enrichment and intervention, encouraging differentiated instruction for all learners and commitment to learner objectives, setting high expectations and developing, planning, and evaluating school programs and curriculum.
- Assistant Principals at the Elementary, Middle School, and High School levels are given the additional task to "provide leadership and management of a school that is focused on 21st century student learning."
- Certified Teachers (Revised August 2004) will "prepare lesson plans and instruct students in accordance with established curriculum" and "participate as a member of an instructional team to promote learning activities for students consistent with district and school education objectives."

Overall, the auditors found that although various job descriptions contained responsibilities for providing direction and alignment of curriculum initiatives and resources, and even mentioned the established curriculum, school programs, and curriculum delivery, there was no single policy or plan that coordinates these roles and responsibilities in conjunction with all curriculum management functions district-wide.

The auditors did not find a written curriculum management plan to compare to the audit characteristics for effective curriculum management. Instead, the auditors examined relevant curriculum documents, including the district online curriculum, district survey results, and board policy, and interviewed board members, administrators, and teachers to determine the district's approach to curriculum planning and management. Their ratings of the current efforts at curriculum management are presented in Exhibit 2.1.2.

The audit uses 15 characteristics of a quality comprehensive curriculum management plan. To be considered adequate, the approach to curriculum management planning requires a minimum of 11 of the 15 characteristic ratings (70 percent).

Exhibit 2.1.2

Curriculum Management Planning Characteristics and Auditors' Assessment of District Approach
Tucson Unified School District
January 2014

Characteristics:	Auditors' Rating	
	Adequate	Inadequate
1. Describes the philosophical framework for the design of the curriculum, including such directives as standards-based, results-based, or competency-based; the alignment of the written, taught, and tested curriculum; and the approaches used in delivering the curriculum.		X
2. Identifies the timing, scope, and procedures for a periodic cycle of review of curriculum in all subject areas and at all grade levels.		X
3. Defines and directs the stages of curriculum development.		X
4. Specifies the roles and responsibilities of the board, central office staff members, and school-based staff members in the design and delivery of curriculum.	X	
5. Presents the format and components of all curriculum, assessments, and instructional guide documents.		X

Exhibit 2.1.2 (continued) Curriculum Management Planning Characteristics and Auditors' Assessment of District Approach Tucson Unified School District January 2014		
Characteristics:	**Auditors' Rating**	
	Adequate	**Inadequate**
6. Directs how state and national standards will be considered in the curriculum. This includes whether or not to use a backloaded approach, in which the curriculum is derived from high-stakes tested learnings (topological and/or deep alignment), and/or a frontloaded approach, which derives the curriculum from national, state, or local learnings.	X	
7. Requires for every content area a focused set of precise student objectives/ student expectations and standards that are reasonable in number so the student has adequate time to master the content.		X
8. Directs that curriculum documents not only specify the content of the student objectives/student expectations, but also include multiple contexts and cognitive types.		X
9. Specifies the overall beliefs and procedures governing the assessment of curriculum effectiveness. This includes curriculum-based diagnostic assessments and rubrics (as needed). Such assessments direct instructional decisions regarding student progress in mastering prerequisite concepts, skills, knowledge, and long-term mastery of the learning.		X
10. Directs curriculum to be designed so that it supports teachers' differentiation of instructional approaches and selection of student objectives at the right level of difficulty. This ensures that those students who need prerequisite concepts, knowledge, and skills are moved ahead at an accelerated pace, and that students who have already mastered the objectives are also moved ahead at a challenging pace.		X
11. Describes the procedures teachers and administrators will follow in using assessment data to strengthen written curriculum and instructional decision making.		X
12. Outlines procedures for conducting formative and summative evaluations of programs and their corresponding curriculum content.		X
13. Requires the design of a comprehensive staff development program linked to curriculum design and its delivery.		X
14. Presents procedures for monitoring the delivery of curriculum.		X
15. Establishes a communication plan for the process of curriculum design and delivery.		X
Total	**2**	**13**
Percentage of Adequacy	**13%**	

As can be seen from Exhibit 2.1.2, the district's approaches to curriculum management planning met audit criteria for adequacy in two of the 15 characteristics for an overall adequate rating of 13 percent, which falls short of the audit adequacy expectation of 70 percent.

The auditors' description of the ratings for each criterion follows:

Characteristic 1: Describes the philosophical framework for the design of the curriculum

This characteristic was not met. A philosophical framework for curriculum was not articulated, and there was no requirement that the written, taught, and tested curriculum be aligned. *Board Policy IGA* delegates the

responsibility for the development of the curriculum to the superintendent, and *Board Policy IGE* refers to the development of curriculum guides for "various subject areas" without stressing the importance of guides for all core curricular areas. Additionally, it is noted in the policy that the guides should include an instructional outline for further development of particular courses. Directives such as standards-based, results-based, or competency-based objectives or alignment of the written, taught, and tested curriculum were not included. Delivery of curriculum was not addressed.

Characteristic 2: Periodic cycle of curriculum review of all content areas and all grade levels

This characteristic was not met. Board policy did not direct a cycle of review. Some job descriptions for district administrators included general references to coordinating curricular initiatives. Campus administrators were given the task of providing direction on curriculum and instruction within their job descriptions. District administrators did not provide the auditors with any document showing a cycle of review of the curriculum for all subjects at all grade levels or how such a review would be conducted or by whom. The auditors did not find written curriculum for most courses. Kindergarten through twelfth grade English language arts, mathematics, some science, and various culturally related course curricula were available in documents and on the district website.

Characteristic 3: Defines and directs the stages of curriculum development

This characteristic was not met. Board policy and job descriptions did not address the stages of curriculum development. Although district administrators provided the auditors with access to developed and online curriculum documents that demonstrated the presence of some curriculum (English language arts, mathematics, various science, and culturally relevant courses), they did not provide any documents defining or directing the stages of curriculum development.

Characteristic 4: Specifies the roles and responsibilities of the board, central office staff members, and school-based staff members in the design and delivery of the curriculum

This characteristic was met. *Board Policy IGA* gave the board authority for approval of all curriculum changes. Job descriptions for district administrators stated responsibility for planning and directing the content of curriculum, instruction, and programs for the district, as well as ensuring the alignment of curriculum and resources. Campus administrators had the responsibility of providing the direction on curriculum and instruction efforts. Certified teachers were responsible for the instruction of students in accordance with the established curriculum.

However, reference to the specificity of the design and delivery of curriculum in all noted job descriptions was vague, and although the descriptions do address some key functions as they relate to curriculum management, the department of curriculum and instruction, overall, is completely understaffed. There simply are not enough personnel who have responsibility for curriculum design and development, possibly the most critical function in any school district.

Characteristic 5: Presents the format and components of all curriculum, assessment, and instructional guide documents

This characteristic was not met. Board policy did not provide direction for the format or components of the district written curriculum. District administrators provided the auditors with access to their online curriculum documents and other documents in Dropbox, which did not show a consistent format for the components of curriculum documents for all courses. The English language arts and mathematics online curriculum showed similarities in the alignment to state and common core standards, but format and design efforts varied by course and grade level in the development of pacing guides, alignment of resources, assessments, and instructional guides.

Characteristic 6: Directs how state and national standards will be considered in the curriculum

This characteristic was met. *Board Policy IGA* states the importance for the school district to continually develop and modify its curriculum to meet changing needs, but falls short of formally directing the alignment of the development of curriculum to state and national standards. However, informally, administrators and teachers

spoke of the alignment of instruction to the state standards. Additionally, the online curriculum for English language arts and mathematics utilized the state and common core standards as the basis for the curriculum in those areas.

The auditors were provided with a form entitled Declaration of Curricular & Instructional Alignment to the Arizona Academic Standards. School principals must sign and submit this form annually (deadline February 4, 2014) to the Arizona Department of Education, declaring alignment to the Arizona Academic Standards and further stating that teachers were provided with access to the standards, instructional materials aligned to the standards, and training related to the standards and were evaluated to assess whether the standards were integrated into their instructional practices. Standards referred to in this document include English language arts, mathematics, science, and social studies. It also states that the declaration requires affirmations from the governing board and superintendent regarding the alignment of curriculum and the evaluation of instruction aligned to the standards.

Characteristic 7: Requires for every content area a focused set of precise student objectives

This characteristic was not met. Board policy did not exist to provide guidance for the identification of student objectives. District administrators did not provide the auditors with any system requirement that the written curriculum be based on a focused set of objectives that are reasonable in number. Rather, auditors found that the objectives for mathematics and English language arts were directly derived from the expectations found within the state and Arizona Standards for College and Career Readiness, with no refinement so these standards are more specific and measurable. Auditors reviewed survey results, which indicated that only 56 percent of those responding felt that the objectives were reasonable in number.

Characteristic 8: Directs that curriculum documents not only specify the content of student objectives/ student expectations, but also include multiple contexts and cognitive types

This characteristic was not met. Board policy did not exist to provide direction or set expectation for a rigorous curriculum that includes not only expectations for content mastery, but also describes the contexts in which students practice their learning and demonstrate that mastery and the ways that they should be cognitively engaged in the classroom. The auditors found no documentation requiring that learning objectives be written to include multiple contexts and cognitive types. In addition, auditors did not observe a wide range of cognitive types in the classrooms (see Finding 3.2).

Characteristic 9: Specifies the overall beliefs and procedures governing the assessment of curriculum effectiveness

This characteristic was not met. District administrators did not provide the auditors with documents describing the beliefs and procedures for assessing the effectiveness of the district curriculum. Although the district had commercially developed benchmark assessments for many core courses and some rubrics for performance-based assessments (see Finding 4.2), there was no evidence of any plan or policy that directs how student progress in mastering the curriculum would be evaluated and the results addressed through classroom instruction. No assessments were presented that measure prerequisite skills or long-term mastery of content.

Characteristic 10: Directs curriculum to be designed so that it supports teachers' differentiation of instructional approaches and selection of student objectives at the right level of difficulty

This characteristic was not met. District administrators did not provide the auditors with any documents directing the inclusion of differentiated instructional approaches in the written curriculum. Board policy did not reference differentiating instruction to meet the learning needs of all students. The job descriptions for campus administrators stated their responsibility to encourage differentiated instruction for all learners. No instructional approaches indicating differentiation were included in any curriculum documents that were provided to the auditors, other than the culturally responsive curriculum that has been developed in accordance with the USP. Auditors did not find integrated, culturally responsive approaches in the curriculum documents that exist, nor any mention of suggestions for regrouping, re-teaching, or accelerating content for students.

Despite the lack of support in district curriculum for differentiation, there appears to be a culture among school-based personnel that acknowledges the need to use data in planning instruction. Survey results indicated that those responding felt they were trained in differentiation strategies (84 percent), and that they used these strategies to meet the individual needs of the students they teach (95 percent). Teachers and principals also reported using programs that they considered to be differentiated, such as SuccessMaker. However, auditors did not consistently observe varied groupings and differentiation of curriculum during classrooms visitations (see Finding 3.2).

Characteristic 11: Describes the procedures teachers and administrators will follow in using assessment data to strengthen the written curriculum and instructional decision making

This characteristic was not met. District administrators did not provide the auditors with any documents describing the use of data to strengthen the written curriculum and instructional decision making. Job descriptions reviewed by the auditors found no reference to expectations regarding the use of data to revise the curriculum or to inform instructional decisions. During interviews with district and campus administrators and review of survey results, the auditors heard about professional development occurring during this current school year that included expectations for the analysis of data in district and building decision-making efforts focused on improving student achievement.

Characteristic 12: Outlines procedures for conducting formative and summative evaluations of programs

This characteristic was not met. District administrators did not provide the auditors with any documents requiring formative and summative evaluation of programs and their corresponding curriculum. In *Board Policy IGA,* the superintendent is directed to organize committees to review the curriculum. There is no directive requiring formative and summative evaluation of programs and their corresponding curriculum. Job descriptions for campus administrators require them to develop, plan, and evaluate school programs and curriculum, but no policy or documents established the expectation that procedures would be in place for conducting formative and summative evaluations of programs and their corresponding curriculum content (see also Finding 4.4.1).

Characteristic 13: Requires the design of a comprehensive staff development program linked to curriculum design and delivery

This characteristic was not met. Board policy did not establish expectations for a comprehensive professional development plan related to curriculum design and delivery. Job descriptions were vague regarding responsibilities for staff development. District administrators did not provide the auditors with a written staff development plan that was linked to curriculum design and delivery (see Finding 3.4). Survey results and interviews with district and campus administrators showed that various professional development activities had been conducted, but these were not guided by goals or articulated priorities. Most recently, the majority of the teaching staff had completed training on the Essential Elements of Instruction.

Characteristic 14: Presents procedures for monitoring the delivery of curriculum

This characteristic was not met. Board policy did not state expectations for monitoring the delivery of the district curriculum. Job descriptions were vague regarding responsibilities for the monitoring of curriculum. During interviews, auditors heard that campus administrators as well as district teams would conduct walk-through visitations throughout buildings on a regular basis to gain information about classrooms practices, comply with special program requirements (i.e., Title 1), and focus on improving student achievement. Through interviews auditors also learned that during the past school year several district teams had been given the responsibility to develop a consistent district-wide "walk-through" form. However, no consistent form was supplied to the auditors, and when asked, principals typically reported using one of their own (borrowed from another district or developed internally).

Even though the expectation for conducting walk-through visitations to classrooms on a regular basis was articulated by staff through survey responses (45 percent responded that they received daily/weekly visitations) and interviews with auditors, there was no evidence of specific or consistent procedures to be used during this monitoring process beyond the teacher evaluation instrument.

Characteristic 15: Establishes a communication plan for the process of curriculum design and delivery

This characteristic was not met. Board policy, job descriptions, and other district documents did not establish a communication plan for the process of curriculum design and delivery. District administrators used memos and verbal communications in administrative meetings and committee meetings to communicate about curriculum design and delivery. Auditors noted that on August 16, 2013, a Team Member Update communication was sent from the superintendent to his constituents sharing a model referencing a teaching and learning cycle. This model included mention of the following areas: Curriculum, Planning and Sharing, Lesson Planning, Student Performance Data Use, Instructional Delivery Models, Curriculum Refinement and Redeployment, Training, and External Inputs. However, there is no evidence of a district communication plan for the articulation of the curriculum design and delivery processes, connecting the two and assuring alignment among the written, taught, and assessed curriculum.

In summary, the auditors found that two of the 15 audit criteria (15 percent) for curriculum management planning were adequate although not contained in a usable written plan. In order for the curriculum management planning to be considered adequate, 11, or 70 percent, of the criteria need to be met. There is insufficient coordination and management of curriculum design and delivery efforts at the district level, which has shifted the balance in tightly held vs. loosely held curriculum functions, placing a greater burden for curriculum development on school sites.

Story time at Soleng Tom Elementary

The auditors also heard many comments during interviews regarding the lack of coordinated and focused efforts to develop and implement a common, aligned curriculum. Comments regarding the lack of consistency district-wide included the following:

- "Our district needs to ensure consistency of expectations and philosophy. I think it important to be able to ask colleagues to share their experiences and best practices - that is difficult to do when we are all doing so many different things." (Building Administrator)
- "There is no collaboration or articulation in our district at this time. We hope to see that change." (Building Administrator).
- "The schools are still pretty much doing their own thing in terms of the textbooks and materials used." (District Administrator)
- "There is no curriculum plan, no curriculum guides and maps." (District Administrator)
- "We are all over the place in curriculum. I am fairly embarrassed at the lack of curricular alignment and being prepared to take on what is ahead of us in *PARCC* assessment and the lack of understanding of the standards." (District Administrator)

- "Our problem right now is we do not have a consistent curriculum across all grades that all schools are implementing." (District Administrator)
- "There is no consistent pacing guide. No guarantee that what kids are tested on is even taught at that grade level or the grade below." (District Administrator)
- "People are used to autonomy, used to doing their own thing." (District Administrator)

As can be seen from the above comments, there has been a great deal of inconsistency across the district in what is being taught and what students are learning at individual schools. Schools have previously been left to develop curriculum on their own, which the auditors found many sites are continuing to do. The auditors also found that without a tightly-held district curriculum that defines for teachers and principals what students need to learn within a reasonable time frame, students cannot progress from one level to the next or transfer from one school to another without gaps or complications (see Finding 2.3).

There were also many comments made attesting to the need for an improved focus on curriculum and clearer direction district-wide:

- "Being text driven, it is difficult to move the district in one direction when we are all using different [math] texts." (Building Administrator)
- "We need lesson plans, common templates, [a] focus on planning." (District Administrator)
- "Curriculum is not a tight part of the district." (Instructional Support)
- "We need foundational pieces in place." (Instructional Support)
- "Our district needs managed curriculum, aligned PD to that, aligned accountability measures with district benchmarks, district assessments, and aligned materials and resources. These four do not exist in any form." (District Administrator)
- "What we do needs to be shaped from a curriculum perspective." (District Administrator)
- "There is a major weakness in this area. There is no consistency of curriculum between schools and there is no consistency in the delivery of it. We need a tight written, taught, and tested curriculum." (District Administrator)
- "There is no curriculum plan, no curriculum guides and maps," and "we are all over the place in curriculum." (District Administrator)

The historic lack of curriculum planning and cohesive management of curriculum at the top level is not surprising given the staffing in central office. The auditors were informed that prior leadership several years ago had eliminated the curriculum and instruction department, moving the function of curriculum development in alignment with assessments to schools. Schools have been left largely without district support in deciding what to teach. This is evident from the wide range of resources teachers reference when asked what they use to plan their instruction (see Finding 2.3). There are currently only a handful of individuals whose positions involve any curriculum development. In mathematics, only one is employed. This is in contrast to a department of over 15 trainers in professional development alone. Other departments likewise have several individuals focused on curriculum delivery issues with students, yet curriculum design has a skeletal staff at best. The imbalance between staff for curriculum design versus staff to support its delivery is indicative in the comment made by one teacher: "I don't know what to teach, but I have all these people here ready to help me."

There were many comments made during interviews regarding the lack of curriculum infrastructure and no real curriculum department:

- "[A former superintendent] took out Curriculum and Instruction and Technology to save money. It is no wonder that we have struggled since. We have no staff to help design curriculum and professional development to support the adopted curriculum." (District Administrator)

- "We haven't had a good strong curriculum department for the last several years. And, yes, we only have one math person right now." (Curriculum Personnel)
- "A tragedy is that we have no curriculum specialists…actually no curriculum department and minimal curriculum expertise now." (Teacher)
- "[The] decentralization of curriculum created inconsistency." (District Administrator)
- "There is no infrastructure for curriculum development in place." (District Administrator)
- "There is no formalized consistent process for curriculum development, textbook selection, etc." (District Administrator)

Other comments concerned the need to focus work on curriculum development and alignment:

- "We are breaking silos down to put work on one way. This is the work now. [We] need to be on same page to guide work." (District Administrator)
- "The basic things need to happen. We must create a managed viable curriculum." (District Administrator)
- "Right now we are trying to line out where we want to go. We want to manage curriculum, we want an assessment system district-wide to measure this in terms of benchmarks. We are all over the place. At elementary we have three curriculum, at middle school others, and nothing at high schools." (District Administrator)
- "We need to get aligned in all ways from curriculum to management." (Building Administrator)
- "We need the district to develop the curriculum—teachers need to think about how to teach, not what to teach." (Building Administrator)
- "We really need a common curriculum and a common way to do things so when the kids walk in they know what they are doing…if [common assessments] were across the district we could see where the student is coming from. We need to get there." (Instructional Support Staff)

Stakeholders attested to a need for a common curriculum and increased consistency in curriculum district-wide.

Summary

The district planning approach to the development, implementation, monitoring, and evaluation of the district curriculum was inadequate. Board policy was inadequate to provide direction to district administration for the written curriculum. No district documentation provided evidence of an aligned, tightly held curriculum that allows teachers and school leaders to have the autonomy to make appropriate site-level decisions in the best interest of their students. The district lacked an adequate philosophical framework for the design of district curriculum, requirements for a specific review cycle in all subject areas and grade levels, and definitions of the stages of curriculum development. Curriculum planning in terms of roles and responsibilities for the design and delivery of the curriculum, for the formats and components of the written curriculum, and for the use of state standards in a frontloaded approach were evident in some areas of curriculum planning and development but were inconsistent and inadequate overall.

Current requirements for curriculum design are inadequate to support teachers' differentiation of instructional approaches, to direct the use of assessment data in instructional decision making, and to evaluate programs and curriculum content both formatively and summatively. Although the presence of professional development was noted, there was no comprehensive staff development plan. Additionally, no communication plan for the processes of curriculum design and delivery existed. Expectations were evident and verbalized, but no procedures were in place for monitoring the delivery of the curriculum. The lack of written direction for curriculum management functions is also evident in the structures and staffing in place at the district level. There is inadequate personnel to support curriculum development, although delivery functions are generously staffed (see Finding 1.3), and a number of schools have assumed responsibilities in curriculum development as the district historically did not take responsibility for what should be a system-level responsibility.

Finding 2.2: The scope of the written curriculum is inadequate to guide classroom instruction in core and non-core courses.

A written curriculum is an essential tool for keeping teachers focused on the objectives students need to master. Well-developed curriculum follows the tightly held/loosely held balance discussed in Finding 2.1 and includes clear, translatable objectives for learning, assessments, suggested strategies and approaches, and the resources available to teachers (texts, videos, kits, and other instructional materials). The scope of the written curriculum refers to the percentage of courses in a district for which written curriculum documents are available. The audit expectation is that written curriculum guides should be present for every course at every grade level; however, minimum adequacy is reached when curriculum guides exist for 100 percent of all core courses and 70 percent of all non-core courses.

When written curriculum is not available for any course or subject area, it can decrease the consistency of subject delivery across grades and schools, particularly when different textbooks are utilized across a subject within the same grade level. Conversely, the presence of a written curriculum helps ensure consistency in student learning (that is, the concepts, skills, and vocabulary that students obtain), while allowing flexibility and professional judgment in how that student learning is obtained.

This begs the question, "what constitutes a curriculum?" Essentially, a curriculum is a written plan or guide that organizes student learning objectives into a rational sequence within given time frames, ties each objective to a common assessment, and provides a district-wide language of instruction across subjects and grades. Thus, a complete district curriculum defines the continuum of learning from grades PK-12. This allows teachers to accurately meet the individual needs of each student, because teachers can assess where students fall on the continuum and instruction can be planned accordingly. The audit does not consider commercially produced resources and materials to be a curriculum, and these are therefore not counted as a curriculum document when determining scope.

Finding 2.2 addresses only the scope of the written curriculum. The quality of the written curriculum documents reviewed by auditors is discussed in Findings 2.3 and 2.4. For Finding 2.2, the auditors reviewed the presence of curriculum relative to the number of courses being taught. The documents can be traditional hard copy or accessible through online technology services within the district. The key question is whether a centrally defined curriculum for any given course exists and is available to all teachers in the system (not just at a single school) to direct and support classroom instruction.

To determine the scope of curriculum, the auditors reviewed all district-level curriculum documents presented to them. Overall, auditors found the scope of written curriculum to be inadequate to direct student learning in both core and non-core courses. As discussed in Finding 2.1, two district policies (*Board Policy IGA: Curriculum Development* and *Board Policy IGE: Curriculum Guides and Course Outlines*) were identified that spoke directly to the district's expectation for a written curriculum, although only minimal curriculum was found in the district.

The complete analysis of the curriculum scope is presented in Appendix E. Exhibits 2.2.1, 2.2.2, and 2.2.3 present a summary of the scope of the curriculum at the elementary, middle, and high school levels. Exhibit 2.2.1 shows the scope of curriculum at the elementary level.

Exhibit 2.2.1

Scope of Elementary School Curriculum Grades K-5
Tucson Unified School District
January 2014

Content Area	Grade Level						Courses Offered	Courses with Curriculum Guides	% Scope
	K	1	2	3	4	5			
Core Content Areas									
English Language Arts/ Reading	X	X	X	X	X	X	6	6	100
ELD Language Arts/Reading	0	0	0	0	0	0	6	0	0
Mathematics	X	X	X	X	X	X	6	6	100
Science	0	0	0	0	0	0	6	0	0
Social Studies	0	0	0	0	0	0	6	0	0
Total Scope of Core Content Area Curriculum							**30**	**12**	**40%**
Non-Core Content Areas									
Art	0	0	0	0	0	0	6	0	0
Physical Education	0	0	0	0	0	0	6	0	0
Music	0	0	0	0	0	0	6	0	0
Total Scope of Non-Core Content Area Curriculum							**18**	**0**	**0%**
Sources: Master Schedules, Campus Administrator Interviews									
Key: X=Course offered, curriculum available 0=Course offered, no curriculum available									

As indicated in Exhibit 2.2.1:

- Standards documents for ELA included objectives for reading, writing, and language arts, so these courses were considered as one for each grade level.
- Written standards documents were present for grades K-5 in English language arts, but no curriculum documents were available for separate ELD classes.
- Written curriculum documents were available for grades K-5 in math, giving it a scope of 100 percent.
- No curriculum documents were available for science or social studies.
- No curriculum was presented for non-core courses such as art, physical education, and music.

The auditors were told that science resources and materials, in the form of kits, are made available to all teachers, but these did not satisfy the criteria for a curriculum guide. It should be noted, however, that multiple teachers and curriculum personnel considered these kits to be the curriculum.

Textbooks provided correlations between Common Core standards and teacher edition pages for ELD classes, and a list of objectives was present in separate, grade level documents. However, these documents were fragmented and developed largely by commercial publishers, and were not included in the calculations for scope.

Overall, the total scope of curriculum for grades K-5 was 40 percent for core courses and 0 percent for non-core courses. This did not meet audit expectations of 100 percent in core areas and at least 70 percent in non-core areas. Therefore, the scope of curriculum at the elementary level was considered inadequate to direct instruction.

Exhibit 2.2.2 presents a summary of data related to the scope of curriculum at the middle school level. High school level courses taught at the middle school are included in the middle school scope analysis found in Appendix F. The presence or absence of a curriculum for those classes was not considered in Exhibit 2.2.2.

Exhibit 2.2.2

Scope of Middle School Curriculum Grades 6-8
Tucson Unified School District
January 2014

Content Area	Grade Level			Courses Offered	Courses with Curriculum Guides	% Scope
Core Courses						
	6	7	8			
English Language Arts*	X	X	X	7	3	42.9
Mathematics*	X	X	X	6	3	50.0
Science*	X	X	X	3	0	0.0
Social Studies*	X	X	X	3	0	0.0
Totals for Core Courses				**19**	**6**	**31.6%**
Non-Core Courses						
World Languages*	X	X	X	9	0	0.0
Fine and Performing Arts	X	X	X	25	0	0.0
Health and Physical Education	X	X	X	1	0	0.0
Electives*	X	X	X	18	0	0.0
Totals for Non-Core Courses				**53**	**0**	**0.0%**
* = Does not include courses found on high school course list						
Sources: Building Master Schedules, Campus Interviews, Administrator Interviews						

The following can be noted regarding Exhibit 2.2.2:

- English language arts had a scope of 42.9 percent. The available curriculum included objectives for reading, writing, and language arts, so these were considered as one course. No separate curricula were presented for honors or gifted level courses.
- Curriculum documents were available for regular math courses in grades 6-8. No grade level honors curriculum was presented, giving a math scope of 50 percent.
- No curriculum was presented for science, social studies, or non-core classes.
- ELD and other courses that mirror courses taught at the high school level were not included in this exhibit, but may be found in Exhibit 2.2.3.

Auditors expected to find curriculum documents for each course listed on the schedule. Since honors and GATE classes were denoted separately in the master schedules, it was expected that these courses would have separate curricula. None were presented, and the existing standards documents did not reference any differentiation for advanced or gifted students. Overall, the scope of curriculum at the middle school was 31.6 percent for core courses and 0 percent for non-core courses. This did not meet audit expectations of 100 percent in core areas and at least 70 percent in non-core areas. Therefore, the scope of curriculum at the middle school level was considered inadequate to direct instruction.

Exhibit 2.2.3 presents a summary of data related to the scope of curriculum at the high school level. A course-by-course analysis may be found in Appendix F.

Exhibit 2.2.3

Scope of High School Curriculum Grades 9-12
Tucson Unified School District
January 2014

Area of Study	Courses Offered	Courses with Curriculum Guides	% Scope
Core Courses			
English Language Arts	40	8	20.0
Mathematics	17	3	17.6
Science	33	0	0.0
Social Studies	19	4	21.1
Totals for Core Curriculum	**109**	**15**	**13.8%**
Non-Core Courses			
World Languages	29	0	0.0
Fine and Performing Arts	81	0	0.0
Health and Physical Education	10	0	0.0
Electives	11	0	0.0
Career and Technical Education	86	0	0.0
Totals for Non-Core Curriculum	**217**	**0**	**0.0%**
Sources: District Course Catalog, Master Schedules, Interviews			

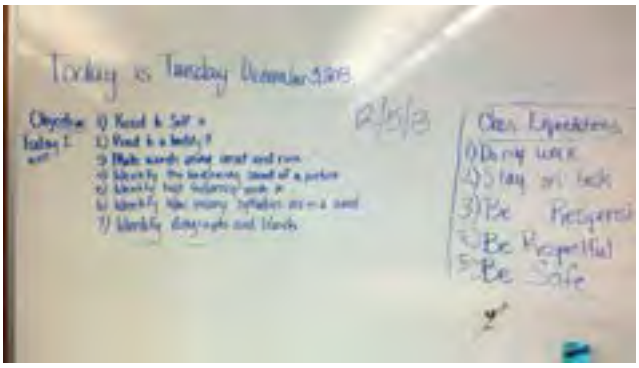
As can be noted from the exhibit:

- Curriculum was available for standard ELA classes in grades 9-12, but not for ELD or any specialized literature or honors classes except four culturally relevant courses. This gave English language arts an overall curriculum scope of 20 percent.
- Curriculum was also available for standard Algebra I, Algebra II, and Geometry, but not for any other math courses. Math had a curriculum scope of 17.6 percent.
- The only curricula presented for social studies were for four culturally relevant courses, giving a scope of 21.1 percent in social studies.
- No district curriculum documents were available for science or non-core courses.

As at the middle school level, auditors expected to find written curriculum for each course on the schedule. Honors and GATE classes are given separate billing, but no curriculum was presented for them from any department. English Language Development (ELD) is a separate class on the schedule for new English language learners, which may take up to four hours of instructional time daily. Therefore, auditors expected to find curriculum documents related to ELD. The existing ELA documents state at the beginning of each strand that students in ELD courses will use the ELP standards as the basis for English language arts instruction. This implies that a separate curriculum exists based on the ELP standards. While some textbooks provided minimal scope and sequence pages for teachers, these publisher-driven documents primarily served as an overview of the teacher edition and did not meet the audit definition of a curriculum. As discussed in Finding 3.3, the lack of curriculum for ELD students presents both curriculum scope and equity issues.

Overall, the scope of curriculum at the high school level was 13.8 percent for core courses and 0 percent for non-core courses. This did not meet audit expectations of 100 percent for core courses and at least 70 percent

for non-core courses. The degree of curriculum guidance available at the high school level was considered inadequate to direct instruction.



Classroom objectives on board at McCorkle K-8

Tully Elementary whole group instruction

Auditors also interviewed teachers, building principals, district administrators, instructional support staff, and parents/community members regarding the availability of curriculum across the district. The auditors found that there is confusion among district stakeholders regarding what comprises a curriculum. This was evident from interview comments, as illustrated by the following remarks:

- "Common Core is the district curriculum." (Building Administrator)
- "Textbook drives instruction in many areas. It is considered the curriculum." (Instructional Support Staff)
- "Curriculum is a tool to reach the end goal of standards mastery." (Teacher)

More often than not, interviewees expressed recognition of the need for a common curriculum. The following comments were typical:

- "From what I've been able to see, there is not a curriculum as I understand curriculum to be." (Community Member/Grandparent)
- "We have English and math pacing guides. But we have no set curriculum from the district level for science and social studies." (Building Administrator).
- "Our problem right now is we do not have a consistent curriculum across all grades that all schools are implementing." (District Administrator)
- "There is no district curriculum for my subject." (Teacher)
- "We are not consistent and do not have a curriculum to offer the district. There has not been any guidance and schools have identified and reached out and said they wanted to use this program. They did not have curriculum to follow." (District Administrator)
- "I did not know there was a district developed curriculum." (Teacher)

There were other comments made during interviews that indicated the need for a curriculum.

- "We need the district to develop the curriculum. Teachers need to think about how to teach, not what to teach." (Building Administrator)
- "We need a district-wide curriculum so any student who transfers can do so seamlessly." (Parent)
- "How can we hold teachers accountable for curriculum that doesn't exist?" (Building Administrator)

This concern over the lack of curriculum was reinforced by teachers who answered the online survey. Over 400 comments were made in open-ended answers to a question on whether teachers use the district curriculum to plan their instruction. The following comments are illustrative:

- "I am unaware of designed curriculum—I have texts and test dates set for my curriculum by the district." (Teacher, online survey)
- "To my knowledge, it does not exist." (Teacher, online survey)
- "I don't get any [curriculum]." (Teacher, online survey)
- "[It's] non-existent." (Teacher, online survey)
- "I didn't know there was one." (Teacher, online survey)
- "Unknown to me beyond CC standards, which are not curriculum. I use cc standards to plan curriculum all the time, and they are easily accessible." (Teacher, online survey)
- "I don't even know what the 'district-designed curriculum' IS or where to find it." (Teacher, online survey)
- "[It] does not exist." (Teacher, online survey)
- "I would prefer some guidance from the District—this is an enormous amount of never ending work." (Teacher, online survey)

To the open-ended question regarding what areas need improvement in the district, over 1,100 teachers responded. Over 150 comments directly related to curriculum, particularly regarding the need to improve it or create it.

- "Teachers rely on internet materials or making copies of workbooks when needed, because we do not have current curriculum resources." (Teacher, online survey)
- "[We need] a district developed curriculum." (Teacher, online survey)
- "[We need] unitary core curriculum." (Teacher, online survey)
- "[We need] a master curriculum calendar for each grade by subject." (Teacher, online survey)
- "[We need] updated curriculum to match Common Core; [there is] different curriculum used for each site." (Teacher, online survey)
- "Teachers are not given enough or appropriate curriculum for the new standards. We were told to follow the common core using our own materials and resources. Everyone is doing their own thing, once again." (Teacher, online survey)
- "[We need] curriculum development. With an emphasis on Science." (Teacher, online survey)
- What needs improvement? "Curriculum development and consistency." (Teacher, online survey)
- "It would be wonderful if there was a school wide curriculum that everyone was using in every school." (Teacher, online survey)
- "[We need] district curriculum for reading, writing, math…each school seems to be doing their own thing. Sometimes [there are] several different curriculums within the same school." (Teacher, online survey)
- "We have no district-wide, grade/content-wide, or even building wide curriculum standards, [no] consistency of the same curriculum throughout all TUSD schools." (Teacher, online survey)
- "[We need] curriculum for LA." (Teacher, online survey)

More comments regarding the lack of or need for curriculum can be found in the Survey Appendix, a separate document which presents all comments from the online survey administered to teachers in TUSD. Overall, auditors found that members of the district community are not united in their understanding of what is considered a curriculum, but regardless of the definition, most recognize a need for a common written curriculum (see also Finding 2.3). There is concern at multiple levels over the lack of a district curriculum.

Summary

Auditors found that the scope of the written curriculum was inadequate at all levels to direct instruction. Anecdotal evidence suggested that some individual campuses had curricula for various courses. The district has adopted curriculum documents for English language arts and math courses, but the existing guides do not cover all courses being taught, particularly at the high school level. Written guidance is not available for over half of the core curriculum at all levels. No written curriculum is present at any level for non-core courses.

Finding 2.3: The quality of the written curriculum is inadequate to provide clear guidance for effective teaching and learning. Teachers report relying on a variety of sources when planning instruction, and the auditors found that the written and taught curriculum are neither articulated nor coordinated.

A clear and comprehensive written curriculum provides the foundation for a school system's efforts to reach desired levels of student achievement. A quality curriculum provides for consistency and coordination while supporting methodological flexibility in how teachers interact with and instruct students. Quality curriculum guides support alignment of the written, taught, and tested curriculum. They focus instruction on essential learnings and connect the curriculum vertically and horizontally within the system, ensuring equal access to the curriculum for all students.

Quality written curriculum guides instruction by providing teachers with specific and measurable objectives for student learning within suggested time frames. These guides assure alignment of those objectives with the tested curriculum, specify the prerequisite skills needed for successful mastery of new objectives, and link the content to a variety of instructional materials and resources. They also suggest effective strategies and approaches for less experienced teachers, while allowing all teachers the autonomy to plan instruction in response to individual student needs. When guides are incomplete or nonexistent, the content taught across district classrooms is less likely to connect in a logical sequence, and instruction is more likely to be inconsistent among teachers and between campuses, which in turn can result in less predictable learning outcomes for students.

To determine the quality of existing curriculum, auditors examined documents provided by the district, including policy and job descriptions, as well as all written curriculum documents approved by the governing board. These documents were frequently referred to by district personnel as standards documents. These standards documents were rated against the minimum audit criteria for curriculum quality and specificity. In addition, auditors interviewed district and campus administrators, instructional support personnel, and teachers to determine the availability and use of curriculum documents, and to determine the degree to which the curriculum was articulated and coordinated across grade levels and schools.

Overall, the auditors found that existing curriculum documents did not meet minimum standards for quality and specificity. Use of the available curriculum was inconsistent, and teachers reported relying on many different resources in planning their instruction. The curriculum as it is taught in district classrooms was found to be inconsistent as well, which has resulted in poor articulation and inadequate coordination across grade levels and among schools.

Auditors expected to find clear direction in governing district documents for expectations and components of written curriculum. The auditors found that policies lacked specific requirements for the written curriculum, as well as for its use. *Policy IGA: Curriculum Development* states the expectation that there will be a district curriculum, but does not address requirements for format or components. *Policy IGE: Curriculum Guides and Course Outlines* reiterates the superintendent's authority to formulate procedures for the development and use of curriculum guides, but also specifies that "the guides shall be designed to assist users in implementing the District philosophy regarding the teaching of a subject and will, when possible, suggest a variety of possibilities for instruction, patterns of individualization, variations of approaches, and materials." No other policies were found related to curriculum design and development. No direction for curriculum development was found in job descriptions (see Findings 1.4 and 2.1).

Quality of Existing Curriculum

As discussed in Finding 2.2, the district has adopted a set of curriculum documents for English language arts, math, and six culturally responsive courses. Auditors next turned to those curriculum documents to analyze the quality of curriculum design.

Based on district plans and governing board minutes, auditors determined that there are currently centrally developed and board approved curriculum guides for English Language Arts grades K-12, Math K-8, Algebra I, Algebra II, and Geometry. Guides for an additional six culturally relevant courses developed under the auspices of the Unitary Status Plan have also been approved. The 28 existing curricula were analyzed for quality of design using the audit criteria listed in Exhibit 2.3.1. Other curriculum documents presented by the district in science, ELD, social studies, and fine arts, while supporting instruction in various ways, did not meet audit definitions of a curriculum as explained in Finding 2.2, and so were not included in this analysis.

Exhibit 2.3.1

Curriculum Management Improvement Model Frame One Analysis:
Minimal Basic Components for Curriculum Document Quality and Specificity

Point Value	Criteria
Criterion One: Clarity and Specificity of Objectives	
0	No goals/objectives present
1	Vague delineation of goals/learner outcomes
2	States tasks to be performed or skills to be learned
3	States for each objective the what, when (sequence within course/grade), how actual standard is performed, and amount of time to be spent learning
Criterion Two: Congruity of the Curriculum to the Assessment Process	
0	No assessment approach
1	Some approach of assessment stated
2	States skills, knowledge, and concepts that will be assessed
3	Keys each objective to district and/or state performance assessments
Criterion Three: Delineation of the Prerequisite Essential Skills, Knowledge, and Attitudes	
0	No mention of required skill
1	States prior general experience needed
2	States prior general experience needed in specified grade level
3	States specific documented prerequisite or description of discrete skills/concepts required prior to this learning (may be a scope and sequence across grades/courses if PreK-12)
Criterion Four: Delineation of the Major Instructional Tools	
0	No mention of textbook or instructional tools/resources
1	Names the basic text/instructional resource(s)
2	Names the basic text/instructional resource(s) and supplementary materials to be used
3	States for each objective the "match" between the basic text/instructional resource(s) and the curriculum objective
Criterion Five: Clear Approaches for Classroom Use	
0	No approaches cited for classroom use
1	Overall, vague statement on approaching the subject
2	Provides general suggestions on approaches
3	Provides specific examples of how to approach key concepts/skills in the classroom

The criteria in Exhibit 2.3.1 represent the tightly held/loosely held components of quality curriculum discussed in Finding 2.1. Criteria one, two, and three represent the curriculum components that must be tightly controlled

by the district. If teachers are not uniformly working toward the same objectives and assessing mastery in the same way, consistency of instruction and achievement will be lost. Criterion three—delineation of the prerequisite essential skills, knowledge, and attitudes—must be tightly held by the district in order to ensure that instruction is efficient and moves students through learning pathways smoothly. Criteria four and five represent the loosely held components of quality curriculum, allowing teachers to choose from a broad menu of resources and strategies that will target their particular students' interest and academic strengths and weaknesses. Without these components, curriculum may become merely rote drill and recitation of facts, leading to loss of creativity, excitement, and passion for lifelong learning.

Auditors rated each approved curriculum guide (standards document) from zero (0) to three (3) on each of the five criteria, with 3 representing the highest rating. To receive a 3 for the first criterion would require that each objective state *what* students will do to meet the objective, *when* within the course the objective is met, *how/under what conditions and to what degree* the actual standard is to be performed, and the *amount of time to be spent learning* material related to the objective. To receive a 3 for the second criterion would require that each objective is keyed to district and/or state performance evaluations, linking the objective to sample questions from the common summative assessments. To receive a 3 for the third criterion would require identification of specific prerequisite skills and concepts that should have been mastered prior to this objective (such as a detailed PK-12 scope and sequence delineating discrete objectives). A 3 rating for the fourth criterion would require a page-specific match between the basic text/instructional resources and each objective. To receive a 3 rating for the fifth criterion would require provision of specific examples on how to approach key concepts/skills in the classroom for each objective. A total score for each curriculum is obtained by adding the five separate criterion scores. The highest score a guide can receive is 15. A rating of 12 points is considered the minimum rating for adequate quality of design of a given curriculum. To obtain an overall picture of curriculum quality, a mean is calculated for each criterion and for total ratings.

Auditors' ratings of the English language arts curriculum analyzed are presented in Exhibit 2.3.2.

Exhibit 2.3.2

Auditors' Ratings of English Language Arts Curriculum Documents for Grades K-12
Tucson Unified School District
January 2014

Curriculum Document Title	Date	1 Obj.	2 Asmt.	3 Prereq.	4 Res.	5 Strats.	Total Rating
English Language Arts Curriculum Grade K	3/27/12	2	1	0	0	0	**3**
English Language Arts Curriculum Grade 1	3/27/12	2	1	2	0	0	**5**
English Language Arts Curriculum Grade 2	3/27/12	2	1	2	0	0	**5**
English Language Arts Curriculum Grade 3	3/27/12	2	1	2	0	0	**5**
English Language Arts Curriculum Grade 4	3/27/12	2	1	2	0	0	**5**
English Language Arts Curriculum Grade 5	3/27/12	2	1	2	0	0	**5**
English Language Arts Curriculum Grade 6	3/27/12	2	1	2	3	2	**10**
English Language Arts Curriculum Grade 7	3/27/12	2	1	2	3	2	**10**
English Language Arts Curriculum Grade 8	3/27/12	2	1	2	3	2	**10**
English Language Arts Curriculum Grade 9-10	3/27/12	2	0	2	1	2	**7**
English Language Arts Curriculum Grade 11-12	3/27/12	2	0	2	1	2	**7**
Mean Rating for Each Criterion		**2**	**.82**	**1.8**	**1**	**.91**	**6.5**

The following observations may be made about Exhibit 2.3.2:

- The overall mean rating for all ELA curricula was 6.5. This did not meet the audit expectation of a minimum score of 12 points.
- The scores per grade level ranged from 3 to 10. No curriculum was rated adequate for quality of design.
- Middle school curriculum (grades 6, 7, 8) had the highest scores, with 10 points for each grade level.

- The link between curriculum and assessments was the weakest area among the five criteria, and specificity of objectives was the strongest area.

Overall, the auditors rated the district's ELA curriculum as inadequate in design. The auditors' comments for each criterion in Exhibit 2.3.2 follow:

Criterion One: Clarity and Specificity of Objectives – Mean Rating 2

All the curricula used Common Core standards as the objectives. Some contained conditions under which students should perform, such as "with adult assistance," but few included a time frame for learning. None were noted to have a specific performance target such as "with at least 85 percent accuracy."

Criterion Two: Congruity of the Curriculum to the Assessment Process – Mean Rating .82

Connections to the benchmark and state assessment processes were noticeably absent in all ELA curricula. Grades K-8 contained the list "state and district assessments, school assessments, classroom assessments" for each strand. However, the documents did not specify what would be tested, how it would be tested, or when it would be tested. Grades 9-12 had no mention of assessment.

Criterion Three: Delineation of the Prerequisite Essential Skills, Knowledge, and Attitudes – Mean Rating 1.8

Each curriculum document, with the exception of Kindergarten, listed skills and concepts that were expected to be mastered in the previous year and the next year, by cluster. Auditors noted that there were several types of PreK programs operating in the district, but no academic curriculum was presented for any of them.

Criterion Four: Delineation of the Major Instructional Tools – Mean Rating 1

Curriculum guides for grades K-5 contained minimal references to websites containing state standards and a recommended vocabulary list. No basic text was referenced, and additional teaching resources were noticeably absent. Documents for grades 6, 7, and 8 were more detailed, containing both suggested online resources for each cluster and textbook page correlations for each objective. Documents for grades 9-12 contained online resources by cluster, but did not reference a basic text.

Criterion Five: Clear Approaches for Classroom Use – Mean Rating .91

Curriculum for grades K-5 contained virtually no strategies to help teachers deliver instruction effectively. Guides for grades 6-12 contained multiple recommended strategies for instruction in each cluster. None of the documents contained multiple strategies by objective.

Overall, curriculum documents for English language did not meet minimal audit standards for quality in grades K through 12, although elements of quality were present in each grade level.

The auditors also analyzed documents related to mathematics instruction from the district website using the same criteria for quality and specificity. Auditors' quality ratings for the adopted math curriculum are presented in Exhibit 2.3.3.

Exhibit 2.3.3

Auditors' Ratings of Mathematics Curriculum Documents for Grades K-12
Tucson Unified School District
January 2014

Curriculum Document Title	Date	1	2	3	4	5	Total
		Obj.	Asmt.	Prereq.	Res.	Strat.	Rating
Mathematics Curriculum Grade K	3/27/2012	2	1	0	1	1	**5**
Mathematics Curriculum Grade 1	3/27/2012	2	1	0	1	1	**5**
Mathematics Curriculum Grade 2	3/27/2012	2	1	0	1	1	**5**
Mathematics Curriculum Grade 3	3/27/2012	2	1	0	1	1	**5**
Mathematics Curriculum Grade 4	3/27/2012	2	1	0	1	1	**5**

Exhibit 2.3.3 (continued) Auditors' Ratings of Mathematics Curriculum Documents for Grades K-12 Tucson Unified School District January 2014							
Curriculum Document Title	**Date**	**1**	**2**	**3**	**4**	**5**	**Total**
		Obj.	**Asmt.**	**Prereq.**	**Res.**	**Strat.**	**Rating**
Mathematics Curriculum Grade 5	3/27/2012	2	1	0	1	1	**5**
Mathematics Curriculum Grade 6	3/27/2012	2	1	0	1	1	**5**
Mathematics Curriculum Grade 7	3/27/2012	2	1	0	1	1	**5**
Mathematics Curriculum Grade 8	3/27/2012	2	1	0	1	1	**5**
Standards for Mathematics – High School Algebra I	3/27/2012	2	1	0	1	1	**5**
Standards for Mathematics – High School Algebra II	3/27/2012	2	1	0	1	1	**5**
Standards for Mathematics – High School Geometry	3/27/2012	2	1	0	1	1	**5**
Mean Rating for Each Criterion		**2**	**1**	**0**	**1**	**1**	**5**

The following can be noted from the exhibit:

- The overall mean for all adopted math curriculum was 5 points. This did not meet the audit minimum of 12 points needed to be considered adequate in design.
- The lowest area was prerequisite skills, with no documents consistently listing prerequisite skills, knowledge, or attitudes.
- The links to assessment were vague, as indicated by a mean score of 1, as were connections to texts. Few strategies were presented for teachers to use.
- Quality of objectives was the highest with a mean score of 2.

Overall, the adopted math curriculum did not meet minimum audit standards for quality. Auditors' comments related to each criterion in Exhibit 2.3.3 follow:

Criterion One: Clarity and Specificity of Objectives – Mean Rating 2

In the adopted curriculum, the Common Core and Arizona state standards were used as learning objectives. These state the skill to be performed but are frequently lacking information on the conditions under which the skill is to be performed and the degree of mastery required.

Criterion Two: Congruity of the Curriculum to the Assessment Process – Mean Rating 1

In documents for grades K-8, each standards cluster was accompanied by a reference to *PARCC* testing and a statement that assessments should be aligned with the standards. Exactly what would be tested and/or sample problems were not included. In the high school documents this reference was only found occasionally (five times in Algebra I, three times in Algebra II, and three times in Geometry).

Criterion Three: Delineation of the Prerequisite Essential Skills, Knowledge, and Attitudes – Mean Rating 0

In the adopted curriculum, references to skills that students were expected to have prior to this course were noticeably absent at all levels.

Criterion Four: Delineation of the Major Instructional Tools – Mean Rating 1

Among the adopted curriculum, the elementary documents contained no reference to basic texts, although each contained some online and literary resources for every cluster. At the middle school level, the documents contained, by cluster, references to chapters in the text and online resources. At the high school level, resources varied by standards cluster. Generally, there were online resources for each cluster. Linkages to textbooks were not always present and, when present, were not specific or linked to individual objectives.

Criterion Five: Clear Approaches for Classroom Use – Mean Rating 1

The adopted curriculum contained general statements and descriptions of sample problems and the thought process that students might use in solving them, and an occasional suggestion of activities that could be used by teachers for a given objective. However, the focus was more on explaining what the standard meant than on providing strategies for teaching.

Overall, the adopted math curriculum was rated as inadequate in design to direct teaching. Auditors noted in interviews and on the district website that curriculum development is ongoing in this department through ad hoc committees. As discussed in Finding 2.1, without clear guidance, these efforts are not fully coordinated. The new documents posted on the district website are works in progress and are so disparate in completion, even within grade levels, that a complete analysis of them did not change the overall math curriculum rating. However, while not consistent, some changes in format were noted within the newly developed documents that bear reporting.

The revised/proposed curriculum includes a scope and sequence for each year (Year at a Glance) that provides estimated time frames for each unit. Standards were grouped by logical instructional units rather than by numerical order. Content of the teaching units varied widely by grade and unit. In the first grade, Units 1-6 (dated September 15, 2013) included standards along with objectives (performance tasks). Suggested means of assessing each performance task were listed, as were time frames for each objective/task. These units contained specific initial, formative, and summative assessment tasks for each objective. No prerequisite skills were listed in these units, but connections to the basic text along with literary and online resources were given. General strategies appeared throughout these six units. However, after Unit 6, the level of direction decreased dramatically in the first grade units. In other grade levels, units were in varying stages of development, with some templates virtually blank. No grade levels were complete enough to increase the overall rating for math curriculum.

The next set of curriculum documents reviewed were for culturally relevant curriculum. The inclusion of culturally relevant curriculum, although historically a point of focus in a number of TUSD schools, is lately a requirement of the Unitary Status Plan (USP). These guides were recently developed in an effort to meet the USP requirement that all students receive instruction that is culturally relevant. The auditors noted that beyond these guides, the few curriculum documents that exist do not mention how to effectively teach subgroups, such as special education, English language learners, ethnically or economically diverse groups, and/or gifted and talented students (see also Finding 2.2). There is a single sentence included in ELA documents that directs English Language Development (ELD) teachers to utilize the state's ELD standards, although it is clear whether this is in conjunction with or in place of district curriculum.

The auditors reviewed the approved multicultural/culturally responsible curriculum for grades 11-12 and compared it against the five criteria for quality and specificity. The result of their analysis is presented in Exhibit 2.3.4.

Exhibit 2.3.4

Auditors' Ratings of Culturally Relevant Curriculum Documents for Grades 11-12
Tucson Unified School District
January 2014

Curriculum Document Title	Date	1 Obj.	2 Asmt.	3 Prereq.	4 Res.	5 Strat.	Total Rating
English Language Arts 5,6 & 7,8: Culturally Relevant African American Viewpoint	July 9, 2013	2	0	1	2	3	**8**
English Language Arts 5,6 & 7,8: Culturally Relevant Mexican American Viewpoint	July 9, 2013	2	0	1	2	3	**8**
US Government: Culturally Relevant African American Viewpoint	Aug. 13, 2013	2	0	0	1	0	**3**

Exhibit 2.3.4 (continued)
Auditors' Ratings of Culturally Relevant Curriculum Documents for Grades 11-12
Tucson Unified School District
January 2014

Curriculum Document Title	Date	1 Obj.	2 Asmt.	3 Prereq.	4 Res.	5 Strat.	Total Rating
US Government: Culturally Relevant Mexican American Viewpoint	Aug. 13, 2013	2	0	0	1	0	**3**
US History: Culturally Relevant African American Viewpoint	Aug. 13, 2013	2	0	0	1	0	**3**
US History: Culturally Relevant Mexican American Viewpoint	Aug. 13, 2013	2	0	0	1	0	**3**
Mean Rating for Each Criterion		**2**	**0**	**.33**	**1.3**	**1**	**3.5**

The following can be observed from Exhibit 2.3.4:

- The mean total for culturally relevant curriculum was 3.5. This is below the audit minimum standard of 12 points for adequate design.
- No curriculum document met the minimum standard of a 12-point rating. Both English language arts courses came closest to the minimum, with a score of 8 points.
- The weakest criterion was linkage to the assessment process. None of the curriculum guides tied content to any form of common assessment.

Overall, the auditors found that the culturally relevant curriculum was inadequate to direct instruction. Auditors' comments for each criterion are provided below:

Criterion One: Clarity and Specificity of Objectives – Mean Rating 2

All the documents used standards as their learning objectives without any refinement or revision. The history and government documents listed both Arizona state social studies standards and Common Core standards. These four documents also included sample learning objectives utilizing Webb's Depth of Knowledge levels to set performance tasks using specific materials. It was unclear whether the tasks in this column were intended as required or optional activities. None of the documents included time frames or standards of mastery for learner objectives.

Criterion Two: Congruity of the Curriculum to the Assessment Process – Mean Rating 0

Connections to common assessments were not included in the documents.

Criterion Three: Delineation of the Prerequisite Essential Skills, Knowledge, and Attitudes – Mean Rating .33

The ELA documents contained some references to what students were expected to master, in terms of prerequisite content, in the previous grade strand. No such references were found in the social studies documents.

Criterion Four: Delineation of the Major Instructional Tools – Mean Rating 1.3

The ELA documents contained some Internet and print resources in the strategies sections, and a link to a suggested vocabulary list, as well as some instructional resources for teachers. The social studies documents also contained references to specific print and electronic resources within the performance objectives. However, references were not provided for every objective to the degree of specificity required for a rating of 3.

Criterion Five: Clear Approaches for Classroom Use – Mean Rating 1

The ELA documents provided numerous suggested strategies by learning objective and grade (note that curriculum was written as semesters 5,6 and 7,8 in the same document). Additional strategies suitable for either grade were presented by strand. These guides received the highest rating of 3 for this component. However, there were no strategies suggested in the social studies documents.

Overall, culturally relevant curriculum documents did not meet audit criteria for quality and specificity, although elements of excellence were noted in each document.

Exhibit 2.3.5 displays a summary of the mean ratings of all the adopted curriculum documents.

Exhibit 2.3.5

Summary of Auditors' Mean Ratings of District Curriculum Documents by Content Area
Tucson Unified School District
January 2014

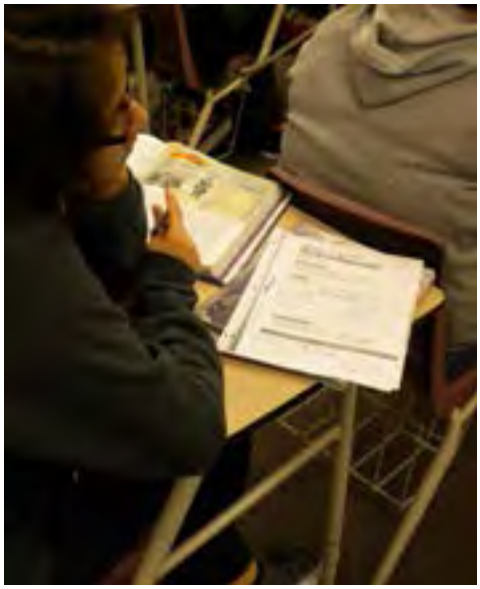
Content Area	Mean Rating by Auditors					
	1	2	3	4	5	Total
	Obj.	Asmt.	Prereq.	Res.	Strats.	Rating
English Language Arts K-12	2	.82	1.8	1	.91	**6.5**
Mathematics K-12	2	1	0	1	1	**5**
Culturally Relevant Topics 11-12	2	0	.33	1.3	1	**3.5**
Mean Ratings n=28	**2**	**.75**	**.79**	**1.1**	**1**	**5.7**
Data Source: district website and hard copies provided by administrators						

The following observations can be made about Exhibit 2.3.5:

- English language arts courses had the highest total rating, with a mean of 6.5.
- The objectives criterion had the highest mean score at 2 out of a possible 3.
- The lowest mean score (.75 points) was in the connections to assessment processes criterion.
- None of the content areas met the minimum audit score of 12 points.

Overall, adopted district curriculum documents had a mean total rating of 5.7 out of a possible 15 points. This did not meet minimum audit criteria of 12 points for quality and specificity in minimum components. Most guides included objectives and only cursory mention of materials/resources, assessment, or some strategies.

Lesson guidelines at Banks Elementary



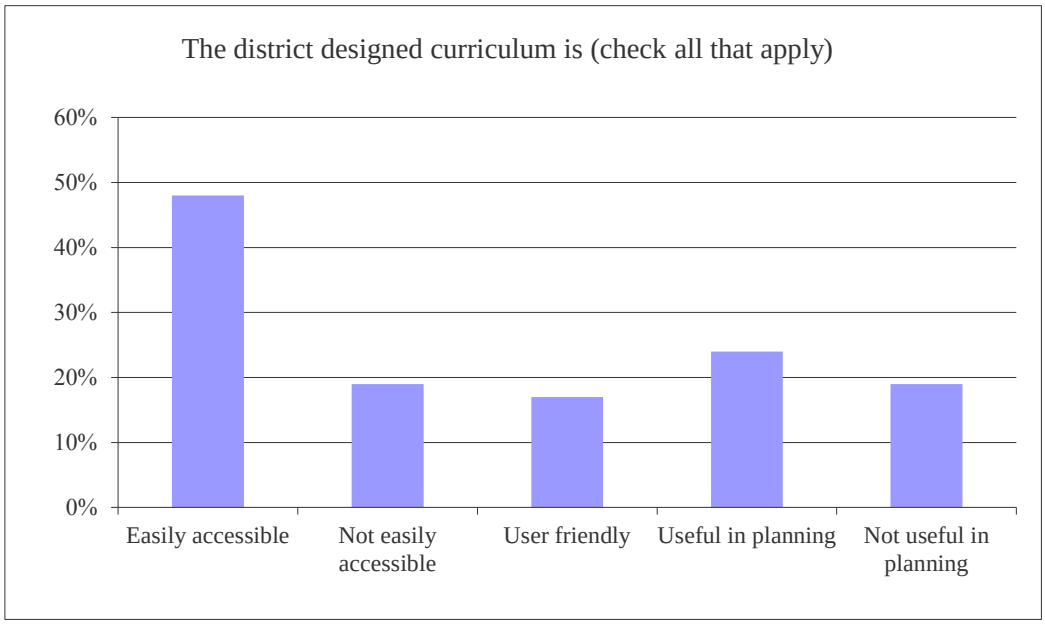
Social studies textbook with worksheet at Sechrist Middle school

Having a comprehensive set of quality curriculum documents is a prerequisite for consistency across grades and between schools. An adequate scope of curriculum that is well-designed and directs teaching increases the likelihood of uniform access to success and of high levels of student achievement across the system. However,

if the curriculum is not utilized by teachers, these benefits are not realized. In interviews and through online surveys, the auditors asked about the online accessibility of the district curriculum and its use by teachers. The responses to this survey question are presented in Exhibit 2.3.6:

Exhibit 2.3.6

All Teacher Responses: Characteristics of Written Curriculum
Tucson Unified School District
January 2014



Over 1,000 teachers responded to this question (N=1009), and 88 percent of the teacher respondents were teachers of core content. As can be seen in Exhibit 2.3.6, when questioned about the accessibility of the district curriculum, almost half (48 percent) of respondents to the teacher survey stated it is easily accessible, while 19 percent stated that it is not easily accessible. However, only 24 percent said the district curriculum was useful for planning, while 19 percent said it was not useful. For this survey question, teachers could select more than one response, so the percentages do not total 100 percent[1].

Survey results would indicate that a relatively low percentage of teachers in the Tucson Unified School District find the district curriculum user-friendly and useful in their planning. What teachers report to be using to guide instruction is presented in the following section.

Use of District Curriculum

Having a quality, central written curriculum that defines the continuum of learning in every content area and for every student is a critical first step in assuring increased student learning. The second step is supporting teachers' delivery of the curriculum effectively, through professional development, monitoring, and on-site support. Determining what teachers actually use to guide their instruction is helpful in discovering where alignment of the written, taught, and tested curricula is weak.

The auditors found that there is limited common written curriculum in the Tucson Unified School District (see Finding 2.2). The curriculum that is available is mostly in the form of standards, which are sequenced in a type of pacing guide. Despite the lack of curriculum, the auditors sought to determine what teachers rely on to guide their daily instruction, to give district leaders information regarding the current status of curriculum delivery across the district.

[1] Due to a glitch in the survey, the first 600 respondents were unable to select more than one answer choice, while subsequent respondents could select as many as they wanted.

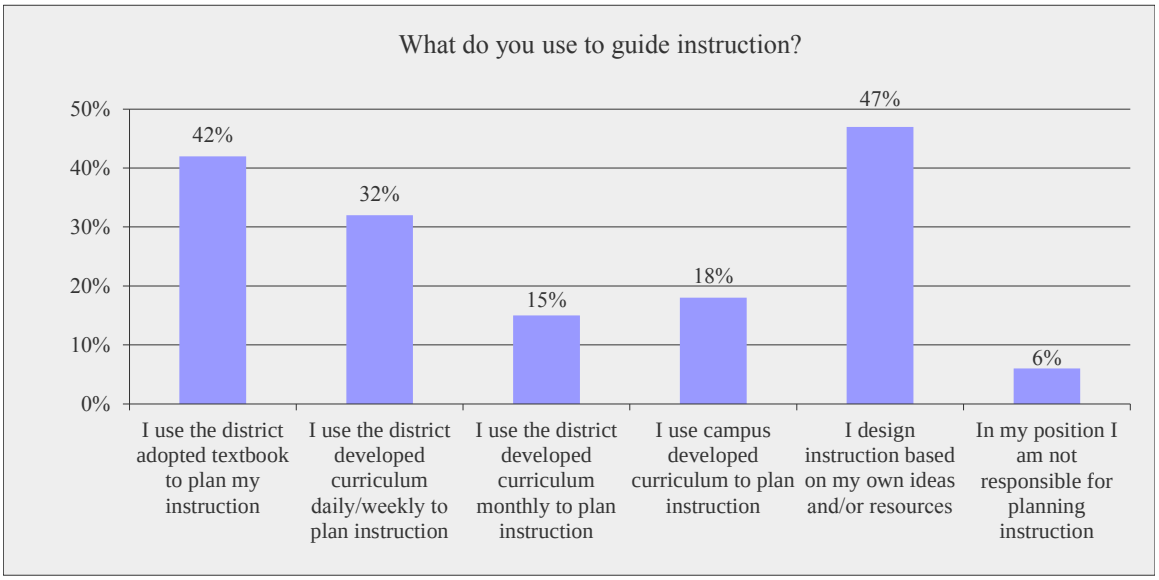
It is important to reiterate that the Curriculum Management Improvement Model recommends holding tightly the objectives that students are expected to master (along with their corresponding assessments), while holding resources, textbooks, strategies, and approaches loosely. Therefore, the auditors do not disapprove of the use of multiple resources and materials in planning instruction, nor teacher use of multiple methods, ideas, and inspiration for planning instructional activities. The issue is the lack of a clear definition of the concepts, skills, knowledge, or vocabulary students are expected to master at every stage and level of their educational progress. Without that definition, it is unclear whether the content being delivered is likely to improve student achievement.

To determine what teachers are using to guide their instruction, the auditors visited every school in the district and interviewed teachers, teacher mentors, principals, and assistant principals. They also surveyed over 1,300 classroom teachers via an online instrument (see Appendix E). Overall, the auditors found that teachers, depending on their content area, are relying on standards and commercially-produced resources for the majority of their instructional planning. Very few teachers reported relying on district-developed curriculum, which was not surprising, given the lack of district-developed written curriculum.

In response to the online survey question, "What do you use to plan instruction?" teachers were allowed to select from five possible responses.[2] These results are presented in Exhibit 2.3.7.

Exhibit 2.3.7

All Teacher Responses: What Teachers Use to Plan Instruction
Tucson Unified School District
January 2014



In Exhibit 2.3.7, since respondents could select more than one answer, the percentages do not total 100 percent. Each bar represents the percentage of all respondents who selected that answer.

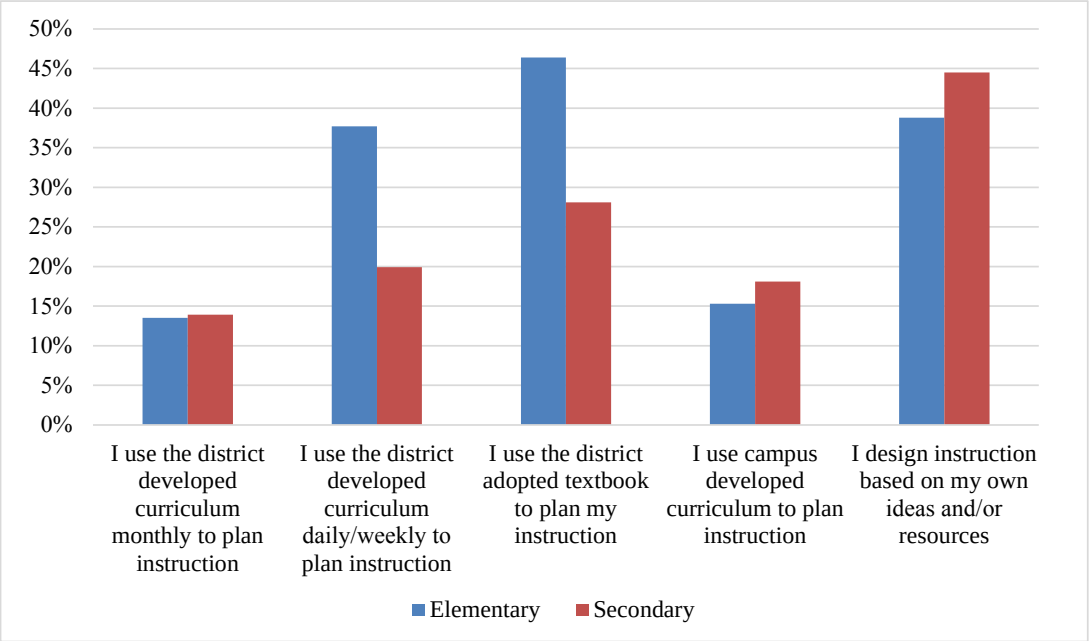
Overall, of the 1,100 teachers who responded, almost half (47 percent) stated that they design instruction based on their own ideas and/or resources, followed by 42 percent that stated they use the district-adopted textbook. Almost one-third said they use the district developed curriculum daily or weekly to plan instruction, and 15 percent said they use it monthly. Eighteen (18) percent said they use campus-developed curriculum.

[2] Due to a glitch in the survey, the first 600 respondents were unable to select more than one answer choice, while subsequent respondents could select as many as they wanted.

The auditors also looked at the data by grade level to see if there were differences in the responses. Interestingly, more elementary teachers cited using the textbook. The results are presented in Exhibit 2.3.8.

Exhibit 2.3.8

Elementary Teacher Responses: What Teachers Use to Plan Instruction
Tucson Unified School District
January 2014



As can be seen in Exhibit 2.3.8, a greater percentage of elementary teachers attested to using the textbook as well as district-developed curriculum (46.4 percent and 37.7 percent, respectively) than did secondary teachers (28.1 percent and 19.9 percent, respectively). A greater percentage of secondary teachers than elementary reported using their own ideas and/or resources for designing instruction (44.5 percent vs. 38.8 percent).

In responding to this question on the survey, teachers were also able to make open-ended comments. Over 400 teachers (410) commented, and of these teachers, 117 reported using the Arizona Standards for College and Career Readiness (Common Core) in planning their instruction. There were very few, if any, comments made regarding the district curriculum; in fact, there were about a dozen comments made that there is no district curriculum, or other comments that cited the commercially-produced resource, referring to it as the curriculum (see also Finding 2.2). Teachers also mentioned using test data from *ATI* to plan instruction, along with a variety of other resources.

During interviews, stakeholders made many comments regarding the various sources teachers turned to in planning their instruction. Many comments regarded the focus on the Common Core or the state standards, or even both in determining what to teach:

- "[In this school], teachers decide what to teach based on the ADE 2010 Common Core Academic Content Standards." (Building Administrator)
- "The state standards are how the teachers know what to teach." (District Administrator)
- "Teachers are trying to base instruction on the Common Core. We have some using old curriculum, some using their own." (District Administrator)
- "[The teachers] follow Common Core." (Building Administrator)
- "Common Core drives instruction." (Building Administrator)

- "The old grade level standards guides [sic] most classrooms. Knowing what to teach varies between schools and even between grade levels within a school." (Building Administrator)
- "Some schools have gone wholeheartedly for the Common Core, others are still focused on *AIMS*." (Curriculum Personnel)
- "The *AIMS* blueprint is driving instruction right now." (District Administrator)
- "There is no curriculum plan, no curriculum guides and maps. Five years ago all curriculum department was demolished and curriculum responsibility went to schools. They are using old standards. What is guiding [instruction] is *AIMS* and the *AIMS* blueprint." (District Administrator)
- "We know the Common Core is here but the state assessment is based on the old Arizona standards so my teachers are teaching for our [state] test this year." (District Administrator)

Other comments were made regarding teacher reliance on textbooks or resources to guide instruction:

- "I would say a third to one-half rely on the standards [in deciding what to teach], but they attach the standards to the book. The rest are in denial—and there is confusion." (Building Administrator)
- "Most teachers are using the adopted texts beginning at Chapter 1 and proceeding through the text." (District Administrator)
- "Textbook drives instruction in many areas. It is considered the curriculum." (Instructional Support)

Others commented on the role of the principal in assisting teachers with deciding what to teach. These comments included the following:

- "How do teachers know what to teach is a key question for principals. The principal is the key." (Instructional Specialist)
- "The principal is the key person in determining what teachers will teach." (Instructional Support)

A number of individuals also mentioned district-developed documents, such as pacing guides or *ATI* resources, that teachers use to guide instruction:

- "Math came up with a pacing guide. Some are using it, some are not." (Instructional Support)
- How do teachers decide what to teach? "They look at pacing calendars and benchmark testing." (Campus Administrator)
- What do your teachers use to determine what to teach? "We use the pacing guide developed by the district." (Building Administrator)
- "We have English and math pacing guides. But we have no set curriculum from the district level for science and social studies." (Building Administrator).
- "How do teachers know what to teach? They look at the content, EEI, and the Danielson model." (District Administrator)

One teacher summed up the lack of clear direction for what they should be teaching with the following statement: "We haven't been told what to do so we decide what to do for ourselves."

There were 60 comments made by principals on the online survey regarding what their teachers use to decide what to teach in the classroom. These comments are presented in full in the Survey Appendix, but over half of the respondents mentioned using the Common Core Standards or the Arizona Standards for College and Career Readiness. A few mentioned the district pacing guides, and many also mentioned being attentive to data when planning instruction, while a few reported that teachers teach whatever they want or whatever they have taught in the past. Several also mentioned that teachers teach from the textbook. There were a few notable comments made that testified to the overall need for curriculum:

- What guides your teachers' instruction? "At this point nothing. We need curriculum mapping."

- "We need a district curriculum guide with pacing calendars!"

Overall, the absence of a clear definition of the content, skills, knowledge, and vocabulary all students are expected to master in a written curriculum has resulted in wide variation across the district in what teachers use to guide instruction. There is also confusion over what constitutes curriculum: state/national standards, textbooks and resources, or district-developed documents (see Findings 2.1 and 2.2)?

Curriculum Coordination and Articulation

A key function of written curriculum in an effective school district is to focus and connect student learning within and across grade levels. As students progress along a sequenced continuum of learning, gaps and overlaps within that sequence must be minimized in order to maximize the effectiveness of the educational program and increase student learning. This sequence or continuum must first be defined in writing, so that it can be widely disseminated throughout the district, after which all training and support for the effective delivery of curriculum can focus on this same continuum, using a variety of appropriate strategies, approaches, and resources.

In the Tucson Unified School District, the auditors found no clear written curriculum that outlines a scope and sequence of specific student learnings by content area, grade level, and course (see also Finding 2.2). There is a resulting lack of consistency in the concepts, skills, processes, and knowledge that students are taught across the district, which is exacerbated by the plethora of resource adoptions district-wide and the high level of student mobility in most buildings. The coordination and articulation of curriculum are inadequate in design and not present in curriculum delivery, an understandable consequence in a district that has not clearly and specifically defined not only what teachers are expected to teach, but more importantly what students need to learn to be successful.[3]

The lack of a specific definition for the learnings students are expected to master within a specific course or grade level has resulted in teachers relying on multiple sources for guidance in deciding what to teach. Even when relying on standards, the lack of a clear definition of what mastery looks like, in specific and measurable terms, hinders consistency in the concepts, skills, and knowledge that students walk away with. To demonstrate the common lack of specificity in defining mastery, the auditors have selected a strand from the Arizona Standards for College and Career Readiness (AZCCR), as it appears at multiple grade levels. This spiraling of content from one grade level to the next is intended to demonstrate how similar the objectives are at each subsequent grade level. The strand is presented in Exhibit 2.3.9:

Exhibit 2.3.9

Objective Redundancy within the AZCCR
English Language Arts
Tucson Unified School District
January 2014

Grade level	AZCCR Standard/Expectation: Determining the meaning of a word or phrase from context
K	Ask and answer questions about unknown words in a text
1st	Identify words and phrases in stories or poems that suggest feelings or appeal to the senses.
2nd	Describe how words and phrases (e.g., regular beats, alliteration, rhymes, repeated lines) supply rhythm and meaning in a story, poem, or song.
3rd	Determine the meaning of words and phrases as they are used in a text, distinguishing literal from non-literal language.
4th	Determine the meaning of words and phrases as they are used in a text, including those that allude to significant characters found in mythology (e.g., Herculean).
5th	Determine the meaning of words and phrases as they are used in a text, including figurative language such as metaphors and similes.

[3] Although the CMIM does not specify that a single textbook or resource should be tightly held, holding onto resources loosely is only effective when the content students are expected to learn is clearly and specifically defined. Otherwise, the use of multiple resources may in fact lead to random student learnings that are not aligned to the targeted standards.

Exhibit 2.3.9 (continued) Objective Redundancy within the AZCCR English Language Arts Tucson Unified School District January 2014	
Grade level	**AZCCR Standard/Expectation: Determining the meaning of a word or phrase from context**
6th	Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of a specific word choice on meaning and tone.
7th	Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of rhymes and other repetitions of sounds (e.g., alliteration) on a specific verse or stanza of a poem or section of a story or drama.
8th	Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.
9th-10th	Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language evokes a sense of time and place; how it sets a formal or informal tone).
11th-12th	Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including words with multiple meanings or language that is particularly fresh, engaging, or beautiful. (Include Shakespeare as well as other authors.)

Exhibit 2.3.9 is intended to demonstrate that although the skill being taught is important at every grade level, there is very little information provided to teachers to demonstrate how a third grader's mastery of the skill differs from a fourth grader's mastery, apart from the emphasis on literal vs. non-literal language in grade 3 and the particular inclusion of mythology in grade 4. It would be inappropriate to assume that on a test of this content, fourth grade students will only encounter passages from mythology. Teachers are not provided with sample texts, nor with exemplars of how this skill is demonstrated. This leaves the interpretation of what the mastery of this standard looks like up to individual teachers, who may in fact interpret it very differently.

This lack of a clearly articulated sequence of skills within the standards documents is particularly important when a district has no written curriculum to supplement the standards documents. TUSD does not have curriculum guides that meet audit criteria, and there are many content areas for which curriculum is not available (see Finding 2.2 and this finding, prior sections).

The auditors also interviewed dozens of administrators, parents, teachers, and board members and surveyed over 1,350 stakeholders in the district regarding the curriculum and its design and delivery across the district. The auditors heard many comments from various stakeholder groups that attested to the lack of consistency in what is taught across grade levels and schools, and the poor articulation among schools as students move from one grade level to the next, especially when they switch schools.

During interviews, auditors heard the following comments about the lack of articulation—the sequencing of concepts, skills, and knowledge from one level to the next—across the district:

- "Middle school students are not ready for high schools. That is an issue." (Board Member)
- "There is no collaboration or articulation in our district at this time. We hope to see that change." (Building Administrator).
- "There is inconsistency, schools are all doing different pacing." (District Administrator)

There were many comments made regarding the lack of coordination and consistency across buildings in the district, or even within a building:

- "Teachers want to get together for alignment purposes, but it hasn't been done to this point. What has been done hasn't been systemic." (District Administrator)
- "[There is a] lack of consistency across schools. Too much is left for schools to decide on, which makes it difficult for students who transfer from school to school." (Building Administrator, online survey)
- "Students should be able to transfer from school to school within TUSD and have the same curricular programs." (Building Administrator, online survey)
- "We need a district-wide curriculum so any student who transfers can do so seamlessly." (Parent)
- "Alignment isn't evident from campus to campus or even from classrooms on the same campus." (Instructional Specialist)
- "There is no consistency across schools in our ELA and math curriculums." (District Administrator)
- "Each teacher chooses their own curriculum, and that's not fair to students." (Parent)
- "The only thing that's used across the district that's consistent is the FOSS. But those rotate because there aren't enough kits for every kid to have." (Curriculum Personnel)
- "Teachers know what to teach—if we're not told what to do, we decide for ourselves. Every school is doing it differently." (Teacher)

Given the lack of written curriculum, the insufficient specificity within the standards documents, and the amount of variation in the materials and resources used by teachers, the auditors determined that curriculum is insufficiently articulated and coordinated district-wide. A major theme in open-ended responses on the online survey instrument and during interviews pertained to the lack of consistency in curriculum and instruction across the district, both related to the lack of a common written curriculum as well as to the number of resources and the different primary resources available to teachers.

Comments from interviews as well as from the survey regarding the lack of consistency included the following:

- "We're all over the place with real curricular alignment." (District Administrator)
- "[A weakness is] consistency in Curriculum." (Building Administrator, online survey)
- "There are no curriculum maps or pacing guides at the high school level. There is little clarity with respect to what texts should be used and many texts are old and are not available." (Building Administrator, online survey)
- "[There is a] lack of consistency in curriculum, no standardized curriculum." (Building Administrator, online survey)
- "[The] district is not yet in alignment with [its] curriculum and resources." (Building Administrator, online survey)
- "Our district needs to ensure consistency of expectations and philosophy. I think it important to be able to ask colleagues to share their experiences and best practices—that is difficult to do when we are all doing so many different things." (Building Administrator)
- "We made a big mistake when we adopted three math curricula, particularly with our mobility." (District Administrator)
- "There is a major weakness. There is no consistency of curriculum between schools and there is no consistency in the delivery of it. We need a tight written, taught, and tested curriculum." (District Administrator)
- "[The] decentralization of curriculum created inconsistency." (District Administrator)
- "Curriculum is all over the place. It has never been clearly defined in TUSD. I have no idea what my teachers are supposed to be teaching in terms of curriculum. There has never been clarity. As a teacher

> myself at the high school level, we got together at my school and developed our course documents. That has never been done district-wide, as far as I know." (Building Administrator)

It is evident that the lack of curriculum and the inadequate quality of the curriculum that does exist have contributed to perceived inconsistency in curriculum and instruction across the district. Multiple stakeholders attested to the lack of coordination and articulation of curriculum, a situation that is particularly challenging with the high mobility of students. There has been insufficient definition of what teachers are expected to teach and, more importantly, what students need to learn.

Summary

In summary, auditors found that the quality of the approved curriculum was inadequate to guide teaching. Board policy lacked specific direction for the development of curriculum documents in all subject areas and courses offered in the district as well as direction for the content of curriculum guides to ensure consistency. Job descriptions lacked a clear path of responsibility and communication regarding the design of curriculum documents. Existing documents (n=28) had an overall mean rating of 5.7 out of a possible 15 points when analyzed for specific design elements. No approved curriculum documents attained the minimum acceptable score of 12 points. About one-fourth of all teachers who responded to the teacher survey reported finding the curriculum useful for planning, while one-fifth reported finding it not useful.

Teachers reported relying most often on state *AIMS* or Career and College Readiness standards when planning instruction, on commercially produced resources and materials, or even on their own inspiration, since curriculum is considered weak or nonexistent. The lack of robust, central curriculum has contributed to the inadequate articulation and coordination of curriculum across the district and to a strong perception of inconsistency in curriculum across a number of district stakeholder groups.

Finding 2.4: The contexts and cognitive demand of sample student work and sample benchmark assessment items are inadequate to prepare students for mastery of Arizona College and Career Readiness Standards and *PARCC* assessments.

A critical premise of curriculum alignment is that the instruction in the classroom is aligned to expectations for student mastery found in both the curriculum standards and in the assessments used to measure mastery of those standards. Likewise, student work should align with district-level assessments; those district assessments should also align to high stakes assessments, to ensure that students' performance on the local assessments is a valid predictor of their performance on high stakes assessments. The most critical role of written curriculum is providing teachers with objectives, resources, and materials to guide their instruction so that it is aligned to all assessments in use. This alignment is assured in the design of the curriculum and increases the likelihood that students will be prepared for the content, contexts, and cognitive demand of any assessments.

The auditors examined curriculum and resources used in Tucson Unified School District classrooms to determine if they adequately align to the standards and assessments. The curriculum itself was based entirely on the standards in mathematics and English language arts. Therefore, the auditors randomly collected samples of student work while visiting classrooms and conducted an examination of those documents, evaluating their alignment with the *ATI* benchmark assessments used to measure student progress in the classroom. The auditors then examined the *ATI* benchmark assessments to see if this tool is adequately aligned to the standards themselves, as well as to the *PARCC* assessments, which measure student mastery of the Arizona College and Career Readiness Standards.

In determining alignment, the auditors use three key dimensions as additional classifications in the analyses: content, context, and cognitive type. Content is simply the concepts, skills, knowledge, and/or vocabulary that are present. Context refers to how students are expected to learn or practice the content, while the cognitive type dimension refers to how students are cognitively engaged when completing the work or practicing the skill or knowledge.

Overall, the auditors determined that the samples of student work collected while in classrooms were not congruent with the content and cognitive demand found on the district benchmark assessments. The district *ATI* benchmark assessments were congruent with the state standards in content, but were not found to be adequately

aligned with the state standards in their cognitive demand. The auditors also determined that the district *ATI* benchmark assessments were congruent in content skills for English language arts in comparison to sample *PARCC* assessment items, but the district *ATI* benchmark assessments were not congruent in content skills for mathematics nor in cognitive demand for both English language arts and mathematics in comparison to sample *PARCC* assessment items. Auditors found the contexts found in the sample artifacts were not congruent with the context demands expected on the district *ATI* benchmark assessments and on the sample *PARCC* assessment items.

The analyses will be presented in four sections. These sections are: 1) the cognitive demand of classroom artifacts and their alignment with *ATI* benchmark assessments, 2) the alignment of *ATI* benchmark assessments with the AZ Standards for College and Career Readiness, 3) the alignment of the *ATI* benchmark assessments with the *PARCC* assessments, and 4) context alignment of the classroom artifacts with *ATI* benchmark assessments and the *PARCC* assessment items.

Cognitive Demand of Classroom Artifacts and Their Alignment with *ATI* Benchmark Assessments

Auditors visited classrooms throughout the district. Among other academic indicators auditors looked for in classrooms was the cognitive type students were expected to use in completing their daily work. The type of cognition is an indicator of the sort of thinking required of the learner to carry out a given task. Auditors expect cognitive types of the written, taught, and tested curriculum to be congruent so that students are not surprised by any of the cognitive demands placed on them in high stakes testing situations. Auditors collected artifacts (worksheets, tests, teacher handouts, etc.) as often as possible in the classrooms they visited. The various assignments and activities collected should reveal a range of cognitive demands so that students have ample opportunity to practice the cognitive skills they need to be successful on national, state, and local assessments.

To perform the analyses of cognitive type, auditors used the framework based on the revised Bloom's taxonomy of cognitive domains as presented in Exhibit 2.4.1.

Exhibit 2.4.1

Description of Cognitive Types in the Revised Bloom's Taxonomy
Tucson Unified School District
January 2014

Cognitive Process Dimension	Definition of Type	Additional Clarification Comments
Remembering	Finding or remembering information.	Answers questions that stem from prompts such as *list, find, name, identify, locate, describe, memorize,* or *define*.
Understanding	Understanding and making sense out of information.	Answers questions that stem from prompts such as *interpret, summarize, explain, infer, paraphrase,* or *discuss*.
Applying	Using information in a new (but similar) situation.	Answers questions that stem from prompts such as *use, diagram, make a chart, draw, apply, solve,* or *calculate.*
Analyzing	Taking information apart and exploring relationships.	Answers questions that stem from prompts such as *categorize, examine, compare and contrast,* or *organize.*
Evaluating	Critically examining information and making judgments.	Answers questions that stem from prompts such as *judge, critique, defend,* or *criticize.*
Creating	Using information to create something new.	Answers questions that stem from prompts such as *design, build, construct, plan, produce, devise,* or *invent.*

Auditors visited 92 sites and 1,237 classrooms during the on-site visits. The auditors randomly collected a sampling of core course student artifacts while visiting classrooms to determine to what extent these artifacts reflected the district's expectations for academic rigor. Auditors analyzed 138 student artifacts for cognitive

type, using the Revised Bloom's Taxonomy of Cognitive Process Dimensions. When artifacts required more than one type of cognition, auditors classified the cognitive domain based on the dominant activity or concept.

Exhibit 2.4.2 displays the number of artifacts collected from classroom visits by grade span (K-5, 6-8, and 9-12) and by subject. Auditors realize this was not a purposeful sampling; auditors only collected artifacts when the opportunity presented itself. This cannot be viewed as a conclusive representation of what is typical in classrooms across the district, but it does allow district leaders to see where concerns may lie, and the process can be repeated for more reliable data.

Auditors did note the source of the classroom artifacts while collecting them. Most of the artifacts collected were from textbooks, internet websites, other state education sources, and teacher blogs. Only a few of the artifacts were teacher created. Materials are expected to be from a variety of sources, but inconsistencies can result if materials are pulled from multiple places without a clearly defined curriculum in place. Without a tightly held curriculum, the materials and resources may not be congruent with assessments in content, context, and cognition. Exhibit 2.4.2 presents an overview of information regarding the samples of student work collected in classrooms.

Exhibit 2.4.2

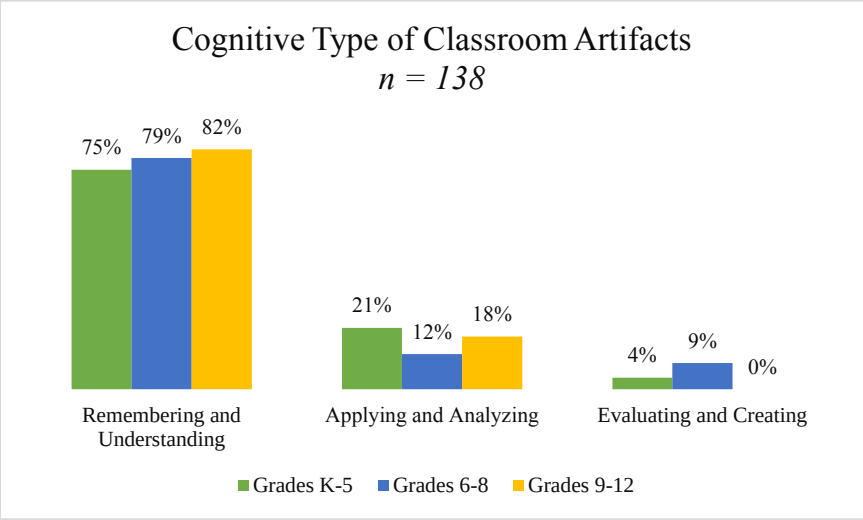
Collected Artifacts by Grade Span and Subject
Tucson Unified School District
January 2014

	ELA	Reading	Math	Social Studies	Science	Elective	Total
K-5	28	19	19	3	3	--	**72**
6-8	13	6	12	6	11	2	**50**
9-12	3	--	6	4	1	2	**16**
Total	**44**	**25**	**37**	**13**	**15**	**4**	**138**

Exhibit 2.4.3 displays cognitive type data from the analyses of student artifacts.

Exhibit 2.4.3

Cognitive Type of Classroom Artifacts by Grade Span
Tucson Unified School District
January 2014



The following can be noted from Exhibit 2.4.3:

- The largest percentage of artifacts collected by auditors fell into the Remembering/Understanding cognitive type as defined by Bloom (76 percent).
- Five percent of the artifacts collected by auditors reflected Evaluating/Creating cognitive type, the highest level as defined by Bloom.

Auditors did not collect any artifacts from high school classrooms that reflected the Evaluating/Creating cognitive type.

Seatwork at Drachman Elementary

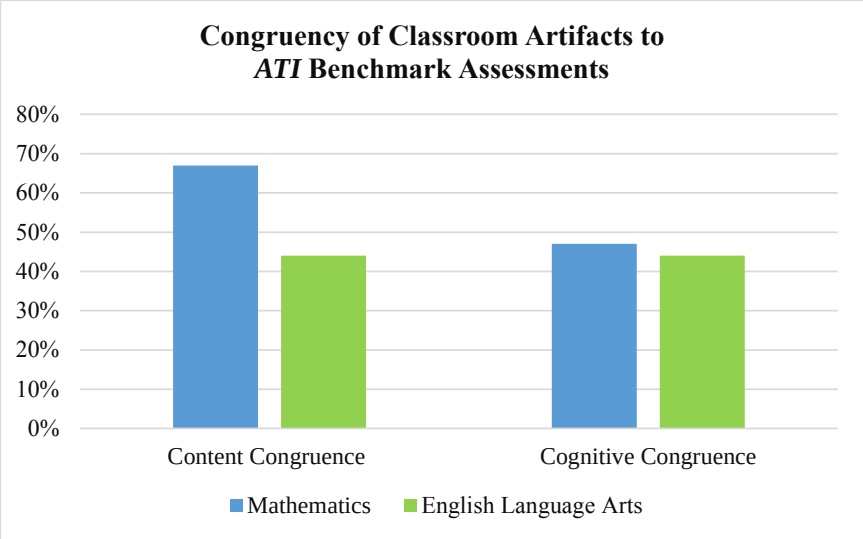
Using kinesthetic strategies for first grade math at Maldonado Elementary

The auditors then subjected the sample artifacts to further analyses. The auditors sought to determine if the samples of student work were aligned in all dimensions. Auditors noted that the district administered the *ATI PM1* benchmark in December, before the on-site visit, and therefore expected the classroom artifacts to minimally meet and exceed the content and cognitive type of the benchmark, since they were collected several weeks after the test. Auditors expected to find a minimum of 70 percent congruence to meet the minimum audit criteria.

Appendices L and M display the auditors' analysis of the congruence between a sampling of mathematics and English language arts classroom and the district benchmark tests for grades 2 to 10. Exhibit 2.4.4 presents the summary data from the analyses.

Exhibit 2.4.4

Overall Congruency of Classroom Artifacts to *ATI* Benchmark Assessments
Tucson Unified School District
January 2014



As can be noted from Exhibit 2.4.4:

- Ten (10), or 67 percent, of the sample mathematics classroom artifacts were congruent to the content of the corresponding *ATI* items.
- Seven, or 47 percent, of the sample mathematics classroom artifacts were congruent with the cognitive type of the corresponding *ATI* items.
- Neither dimension met the audit minimum requirement of 70 percent congruence.
- Four, or 44 percent, of the sample ELA classroom artifacts were congruent to the content and cognitive levels of the corresponding *ATI* items. This does not meet the auditors' expectation of 70 percent.

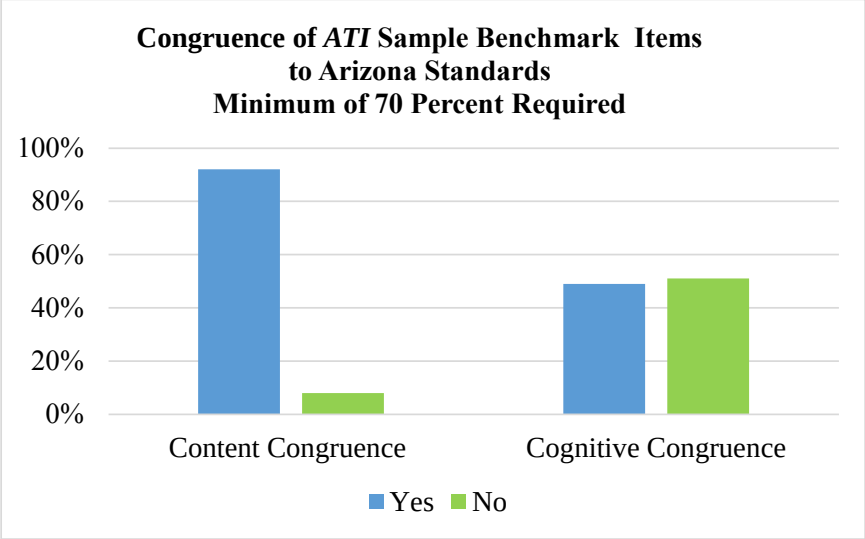
Overall, auditors found that the classroom artifacts collected during the on-site visits were not congruent with district *ATI* benchmark assessment samples. Based upon the artifacts collected from across the district and the information displayed in Appendix L, auditors concluded that students may not be completing work in the classroom that is sufficiently aligned with the benchmark assessments to ensure success on those assessments. Auditors noted the *ATI PM1* benchmark test had been administered in December and many classroom artifacts required less content and/or cognitive demand than that necessary to master the selected *ATI* benchmark assessment items.

Alignment of *ATI* Benchmark Assessments with Arizona Standards for College and Career Readiness

Auditors then examined the district benchmark assessments to evaluate their congruence with Arizona College and Career Readiness Standards in the dimensions of content and cognitive type. Selected items from the December benchmark and end-of-year benchmark assessments, along with the Arizona College and Career Readiness Standards provided by the district to the auditors for grades 3, 6, 8, and 10 in mathematics and English language arts are compared in Appendices N and O. The summary of these data is presented in Exhibit 2.4.5.

Exhibit 2.4.5

Overall Congruency of *ATI* Benchmark Sample Items to Arizona College and Career Readiness Standards
Tucson Unified School District
January 2014



The auditors found the following when conducting this analyses:

- Fifteen (15), or 88 percent, of the district *ATI* benchmark examples for mathematics were found to be congruent with the content designated in the Arizona standard. This exceeds the minimum audit standard of 70 percent congruency.
- Ten (10), or 59 percent, of the district *ATI* benchmark examples for mathematics were found to be congruent with the cognitive type designated in the Arizona standard. This does not meet the minimum audit standard of 70 percent for congruency.
- Nineteen (19), or 95 percent, of the district *ATI* benchmark examples for English language arts were found to be congruent with the content designated in the Arizona standard. This exceeds the minimum audit standard of 70 percent congruency.
- Eight, or 40 percent, of the district *ATI* benchmark examples for English language arts were found to be congruent with the cognitive level designated in the Arizona standard. This does not meet the minimum audit standard of 70 percent for congruency.
- Many items considered not fully congruent in cognitive type usually met only one or two aspects of the cognitive type required to master the standard. Other elements of the standard may have been addressed in other *ATI* questions not examined by the auditors.

Overall, auditors found the district *ATI* benchmarks aligned with the Arizona College and Career Ready Standards for content congruence in both mathematics and English language arts. The district *ATI* benchmarks were not found to be congruent with the Arizona standards in cognition because most of the standards had multiple levels to them and the selected *ATI* benchmark examples only addressed the first part of each standard, with a limited level of cognitive engagement.

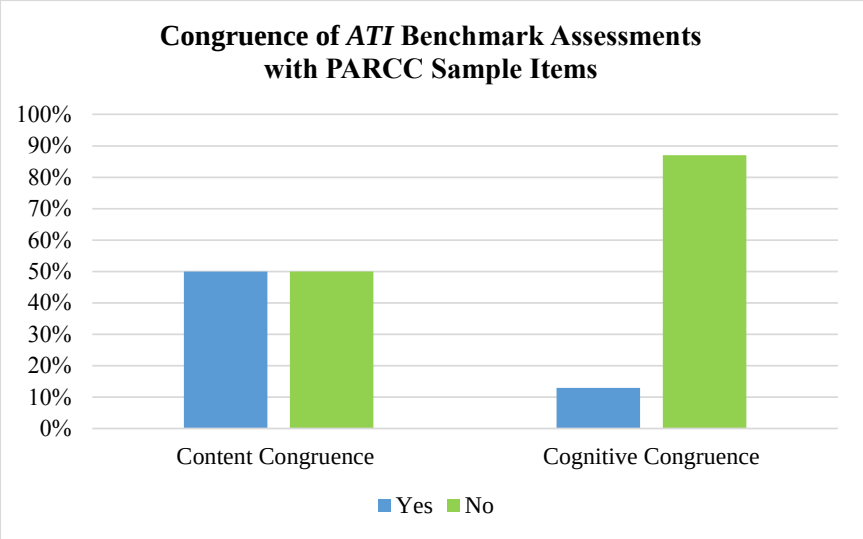
Alignment of *ATI* Benchmarks to *PARCC* Assessments in Content and Cognitive Type

After auditors examined the congruency of the benchmark assessments themselves to the content and cognitive levels of the Arizona College and Career Ready Standards, auditors wanted to examine the congruency levels between the *ATI* benchmark assessments and sample items from the *PARCC* assessment. Appendices P and Q presents selected items from the district *ATI* assessments and comparisons for alignment with *PARCC* sample

items for grades 3 to 10 in mathematics and English language arts. A summary of these analyses are presented in Exhibit 2.4.6. Auditors expected to find a minimum of 70 percent congruency to meet the minimum audit criteria.

Exhibit 2.4.6

Overall Congruency of *ATI* Benchmark Assessments to *PARCC* Sample Items
Tucson Unified School District
January 2014



The auditors found the following when examining the alignment of the *ATI* with *PARCC* sample items.

- Two, or 25 percent, of the district *ATI* benchmark examples for mathematics were found to be congruent with the content and cognitive levels of the *PARCC* examples for grades 3 to 10.
- Auditors noted that the district *ATI* benchmark examples for mathematics involved fewer steps than the *PARCC* examples.
- Six, or 75 percent, of the district *ATI* benchmark examples were found to be congruent with content skills necessary to master the curriculum when compared to the *PARCC* sample items for English language arts in grades 3 to 10. This exceeds the minimum audit criteria of 70 percent for congruency.
- None of the district *ATI* benchmark examples for English language arts were found to be congruent with cognitive skills necessary to master the curriculum when compared to the *PARCC* sample items for English language arts in grades 3 to 10.
- The main difference noted between *ATI* benchmark examples and *PARCC* sample items was that the *PARCC* sample items all asked for additional steps that could not be answered through a single multiple choice item such as those found on the district *ATI* benchmark assessments.

Overall, auditors found that the district *ATI* benchmark assessments were aligned to the *PARCC* items in content in English language arts (75 percent congruence), but not in mathematics. Neither content area's *ATI* assessment items aligned adequately with the *PARCC* items. The *PARCC* assessments asked students to perform multiple steps, whereas the district *ATI* benchmark assessments were single answer, multiple-choice questions. The cognitive demand of the *PARCC* assessments exceeded that of the *ATI*, mostly due to the contexts found on the *PARCC* assessments.

Context Congruency

Context refers to the format or situation in which the student will demonstrate his/her learning or his/her mastery of the content objective. For example, the student may be asked to demonstrate performance of content via multiple choice options, a short essay, a quiz or test, or a real world situation. Real world applications

ground students' work in lifelike situations, deepening student understanding by connecting knowledge and skill development to scenarios with which they can personally relate, as they are relevant and authentic. Real world applications also typically involve more hands-on interactions and increase students' intrinsic motivation.

Auditors analyzed all student artifacts collected during school visits for objective contexts and classified them into three domains: Real World, Test-Like, and Other Contexts. The results of this analysis are reported in simple percentages. The auditors added up the number of type of contexts and determined the percent by core subject and grade levels K-2, 3-5, 6-8, and 9-12.

The next two exhibits summarize results from the analysis of the congruency of context from 134 student artifacts collected in core classrooms only during on-site visits to 92 sites (see Exhibit 2.4.2).

Exhibit 2.4.7 displays the percentages of artifacts by grade level (K-2, 3-5, 6-8, and 9-12) and context for English language arts and social studies.

Exhibit 2.4.7

Context Percent of Student Artifacts
English Language Arts and Social Studies, K-12
Tucson Unified School District
January 2014

Percent of Artifacts by Context for English Language Arts and Social Studies Distributed by Grade Level						
English Language Arts			Grade	Social Studies		
Real World	Test-Like	Other Contexts		Real World	Test-Like	Other Contexts
7%	81%	12%	K-2	--	--	--
10%	90%	--	3-5	--	100%	--
16%	78%	6%	6-8	17%	83%	--
--	100%	--	9-12	--	75%	25%
Data Sources: Student artifacts collected in English language arts and social studies classes by auditors during classroom visits.						

As can be noted from Exhibit 2.4.7:

- The majority of artifacts for English language arts and social studies reflected context that is test-like in nature.
- There were small, but noticeable, percentages of artifacts that reflected real world contexts.
- Grades 6 to 8 have the most varied contexts of the artifacts collected.
- While English language arts shows minimal artifacts with real-world experience across grade levels, social studies has only one grade level observed with an artifact that reflected real world contexts.

Exhibit 2.4.8 displays the percentages of artifacts by grade level (K-2, 3-5, 6-8, and 9-12) and context for mathematics and science.

Exhibit 2.4.8

Context Percent of Student Artifacts
Mathematics and Science, K-12
Tucson Unified School District
January 2014

Percent of Artifacts by Context for Mathematics and Science Distributed by Grade Level						
Mathematics			Grade	Science		
Real World	Test-Like	Other Contexts		Real World	Test-Like	Other Contexts
17%	66%	17%	K-2	--	100%	--
15%	85%	--	3-5	33%	33%	33%
--	88%	12%	6-8	29%	71%	--
--	100%	--	9-12	20%	80%	--
Data Sources: Student artifacts collected in mathematics and science classes by auditors during classroom visits.						

As can be noted from Exhibit 2.4.8:

- The majority of artifacts for mathematics and science reflected context that is test-like in nature.
- Science had the highest percentages of artifacts that reflected real world experiences across all grade levels.
- All the high school mathematics artifacts and all the grades K-2 science artifacts examined reflected test-like contexts.

Exhibit 2.4.9 displays a summary of the auditors' ratings for Finding 2.4.

Exhibit 2.4.9

Summary of Congruency of Classroom Artifacts, *ATI* Benchmark Assessments, Arizona State Standards, and *PARCC* Assessment Sample Items
Tucson Unified School District
January 2014

	Content Congruency	Cognitive Congruency	Context Congruency to Real World Applications
Classroom Artifacts to *ATI* Benchmark			
Mathematics	No	No	No
ELA	No	No	No
Arizona Standards to *ATI* Benchmark			
Mathematics	Yes	No	No
ELA	Yes	No	No
ATI* Benchmark to *PARCC			
Mathematics	No	No	No
ELA	Yes	No	No
Total (Percent Congruent)	**50%**	**0%**	**0%**

As can be noted from Exhibit 2.4.9:

- Three, or 50 percent, of the items compared were found to be congruent in content type.

- None of the items compared were found to be congruent in the cognitive type required for students to master the content.
- None of the artifacts examined were found to be congruent to real world contexts.

Summary

In summary, auditors searched for content and cognitive congruence in three main areas: between classroom artifacts and district *ATI* benchmark assessments; Arizona standards and district *ATI* benchmark assessments, and district *ATI* benchmark assessments and *PARCC* sample assessments. The classroom artifacts evaluated by auditors were not cognitively demanding, and they were not aligned with the *ATI* assessments in content or cognitive type. While the *ATI* benchmark assessments do align in content with the standards used to guide instruction, they do not align with the cognitive type necessary for students to master the standard. There is a lack of congruence between the district benchmark assessments and the state *PARCC* assessments, with the exception of content congruence in English language arts. In addition, auditors examined collected classroom artifacts for context: real world applications, test-like in nature, or other context. Results of this final analysis revealed that the majority of classroom artifacts reflected test-like contexts (multiple choice, short answer). This correlates with the cognitive rigor found in student artifacts.

STANDARD 3: THE SCHOOL DISTRICT DEMONSTRATES INTERNAL CONSISTENCY AND RATIONAL EQUITY IN ITS PROGRAM DEVELOPMENT AND IMPLEMENTATION.

A school system meeting this Curriculum Audit™ standard is able to show how its program has been created as the result of a systematic identification of deficiencies in the achievement and growth of its students compared to measurable standards of pupil learning.

In addition, a school system meeting this standard is able to demonstrate that it possesses a focused and coherent approach toward defining curriculum and that, as a whole, it is more effective than the sum of its parts, i.e., any arbitrary combinations of programs or schools do not equate to the larger school system entity.

The purpose of having a school system is to obtain the educational and economic benefits of a coordinated and focused program for students, both to enhance learning, which is complex and multi-year in its dimensions, and to employ economies of scale where applicable.

What the Auditors Expected to Find in the Tucson Unified School District No. 1:

The CMSi auditors expected to find a highly-developed, articulated, and coordinated curriculum in the school system that was effectively monitored by the administrative and supervisory staffs at the central and site levels. Common indicators are:

- Documents/sources that reveal internal connections at different levels in the system;
- Predictable consistency through a coherent rationale for content delineation within the curriculum;
- Equity of curriculum/course access and opportunity;
- Allocation of resource flow to areas of greatest need;
- A curriculum that is clearly explained to members of the teaching staff and building-level administrators and other supervisory personnel;
- Specific professional development programs to enhance curricular design and delivery;
- A curriculum that is monitored by central office and site supervisory personnel; and
- Teacher and administrator responsiveness to school board policies, currently and over time.

Overview of What the Auditors Found in the Tucson Unified School District No. 1:

This section is an overview of the findings that follow in the area of Standard Three. Details follow within separate findings.

The Tucson Unified School District provides for gifted education, special education, and English language learners through a variety of models in the district. Not all of the models are offered at every school; however, the district provides transportation for students to attend the school in order to receive the service. The district has several board policies addressing equity and equal opportunity for learning and non-discrimination. The policies fail to provide specific guidance for the design and delivery of the instructional programs to ensure student success. In addition, the ESL/bilingual program uses a curriculum separate from the general curriculum, while special education material is considered to be supplemental, and gifted and talented is considered "differentiated." Auditors identified multiple inconsistencies and inadequacies in a number of practices of these programs. Specifically, inequities were noticed in identification of ethnicities in special education and GATE. Discipline, retention, graduation, and student achievement raised concern as to the equal opportunity for all students to be successful. An expectation that every student was capable of achieving and will learn was lacking.

Auditors found that professional development is occurring in the Tucson Unified School District at the district and campus levels to varying degrees and that some components of a professional development plan are in

place. However, the current components do not provide for focused, ongoing training for all employees of the district. Additionally, there is no vehicle to ensure that initiation, implementation, institutionalization, and evaluation occur and that student performance increases as a result of improved staff performance. The Tucson Unified School District does not have a comprehensive professional development plan to provide direction for the systemic development of all district staff, or to ensure that all professional development requirements of the Unitary Status Plan are met.

Given the status of policy and plans, auditors determined that, in its present state, the design for student equity and equal access is inadequate.

The auditors found that the overall design for equity and equal access to education within the district is inadequate, especially as board policies and district plans did not meet audit criteria for designing equitable programs and processes. In spite of the fact that the district has been under court order to provide equity and equal access for more than 30 years, an adequate design for those efforts—the Unitary Status Plan—is in the first year of implementation and many necessary and required supporting plans and infrastructure have not been completed or put into place. Further, the auditors determined that delivery of equal access and equity is ineffective. The composition of the staff was inconsistent with the district's policy commitment to diversity and the court's requirement for it. Enrollments in the Advanced Learning Experiences (ALE) (e.g., University High School and Advanced Placement, honors, and gifted and talented courses) did not reflect the ethnic and gender characteristics of district students. The same is true for disciplinary actions, retentions in grade, and exceptional education placements. Achievement gaps existed among students groups and many of them cannot be closed at current growth rates in the percentages of students performing satisfactorily on *AIMS* tests. Given these facts, the audit team concluded that delivery of equal access and equity in the Tucson Unified School District is ineffective.

Finding 3.1: Direction for desired modes of instruction in governing documents is inadequate. Some elements of an instructional model are informally present, but not formalized. Auditors observed mostly large group approaches in classrooms, with varying degrees of student time-on-task.

The effectiveness of curriculum delivery is dependent on two key components: what is being taught in combination with how it's being taught. The first relates to the quality and clarity of the written curriculum, in that it provides the necessary content for teachers to teach and focuses and connects that content. The second relates to teachers' adherence to an instructional model that reflects the type of strategies and approaches known to be effective in improving student mastery of the desired skills, concepts, knowledge, and vocabulary. Curriculum delivery, however, is a fluid act that relies on teacher expertise and judgment; teachers must have the freedom to make choices on how they will teach based on data and observation in order to meet students' academic and affective needs. This freedom occurs within a framework of curriculum objectives that are tightly held—all students are expected to master the same concepts, skills, and knowledge—while allowing for teacher-level decision making and action that are loosely held and in the students' best interest. An instructional model is defined to provide teachers (especially inexperienced teachers) a model for what district leaders know to be effective, but the quality of instruction must ultimately be determined by its results—student achievement—rather than by adherence to the model. A defined model also allows district leaders to articulate other classroom-based approaches that are desirable, or even required, such as culturally responsive approaches, sheltered instruction, or flexible groupings.

In other words, a strong framework for quality instruction must be in place in the form of a rigorous, aligned curriculum (with clearly defined and specific objectives; see Findings 2.1 and 2.3) and a defined instructional model, but student learning and student needs must be the driving force behind all decisions made, whether administrative or instructional. Much of the decision making for instruction has to be based on solid information that is available frequently enough to be useful, such as from formative assessments, and on information that is diagnostic in nature. To be diagnostic, an assessment instrument must hone in on specific skills and concepts and determine the level to which students have mastered that skill or concept so that specific gaps or weaknesses in student learning may be identified. Teachers can then respond to those gaps that the assessment has identified.

Being precise in diagnosing and addressing gaps in student learning is an essential part of making the most of the overall instructional time available; it is simply more efficient.

To determine the nature of instruction in classrooms during a Curriculum Audit, and to get an accurate picture of what modes of instruction are evident, the auditors seek to collect several forms of data. These different streams of data all provide a general picture of instruction, or curriculum delivery, in the district. The first data source is classroom observations. The auditors visit classrooms for a short period of time and record observations regarding the nature of student engagement and the dominant activities students are involved in, as well as the dominant teacher activity, objective being taught, and students' level of attentiveness (percentage of students engaged or on-task).

Information is also collected regarding more rigorous cognitive engagement or critical thinking that is evident in any activity students are observed completing. The second data source is from samples of student work collected during classroom walk-throughs. When the auditors observe students completing an assignment or task, they request a blank copy to take along or take a picture of a sample or of the directions. These samples of student work are another example not only of the content students are learning, but how they are demonstrating their learning.

The final data source encompasses district documents. These documents include board policies, regulations, plans, teacher evaluation instruments, and job descriptions, among other documents, that describe what district leaders' expectations are for teaching and learning—both what is expected to be taught and how. Such documents might describe an instructional model, belief statements regarding how students learn, or a collective district philosophy concerning what effective instruction looks like.

For this finding, the auditors collected information from the documents mentioned above to create a list of district expectations for classroom instruction. They then collected observational data and the samples of student work, and compared each to these expectations. The student work is analyzed and discussed in Finding 2.4. The observational data are presented here.

Overall, the auditors found that there is only limited direction in governing documents regarding district expectations for instruction, and there is no district-wide instructional model. There has been system-wide training in the Essential Elements of Instruction (EEI), which has components of an instructional model, but the auditors found no evidence that EEI has been formally adopted or integrated into teacher evaluation and classroom monitoring. The auditors saw some evidence of engaged classrooms and examples of cognitive engagement beyond basic knowing and understanding, but more rigorous types (synthesizing and evaluating) were observed infrequently. The most commonly observed mode of teaching was whole group, direct instruction.

From various documents, the auditors found the following expectations regarding classroom instruction, displayed in Exhibit 3.1.1:

Exhibit 3.1.1

District Expectations Regarding Instructional Delivery
Tucson Unified School District
January 2014

Statement	Document
The mission …is to assure each pre-K through 12th grade student receives an engaging, rigorous and comprehensive education.	*Board Policy A: Vision, Mission Statement*
Classroom practices encourage multiple intelligences and reflect an understanding of different learning styles, both in individual and in cultural applications.	*Policy Regulation ADF-R: Intercultural Proficiency*
Modify instruction to meet the needs of each child.	*Teacher job description, Code 35001*
Implement instructional techniques to encourage and motivate students.	*Teacher job description, Code 35001*
Understand and appreciate diversity.	*Teacher job description, Code 35001*

The direction found in the documents listed in Exhibit 3.1.1 is limited, but one at least can extrapolate the general expectations that students will be cognitively challenged and engaged; their individual learning styles and preferences will be taken into account; their diversity respected and valued; and that, perhaps most importantly, instruction will be modified to meet individual needs of children. The auditors also found directives in the USP requiring culturally responsive pedagogy in every school and classroom. In reviewing the EEI, the auditors found that although the elements do represent an instructional model, the model does not support individualized differentiation, nor has it been incorporated into any policy or plan that makes its use a system expectation.

During classroom visits, the auditors collected information regarding dominant student activities, dominant teacher activity, cognitive type of activities observed, effective ELL strategies in use, and the general percentage of student oriented to their work or to the lesson. Classroom visits were short in duration and the data are only intended to reflect a snapshot of what instruction was like at a single point in time during the week of the audit. Care should be used in drawing any conclusions or in generalizing the findings, since this was only a single data collection. Trends cannot be discerned, nor is this to suggest that the auditors' observations are typical for daily instruction in TUSD. It does, however, present to district leaders what instruction did look like during auditors' visits and whether it was reflective of district expectations.

Exhibit 3.1.2 presents the categories into which auditors classified their observations.

Exhibit 3.1.2

Categories for Classroom Observation Data
Tucson Unified School District
January 2014

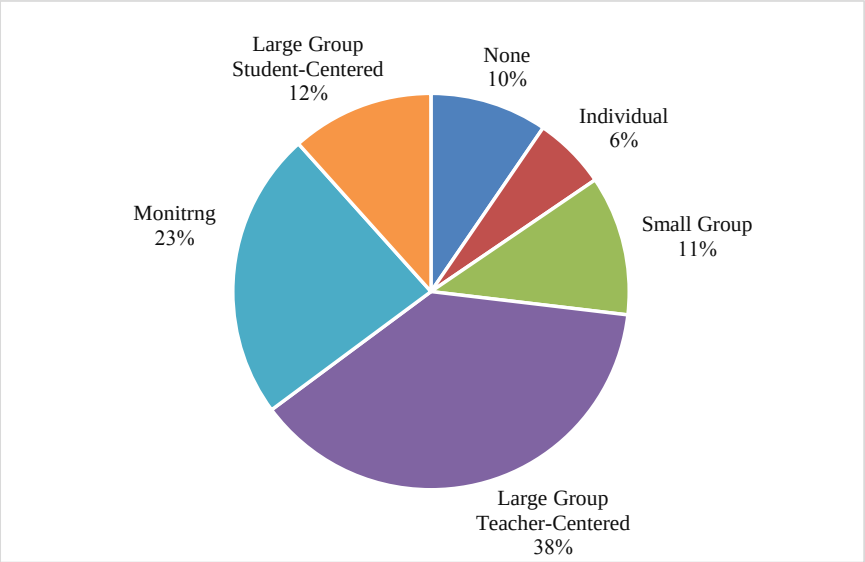
Teacher Instructional Behaviors	
Large Group Instruction—Teacher Centered	Refers to the teacher verbally leading the entire class through a learning activity, e.g., lecture, demonstration, overhead projector or Promethean Board. Student involvement is typically passive.
Large Group Instruction—Student Centered	Refers to the teacher leading a whole-group activity that engages students actively, such as discussion, question/answer, etc.
Small Group Instruction	Refers to a teacher working with a group of students that is less than approximately one-fourth of the number of students in the classroom. Examples include reading groups, centers, or tutoring a small group.
Individual Work	Refers to a teacher working with students individually for instruction, such as giving the student information about specific steps or actions the student(s) should use, or reviewing student work, not simply providing praise or feedback.
Monitoring	Refers to the teacher circulating about the classroom, visually monitoring the students as they work.
Other	Refers to an instructional activity not included in the classifications above, such as reading aloud or sitting at their desk. Auditors typically note what "other" refers to.
Student activities	
Large Group Work	Refers to students involved as a whole class in a common activity that could include receiving direct instruction, listening to someone read aloud, listening to a lecture, watching a demonstration, etc.
Small Group Work	Refers to students working with a group that is less than approximately one-third of the total number of students in the classroom. Examples include reading groups, centers, students in groups trying to solve mathematical or science problems by deciphering information or analyzing data, pair work in a lab situation, or the teacher tutoring a small group.
Seatwork	Refers to students working at their desks doing some type of paper and pencil textbook-type exercise or prepared worksheet.
Individual Work	Refers to students actively involved in an individual learning activity that is more cognitively engaging and open-ended, such as researching for a project, sustained silent reading of authentic literature, or a writing task.

Exhibit 3.1.2 (continued) Categories for Classroom Observation Data Tucson Unified School District January 2014	
Teacher Instructional Behaviors	
Media/Presentation	Refers to the class completing or being engaged in some type of media activity, such as oral presentations, computer research, video viewing, etc.
Other	Refers to any activity not included in the categories above, such as lab work.

Exhibit 3.1.3 presents the data regarding the dominant teacher activity observed in over 1,230 classrooms.

Exhibit 3.1.3

Dominant Teacher activity Observed
Tucson Unified School District
January 2014



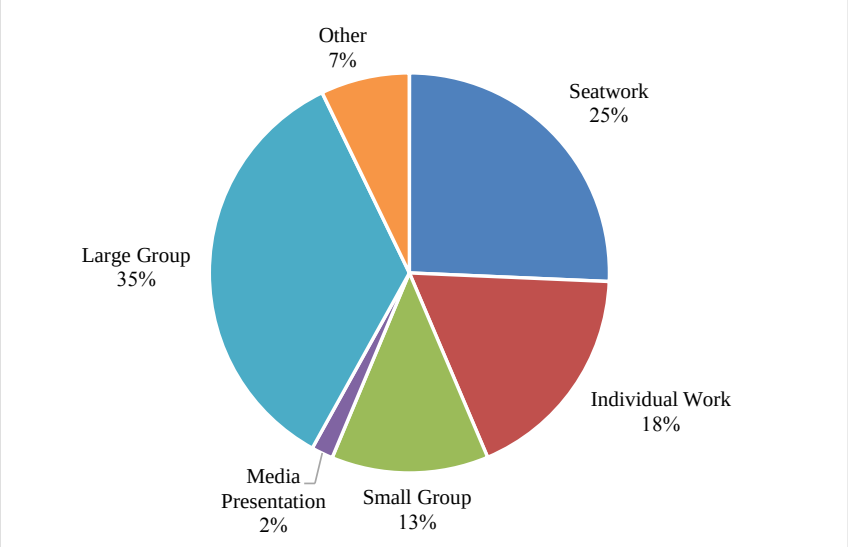
As can be seen in Exhibit 3.1.3, in 10 percent of all classrooms, teachers were not observed conducting instructional activity. In six percent of all classrooms visited, teachers were observed working with individual students, and in 11 percent of all classrooms, teachers were working with small groups. In the largest percentage of classrooms, 38 percent, teachers were observed conducting large group instruction that was teacher-centered in nature (lecture, etc.). The second most observed activity was monitoring, which involved teachers monitoring students while the students were completing individual work or seatwork. If teachers were working with an individual student while other students were completing work, this was classified as individual instruction. In 12 percent of all classrooms, teachers were observed conducting large group instruction that was student-centered in nature.

Although large group instruction can be effective, it doesn't universally support meeting individual students' needs, and students are generally passive during these approaches. This may not be in keeping with the district expectation for engaging instruction that incorporates students' learning styles. Half of all teacher activity observed was large group in nature.

The auditors collected information on the dominant student activity in each classroom, as well. These data are presented in Exhibit 3.1.4.

Exhibit 3.1.4

Dominant Student activity Observed
Tucson Unified School District
January 2014



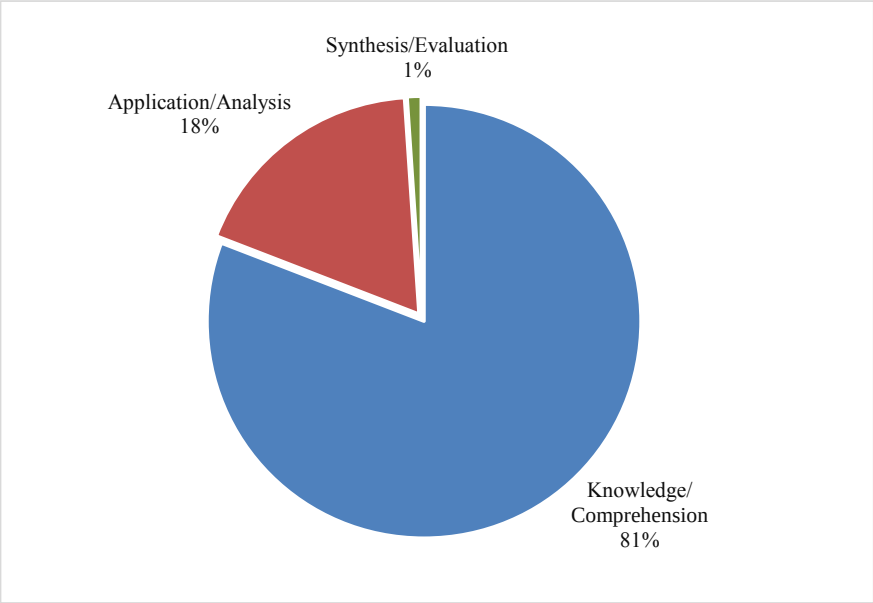
As can be seen in Exhibit 3.1.4, in one-fourth of the classrooms visited, students were observed completing seatwork. In 18 percent of the classrooms, they were observed completing individual work, such as a writing assignment, research activity, or meaningful individual work. In 13 percent of all the classrooms, students were working in small groups, and in a very small percentage (two percent), students were having or giving media presentations. In over one-third of all the classrooms visited, students were engaged in large group instruction of some kind, either teacher-centered or student centered (see Exhibit 3.1.3). This was the most commonly observed activity for students in all TUSD classrooms. In seven percent of the classrooms, students were engaged in activities that did not fall under the given classifications.

Overall, students were mostly involved in seatwork or large group instruction. Although any mode of instruction can be effective, certain modalities tend to correspond more with individualized instruction. These modes are usually small, flexible groups; centers; and individual work that corresponds with the students' academic needs and interests. Whole-class activity that is identical for every student cannot respond to or meet individual needs, yet whole-group activities were observed in over one-third of all classrooms.

The auditors then collected information regarding the cognitive type of instruction observed. This information is presented in Exhibit 3.1.5.

Exhibit 3.1.5

Cognitive Type Observed
Tucson Unified School District
January 2014



N=1,157

As can be seen in Exhibit 3.1.5, the predominant cognitive type observed by auditors was knowledge and comprehension, noted in 81 percent of the 1,157 classrooms visited. In almost one-fifth (18 percent) of classrooms, students were engaged in application and analysis types of cognition, and in one percent of classrooms, the most rigorous cognitive types were observed. Although these observations may not be reflective of typical instruction, auditors did not observe the majority of students engaged in rigorous instruction, if rigor is defined as the more engaging cognitive types of analysis, synthesis, and evaluation. This finding was also true of the artifacts collected, although the sample was not robust (see Finding 2.4).

Finally, auditors also collected information regarding effective strategies with English language learners. There were fewer observations recorded of these strategies, but the data show the frequency with which certain strategies may be implemented. These data are presented in Exhibit 3.1.6.

Exhibit 3.1.6

ELL Strategies Observed
Tucson Unified School District
January 2014

Strategy Observed	Percentage of Observations
Visual aids used	15
Slow & simple language	11
Verbal cues	10
Modeling spoken language	8
Range of reading & writing activities	6
Extra process time	6
Text preview w/ key vocabulary	5
Scaffolded writing	4
Peer support & collaboration	3
High expectations	3
Oral/written sentence stems	3
Native language help provided	3
Allowance for non-participant	3
Direct teaching of vocabulary	1
Positive feedback	1
N=301 observations recorded in all classrooms visited	

As can be seen in Exhibit 3.1.6, the most commonly observed ELL strategy was the use of visuals to support students' comprehension in the classroom, accounting for 15 percent of the observations. The second and third most commonly observed strategies were using slower and more simple language structures (11 percent) and verbal cues (10 percent). It cannot be concluded that these frequencies are typical; rather, the auditors suggest to district leaders that this may be an area for further study, to determine how frequently and how successfully ELL strategies are being implemented in TUSD classrooms.

The auditors heard concerns over classroom instruction during interviews with district personnel. Comments regarding a perceived lack of rigor included the following:

- "We have to have increased rigor early to get them ready for that challenge." (Board Member)
- "Our rigor in this district has fallen below what it should be. A number of our children have left the district to attend charter schools." (Board Member)
- "The rigor of the schools needs to be raised. The kids ought to be held accountable for their behaviors." (Board Member)
- "We really need to increase the rigor in our curriculum, get some consistency, get some of that central support that schools really don't have right now." (Board Member)
- "Educationally sound practices conflict with high stakes testing. There is no depth, analysis, or problem solving in curriculum." (Building Administrator)
- "How do we take to scale that teachers need to teach at a higher level?" (District Administrator)

Other comments were made that addressed the lack of consistency in the quality of instructional delivery, and an awareness of the need to improve instruction:

- "Our building currently lacks systems to deliver effective instruction.…The current focus…is to create an effective learning environment for our students." (Building Administrator)

- "I want to make sure what we are doing is right for kids." (Building Administrator)
- "High levels of student engagement are my top priority." (Building Administrator)
- "[Our focus is on] moving us away from being a tier 2 model. There hasn't been any sound first tier instruction" (District Administrator)
- "There is a weakness in our district with consistency of instruction." (District Administrator)
- "We have pockets of excellence, but we haven't been able to take that to scale." (District Administrator)

Several district stakeholders commented in particular on the Essential Elements of Instruction. The training was rolled out in the last year to all teachers; however, consistent implementation has not been verified. Comments regarding the perceived benefits of the EEL included the following:

- "EEI practices provided a strong foundation for curriculum planning." (District Administrator)
- "There was a strong instructional planning framework with EEI training…at least it provided a common language from which to start consistency in the district." (District Administrator)
- "EEI training gave us common language." (School Administrator)
- "We did EEI last year. It was a big district initiative." (Elementary Principal)

Others shared concerns about the effectiveness of the EEI training:

- "I can tell you that I see very little of EEI. I say, at minimum, I need to see active engagement." (Building Administrator)
- "We have focused on EEI and our teachers are capable. But I think that some teachers just begin to use it when we walk in the door for walk-throughs." (Building Administrator)
- "Mentors are interesting. They are here to support new teachers and they do not report to the principal. Yet they do their own thing. There is a district agenda and it is EEI and Danielson. I would like it to be a bit more collaborative." (Building Administrator)

Auditors' observations suggest that differentiation at the individual student level may not be implemented as widely as district documents would suggest. There were comments regarding a need to improve differentiation in the classroom, particularly in implementing effective guided reading (small group) instruction. A few stakeholders felt new teachers are not equipped to manage small group instruction and modalities that require different groupings of students. Concerns regarding differentiation and using interventions with students included the following:

- "Interventions are not effective—we need to improve instruction first and differentiation based on needs." (Building Administrator)
- "We need district-wide professional development in math, differentiation, and gifted education. We are not doing well anyplace in the district." (Instructional Personnel)
- "We need actual training, like [on] differentiation." (Building Administrator)
- "We have a bunch of teachers that don't know guided reading—they are coming out of the university not knowing guided reading. Especially at the lower grades." (Curriculum Personnel)

The expectation for culturally responsive pedagogy and effective instruction for ELLs is shared among district leaders and is a requirement of the USP. Comments suggest that these strategies should be an integral part of daily instruction. A few individuals expressed concern that the current initiatives do not adequately integrate SIOP and culturally responsive pedagogy with the EEI and the Danielson framework. The auditors found no district documents or plans that link all these initiatives for teachers and principals. Comments regarding these issues included the following:

- "We do have lesson plan template with SIOP included on it. When we do trainings we infuse SIOP." (District Administrator)

- "It (Danielson) correlates with EEI and with SIOP….The cultural piece could be stronger." (District Administrator)
- "Because of USP, multi-culture curriculum was developed and is out there. This curriculum rolled out without alignment to Common Core Standards." (District Administrator)

Overall, the dominant modes of instruction observed by auditors do not reflect high levels of individualized instruction. Auditors did see some evidence of ELL strategies but could not conclude if the frequency of their use is at desired levels. Rigor in classrooms was limited; students were most frequently engaged with knowledge and comprehension activities. There are elements of an instructional model within the Essential Elements of Instruction, but this model is not a formal district expectation (in writing) and its implementation was not determined to be consistent. District documents do not communicate clear expectations regarding the type of instructional approaches district leaders want to see in TUSD classrooms.

Finding 3.2: Monitoring of instruction by building principals occurs inconsistently across the district. There is inadequate direction for the purposes of and procedures for monitoring in district documents.

Academic success for students depends on two fundamental pieces: curriculum design and curriculum delivery. The first critical piece, the written curriculum, is a high priority in successful districts. The necessary complement to a high-quality written curriculum is effective delivery: how well the curriculum is delivered to students, how well that delivery is aligned to state and national standards, and, most importantly, whether or not instruction is differentiated to meet individual student needs. To ensure effective delivery of the curriculum, it must be monitored consistently and on a regular basis. As the instructional leader of a campus, the principal plays a vital role in monitoring the delivery of curriculum.

Monitoring is much more in depth than simply observing what the teacher is doing and what the students are doing during daily classroom visits. There are multiple purposes involved in monitoring. Lesson plans should be monitored and linked to curriculum guides to ensure that teachers are teaching the appropriate standards and objectives for that course or content area; that research-based, sheltered, and culturally responsive instructional strategies are being used; that assessments are varied and are appropriate to give teachers feedback regarding student learning; and that those assessment results are then used to inform instructional decision making, so student learning is maximized. Resources should be checked to assure their content is on-level, rigorous, and aligned in all dimensions with the district curriculum and required assessments.

Monitoring must begin with direction from board policy on the philosophy and purposes of monitoring instruction, the accompanying guidelines, and the results expected from implementation of the monitoring process. The elements to be monitored should be explicitly described and all campus administrators trained in the district adopted process and requirements for monitoring curriculum delivery. To inform instruction and ensure that student learning and achievement are present, principals must become skilled at analyzing the many factors involved in classroom curriculum delivery. Although teacher appraisals are an important component of school-level leadership, monitoring is fundamentally different in that it is ongoing, formative, and a process that should engage teachers and building administrators in reflective discussions regarding student learning. Monitoring should also include a review of lesson plans, ongoing analysis of the level of rigor and relevance of the work students are being asked to do, evidence of strategies and approaches that district leaders expect to see in classrooms, and frequent assessments of the alignment of classroom work with curriculum and assessments in all three dimensions (content, context, and cognitive type).

To determine the expectations for monitoring the district's curriculum and instruction, the auditors reviewed board policies, job descriptions, appraisal instruments, district and campus improvement plans, and other pertinent district documents. The auditors visited campuses and interviewed principals, district administrators, and teachers and surveyed over 1,350 district teachers, counselors, and building-based personnel regarding monitoring frequency.

Overall, the auditors determined that the majority of principals in TUSD understand and appreciate the importance of visiting classrooms, but the frequency with which principals do visit classrooms is inconsistent, and direction for the philosophy and purposes of monitoring, as well as guidelines for how to monitor, are inadequately defined in district policy and governing documents.

Administrative Regulation GCO mentions classroom observations within the context of conducting teacher evaluations, but there is no definition for monitoring, no expectations attached to the observations, nor any process or additional requirement mentioned. *Policy CF: Principles of Leadership* delineates more formal expectations of principals and specifies their responsibility to oversee the educational program of the school and supervise staff:

> "…The primary duty of a principal is to administer and supervise the instructional program….These duties include, but are not limited to, the following:

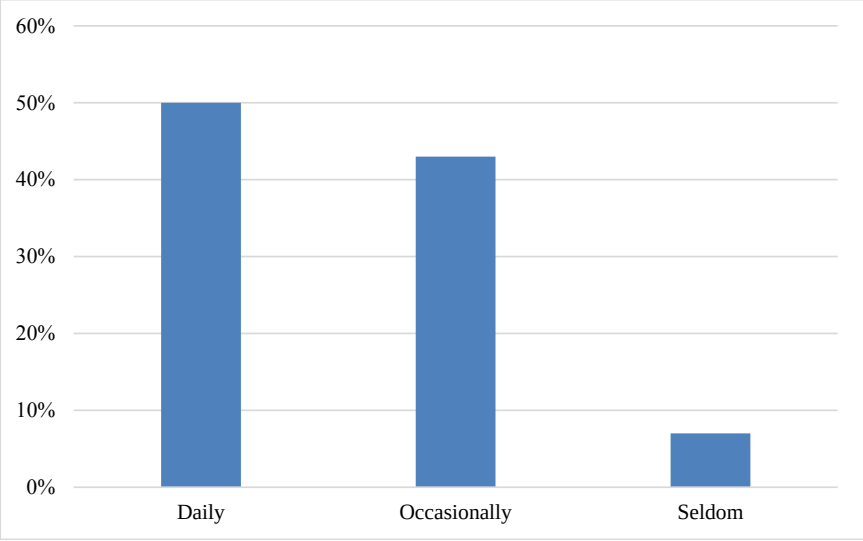
- A principal is responsible for the operation of the educational program of the school.
- A principal is responsible for the supervision, evaluation, and support of the school staff members."

In addition to these requirements, *Administrative Regulation CF-R* also requires principals to "coach employees to focus on job tasks and behaviors." The general requirement to monitor curriculum is present in policy, but there are no specifics as to how, how frequently, why, and with what instruments. The TUSD *P*rincipal Evaluation Process, dated April 2013, also includes the expectation that principals supervise instruction and "monitor and evaluation [sic] the impact of the instructional program."

While visiting schools, the auditors asked principals how often they visited classrooms. Exhibit 3.2.1 presents the information collected from principals.

Exhibit 3.2.1

Frequency of Classroom Visits Reported by Principals
Tucson Unified School District
January 2014



As can be seen in Exhibit 3.2.1, about half of principals reported being in classrooms daily. Over 40 percent reported being in classrooms occasionally, and about five percent reported being in classes infrequently. The auditors then asked teachers, via the online survey, to report how often they saw their building principal in their classroom.

Exhibit 3.2.2 presents this information.

Exhibit 3.2.2

Frequency of Classroom Visits Reported by Teachers
Tucson Unified School District
January 2014

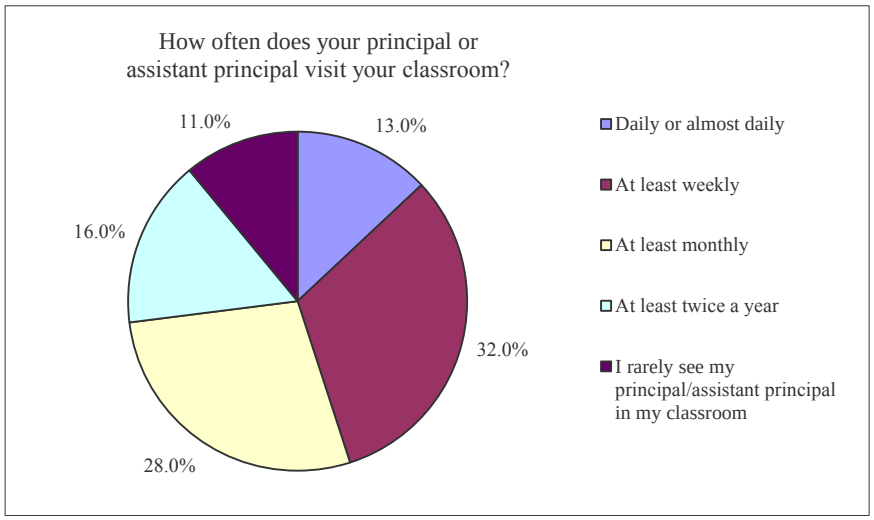


Exhibit 3.2.2 shows that a smaller percentage of teachers reported seeing their principal or assistance principal on a daily basis, at 13 percent. Almost one-third of teachers reported seeing their principal at least weekly, twenty-eight percent reported seeing their administrator at least monthly, while over one-fourth of teachers reported seeing their principal rarely. In addition to this question, teachers had the opportunity to add open-ended comments. There were over 150 comments made, and several indicated that their building was severely understaffed, leaving the principal no time to conduct walk-throughs. Others commented on the number of meetings downtown that pull their administrator out of the building, while a few mentioned the "invisibility" of their building leader. Many also made comments about the excellent support they receive from their administrator and the frequent classroom visits. Overall, however, there was a clear indication that classroom visits for the purposes of monitoring curriculum are inconsistent across the district.

The auditors were also unable to find any clear written direction regarding the purposes and philosophy of monitoring. Several principals reported using TeachScape, a walk-through tool that connects with the Teacher Evaluation Instrument. However, several principals also reported being unable to use TeachScape since wireless internet access is unavailable throughout the building. There was no consistent tool or checklist presented to the auditors for collecting classroom data, and a number of principals also reported creating their own tool or using a tool or checklist they located on their own.

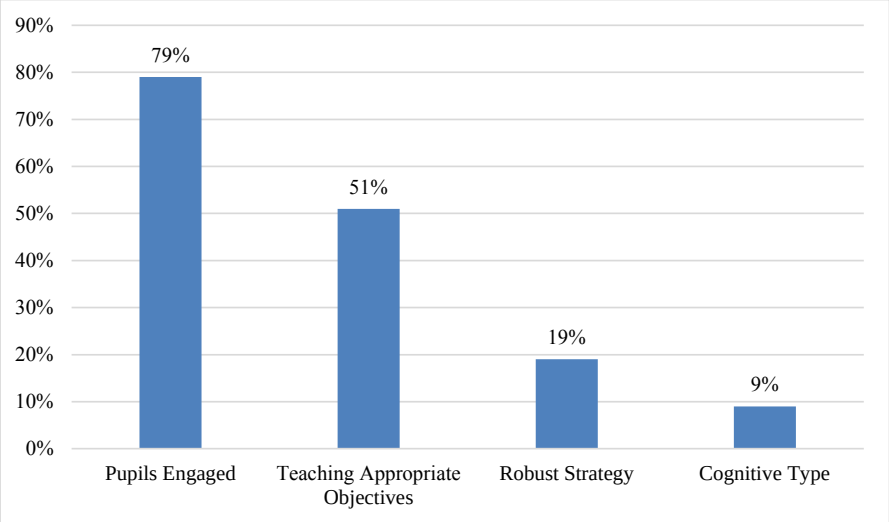
Writing a prediction—Marshall Elementary

Finishing the spelling words—Dunham Elementary

When in classrooms, principals reported looking for various things. These data were collected from principals during school visits by the auditors and are presented in Exhibit 3.2.3.

Exhibit 3.2.3

Things Principals Look for When Visiting Classrooms
Tucson Unified School District
January 2014



The most common classroom characteristic principals reported looking for was pupil engagement. Almost 80 percent of the principals reported looking for this when visiting classrooms. Just over half of the principals reported looking for teachers teaching the appropriate objectives, almost 20 percent (19 percent) reported looking for robust teaching strategies, and just under one-tenth (nine percent) reported looking for the type of cognition in which students are engaged.

Seatwork at Marshall Elementary

Tolson Elementary School students in sleeping posture

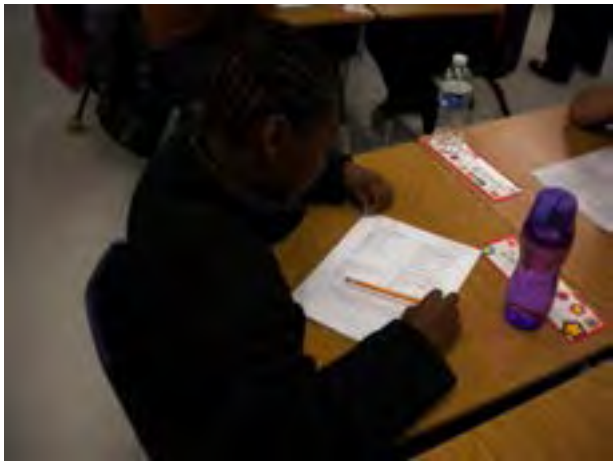
During interviews, the auditors heard comments that conveyed a common expectation that principals should visit classrooms and monitor instruction.

- "We are in classrooms weekly. We look at what students are doing more than what teachers are doing. We are checking to see if students are actually understanding what is being taught." (Building Administrator)
- "The building principal is responsible for monitoring teacher instruction." (District Administrator)
- "Walk-throughs are required, but principals are not required to use the same walk-through forms or processes." (Instructional Support)

Other comments were made by building administrators and building-based personnel that also conveyed a sense of responsibility for monitoring and for overseeing teachers and classroom instruction:

- Monitoring: "I chat with teachers before and after school." (Building Administrator)
- "We use a walk-through protocol developed loosely around EEI. We also use TeachScape" (Building Administrator)
- "During our classroom observations we look for student and teacher engagement, energy. We also look for probing questions. We look for evidence of Spanish being spoken since we are a dual language school." (Building Administrator)
- "I love the Danielson framework. The use of the framework during conferencing with teachers has raised the levels of our conversations." (Building Administrator)
- "When my teachers fail, I fail." (Building Administrator)
- "I have a responsibility for monitoring, not so much with curriculum." (District Administration)
- "In our walk-throughs, we look for preplanning, objectives, the Essential Elements of Instruction." (District Administrator)

As can be seen from interview comments, the expectation to be in classrooms is perceived as a responsibility and is being implemented by a number of principals. However, monitoring is not clearly defined at the system level and its delivery is inconsistent across buildings.



Marking the best answer—Marshall Elementary

Multiple choice worksheet - Marshall Elementary

Current district leadership communicated a clear goal to support principals more effectively in the future:

- "We will align and pull principals together via the academy…we will do PD, so [they] understand being a campus leader. We have the Assistant Principal participate in the ILA to build their capacity. In organizing around the [district], we convey the same message—that the district office is here to support schools." (District Administrator)

Summary

In conclusion, there is an expectation in Tucson Unified School District that principals need to be supervising the educational program and that they should be coaching teachers. However, monitoring the curriculum is inconsistent from one building to the next, and principals cited difficulties in having time to be in classrooms because of meetings, disciplinary issues, or no building support (such as an Assistant Principal). A number of teachers reported never seeing their building administrator, while others reported seeing him or her often. Written direction regarding the philosophy, purposes, instruments, and results of monitoring is inadequate to ensure proper support and oversight of the delivery of curriculum.

Finding 3.3: District programs for exceptional education and English language learners are inadequate to provide the impetus needed to eliminate the difference in achievement among student groups District programs for gifted and talented students continue to grow, but current delivery models fail to offer equal opportunities for access.

In an effective public school system, every student has access to the programs and services available in the district. Access to these programs and services should not be determined by gender, ethnicity, disability status, socioeconomic background, or the school in which a student is enrolled. In these systems, one finds similar proportions of students by gender and ethnic origin in specific programs as reflected in the general student population. There should not be a disproportionate representation of students in advanced programs, or in retention and suspension rates, graduation rates, or identified for special programs and services. The terms *equal* and *equity* are not synonymous. While "equal" is defined as exactly the same, "equity" means fairness. The audit refers to "equity" as the allocation of resources based on need. Rather than distributing resources based on per pupil allocation formulas, equity requires that additional resources be directed to students with greater needs. Without an equitable distribution of resources, equal access to programs and services cannot occur, resulting in school systems perpetuating the disparities that a public school education was designed to ameliorate

A school system that has a strong curriculum in place is well positioned to adopt or create programs that serve to customize instructional delivery of that curriculum to meet the learning requirements of students with a variety of special needs. School systems demonstrate program definition when each program is derived from the common curriculum and developed rationally in response to a systematic identification of deficiencies in the achievement and development of all students, based on measurable standards of pupil learning (see Finding 4.3). Communication between the core curriculum program management and support programs creates a linked and focused approach to program planning, development, and implementation. District procedures, practices, and expectations for all students are critical to facilitating the design, delivery, and assessment of district programs to remove student achievement gaps.

Well-defined programs have clear goals and objectives, targeted approaches, and measurable outcomes. Cohesiveness is demonstrated when the various program effects logically relate to the common core of learnings and to each other without being redundant. Program integration is demonstrated when the outcomes of the programs support and build on each other in order to systematically foster common curriculum learnings.

A systematic and cohesive plan for program development begins with an assessment of student needs relative to a common core of learnings. This is followed by the development of program models that are congruent with and function to support and convey the curriculum, in concert with the other programmatic efforts, to meet the needs identified. A school district meeting this standard is able to demonstrate that it possesses a coherent and focused approach toward program development and implementation, and that the program efforts work in common to support and extend the comprehensive curriculum. Without program cohesiveness and integration, meaningful program evaluation becomes very complex and contributes little to rational program decision making. When programs operate without a consistent framework, the fragmentation complicates staff training efforts and increases the risk of inequities or counterproductive efforts.

To assess the status of program development in the Tucson Unified School District, the auditors reviewed documents including district plans, test data, budget documents, job descriptions, program documents, memoranda from administrators, state reports and data summaries, as well as enrollment data and other reports compiled by school district personnel. They interviewed board members, administrators at the district and school sites, teachers, and parents. Auditors visited classrooms and collected observational data at every school site in the district. . The auditors also examined district policies to identify the direction given by the governing board regarding how the need for programs is to be established (see Finding 1.1.), how the programs are to be delivered, and how they are to be evaluated (see Finding 4.4).

The auditors found that the programs in Tucson Unified School District operate as stand-alone programs with minimal interface with the regular curriculum program. Selection of materials and resources lacks coordination with the curriculum process and is not aligned with the assessments. Provision of services is mostly self-contained pull-out programs. Student achievement in the special education and English language learner

programs is below district achievement. Dropout, retention, and graduation rates are out of proportion to the special population in the district. Program planning is minimal, evaluation of the programs is not done, and the teachers are not all highly qualified to teach in the programs. There were numerous inconsistencies in the implementation of programs and practices intended to improve student achievement. The belief that every student can achieve and will achieve was not found district-wide.

The following relevant board policies and accompanying regulations were identified and are briefly summarized here. A more detailed explanation of these policies is found in Appendix G.

- *Board Policy AC: Non-Discrimination* states, "Tucson Unified School District is committed to a policy of nondiscrimination based on disability, race, color, religion/religious beliefs, sex, sexual orientation, age, or national origin. This policy will prevail in all matters concerning Governing Board, District employees, students, the public, educational programs and services, and individuals with whom the Board does business." This policy provides the legal definitions, laws, and the definitions associated with such. It further stipulates a procedure to be in place to monitor and address complaints of discrimination.
- *Board Policy ADF: Intercultural Proficiency* stipulates, "Tucson Unified School District is committed to creating and fostering a systemic educational ecology that respects the cultural diversity and inherent cultural wealth of the various TUSD communities and cultures that TUSD serves. TUSD further recognizes that culture exerts a powerful influence on teaching and learning and will therefore promote cultural understanding in all aspects of a student's school experience by adopting curriculum, learning activities and teaching practices that lead to intercultural proficiency. All students have the opportunity to learn their cultural heritage and appreciate its uniqueness as well as that of others. TUSD will assess and hold accountable District staff for increasing intercultural proficiency and understanding that leads to academic success. In its support of multicultural education TUSD directs the implementation of programs and activities which foster recognition of and respect for, basic human rights and fundamental freedoms for all, regardless of race, gender, socioeconomic status, linguistic proficiency, language, ethnicity, national origin, religion, age, disability, sexual orientation, or gender identity/expression." The policy defines diversity in the broadest sense and is not limiting to any population.
- *Regulation AD-F: Intercultural Proficiency* addresses the district's commitment to diverse populations and defines equity as follows: "equity means that all individuals, the organization, and our work must be all inclusive and respective for the diverse population of which we serve." Specific points within the regulation are found in Appendix G.
- *Board Policy GBA: Equal Opportunity* emphasizes, "Discrimination against an otherwise qualified individual with a disability or any individual by reason of race, color, religion, sex, sexual orientation, age, or national origin is prohibited. Efforts will be made in recruitment and employment to ensure equal opportunity in employment for all qualified persons."
- *Regulation GCAB-R2: Highly Qualified and Appropriately Certified Staff* directs, "Principals are required to assign teachers to only teach classes for which the teacher is highly qualified and appropriately certified. Only in an emergency situation when no highly qualified or appropriately certified teacher is available may a teacher be assigned to teach a class for which the teacher is not highly qualified/ appropriately certified. In that event, the teacher must take steps to meet the requirements prior to the end of the current school year."
- *Board Policy GCFC: Certification and Credentialing* stipulates, "Before beginning a teaching/ administrative assignment in Tucson Unified School District, and in order to be placed on the payroll, a teacher/administrator must possess a valid and appropriate teaching certificate issued by the Arizona State Department of Education."
- *Board Policy IGA: Curriculum Development* addresses the need for ongoing program of curriculum development and evaluation. The superintendent is designated as the person responsible for all curriculum development for programs.

- *Board Policy IHAA: English Instruction* provides guidance for English language learning and provision of programs, stating that the goals of Dual Language are to promote individual student achievement, to provide student full access to the curriculum, and to secure acquisition of Basic English language skills. This policy directs the superintendent to develop regulations to address services for ELLs and "establish a plan for language education which shall include the training and professional growth of employees involved in the educational programs and activities governed by this policy."
- *Board Policy IHB: Exceptional Education Instructional Programs* requires that "A long-range plan will be the basis for providing special education services for students with exceptional needs and education requirements. These services may include specialized programs, personnel, facilities, materials, and equipment needed to promote the individual physical, social, intellectual, and emotional growth of exceptional students." The policy directs the superintendent to develop a regulatory procedure for the implementation of the provisions of IDEA for students with disabilities.
- *Regulation IHB-R: Exceptional Education Instructional Programs,* as detailed in Appendix G, provides additional specific information related to programs for exceptional education, free appropriate public education, and Individual Education Programs.
- *Board Policy IHBA: Education of Section 504 Disabled Students* provides for district services to students who meet the definition of disabled under Section 504. The policy states that "Students may be eligible for services under the provisions of Section 504 even though they do not require services, pursuant to the Individuals with Disabilities in Education Act (IDEA)."
- *Board Policy IHBB: Gifted Talented Education* stipulates that "Gifted and talented students shall be provided with appropriate instruction and/or special ancillary services (from first grade through high school) that are designed to meet their educational needs" and "No students shall be excluded from the program(s) because of their ethnic status, handicapping condition, creed, gender, or religious convictions if they meet the eligibility criteria and have parent or guardian approval for participation."
- *Board Policy IHBE: Parental Waiver for English Learners in Dual Language Classrooms* provides a mechanism whereby parents may seek a waiver from the requirements relating to teaching children who are English learners in Structured English Immersion. This policy addresses the request for waiver form administration as well as stipulations on when the waiver would be granted.
- *Board Policy IIB: Class Size* addresses special education: "It is the intent of the District to maintain a special education student-teacher ratio that will allow the teacher to work effectively and efficiently toward the individualized education program (IEP) objectives of each student with a disability and to work with classroom teachers to prevent learning problems whenever possible."
- *Board Policy IJ: Instructional Materials* outlines the foundation for instructional material provisions within the district.
- *Board Policy IJJ: Textbook/Supplementary Materials Selection and Adoption* addresses the state requirement for textbooks, supplementary course books, e-textbooks, and course software.
- *Board Policy IKA: Grading/Assessment* provides guidance for grades for regular and special education.
- *Regulation IKA-R: Grading/Assessment Systems* states that the subject grade should be based upon pupil mastery of the content of the course. Grades shall be based on performance, and discipline is to be marked separately.
- *Board Policy IK-AB: Report Cards/Progress Reports* provides for student progress reporting in a timely manner to parents.
- *Board Policy IKE: Promotion, Retention, Acceleration and Appeal* states that the Tucson Unified School District is dedicated to the continuous development of each student and describes the promotion, retention, and acceleration provisions. It provides for diverse learners.

- *Regulation IKE-R1: Promotion, Retention, Acceleration and Appeal* defines the requirements for promotion from grade to grade and level to level as well as the retention, acceleration, and appeal process. Special subpopulations are not addressed.
- *Regulation IKE-R2: Competency Requirement for Promotion of Students from Third Grade* provides direction for how TUSD will address the requirement for students to be promoted from third grade based on the reading section of the *AIMS* test (see Appendix G for specifics).
- *Board Policy IKF: Graduation Requirements* defines the number of credits in specific courses that must be achieved, as well as a statement that students must "demonstrate proficiency/competency in the areas determined by the State Board of Education by achieving a passing score on established tests." See Appendix G for specifics.
- *Regulation IKF-R: Graduation Requirements* outlines the verification of student accomplishment of subject area requirements and credits, including decisions made by IEP teams.
- *Board Policy JG: Equal Education Opportunities & Anti-Harassment* provides, "The right of a student to participate fully in classroom instruction shall not be abridged or impaired because of race, color, religion, sex, sexual orientation, age, national origin, and disability, or any other reason not related to the student's individual capabilities. The right of students to participate in extracurricular activities shall be dependent only upon their maintaining the minimum academic and behavioral standards established by the Board, and their individual ability in the extracurricular activity."
- *Regulation JG-R: Equal Education Opportunities & Anti-Harassmen*t outlines procedures for appeals.
- *Regulation JG-R: Assignment of Students to Classes and Grade Levels* addresses the process for determining placement, credit status, and assignment to a grade level.
- *Board Policy JK: Student Discipline* names the Student Code of Conduct (entitled Guidelines for Student Rights and Responsibilities) as the policy and procedures for discipline within the district.
- *Regulation JK-R1: Short Term Suspensions* provides definitions of short term suspension, the use within the district for disciplinary action, the documentation, the notice to parents and the conference, the appeals procedures, and the hearing process.
- *Regulation JK-R2: Long Term Suspensions* gives direction for long term and short term suspensions and the use within the district for disciplinary actions. This regulation defines the procedures for implementing long term suspensions, the documentation, the appeals procedures, and the hearing process.
- *Board Policy JKAA: Discipline, Suspension, Expulsion for 504 Handicapped Students* outlines the district commitment to students with disabilities and provides direction for procedural safeguards.
- *Board Policy JKAB*: *Discipline of, and Alternative Interim Education Placements for Special Education Students* details the process for students with disabilities as it relates to alternative disciplinary placements.
- *Board Policy KBF: Interpreter and Translator Support Services for Students and Parents/Guardians* states, "In order to ensure equal access to District education and support services, Tucson Unified School District is committed to ensuring communication with Limited English Proficient (LEP) students and their families in a language they understand."

Overall, auditors found board policies to be inadequate for addressing the development, implementation, and evaluation of programs in the district to ensure support of the curriculum (see Finding 1.1). While board policy provides some general support for equity in the delivery of instructional programs, it is inadequate as a comprehensive guide to those who implement those programs. The policies focus on the provision of programs and legal mandates, but do not provide direction for the delivery of the programs. Furthermore, none of the policies directs the district to align these programs as true support and inclusive programs within the delivery of the curriculum.

In order to ascertain information about the interventions in Tucson Unified School District, auditors reviewed board policy and administrative regulation, job descriptions, program reports, and professional development documents; visited classrooms; and interviewed district and site staff, parents, students, and teachers. Exhibit 3.3.1 displays information regarding key documents reviewed. A full listing of documents reviewed can be found in Appendix D.

Exhibit 3.3.1

Program Documents Reviewed by Auditors
Tucson Unified School District
January 2014

Document	Date
2013-14 40th Day Enrollment by School and Subgroup (Excel File)	1-28-2014
AIMS Achievement Data 5 years for District, ALE, Spec Ed, ELL, FARM	1-29-2014
ALE Access and Recruitment Plan	2-1-2014
ALE Enrollments by program types and schools Excel File	1-22-2014
ALE GATE, HONORS, AP, IB Courses and Enrollments Excel File	1-29-2014
ALE Organization Chart	2014
ALP Guidebook	2012-13 & 2013-14
Alternative Language Programs Descriptions Website	2-5-2014
Discipline Data for ELL Five Years by Gender, Ethnicity, Levels Excel File	2010-2014
Dropout Retention Data for 2008-09, 2009-10, 2010-11, 2011-12, 2012-13	Various
ELL Budget	1-30-2014
Exceptional Education Organization Chart	1-25-2013
GATE Itinerant Student Count	1-28-2014
GATE Models Description	ND
Gate Self Contained Enrollments by Schools Excel File	1-31-2014
GATE Student Growth Excel File and Email	2-3-2014
GATE Student Achievement Growth TUSD Stats Dept	1-28-2014
GATE, LAP, Exceptional Education from TUSD Website	Various
Gifted and Talented Parent Handbook	No date
HR Teachers in Non Highly Qualified Status	1-30-2014
LAD Professional Development Sessions June 2013-January 2014	2-6-2014
LAD Program Models by Schools Excel File	1-29-2014
List of Language Acquisition Materials	2-7-2014
Materials Purchased for Special Education Excel File	1-28-2014
Professional Development Materials For Checkout---GATE	No date
Software, Textbooks, Materials Requests GATE, Ex ED, ELL	1-29-2014
Special Education Budget	1-31-2014
Special Education Criteria for Referral and Place	1-28-2014
Special Education Enrollment by Ethnicity, Gender and Sub Group	1-29-2014
Special Education Primary Identification by School Excel File	1-31-2014
Student Retention Data by District, School, Program, Gender, Ethnicity Five Years	2008-2013
TUSD: Gifted and Talented Services	NA
Two Way Dual Language Program Handbook	12-2014
Unitary Status Annual Report (website)	2-13-2014

The auditors reviewed all job descriptions (see Finding 1.4). In this finding, job descriptions specific to GATE, ELL, and Exceptional Education were reviewed. Over 35 different job descriptions were reviewed, including

Exceptional Education Director, compliance coordinator, interpreter, teacher, paraprofessional, job coach, instructional specialist for exceptional education, prevention-intervention specialist, program coordinator, psychologist, Director of Advanced Learning Environment, language acquisitions specialist, and learning support specialist. The job descriptions were written in very general language; for those jobs that overlapped several areas, such as instructional specialist, the descriptions were identical except the infusion of words such as special education, ELL, or ALE.

Exhibit 3.3.2 lists the state, federal, and local programs established at the district level; the funds budgeted to provide these programs; and the funding sources. While this exhibit includes the major program funds, the listing is not intended to represent a comprehensive itemization of all the district program efforts.

Exhibit 3.3.2

Grants and Program Funds, 2013-14 Approved Budgets and Funding Sources
Tucson Unified School District
January 2014

Program	Funding Deseg	Funding State/ Federal	Funding Other Grants	Funding Received
Bilingual Education	$9,584,418.77	Title III $1,140,828.20		$10,725, 246.77
Special Education		IDEA Basic $9,129,605.73 IDEA CSPD Grant $46,053.06 IDEA PreSchool $425,426.62	Autism $18,652.62 AZ TIERS $11,121.72 IDEA LETRS TOT Academy $17,041.42 IDEA Secondary Transition Mentoring Year 2 $33,478.79 1st Things 1st Grant $193,000.	$9,901,379.96
Advanced Learning Environments	$6,481,943		$93,625	$8,241,889
Totals				**$28,868,515.73**
Budget provided by District dated 2013-14				

The information on district-wide program efforts presented in Exhibit 3.3.2 shows that $28,868,515.73 in grant-based state and federal funding supplements the basic local budget. This significant level of funding represents a strong resource to support curriculum delivery, but the auditors found that linkages vary widely between these programs, core curriculum, and student achievement. The auditors recognize the lack of a mandate for alignment between the funding agencies and the district curriculum in board policy; however, the benefit for the achievement of students would be greatly enhanced should this occur.

Major Program Efforts

The district operates several major district-wide programs including gifted and talented, special education, Title I, ELL, and magnet school programs, as well as a variety of innovative and intervention programs (see Finding 5.3). Below are descriptions of three major program efforts funded through state and federal grants. The district is operating under a long standing desegregation order, with the latest document January 20, 2013 outlining specific compliance issues. Finding 3.5 addresses equity and issues surrounding the Unitary Status Plan. Auditors have also noted areas of noncompliance as reported in the district compliance reports. Tucson Unified School District has entered into three agreements with the Office of Civil Rights. These agreements [Instructional Services for ELLs (OCR #08955002), Interpreter/Translation Services (OCR #08011157), and Health and Human Services Meaningful Access (OCR #09-01-3298)] have been developed to ensure meaningful access to district services for limited English proficient members of the TUSD community.

Gifted and Talented (GATE—Advanced Learning Environment)

In order to ascertain the development and operation of the Gifted and Talented Education (GATE) program, auditors reviewed information provided by district staff, visited classrooms, and conducted interviews. GATE is one component of the larger Advanced Learning Environment (ALE) created through the Unitary Status Plan in 2013. Finding 3.5 presents information about the desegregation order for addressing underrepresentation of minorities, particularly African American and Hispanic students in the GATE program. This finding focuses on the GATE program services and delivery.

From district documents, the following is a description of district service delivery: "Gifted and Talented Education provides services are designed to meet the academic and social needs of identified students. Lessons integrate critical and creative thinking, along with problem solving within the content areas of language arts, science, math, social studies, and fine arts. Emphasis is placed on self-direction, flexibility, and cooperation in social and academic situations. A student who qualifies may receive services through one of the following programs.

- **Elementary Pull-out Model:** The GATE Pull-out Model is offered at all elementary schools in TUSD. A teacher with a gifted endorsement is assigned to each elementary school. Identified students are pulled from class one day per week for 30 – 90 minutes to work in cooperative and collaborative groups. All group activities are highly enriched and focus on higher order thinking skills, inquiry learning, and systems thinking.
- **Elementary Clustering, Enhanced Pull-out Model:** This nationally research-based gifted and talented model was piloted in TUSD during the 2010-11 academic year. Under this model identified students are clustered in a classroom with a teacher trained in gifted education. Not all students in the classroom have been identified as gifted, but all students in a cluster classroom have access to gifted education strategies used in that mainstream, cluster classroom. Gifted students participating in the clustering model also receive pull-out services through a once per week expanded block of up to 3.5 hours. Schools that offer clustering are Collier, Cragin, Dietz, Drachman, Dunham, Erickson, Ford, Fruchthendler, Gale, Hudlow, Miller, Robins, Warren, and Whitmore. More TUSD teachers are to receive training in hopes of expanding this program model to additional schools.
- **Grades 1-8 Self-Contained Model:** Students attend self-contained GATE classes according to a geographic feeder pattern. All students who have been previously identified are assigned to a GATE trained or GATE endorsed classroom teacher. The GATE classroom teacher incorporates gifted education strategies in all core content areas on a daily basis. Project- based learning is a major focus of the self-contained model. Currently, TUSD has four self-contained elementary sites (Kellond, Hollinger, Lineweaver, Tulley, and White) and three self-contained middle school sites (Doolen, Pistor, and Vail). Tulley is an accelerated Magnet School model. Hollinger is a Dual Language program that provides the additional benefit of instruction in both Spanish and English; all qualified elementary GATE self-contained students can apply. Pistor has both an English instruction program and a Dual Language program that provides instruction in Spanish and English.
- **Middle School GATE Classes:** All middle school students have the option to enroll in GATE classes outside of the self-contained schools. Part-time GATE resource programs are available at all middle schools. Programs typically consist of one class period daily. GATE classes may be offered in all core subject areas. GATE offerings vary from site to site in terms of service delivery.
- **High School Block**: GATE block classes for English and Humanities are offered at all neighborhood high schools for students and determined by site administration and may consist of any of the following: English, Western Civilization, Non-Western Civilization. High school students may register for GATE block classes through the registration process. High school counselors should be consulted for information on participation in GATE block classes."

Students are initially identified for the GATE program through assessments. The assessments currently used by the GATE department include the Cognitive Abilities Test, grades 1 through 8; Raven Test of Progressive

Matrices, (non-verbal) kindergarten through 8; Otis-Lennon, kindergarten only; and SPARK (Screening Procedure and Assessment for the Recruitment of Kindergartners). The SPARK assessment is a performance-based assessment designed to identify gifted children from underrepresented populations.

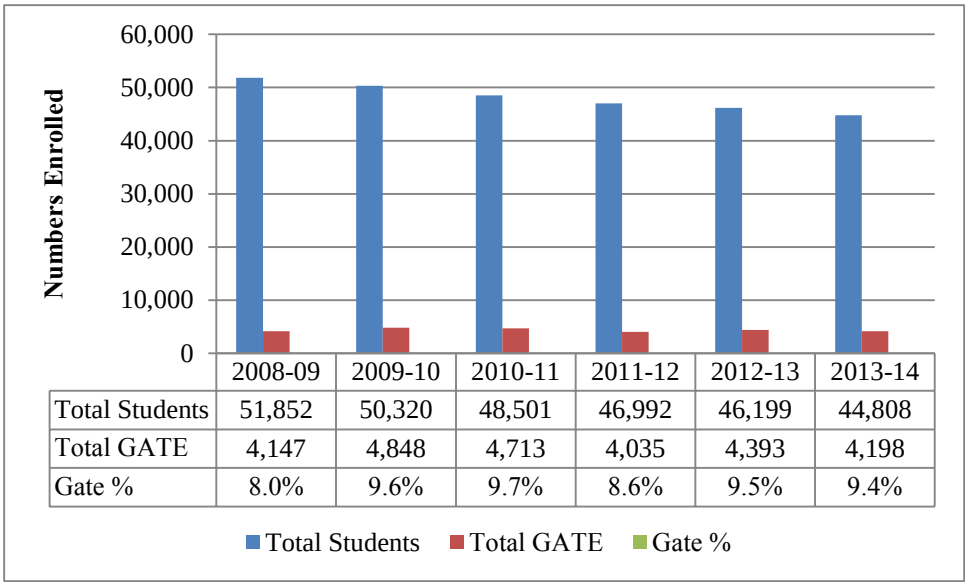
The decisions on how student assessment results are reviewed for placement decisions occur in different ways. District documents provide the following regarding the placement process:

- All GATE test results are compiled and rank-ordered by the central GATE Office. The Placement Team reviews all test results. The Placement Team is responsible for reviewing all test information including teacher checklists submitted with kindergarten referrals.
- Students who score at the 97th percentile or above in any one of three areas--verbal, non-verbal, or quantitative reasoning--on any test from the State Board approved list will be considered eligible to receive services.
- All placements in self-contained GATE classes and the elementary GATE Pull-out program are approved and monitored by the GATE Office. Placements in self-contained classes in grades two through eight (2-8) are very limited, occurring as the result of student attrition.
- All students are rank-ordered by composite test score and within the district geographic feeder pattern for purposes of eligibility and placement consideration. Students are offered placement in self-contained classes based on their rank order and the number of vacancies available in their specific grade level.
- State qualified students (students with a minimum of one 97th percentile score) who are not placed in self-contained classes in grades 1 through 5 will be placed in the part-time GATE pull-out program offered at all elementary school sites. The GATE Pull-out program begins in 1st grade at all schools.
- State qualified students who are not placed in self-contained classes in grades 6, 7, and 8 will be referred to their home school for GATE resource classes offered at all middle schools.
- Self-contained elementary placement is not guaranteed for middle school classes.
- Middle schools are responsible for enrolling students in GATE resource classes.
- High schools are responsible for enrolling students in GATE block classes for 9th and 10th grade. Site administrators, teachers, and counselors are responsible for ensuring equal access for students.

One of the first questions to ask in an audit of a special program addresses the issue of the population receiving the services. Exhibit 3.3.3 displays six years of enrollment in GATE in TUSD.

Exhibit 3.3.3

Six-Year Enrollment in GATE
Tucson Unified School District
2008-2014



	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Total Students	51,852	50,320	48,501	46,992	46,199	44,808
Total GATE	4,147	4,848	4,713	4,035	4,393	4,198
Gate %	8.0%	9.6%	9.7%	8.6%	9.5%	9.4%

Data from Accountability Office, TUSD

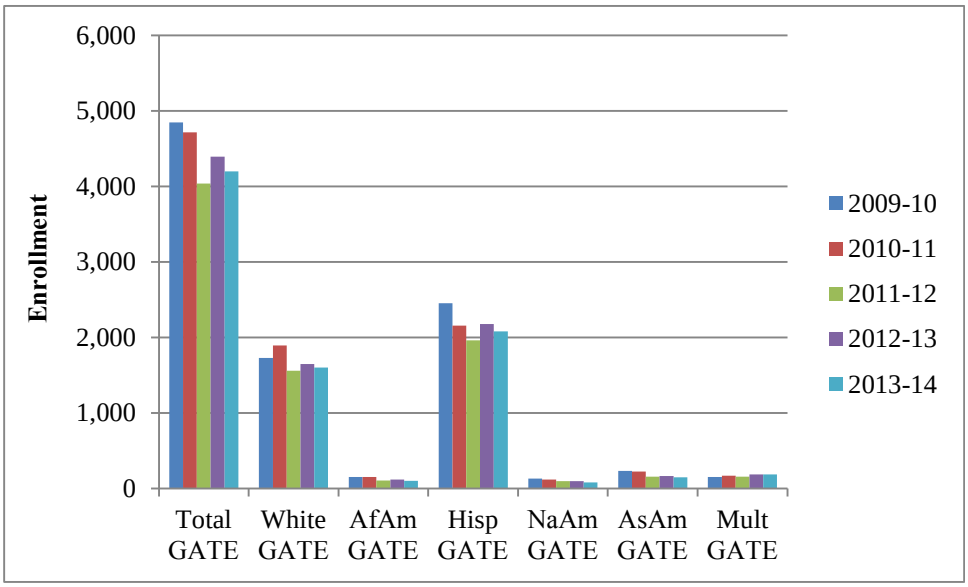
As shown by Exhibit 3.3.3:

- The GATE enrollment was highest in 2010-11 at 9.7 percent.
- The lowest year of enrollment was 2008-09 at eight percent.
- The second lowest year of enrollment was 2011-12 at 8.6 percent.
- The current year's enrollment is down from the previous year by one-tenth of a percentage point.
- The current enrollment in the GATE program is 4,198 students, which is 9.4 percent of the district student enrollment.

Exhibit 3.3.4 shows the ethnic enrollment in the GATE program for five years.

Exhibit 3.3.4

Five-Year Enrollment in GATE by Ethnicity
Tucson Unified School District
2009-2014



Data from Accountability Office, TUSD

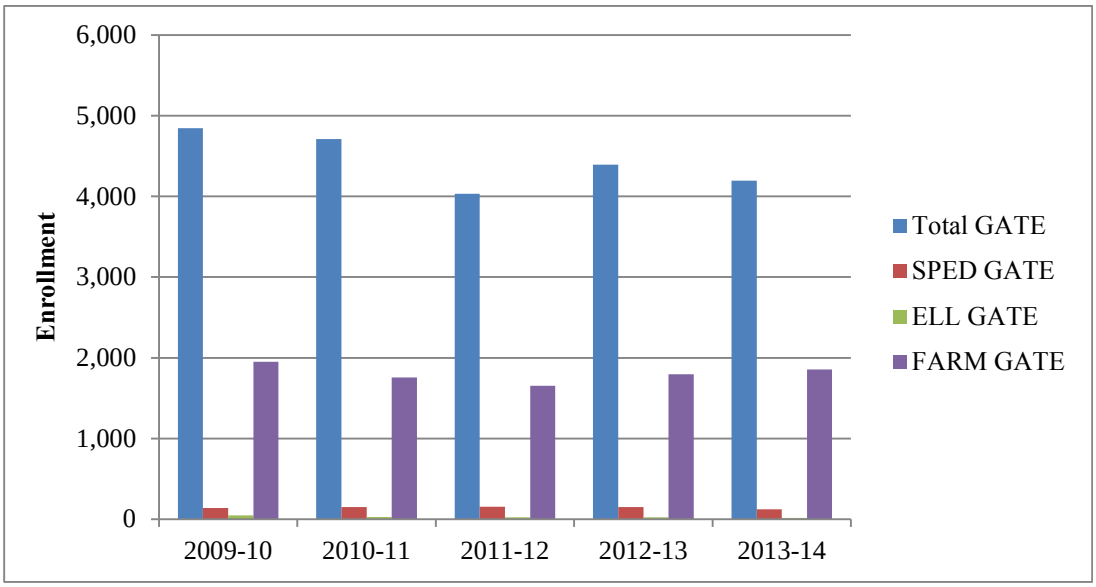
As can be seen in Exhibit 3.3.4**:**

- White student enrollment increased in 2012 and decreased in 2013.
- Hispanic student enrollment increased in 2012 and then decreased in 2013.
- Hispanic students constitute the largest number of students enrolled in GATE**.**

Exhibit 3.3.5 shows the specific subpopulations enrolled in the GATE program for the last five years.

Exhibit 3.3.5

Five-Year SubPopulation Enrollment in GATE
Tucson Unified School District
2009-2014



Data from Accountability Office, TUSD

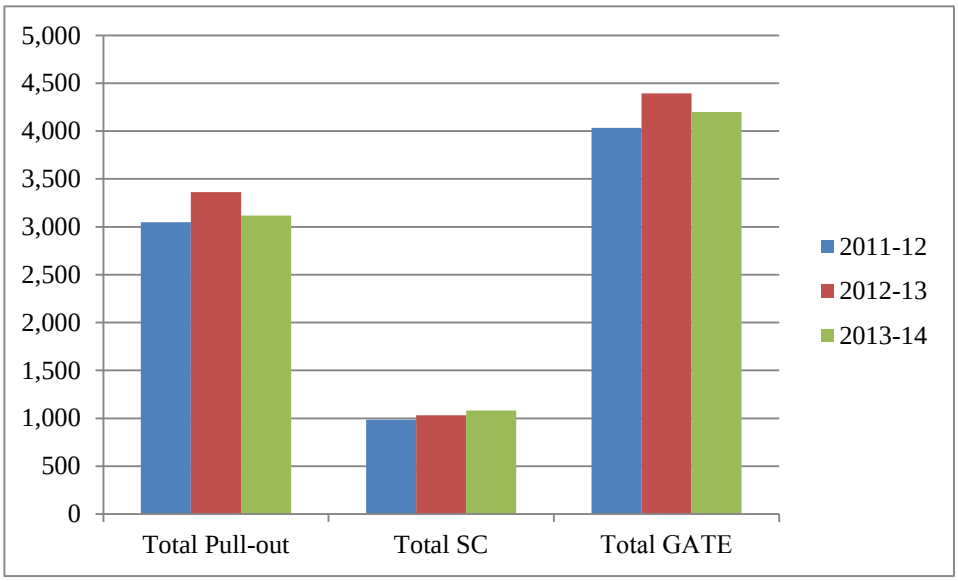
From Exhibit 3.3.5, it is noted**:**

- The largest subpopulation of students enrolled in GATE is the free and reduced lunch students.
- Special education constitutes the second largest subpopulation of students enrolled in GATE.
- The special education subpopulation numbers are decreasing in enrollment in GATE, going from a high in 2011-12 of 153 to a low of 123 for the current year.
- English language learners are minimally enrolled in the GATE program, with only 16 students identified for the current year**.**

Exhibit 3.3.6 provides information regarding the numbers of students enrolled in self-contained programs in grades 1-8 and pull-out programs in grades 1-2 receiving GATE services for the last three years.

Exhibit 3.3.6

Self-Contained (Grades 1-8) and Pull-out (Grades 1-12)
GATE Program Enrollments
Tucson Unified School District
2011-2014



Data from Accountability Office, TUSD

From Exhibit 3.3.6, it is noted:

- The majority of students receiving GATE services are in pull-out programs.
- The number of students in pull-out programs was lowest in 2011 and highest in 2012. The current year shows a decrease in the number of GATE students receiving pull out services.
- The number of students receiving self-contained services in grades 1 through 8 is increasing, going from a low in 2011 of 986 to a high for 2013 of 1,081.
- The number of identified students in GATE decreased from 2012 to 2013.

Achievement scores of GATE students were reviewed by grades 3-10 in math and reading for 2012-13. Exhibit 3.3.7 shows this information for mathematics.

Exhibit 3.3.7

GATE Achievement in Math by Grade Level
Tucson Unified School District
2012-13

Test Year	Subject	Test Grade	Total N	GATE N	GATE %	Non-GATE N	Non-GATE %
2013	Math	3	3954	417	96	3537	55
2013	Math	4	3896	590	94	3306	48
2013	Math	5	3865	579	92	3286	48
2013	Math	6	3607	323	91	3284	44
2013	Math	7	3620	258	96	3362	47
2013	Math	8	3630	205	98	3425	40
2013	Math	10	3415	192	76	3223	51
	Total		25987	2564		23423	
Data from Accountability Office, TUSD							

From Exhibit 3.3.7, the following can be noted:

- GATE students scored consistently higher in math than non-GATE students.
- GATE students performed at 90 percent proficiency at all levels except grade 10 mathematics.
- Non-GATE students scored at a higher proficiency level at grade 10 than in grade 8.

Exhibit 3.3.8 shows reading achievement scores of GATE students for 2012-13.

Exhibit 3.3.8

GATE Achievement in Reading by Grade Level
Tucson Unified School District
2012-13

Test Year	Subject	Test Grade	Total N	GATE N	GATE %	Non-GATE N	Non-GATE %
2013	Reading	3	3955	417	95	3538	64
2013	Reading	4	3897	590	98	3307	67
2013	Reading	5	3867	579	97	3288	70
2013	Reading	6	3600	323	98	3277	69
2013	Reading	7	3623	258	99	3365	77
2013	Reading	8	3629	205	98	3424	60
2013	Reading	10	3423	191	96	3232	79
2013	Reading	99	25994	2563	97	23431	69
Data from Accountability Office, TUSD							

From Exhibit 3.3.8, it is noted:

- GATE students scored above 90 percent proficiency at all levels.
- GATE students increased in percentage of proficiency until seventh grade, and then declined.
- Non-GATE students showed an up and down trend in reading from grades 3 through 10.
- At grade 10, the non-GATE students increased in proficiency while the GATE students declined.

The auditors worked with the district officials in determining the growth of GATE students in self-contained GATE programs when compared to non-GATE students in the same schools. The growth values represent the median Student Growth Percentile (SGP) for the group. In this analysis the self-contained GATE schools were split into two schools, and their letter grades were re-calculated. Exhibit 3.3.9 shows this information.

Exhibit 3.3.9

GATE vs Non-GATE Reading and Math Achievement
Tucson Unified School District
January 2014

2012-13 School Letter Grades - Disaggregated by Self-Contained GATE vs. Non-GATE Classes														
Code	School	Group	Total *AIMS* Passing			Median Percential Rank of Growth				Growth + 1	FFB reduction Points	ELL Reclass. Points	Total Points	Letter Grade
						Total		Lowest 25%						
			Reading	Math	Combined	Reading	Math	Reading	Math					
173	Corbett	Non-GATE	54	33	44	55	43	54	52	52	0	3	99	D
173	Corbett	Self-Contained GATE	94	97	95	66	67	66	70	68	0	3	166	A
233	Hollinger	Non-GATE	66	53	60	47	52	60	63	56	3	0	119	C
233	Hollinger	Self-Contained GATE	98	93	95	70	53	4	31	40	3	0	138	B
281	Lineweaver	Non-GATE	66	56	61	38	56	37	51	46	3	3	113	C
281	Lineweaver	Self-Contained GATE	99	98	99	60	73	93	70	75	3	3	180	A
419	Tully	Non-GATE	68	49	59	47	45	50	46	48	3	0	110	C
419	Tully	Self-Contained GATE	98	98	98	64	65	67		66	3	0	164	A
505	Doolen	Non-GATE	63	43	53	48	53	50	58	53	3	0	109	C
505	Doolen	Self-Contained GATE	99	100	100	67	79			74	3	0	174	A
527	Pistor	Non-GATE	67	38	53	47	47	50	47	49	0	0	102	C
527	Pistor	Self-Contained GATE	98	94	96	48	47	41	33	43	0	0	139	B
555	Vail	Non-GATE	65	37	51	44	39	44	46	44	3	0	98	D
555	Vail	Self-Contained GATE	100	98	99	39	41			41	3	0	140	A

NOTE: The data is based on Betebenner's growth model http://www.azed.gov/research-evaluation/files/2013/11/2013-a-f-technical-manual.pdf By way of understanding this exhibit, the Betebenner's growth model was utilized to determine the school letter grade formula. Statewide distribution of Composite and Growth Points for the 1,665 schools evaluated by the ADE last year show the statewide median composite score was 74, and the statewide growth score was 52. Additionally, 67% of all schools (or roughly the first standard deviation) earned between 44 and 60 growth points, 16% earned 43 or fewer, and 17% earned 61 or more points. Given what is known about the statewide growth-points distribution, it is expected that groups of students who are keeping up with their statewide peers to have a median SGP of approximately 52. And, that if the group is below 44 or above 60, they are statistical outliers (above or below the approximate first standard deviation).

Explanation and data provided by TUSD stats department.

From Exhibit 3.3.9, the following is noted:

- Corbett Elementary (note, the school was closed last year and transferred the GATE program to Kellond Elementary) had a median SGP of 52 for their non-GATE students and 68 for their GATE students. However, because of the overall poor performance in math (33 percent passing) for their non-GATE students, that group would have earned a D letter grade when growth and achievement are combined.
- A similar growth gap, where the non-GATE students perform near the statewide median, and the GATE students perform above the first standard deviation, is observed at Lineweaver and Tully Elementary schools. However, at these schools, the non-GATE students performed better in math, resulting in hypothetical C letter grades for the non-GATE students and A letter grades for the GATE students.
- Hollinger is an outlier among the elementary GATE schools. While the non-GATE students at the school scored a median SGP of 56 (slightly above the statewide median), the GATE students scored only 40 points, meaning they are falling significantly behind their academic peers statewide.
- At the middle school level, the non-GATE and GATE performance of the Doolen students mirrors that of the majority of elementary GATE schools. However, the GATE growth at Pistor and Vail, like that observed at Hollinger, is surprisingly low. Not only is the GATE median SGP below the non-GATE median, but in both cases, the GATE students fall outside the first standard deviation below the statewide mean.
- The poor growth performance of the Vail GATE students is particularly disturbing because this school serves a more affluent population of students than the other GATE middle schools, and these GATE students had the lowest growth of any group of kids in this analysis, including the neighborhood non-GATE kids at Pistor.

In reviewing the curriculum for GATE, auditors were informed that a committee had developed a scope and sequence chart in 1988. The curriculum since that time has been largely determined by the schools with recommended resources and materials from the administration. Auditors requested a listing of resources and materials utilized in the program but were informed that since schools and classrooms made those decisions, no central list was available.

Additionally, the audit team requested data on the certification of teachers providing GATE services to students in the district. Through interview data, auditors found that not all teachers providing services in the GATE program held appropriate certification, but the district provides multiple opportunities for teachers to gain such expertise. A review of documents and additional interviews failed to provide specific numbers of non-certified GATE teachers, a listing of the opportunities for training, and the current status of GATE teachers. One explanation for this was given by an interim director explaining that the GATE program had not been updated, was in a constant state of change due to the Unitary Status Plan, and was being reconstituted within the Advanced Learning Environments programs. This same director indicated that data and documents were difficult to find regarding the development and delivery of the GATE program. Decision making for the program had been held tightly by past administration and schools, and evidence regarding the process was not available.

During interviews with district and school administrators, teachers, parents, and board members, auditors received the following representative comments regarding the GATE program:

- "There is nothing in writing, no documents that present the rationale or criteria for the GATE program." (District Administrator)
- "Once you are in the program (GATE), you are in it through eighth grade." (District Administrator)
- "The GATE handbook was last updated in the '90s. We found a folder with lots of documents in it. We do not have a program guidebook." (District Administrator)
- "When I looked at all our programs, every level has different materials, books, etc., as there is no set of cohesive standards. In one level, I saw the novels matched the topic but not the level it should have been. There are gaps in GATE to be addressed." (District Administrator)

In summary, GATE is one programmatic piece of the Advanced Learning Environments (ALE) program offered by the district. The overall discussion of equity issues in the total ALE program is found in Finding 3.5. The GATE program is provided in Tucson Unified School District with several service delivery models. Not all service models are provided at every school. Not every student identified as GATE has the opportunity to enroll in a self-contained GATE program because of the qualification criteria, number of students who are eligible, and the number of available classes. In order to participate in the GATE self-contained program, students may need to attend a school outside their assigned school, as the self-contained classes are not offered through district-wide classrooms. Furthermore, once a student is identified as GATE in elementary school, he or she remains identified through grade 8, leading to a waitlist for these classes. Few students enter the GATE program as a result of the lack of vacancies. The largest ethnic subgroup in the GATE program is Hispanic students. The white population continues to increase in GATE enrollment, even as there is a declining white population in the district general enrollment, while the Hispanic population does not show the same trend. Students enrolled in the GATE programs perform well in math and reading until tenth grade, and then show a slight decline. At the same time, the non-GATE students show an increase in proficiency at the tenth grade. When comparing the growth performance of the self-contained GATE students to the non-GATE students at the six self-contained classroom schools, auditors noted that some of the GATE students demonstrated performance higher than one standard deviation above the average student growth norm. However, this was not evident across the entire GATE self-contained programs, indicating a lack of consistency in GATE programs to afford all GATE students appropriate gains in their student achievement.

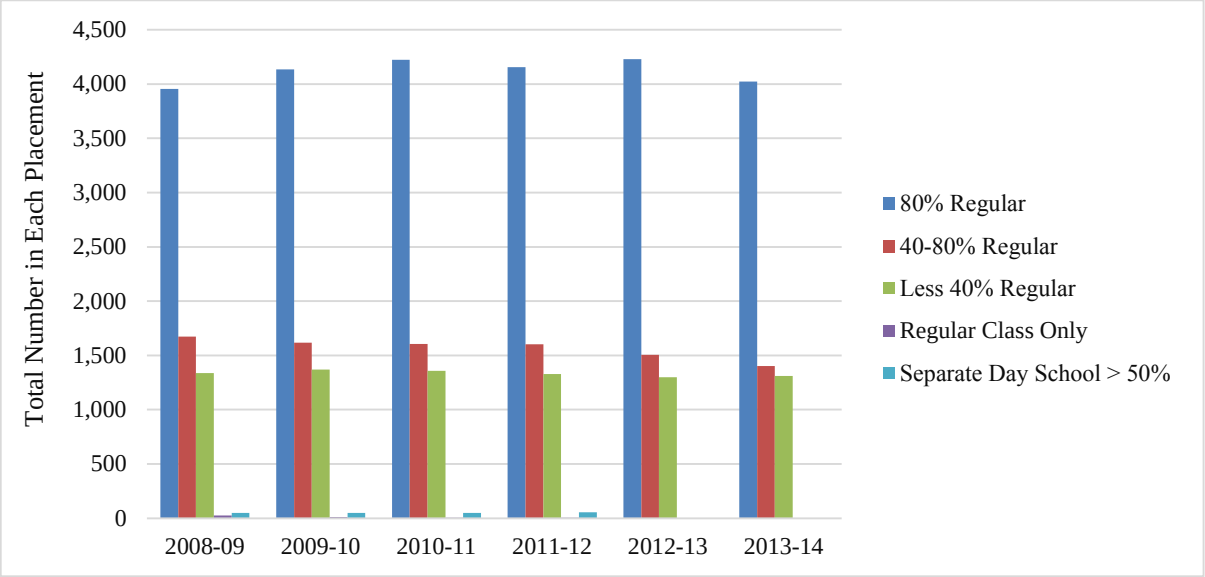
Exceptional Education Program

The Tucson Unified School District provides programs for students with disabilities. The program and students are identified as Exceptional Education in TUSD, even though many data reports utilize the federal term "students with disabilities" and state data term "special education (SPED)".

Exceptional education programs in TUSD are organized as either inclusive, pull-out or self-contained programs. Not all of the categorical programs are offered at each school. Inclusion is the district's name for a collaboration class in which the student attends regular education with an exceptional education collaborating teacher and/or paraprofessional in the regular classroom. According to federal guidelines, that is one of the least restrictive environment options. If a student needs a resource program in which he or she receives instruction from the exceptional education teacher for a particular content area, the district provides this service at every school. District officials in the office of exceptional education identified increasing the number of learners who receive their education in the regular classroom as a priority. The district was asked to provide the service delivery options available within each school; however, these data were not provided to the auditors. Instead, the district provided the federal report from December 2013, indicating the summative service delivery options for the district. These options are shown in Exhibit 3.3.10.

Exhibit 3.3.10

Exceptional Education Service Delivery Classrooms
Tucson Unified School District
2008-2014



Data from Accountability Office, Tucson Unified School District

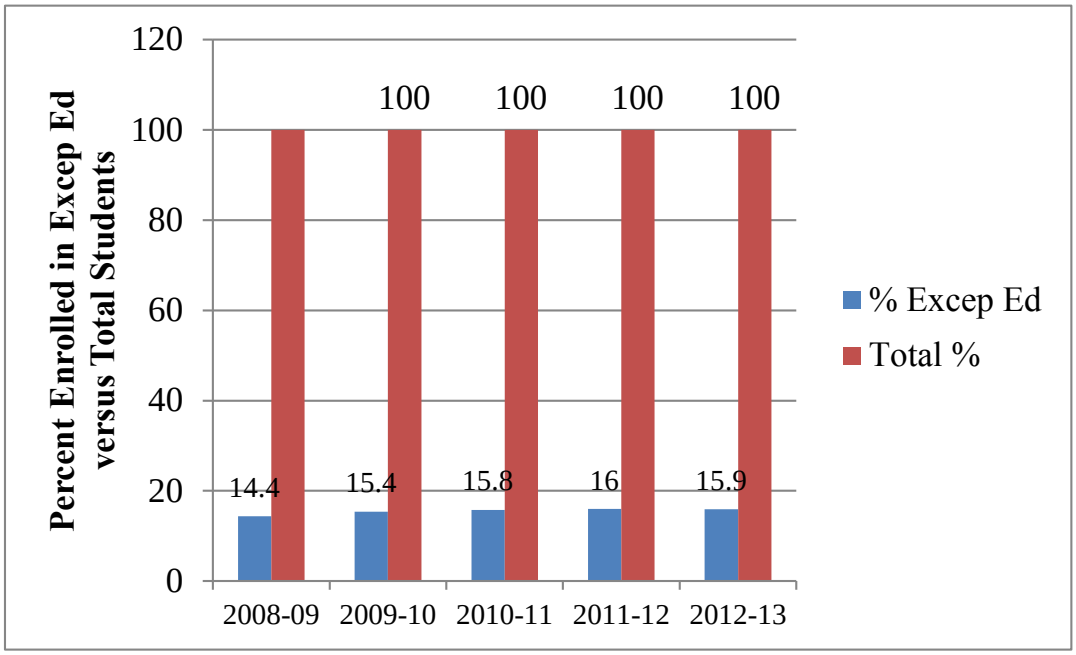
From Exhibit 3.3.10, the following is noted:

- The placement of students in exceptional education service delivery has remained relatively constant over the six years.
- In 2012-13, the district significantly reduced the number of students in a separate school.
- Numbers of students receiving services in resource classrooms decreased by one percent in the past two years.
- Numbers of students receiving services in self-contained classrooms has remained at the same level for all six years.
- The number of exceptional education students receiving the majority of their education in the regular classroom is not increasing in Tucson Unified School District.

The audit team reviewed documents and interviewed administrators and teachers regarding the numbers of students identified as exceptional education. The number of students eligible for exceptional education programs in the Tucson Unified School District is between 15 and 16 percent of the district enrollment. Exhibit 3.3.11 shows the enrollment over five years.

Exhibit 3.3.11

Exceptional Education Eligibility and Total Student Population
Tucson Unified School District
2008-2013



Data from Accountability Office, TUSD

From Exhibit 3.3.11, it is noted:

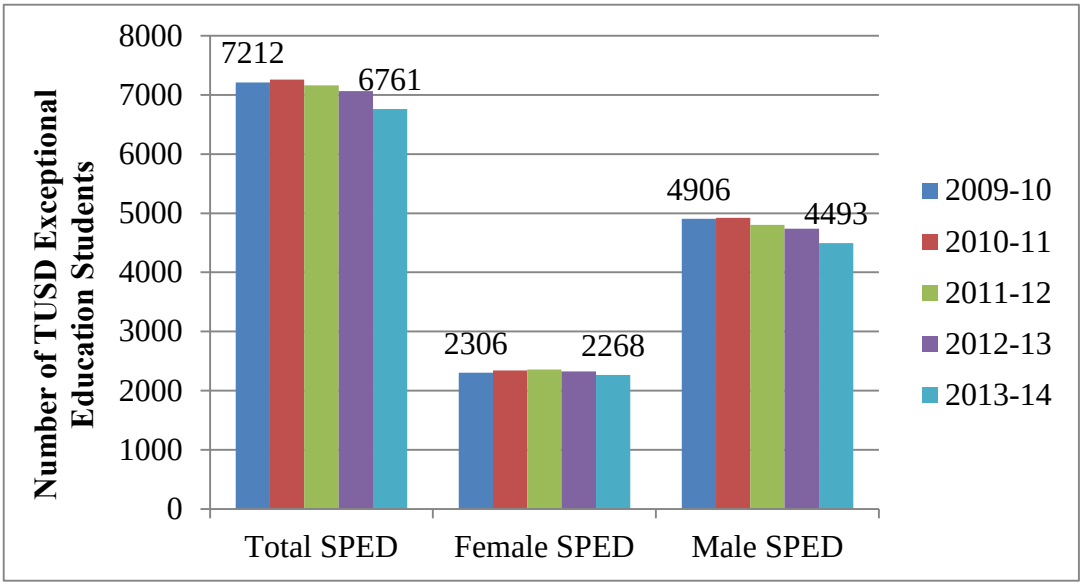
- The enrollment in exceptional education eligibility increased from 2008-09 through 2011-12.
- There was a slight decrease in the percent of identified exceptional students from 2011-12 to 2012-13.
- The identified population of exceptional education students ranges from a low of 14.4 percent in 2008-09 to a high of 16 percent in 2011-12.
- Currently, TUSD has 15.9 percent of their total population of students identified as exceptional education.

Auditors asked during interviews about the implementation of federal laws and regulations regarding referrals and placements in special education programs. In response to inquiries from auditors about the national student with disability rate being at 12 percent and the TUSD rate being at 16 percent, administrators had no response other than describing the most recent attempt to implement a Response to Intervention (RtI) process as part of the referral process. Interviewees described the RtI process in TUSD as a multitiered system of intervention, developed within the past year and being implemented this year. The multitiered system of intervention was a direct response to the Unitary Status Plan addressing the overidentification of certain ethnicities as exceptional learners. Auditors reviewed specific data related to the numbers of students identified in each category of exceptional education and noted the specific learning disabilities category and speech category that had the largest numbers of identified students.

Gender demographics of students eligible for exceptional education are shown in Exhibit 3.3.12.

Exhibit 3.3.12

Gender of Exceptional Education Students
Tucson Unified School District
2009-2013



Data from Accountability Office, TUSD

From Exhibit 3.3.12, it is noted:

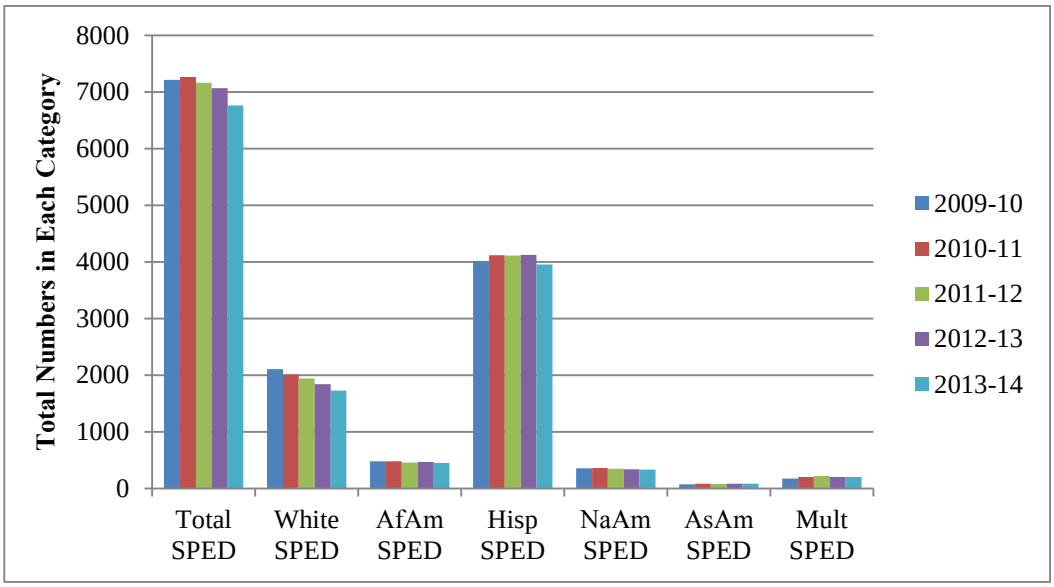
- More males than females are identified as eligible for exceptional education programs.
- The distribution of females has remained between 32 percent and 34 percent of the exceptional education students.
- The proportion of males has remained between 66 and 68 percent of the exceptional education population.

Using data obtained from the district website, auditors found that males constitute 51.2 percent of the total student population in TUSD, while females constitute 48.8 percent. When compared to the percentage of males in the general population, males are disproportionately identified for exceptional education.

Exhibit 3.3.13 displays the ethnicity of the students identified as exceptional education for the past five years.

Exhibit 3.3.13

Ethnicity of Exceptional Education Students
Tucson Unified School District
2009-2014



Data from Accountability Office, TUSD

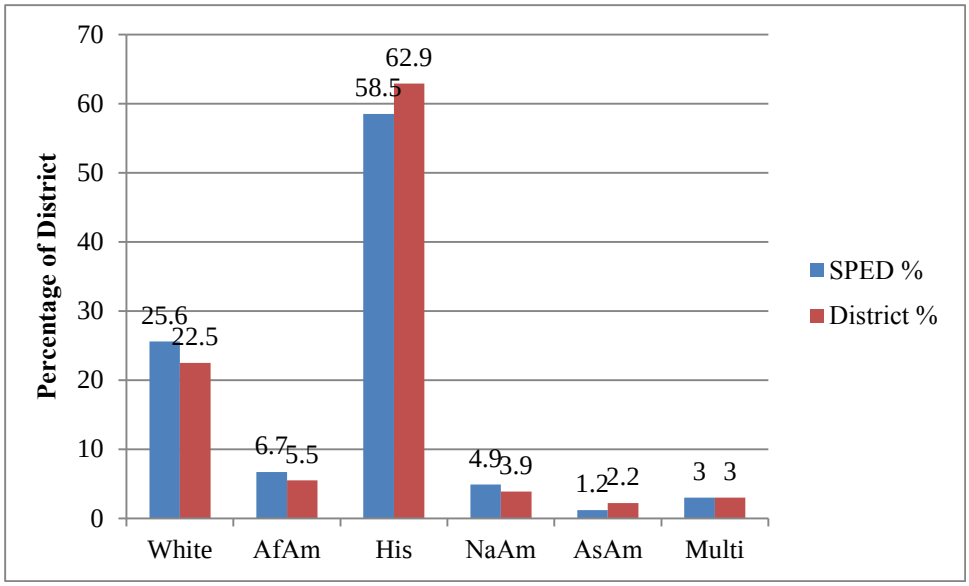
From Exhibit 3.3.13, the following is noted:

- The number of white students enrolled in exceptional education is decreasing.
- The largest ethnicity in exceptional education is Hispanic students.
- The Asian American ethnicity is the smallest subpopulation in exceptional education.

Exhibit 3.3.14 compares the percentages of the ethnic subgroups identified as exceptional education to the percentage of the ethnic subgroup in the TUSD population for 2013-14.

Exhibit 3.3.14

Ethnic Percentages in Exceptional Education and District
Tucson Unified School District
2013-14



Data from TUSD Statistics and Accountability Department

Exhibit 3.3.14 shows the following:

- Native American students are overrepresented in exceptional education, making up 17.8 percent of exceptional education but only 3.9 percent of the overall population.
- African American students identified as exceptional education constitute 6.7 percent of the exceptional education students, while making up only 5.5 percent of the overall TUSD population.
- Hispanic students make up 58.5 percent of exceptional education students, while Hispanics constitute 62.9 percent of the TUSD students.
- White students identified as exceptional education constitute 25.6 percent, while they are only 22.5 percent of the overall TUSD population.

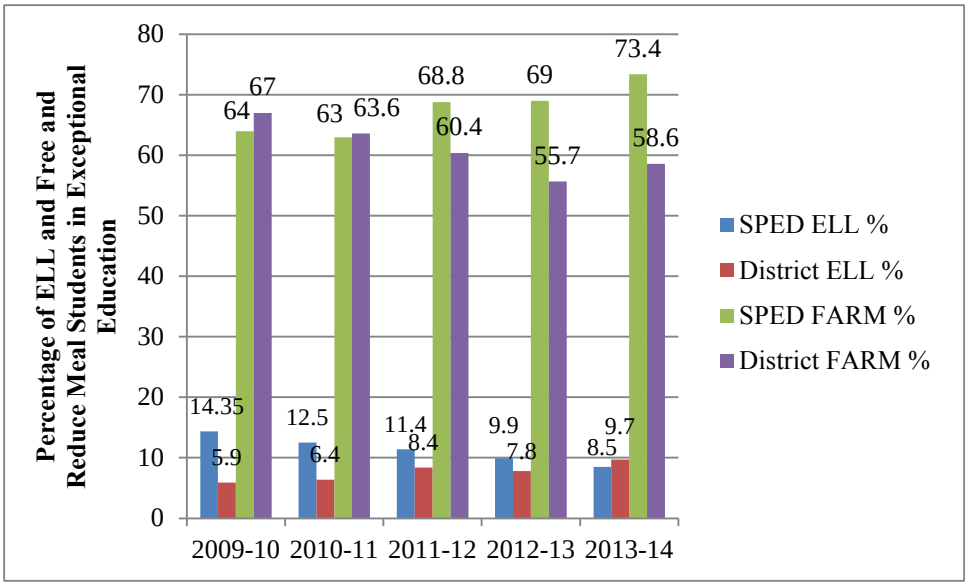
Note: The percentage of a subgroup identified for special education is not the same as the percentage of the special education population made up by that subgroup.

Based on this data, auditors concluded that some ethnicities are disproportionately identified as exceptional learners. Additional comparisons of ethnicities and program eligibility can be found in Finding 3.5.

Exhibit 3.3.15 shows the percentage of English language learners and of free and reduced meal students who are enrolled in exceptional education.

Exhibit 3.3.15

English Language Learners and Free and Reduced Meals Enrollment in Exceptional Education
Tucson Unified School District
2009-2014



Data from Accountability Office, TUSD

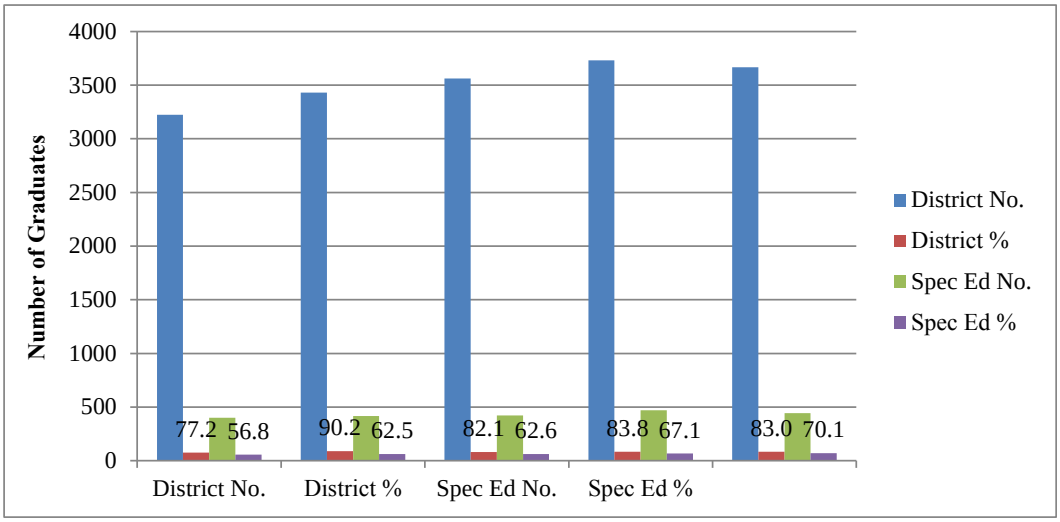
From Exhibit 3.3.15, it is noted:

- The percentage of exceptional education students who also qualify as free and reduced meals continues to increase each year.
- The percentage of exceptional education students who are identified as English language learners has decreased in the past three years.
- The total number of exceptional education students has been declining over the past three years, while the percentage of those students who qualify for free and reduced meals is increasing.
- The district FARM percentage is 58.6 percent in 2013-14, while the percentage of FARM students identified as exceptional learners is 73.4 percent.
- The district ELL percentage for 2009-10 was 5.9 percent, while the percentage of ELL students in exceptional education was 14.35 percent.
- There was a trend of ELL students being overrepresented in exceptional education until 2013-14.
- While the percentage of FARM students has decreased in the district since 2009, the percentage of FARM students has increased in exceptional education.

An area of exceptional education that has been identified as a concern is the graduation rate of exceptional learners. Exhibit 3.3.16 shows five years of exceptional education graduation rates.

Exhibit 3.3.16

Exceptional Education Graduation Rates
Tucson Unified School District
2008-2013



Data from Accountability Office, Tucson Unified School District

From Exhibit 3.3.16, it is noted:

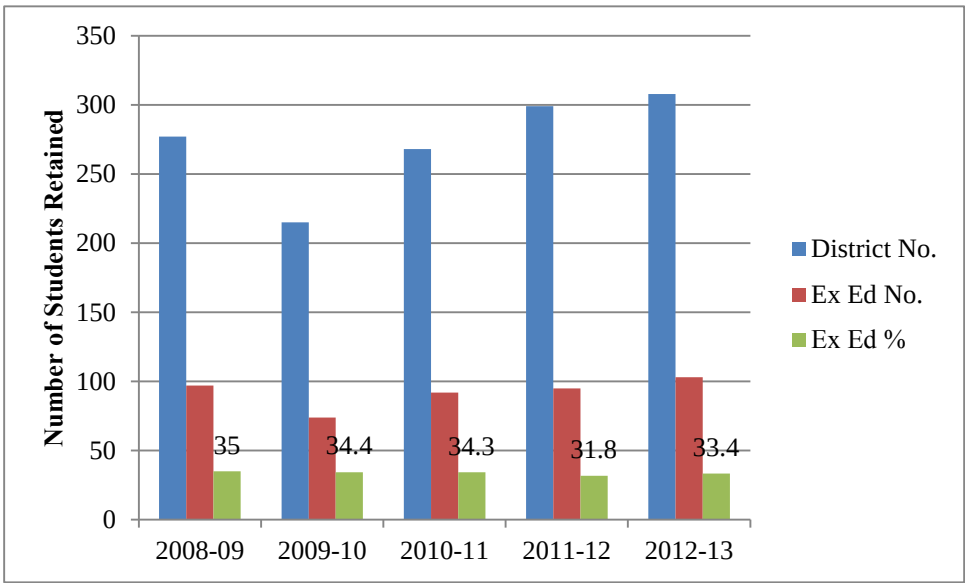
- Exceptional education graduation rates range from 56.8 percent in 2012 to 70.1 percent in 2008.
- Graduation rates for exceptional education students show a decline from a high in 2008 to the low in 2012.
- The special education graduation rate is lower than the district graduation rate in all five years.

The graduation rates for both the district and exceptional education are concerns for the district.

The auditors reviewed information obtained from the TUSD Statistics and Accountability Office regarding district and exceptional education retentions and dropouts. Exhibit 3.3.17 displays the data on exceptional education retention for five years compared to district retention.

Exhibit 3.3.17

Retention of Exceptional Education Students
Tucson Unified School District
2008-2013



Data obtained from TUSD Accountability Office

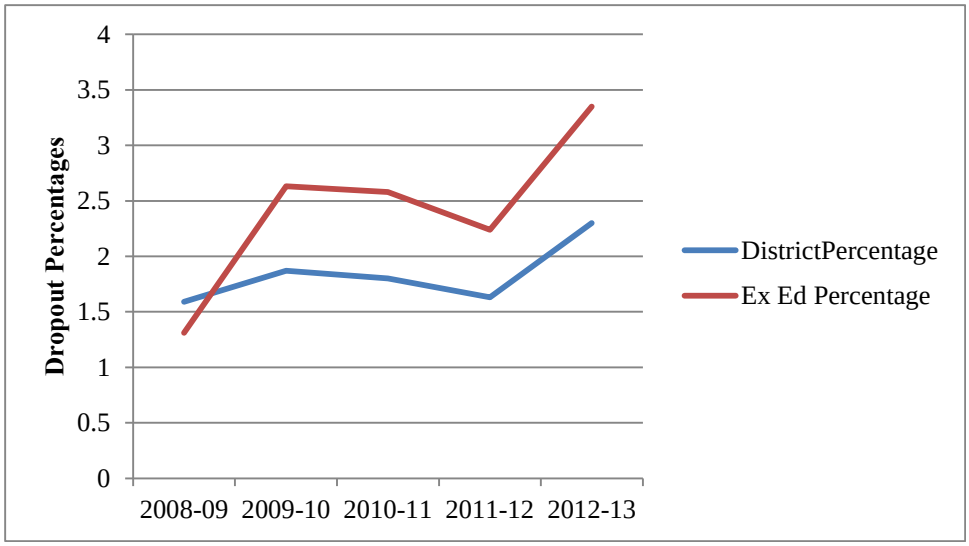
From Exhibit 3.3.17 we note the following:

- Given the percentage of the total population, special education students are retained at more than twice their percentage of the total population. Special education students comprised 15.9 percent of the total population, but their retention rate was 33.4 percent.
- From 2009 to 2012 the percentage of special education students retained decreased.
- In 2013, the percentage of special education students retained increased.
- Special education students are retained at a higher rate for their subpopulation than the general student population.

Exhibit 3.3.18 displays data on the exceptional education student dropout rate compared to the district dropout rate for five years.

Exhibit 3.3.18

Exceptional Student Dropout Rates Compared to District Rates
Tucson Unified School District
2008-2013



Data Obtained from http://tusdstats.utsd1.org/paweb/aggD/dropouts

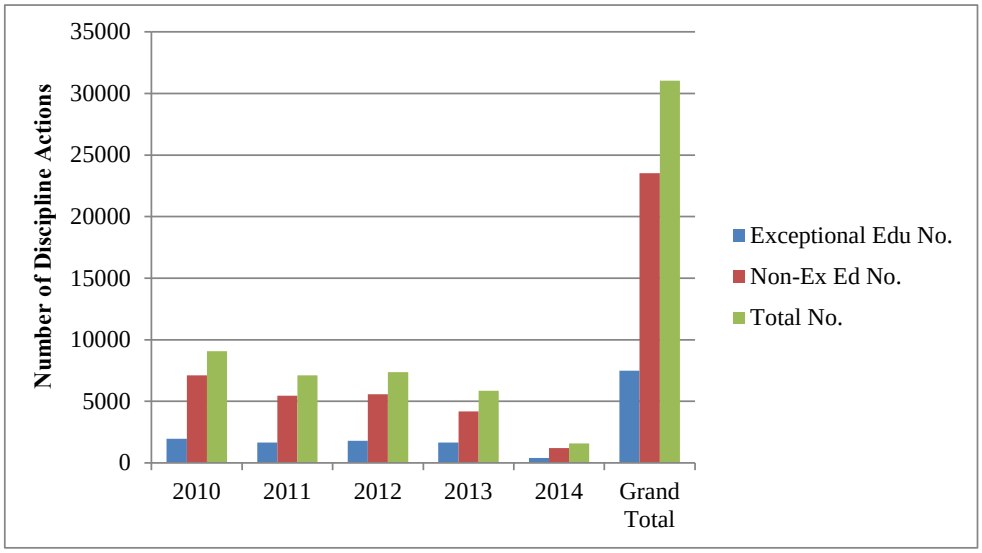
From Exhibit 3.3.18 the following is observed:

- The exceptional education student dropout rate has increased from 2009 to 2013.
- The percentage of exceptional students dropping out has almost tripled from 2009 to 2013 (1.31 percent versus 3.35 percent).
- The exceptional student dropout rate was higher than the district dropout rate from 2010 to 2013.
- The exceptional student dropout rate decreased from 2010 through 2012.
- There was an increase in exceptional student dropout rates of 1.11 percentage points from 2012 to 2013.

Auditors were also provided with discipline data for exceptional education students for five years. Exhibit 3.3.19 shows this data.

Exhibit 3.3.19

Discipline Data for Exceptional Education
Tucson Unified School District
2010-2014



Data from Accountability Office, Tucson Unified School District

From Exhibit 3.3.19, it is noted:

- The percentage of exceptional education students receiving discipline has increased from nearly 23 percent in 2010 to over 28 percent in 2013.
- The lowest percentage of exceptional education students receiving discipline occurred in 2010.
- The highest percentage of exceptional education students receiving discipline occurred in 2013.
- Over a five-year period, the percentage of exceptional education students receiving discipline constituted 24 percent of the total.

From Exhibit 3.3.19, auditors determined that exceptional education students are overrepresented in disciplinary actions, making up 28 percent of discipline incidents but only 16 percent of the overall student population. A review of the percentage of students enrolled in exceptional education services compared to the discipline rate shows that for all five years, the rate of disciplining students with disabilities is higher. Additional data and discussion regarding discipline and suspensions can be found in Finding 3.5.

Additionally, auditors reviewed data relative to the student achievement of exceptional education learners for the past five years. Exhibits 3.3.20 displays achievement data for exceptional learners in reading for the previous year.

Exhibit 3.3.20

Reading Achievement Data for Exceptional Education
Tucson Unified School District
2012-13

	Grade Level	ExEd No.	Ex Ed %	Non-ExEd No.	Non-ExEd %
Reading	3	527	26	3428	74
Reading	4	572	32	3325	79
Reading	5	548	32	3319	81
Reading	6	478	27	3122	79
Reading	7	482	42	3141	84
Reading	8	499	22	3130	69
Reading	10	373	35	3050	86
Reading	99	3479	30	22515	79
Data from Accountability Dept, TUSD					

From Exhibit 3.3.20, it can be noted:

- Exceptional education students score significantly lower scores than non-exceptional education students in reading.
- Exceptional education students' percentages increased from third grade to fourth grade (26 percent to 32 percent).
- Exceptional education students stayed at the same achievement percentage in fourth and fifth grades with no increase.
- Exceptional education students showed a decrease in reading scores from fifth to sixth grades.
- Exceptional education students' percentages showed an increase from sixth grade scores to seventh grade scores (27 percent to 42 percent).
- There was a decrease from 42 percent to 22 percent in scores from seventh grade to eighth grade for exceptional education students.
- There was an increase from 22 percent to 35 percent in exceptional education student scores from eighth grade to tenth grade.

Thus, in reading, exceptional education students' achievement in reading was well below their peers in all grades. The scores did not exhibit a gradual increase in achievement from third grade to tenth grade; rather, there were three grades in which the exceptional education student achievement declined from the previous grade level.

Exhibit 3.3.21 displays achievement data for exceptional learners in mathematics for 2013.

Exhibit 3.3.21

Mathematics Achievement Data for Exceptional Education
Tucson Unified School District
2013

	Grade Level	Total No	Total %	ExEd No	Ed Ex %	Non Excep No	Non-ExEd %
Math	3	3954	60	526	26	3428	65
Math	4	3896	55	570	21	3326	60
Math	5	3865	55	547	17	3318	61
Math	6	3607	48	488	12	3119	54
Math	7	3620	50	480	14	3140	56
Math	8	3630	43	500	11	3130	49
Math	10	3415	52	372	10	3043	57
Math	99	25987	52	3483	16	22504	58
Data provided by TUSD Accountability Office							

The following is noted from Exhibit 3.3.21:

- Except for a slight increase in percentage at the seventh grade level, the exceptional education students' scores decrease as they advance to higher grade levels.
- From third grade to tenth grade the percentage of exceptional education scores on *AIMS* mathematics decreases from a high of 26 percent to a low of 10 percent.
- The highest percentage of exceptional students achieving at grade level was third grade with 26 percent.
- The lowest percentage of exceptional students achieving at grade level was tenth grade with 10 percent.

Using the identified subgroups in Tucson Unified School District, a "years to parity" comparison was made of the percent passing the state's *AIMS* test in language arts and math. Years to parity is a numerical estimate of the predicted trend of measured achievement differences between two or more groups with two or more years of testing data. Assuming that poverty, race, gender, or other ethnic or demographic differences should not predict differences in achievement levels, conventional wisdom is that group differences in achievement are the result of disparate, inadequate, or ineffective educational experiences rather than ethnic or demographic characteristics. The expectation in curriculum management auditing is that all such groups should achieve at comparable levels—demonstrating parity or equivalency in achievement, if not at the time of measurement, then with intervention at some demonstrable and reasonable future point in time.

If differences are observed between groups, it is important to determine what the system is doing in regard to such differences and also to determine what progress is being made, if any. If achievement trends indicate disparities among or between groups and those trends continue without intervention, it is likely that the disparity may continue at the same ratio.

The auditors calculated years to parity, or the amount of time needed to close the achievement gap. The rate of change of the lower performing group must be higher than the rate of change of the comparison group in order for the gap to be closed at some point in the future. If the rate of change of the lower performing group is equal to or less than the rate of change of the comparison group, then the gap will not be closed. To calculate the rate of change for both groups in the comparison, the auditors subtracted the mean score of the lower scoring group from the mean score of the higher scoring group for the initial year and the final year. This change was divided by the number of years minus one, identified as gain by year. The years to parity was derived by dividing the final year gap by the gain by year.

Exhibit 3.3.22 displays the data related to years to parity for exceptional education learners in reading and mathematics by grade levels. A discussion of years to parity will be found in Finding 3.5 and Finding 4.3.

Exhibit 3.3.22

Years to Parity Data for Exceptional Education
Tucson Unified School District
2008-2013

Student Group	Percent Scoring Proficient or Advanced (P/A) on *AIMS* Tests					Annualized Gain/ Loss in Relation to Leading Group	Years to Parity
	2008-09	2009-10	2010-11	2011-12	2012-13		
Reading							
Grade 3	36	31	30	27	26	-2/2	Never
Grade 4	29	29	30	30	32	0.2	227.1
Grade 5	29	26	35	28	32	0.8	64.3
Grade 6	22	25	28	31	27	0.6	90.7
Grade 7	22	28	30	34	42	2.3	18.8
Grade 8	19	19	19	22	22	0.4	141.5
Grade 10	23	28	28	33	35	1.1	52.6
Mathematics							
Grade 3	40	30	29	26	26	-1.4	Never
Grade 4	36	21	22	21	21	-0.9	Never
Grade 5	31	18	18	16	17	0.2	240.9
Grade 6	15	8	10	12	12	2.4	18.8
Grade 7	21	11	11	10	14	0.7	74.7
Grade 8	16	11	9	9	11	1.5	30.8
Grade 10	20	9	9	13	10	-0.3	Never

Notes:
* Negative number indicates that the gap will never close at rates of progress recorded during the period 2008-09 through 2012-13.
Exceptional Education = Students with disabilities.
Average annual gains shown are rounded up to one decimal place.

Source: Annual AIMS results by subgroup, grade, and subject provided by TUSD.

From Exhibit 3.3.22, the following can be noted with regard to the reading achievement gap:

- At grade 3, at the rate students are now achieving, the gap in reading achievement between exceptional education students and non-exceptional education students will never close.
- At grade 4, it would take 227.1 years for the reading achievement gap to close between exceptional education students and non-exceptional education students.
- At grade 7, the lowest number of years exists for the reading closing of the achievement gap between exceptional education students and non-exceptional education students at 18.8 years.
- Grade 10 has the second lowest number of years for the reading achievement gap to close for exceptional learners at 52.6 years.

From Exhibit 3.3.22, the following can be noted with regard to the mathematics achievement gap:

- At grades 3, 4, and 10, at the rate students are now achieving, the gap in mathematics achievement for exceptional education students will never close.
- The lowest number of years for the achievement gap to close for exceptional learners exists at grade 6 with 18.8 years.
- At grade 5, it would take 240.9 years for the mathematics achievement gap to close for exceptional learners.

Due to the low achievement level of the exceptional education students, the auditors inquired as to the professional training the teachers received as well as the highly qualified status of the teachers. The auditors additionally reviewed data regarding professional development, recruitment, and retention of exceptional education teachers. Of the 105 non-highly qualified teachers, in the district, 32 are exceptional education teachers for a percentage of 30.56 percent. Of the 35 vacant or long-term substitute positions in the district, thirteen (13) were in exceptional education, for a 37 percent rate. The district has a recruitment plan in place to recruit and retain all teachers (see Findings 1.4 and 3.5). However, not all students identified as exceptional learners have access to a highly qualified and credentialed teacher.

Professional development provided by the exceptional education department consisted of the following topics:

- Assistive Technology: Promoting Independence in the Classroom
- Community Based Instruction
- Sign Language
- Connecting Informal Assessments to SMART Goals and Data
- Destination Co-Teaching
- IEP Meeting Facilitation
- Secondary Transition Requirements
- Job Alike for Speech
- Job Alike for OT/PT/APE
- Mandatory Compliance Training
- Mapping Paraprofessionals
- Methods of Data collection
- Preschool and Kinder Transition
- Job Alike Psychologist
- Teaching Social Thinking through Stories and Play in Preschool
- Motivation Breakthrough
- TIENET for Principals
- Together, We Are Better: Inclusive Practices that Work
- Transitions: Bridging Across Schools and Programs
- Universal Design for Learning
- Writing a Secondary IEP for Transition
- ADE Approach to Learning
- Infant and Toddler Guidelines

- Introduction to Early Learning Standards
- Alternate Assessment Testing
- IEP Make and Take for TIENET Help
- Student Intervention Training
- TIE NET For New Hires
- Job Alike HI Specialists
- Job Alike VI Specialists
- Exceptional Education Compliance Requirements A-Z
- Exceptional Education Welcome Back Meeting

These topics covered a two-year period from 2011 through 2013. Of the 32 topics listed, it was noted that only four addressed promising practices for the teachers of the majority of the students. Much of the training addressed compliance and legal issues. During interviews auditors were informed that the exceptional education teachers received training from their schools and the general curriculum this year. One of the topics included the mandated Danielson Training.

Interviews with school administrators, teachers, and parents provided the following comments regarding special education;:"In pockets, our special education students do well. Overall, they are not doing well. There is a culture of not looking at their data…the thinking is if they have an IEP they don't have to look at them." (District Administrator)

- "We need to improve the quality of special education programs and services to students. " (District Administrator)
- "We have too many students in restrictive placements…we are trying to shift to the inclusive settings. This is one of our ongoing goals through a variety of strategies." (District Administrator)
- "We are working on standards of practice and there is an effort for consistency in the amount of services and inclusion; however, from one building to another, the services vary." (District Administrator)
- "We have some schools where kids with IEPs are in the bottom of *AIMS*. We have two grants to provide training on Teaching Reading Effectively." (District Administrators)
- "We have about 20 teachers (special education) who are not highly qualified." (District Administrator)
- "Our special education students are not really doing well. We have to remind our people to look at individual students." (District Administrator)
- "Special programs like special education often miss professional development with their colleagues (job alike) because they are not permitted to leave their buildings." (Teacher)
- "One of the weaknesses in our district is finding highly qualified math, special education, and science teachers." (District Administrator)
- "A lot of parents are concerned about students being promoted without the grade level skills. Then they later fail or drop out of school." (Parent)
- "There is confusion with our special education pop—I am saying we need to be standards driven, but (the teachers) are not there yet." (Building Administrator)

In summary, the auditors found that the exceptional education program does not provide equitable opportunities for students identified as exceptional education in order to increase student achievement. Although the exceptional education program provides a continuum of services for the Tucson Unified Public Schools, the number of students receiving services in the delivery models has had minimal change in the past five years. The majority of students receive services within the regular program with itinerant or special education teacher support, or

in resource rooms. Currently, 15.9 percent of district students are identified as exceptional education, with the greatest numbers of students being identified as special learning disabled or specific language disorder. The majority of students are male with Hispanic ethnicity. African American and white students are overidentified within exceptional education, while Hispanics are under represented. The percentage of exceptional education students graduating is 56.8 percent, which is below the district graduation average of 77 percent. Students identified as exceptional education are retained at a higher rate than students not identified. The rate of retention for exceptional learners has held steady at approximately a third of all students retained for the past five years. Students identified as exceptional education have a higher dropout rate than the district average. The rate has continued to increase since 2009. In 2012-13, the rate of exceptional student dropout was 3.35 percent,and the district rate was 2.3 percent. Given the exceptional education percentage of the total district population (15.9 percent), exceptional education students are over-identified for discipline issues at 25 percent. The percentage of exceptional learners receiving discipline has increased over the past five years. Additionally, the biggest issue facing the exceptional education program is the under achievement of the students. Auditors found that in reading and math, it would take an inordinate number of years to close the achievement gap for exceptional education students given the current rate of achievement. Exceptional education students are not receiving equitable opportunities to achieve in Tucson Unified School District.

Language Acquisition Program (Bilingual/ESL)

In Tucson Unified School District, the English language learners are served by the Language Acquisition Programs (LAP). The LAP services support both the acquisition of the English language by non-native speakers of English and the acquisition of several world languages (Arabic, Chinese (Mandarin), French, German, Korean, Russian, and Spanish) and American Sign Language. The audit focused on the English language learner (ELL) population of the LAP.

According to the Language Acquisition Program Guidebook for Administrators, the overall goals of the Language Acquisition Department are to provide support and resources so that:

- English and world language learners participate fully in our district-wide academic initiatives.
- English language learners acquire English and content at an accelerated pace.
- World language learners acquire proficiency in foreign language communication skills.
- English language learners are prepared to meet rigorous promotion and graduation requirements.
- World language learners are prepared to meet the challenges, demands, and needs of the 21st century global society.

The guidebook provided a history of ELL in TUSD as follows: "Since 1970 TUSD has offered bilingual education to parents interested in obtaining for their children the advantages that bilingualism imparts. Current state law permits school districts to offer students a range of language programs, including bilingual education, and thus TUSD takes special pride in promoting Dual Language Instruction (DLI). As noted in governing board policy HIAA, DLI stands out as the most effective method available for developing bilingual students in our public schools. DLI is a bilingual education model that combines students from two different language groups—most commonly English-dominant and Spanish-dominant students—in a classroom setting designed so that each group facilitates the acquisition of the other group's language. The program emphasizes learning through the use of the student's primary language as an initial and continuing medium of instruction while also emphasizing second language acquisition as an essential part of the student's education."

Exhibit 3.3.23 displays the enrollment of English language learners in the Tucson Unified School District.

Exhibit 3.3.23

English Language Learner Enrollment
Tucson Unified School District
2013-14

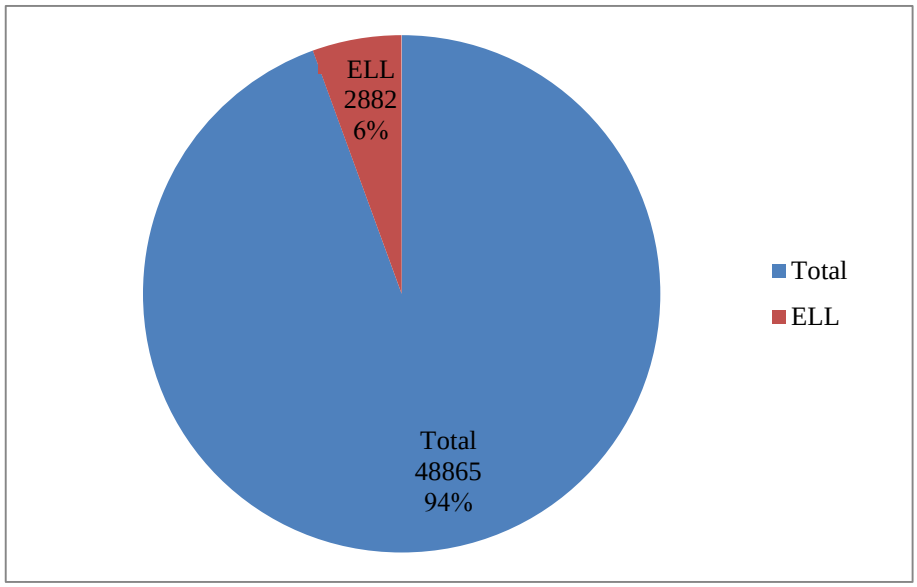


Exhibit 3.3.23 shows there are 2,882 ELLs enrolled in the Tucson Unified School District for 2013. This constitutes six percent of the enrollment in TUSD.

According to the Alternative Language Program Guide Book 2013-14 for Principals, there are three placement options for English language learners: Structured English Immersion (SEI), Bilingual Education (BLE) or Dual Language (DL), and Individual Language Learning Plans (ILLP).

The guidebook offered the following criteria for ALP Instruction: "Whether in Structured English Immersion or Bilingual Education, the instruction offered to ALP students must meet the following criteria:

- Criteria #1: The instruction must effectively develop sufficient English language listening, speaking, reading and writing skills as specified in the Arizona Academic Standards and the Arizona English Language Proficiency Standards.
- Criteria #2: The instruction must be sheltered so that it is comprehensible for students at their level of proficiency while addressing appropriate grade-level content in all subjects, including math, science, and social studies, as specified in the Arizona Academic Standards."

Additionally, the guidebooks offered standards of instruction: "The curriculum for ELLs in the ALP must reflect the same academic standards established for mainstream students with the additional goal of acquiring proficiency in speaking English and, in BE programs, developing speech, academic literacy and content knowledge in both English and Spanish." For further information on the curriculum, please review Findings 2.2 and 2.3.

The guidebook provided guidance regarding ALP instructional materials: "Teachers and students in SEI Programs should be provided with the following materials:

- English Language Development (ELD) adoptions; and
- District adopted literature and content materials in English."

"Teachers and students in DL Programs should be provided the following tools:

- English/Spanish Language Development (ELD) adoptions

- Spanish language materials and
- District adopted Language Arts and content materials."

The guidebook provided graduation information, stating, "The graduation requirements are the same for ELL students as for all other students. The following statements provide additional clarification for the special circumstances that commonly affect ELLs:

- ELL students must pass the *AIMS* test to qualify for graduation but the AZELLA test is not a graduation requirement.
- Certain ELD courses count as English credits toward graduation, but ELD courses are not accepted by the University of Arizona for meeting admission criteria.
- ELL students' ELD courses may be used to meet all four of the English credits required for graduation, provided that the ELD courses are those that are specifically approved for English credit rather than those approved for elective credit."

The guidebook provided the following descriptions of the ELL service delivery options:

Option One: SEI Program Design: The Structured English Immersion program is designed exclusively for ELLs with the aim of providing an early-exit transition into the mainstream program once students achieve a composite score of Proficient on the state's English proficiency assessment. ELL instruction from the teacher is in English though a minimal amount of a student's native language other than English may be used. The state of Arizona requires a sheltered immersion block of four hours of instruction. The District allows individual schools to make decisions on how to block ELL students into SEI instruction for four hours. As a result many of the schools utilize a separate ELD classroom for the four hour instruction. Four special factors contribute to the effectiveness of SEI classes:

- The class requires specific instruction for English language development (ELD).
- The teacher is trained in ELD methodology and sheltered instructional techniques (SIOP).
- ELLs have access to materials designed for ELLs as well as to mainstream texts.
- It is recommended that SEI class sizes be kept lower than those of mainstream classes to promote the most effective instruction and to allow for space availability for incoming ELLs.
- Instruction shall follow the State academic and ELL proficiency standards and the state's Discrete Skills Inventory.

Option Two: Individual Language Learning Plans (ILLP)

This option is available only to schools having 20 or fewer ELLs in a three-grade span. Such schools are permitted to mainstream ELLs by providing each ELL student with an Individual Language Learner Plan. ILLP students must still receive four periods of individualized ELD instruction per day. At some Elementary schools, the ILLP involves an itinerant teacher funded through the Language Acquisition Department. At most ILLP secondary schools in TUSD, the four periods of ELD instruction are delivered as two periods of ELD instruction provided through an English class or as two periods of ELD instruction provided through any two of the student's content classes. Teachers designated to participate in the ILLP are required to prepare an annual ILLP Form, as well as two quarterly forms for each ELL student.

Option Three: Dual Language (Bilingual) Program Design

The Dual Language program is designed for all students seeking to become fluent and literate in two languages. The resources currently available permit the District to offer the program only in an English-Spanish combination, except for a very limited number of students receiving instruction in English-American Sign Language. Four special factors contribute to the effectiveness of DL classes:

- The teacher is specifically trained to meet the needs of 2nd language learners and holds a BE endorsement.
- ESL or SSL instruction is required for all students.

- All students have access to materials in two languages.
- The recommended maximum class size of 24 to 1 is maintained.

Auditors reviewed documents and data and interviewed administrators, teachers, staff, and parents to determine the success of implementation of the LAP delivery programs. Exhibit 3.3.24 shows which type of service delivery LAP program is offered by schools within the district**.**

Exhibit 3.3.24

LAP Service Delivery Offered by School
Tucson Unified School District
January 2014

Elementary Schools	ELDP	ILLP	BIL/DUAL LG	Middle Schools	ELDP	ILLP	BIL
Banks	K-5			Doolen	4 Periods		
Blenman	K-5			Mansfield	4 Periods		
Bloom		K-5		Naylor	4 Periods		
Bonillas	K-5			Utterback	4 Periods		
Booth-Fickett	K-5			Valencia	4 Periods		
Borman		K-5		Roskruge	1 Period	6-8	K-8
Borton	K-2	3-5		Pistor	2 Periods	6-8	6-8
Carrillo	K-2	3-5		Fickett	2 Periods	6-8	
Cavett	K-5			Gridley	2 Periods	6-8	
Collier		K-5		Magee	2 Periods	6-8	
Cragin	K-5			Saffor	2 Periods	6-8	
Davidson	K-5			Secrist	2 Periods	6-8	
Davis			K-5	Vail	2 Periods	6-8	
Dietz	K-2	3-5		Dietz	1 Period	6-8	
Drachman	K-2	3-5		Drachman	1 Period	6-8	
Dunham		K-5		Mccorkle	1 Period	6-8	
Erickson	K-2	3-5		Rose	1 Period	6-8	
Ford		K-5		Dodge Magnet		6-8	
Fruchthendler		K-5		Hollinger		6-8	
Gale		K-5		Lawrence		6-8	
Grijalva	K-5		K-5	Miles		6-8	
Henry		K-5		Maxwell		6-8	
Holladay	K-2	3-5		Pueblo Gardens		6-8	
Hollinger	K-2		K-5	Robins		6-8	
Howell	K-5						
Hudlow		K-5					

Exhibit 3.3.24 (continued) LAP Service Delivery Offered by School Tucson Unified School District January 2014							
Elementary Schools	**ELDP**	**ILLP**	**BIL/DUAL LG**	**High Schools**	**ELDP**	**ILLP**	**BIL**
Hughes		K-5		Rincon	4 Periods		
Johnson	K-2			Catalina	4 Periods		
Kellond		K-5		Pueblo	3 Periods	9-12	9-12
Lawrence		3-5		Cholla	2 Periods	9-12	
Lineweaver	K-2	3-5		Palo Verde	2 Periods	9-12	
Lynn/Urquides	K-5			Tucson	2 Periods	9-12	
Maldonado	K-5			Sabino	2 Periods	9-12	
Manzo	K-5			Sahuaro	2 Periods	9-12	
Marshall		K-5		Santa Rita		9-12	
Maxwell	K-5			Tapp		9-12	
Mccorkle	K-4	5-7	K-3	Project More		9-12	
Miles		K-5		University		9-12	
Miller	K-5						
Mission View	K-4	5	1-5				
Myers/Ganoung	K-5			Agava		X	
Ochoa	K-5			Direct Link		X	
Oyama	K-5			Life Skills/ Core Plus		X	
Pueblo Gardens	K-5			Southwest		X	
Roberts/Naylor	K-5			Meredith		6-12	
Robins		K-5					
Robison	K-5						
Rose	K-5						
Roskruge			K-8				
Safford	K-5						
Sewell	K-5						
Soleng Tom		K-5					
Steele		K-5					
Tolson	K-5						
Tully	K-5						
Van Buskirk	K-5		K-5				
Vesey	K-5						
Warren	K-2	3-5					
Wheeler	K-2	3-5					
White	1	K-5	K-5				
Whitmore	K-2	3-5					
Wright	K-5						

As can be seen in Exhibit 3.3.24:

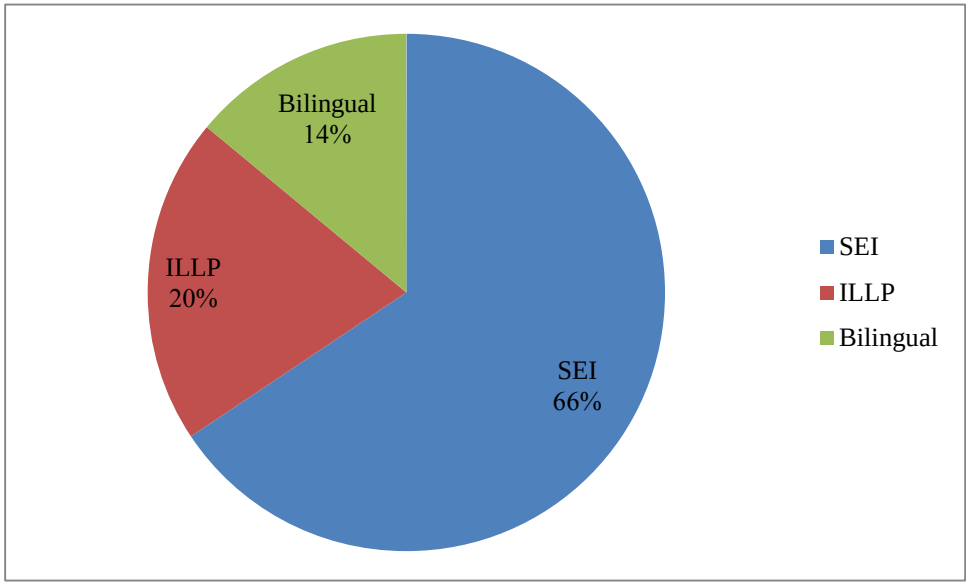
- All schools in the district offer at least one delivery model.

- Many schools offer two delivery models to ELL students.
- At the Elementary level, service delivery for K-2 is in SEI classrooms.
- At the elementary level, service delivery for grades 3-5 is ILLP.
- There are eight elementary schools with a Dual Language Program.
- At five middle schools, ELL is offered four periods a day.
- At twelve middle schools, ELLs are offered one to two periods a day through SEI as well as ILLP.
- Seven middle schools offer ELLs only through ILLPs.
- There are two dual language schools at the middle school level.
- At two high schools, ELL is offered through SEI four hours a day.
- At five high schools, ELL is offered through SEI two periods a day, along with ILLP.
- One high school offers dual language ELL and three periods of SEI.
- At four high schools, ELL is offered only through ILLPs.

Auditors then reviewed data regarding the number of English language students served through each model. A summary of the district is shown in Exhibit 3.3.25.

Exhibit 3.3.25

LAP Enrollment by Service Delivery
Tucson Unified School District
January 2014



As noted in Exhibit 3.3.25**:**

- The majority of ELLs are served in self-contained SEI classes (approximately 66 percent).
- The second largest number of ELLs are served with ILLPs (approximately 20 percent).
- The smallest number of ELLs are served through dual language programs (14 percent).

Auditors requested information from the district as to the length of time English language learners spent in ELL classrooms. Exhibit 3.3.26 displays this data.

Exhibit 3.3.26

Number of Years in ELL Programs and Reclassifications
Tucson Unified School District
January 2014

Grade	Reclass Count	Years as ELL
1	37	0.53
2	307	0.99
3	492	1.36
4	335	1.28
5	552	1.17
6	684	2.28
7	685	2.47
8	653	2.94
9	592	3.14
10	527	3.38
11	486	3.65
12	473	3.91
Total	**5,823**	**2.49**

Exhibit 3.3.26 shows:

- At the elementary level, ELL students spend an increasing number of years classified as ELL until fourth and fifth grades, at which time the number of years start to decline.
- Middle school ELLs show an increase number of years to reclassification, going from 2.28 years to 2.94 years in three grade levels.
- High school ELL students take almost as many years to reclassification, going from 3.14 in ninth grade to 3.91 in twelfth grade.
- The average number of years it takes an ELL in TUSD to reclassify is 2.49.

Arizona state law requires that ELL students be reassessed annually for reclassification as fluent English proficient once the student demonstrates proficiency on the *AZELLA*. Auditors reviewed data regarding the reclassification of English language learners. Exhibit 3.3.27 displays this data.

Exhibit 3.3.27

Reclassification of ELL Students by Grade Level
Tucson Unified School District
2011-12

Grade	Tested	Passed	Rate
K	1,034	312	30.2%
1	878	253	28.8
2	643	353	54.9
3	329	64	19.5
4	365	123	33.7
5	301	138	45.8
6	210	113	53.8

Exhibit 3.3.27 (continued) Reclassification of ELL Students by Grade Level Tucson Unified School District 2011-12			
Grade	**Tested**	**Passed**	**Rate**
7	124	62	50.0
8	120	46	38.3
9	135	41	30.4
10	134	41	30.6
11	116	37	31.9
12	118	26	22.0
Total	**4,507**	**1,609**	**35.70%**
Data from April 2, 2013 OCR Letter			

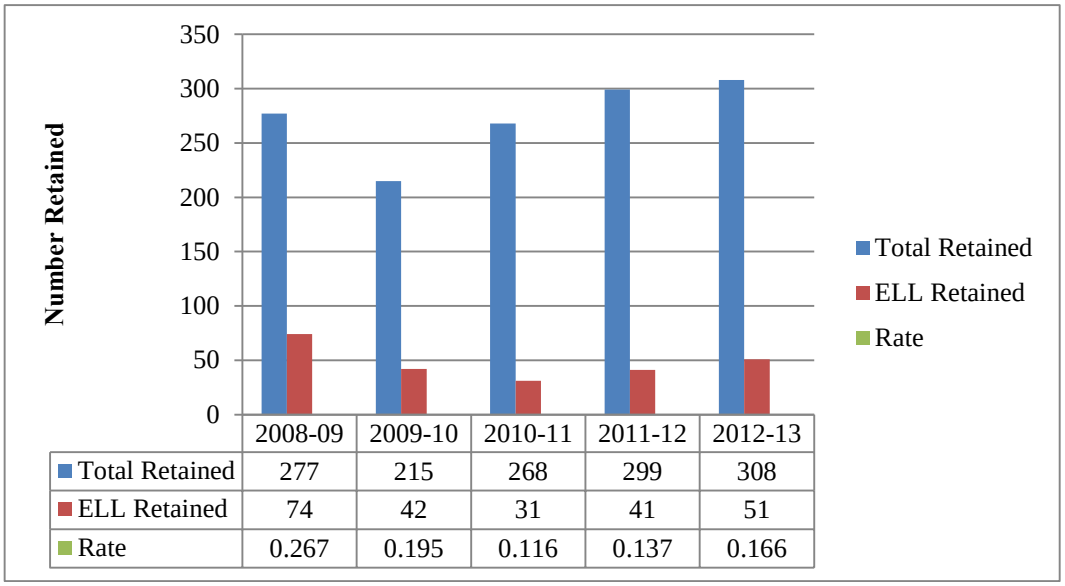
As can be noted in Exhibit 3.3.27:

- The highest rate of reclassification occurs at grade two (54.9 percent).
- The lowest percentage of reclassification of ELL students occurs at third grade (19.5 percent).
- Grades 5, 6, and 7 reclassify students at a higher rate than grades 8 through 12.
- Approximately one-third of the ELL students in grades 9, 10, and 11 reclassify.
- The overall ELL reclassification rate for the district is 35.7 percent, or just above one-third of the students.

Auditors requested and reviewed data regarding ELL student achievement. Exhibit 3.3.28 shows the number of ELL retentions versus total district retention for five years.

Exhibit 3.3.28

Number of ELL Students Retained vs. District Retention
Tucson Unified School District
2008-2013



	2008-09	2009-10	2010-11	2011-12	2012-13
Total Retained	277	215	268	299	308
ELL Retained	74	42	31	41	51
Rate	0.267	0.195	0.116	0.137	0.166

From Exhibit 3.3.28, it is noted:

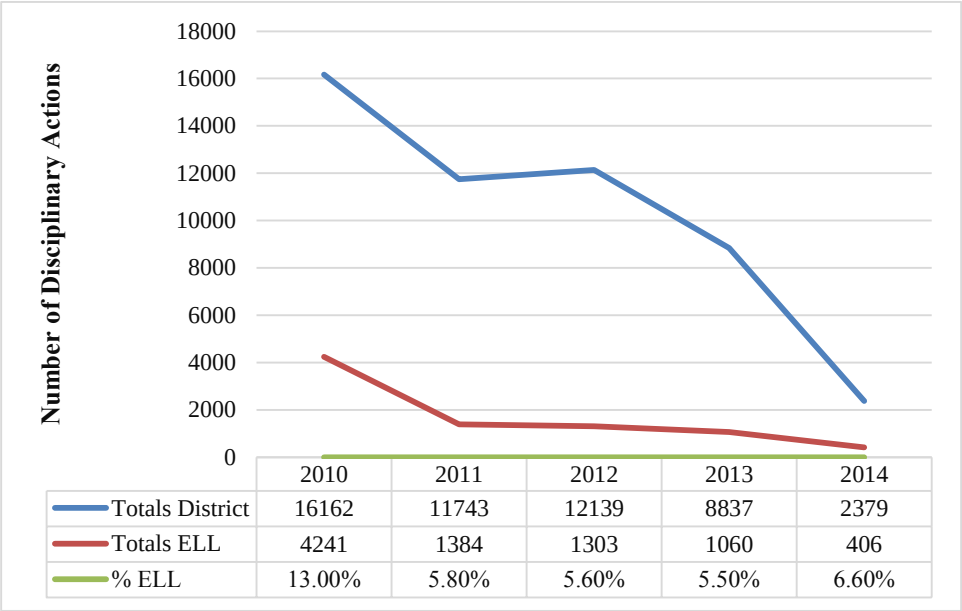
- There was a higher percentage of ELL students retained in 2008-09 than any other school year.

- From 2008-09 until 2010-11, ELL student retentions declined.
- From 2010-11 through 2012-13, ELL student retentions increased.
- At 16.6 percent retention, there is a higher retention rate for ELL students proportionate to the percentage of ELL students in the population (six percent).

Auditors also requested discipline data from the district for English language learners versus the total student population. Exhibit 3.3.29 displays this data for five years.

Exhibit 3.3.29

Number of ELL Disciplinary Instances vs. District Disciplinary Instances
Tucson Unified School District
2010-2014



	2010	2011	2012	2013	2014
Totals District	16162	11743	12139	8837	2379
Totals ELL	4241	1384	1303	1060	406
% ELL	13.00%	5.80%	5.60%	5.50%	6.60%

From Exhibit 3.3.29, is it noted:

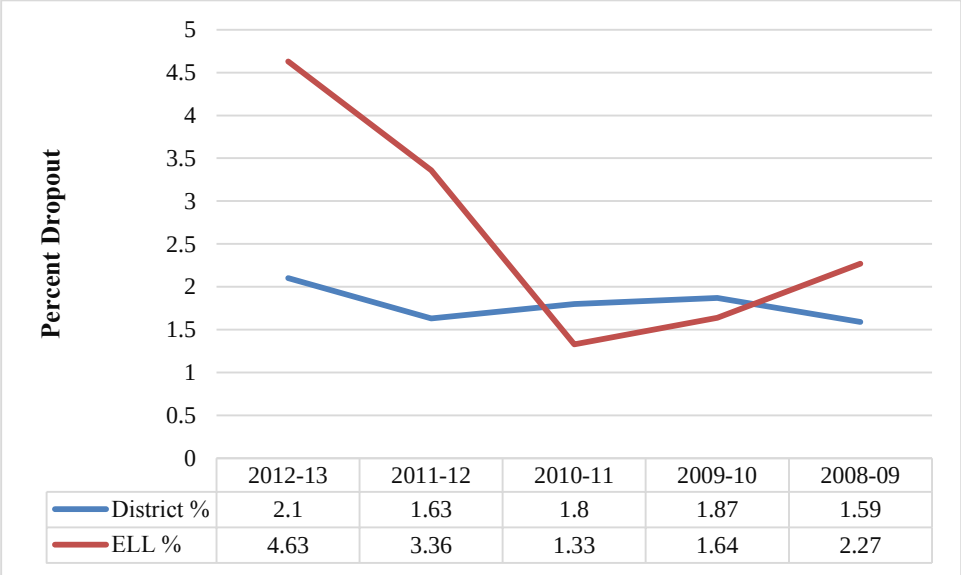
- The number of disciplinary actions for all students decreased from a high in 2010 to a low in 2014.
- The number of disciplinary actions for ELL students has decreased from a high in 2010 to a low in 2014.
- District-wide disciplinary actions decreased at a greater rate than ELL disciplinary actions in 2014, creating a slight increase in the percentage of ELLs disciplined from 2013.

A review of the same data provided auditors showed that male ELL students were three times more likely to receive disciplinary actions than females. Additional discussion of the discipline of ELL students is found in Finding 3.5.

Auditors received information about the dropout and graduation rates of ELL students compared to district dropout and graduation rates. Exhibit 3.3.30 shows the dropout information. Exhibit 3.3.31 displays the graduation data.

Exhibit 3.3.30

Number of ELL Dropouts vs. District Dropouts
Tucson Unified School District
2008-2013



	2012-13	2011-12	2010-11	2009-10	2008-09
District %	2.1	1.63	1.8	1.87	1.59
ELL %	4.63	3.36	1.33	1.64	2.27

Data from http://tusdstats.tusd1.org/paweb/aggD/graduation/dropouts.aspx

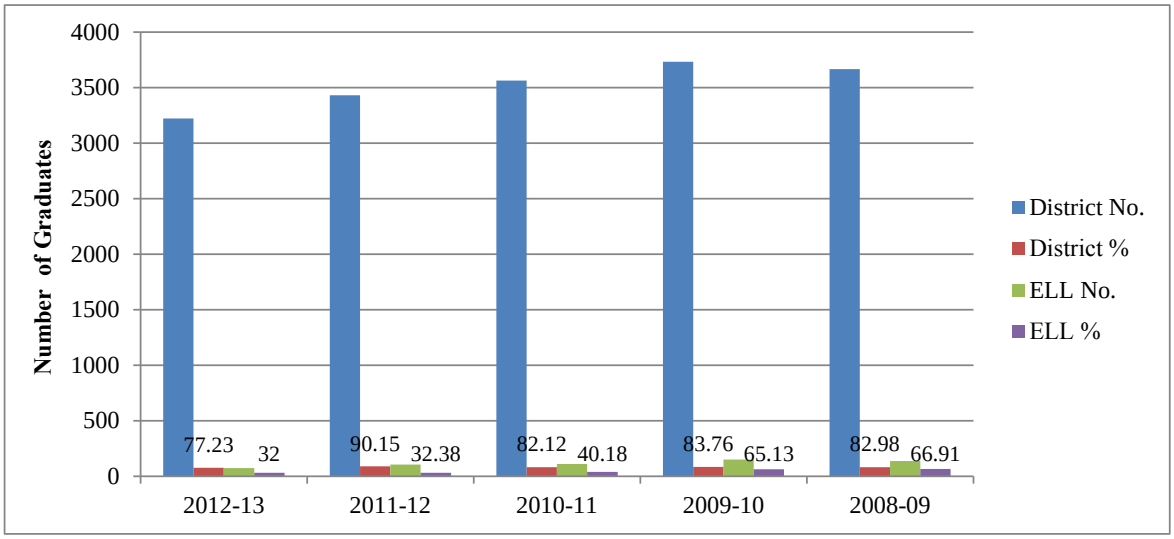
From Exhibit 3.3.30 it is noted:

- The dropout rate for the district for 2012-13 was 2.1 percent while the ELL dropout rate was 4.63 percent, double the rate of the district.
- The dropout rate for the district in 2011-12 was 1.63 percent, while the dropout rate for ELL was 3.36 percent, double the rate of the district.
- The dropout rate for English language learners dropped from 2008 through 2010 and then rose sharply in 2011 and 2012.
- The dropout rate for the district increased from 2008 to 2009, decreased slightly in 2010 and 2011, and then increased in 2012.

Graduation rates for English language learners compared to district graduation rates are shown in Exhibit 3.3.31.

Exhibit 3.3.31

Number of ELL Graduates vs. District Graduates
Tucson Unified School District
2008-2013



Data from http://tusdstats.tusd1.org/paweb/aggD/graduation/dropouts.aspx

The following is shown in Exhibit 3.3.31:

- The graduation rate of ELL students has declined for five years from a high in 2008-09 of 66.91 percent graduating to a low of 32 percent graduating in 2012-13.
- The graduation rate of the ELL students is less than half that of the general district students population.
- The graduation rate of ELL students was closest to the graduation rate of the district in 2008-09 at 66.91 percent and 82.98 percent, respectively.

Auditors also reviewed student achievement data for English language learners for five years in reading and mathematics. As with the exceptional education population, the auditors examined the *AIMS* scores for reading and math for five years at grades 3, 4, 5, 6, 7, 8, and 10 and calculated the years to parity. ELL has been identified as a subgroup in the achievement gap data for the district. Exhibit 3.3.32 provides the data to demonstrate how many years it would take at specific grade levels to close the achievement gap.

Exhibit 3.3.32

Years to Parity Data for English Language Learners
Tucson Unified School District
2008-2013

Student Group	Percent Scoring Proficient or Advanced (P/A) on *AIMS* Tests					Annualized Gain/Loss in Relation to Leading Group	Years to Parity
	2008-09	2009-10	2010-11	2011-12	2012-13		
Reading							
Grade 3	24	15	9	11	23	0.3	193.9
Grade 4	19	7	15	12	24	-0.8	Never
Grade 5	14	2	13	9	21	2.0	30.4
Grade 6	6	1	2	1	15	1.7	37.6
Grade 7	3	4	5	4	16	0.6	107.7
Grade 8	3	2	2	0	3	-0.1	Never
Grade 10	7	4	2	7	11	-3.6	Never
Mathematics							
Grade 3	29	16	12	18	24	1.1	41.6
Grade 4	24	8	12	10	17	1.1	45.8
Grade 5	18	5	7	7	15	3.1	15.9
Grade 6	7	1	1	0	10	4.0	12.1
Grade 7	10	4	5	0	6	1.8	33.3
Grade 8	5	5	2	1	2	1.8	31.7
Grade 10	12	4	6	4	6	0.5	152.0

Notes:
* Negative number indicates that the gap will never close at rates of progress recorded during the period 2008-09 through 2012-13.
ELD = Students formerly and currently classified as having limited proficiency in the English language.
Average annual gains shown are rounded up to one decimal place.

Source: Annual AIMS results by subgroup, grade, and subject provided by TUSD.

From Exhibit 3.3.32, the following can be noted with regard to the reading achievement gap:

- At grade 3, at the rate students are now achieving, the gap in reading achievement between ELL students and regular students will take 193.9 years to close.
- At grades 4, 8, and 10, the reading achievement gap for ELL students will never close at the rate students are currently achieving.
- At grade 5 and 6, it would take approximately 30.4 and 37.6 years, respectively, for the reading achievement gap between ELL and non-ELL students to close, which is the least amount of years in the grade levels reviewed.
- At grade 7, it would take 107.7 years for the achievement gap to close for ELL students in reading.

From Exhibit 3.3.32, the following can be noted with regard to the mathematics achievement gap:

- At grades 3 and 4, at the rate students are now achieving, the gap in mathematics achievement for ELL students will take 41.6 and 45.8 years, respectively, to close.
- The lowest number of years for the math achievement gap to close for ELL exists at grade 6 with 12.1 years.
- At grade 5, it would take approximately 15.9 years for the mathematics achievement gap to close for ELL learners.

- Grade 10 poses the greatest challenge to closing the achievement gap for ELL learners as it would take 152 years to close the mathematics gap.

During interviews and review of documents, auditors requested information describing the curriculum and materials that guide instruction in ELL classrooms. The curriculum materials utilized in ELL classrooms are considered to be supplemental to the general curriculum, but in the absence of general curriculum (see Findings 2.1, 2.2, and 2.3) ELL teachers indicated that these materials guided the instruction ELL students received in TUSD. Auditors reviewed information related to materials utilized in schools for ELL students and the instructional recommendations for ELL students recommended by the Language Acquisition Program. Exhibit 3.3.33 displays the materials utilized and the instructional strategies recommended for ELLs.

Exhibit 3.3.33

ELL Materials and Instructional Strategies
Tucson Unified School District
January 2014

Program Materials
Elementary: • Achieve 3000 • Avenues
Secondary: • Visions 6-12 • Edge 9-12 • Rosetta Stone- ELD Level 1 (6-12)
Additional (pilots): • Imagine Learning English (Davidson, Lynn, Rose, and Van Buskirk) • Imagine Learning Española (Dual language schools-first grade) • Kidspiration • English At Your Command K-5 and • Alphachant (K)
Strategies: • Utilize the SIOP model daily • Use data weekly/monthly from running records, Avenues e-assessment, and DRA • Provide 30 minutes additional reading instruction to review skills taught in 90-minute block using Avenues • Increase computer lab time in dual language schools • Optimize differentiated instruction by creating flexible and targeted reading groups • Maximize the use of phonics in Avenues • Small group pre-teach reading • Small group pre-teach math • Provide strategic reading instruction with daily Guided Reading • Frequent 1:1 help during whole group instruction in reading • Additional leveled reading intervention groups • Use of Promethean boards and computers to enhance reading instruction. • Use of paraprofessionals in the classroom to increase adult contact time • Have literacy nights for parents, provide instructional supplies and games for use at home. • Provide supplemental educational services (SES) four times a week for at least 1.5 hours in reading and math
Source: Language Acquisition Program Handbook

Given the above information for materials, curriculum, and teaching strategies, the auditors visited classrooms in the district and collected data from those classrooms auditors were told were ELD classrooms. Exhibit 3.3.34 displays the strategies observed in these classrooms.

Exhibit 3.3.34

Strategies Observed in ELL Classrooms
Tucson Unified School District
January 2014

Strategies	Number of Classroom Observed Using Strategy	Percentage of Total
Slow & Simple Language	33	11%
Text Preview with Key Vocabulary	16	5
Visual Aids Utilized	46	15
Regrouping of Reading & Writing activities	19	6
Verbal Cues	31	10
Peer Support & Collaboration	10	3
Direct Teaching of Vocabulary	30	9.9
Extra Process Time	17	5.6
High Expectations	8	2.6
Oral/Written Sentence Stems	9	2.9
Native Language Help Provided	9	2.9
Modeling Spoken Language	23	7.6
Allowance for Non-Participation	7	2.3
Scaffold Writing	12	4.0
Positive Feedback	31	10
Total	**301**	

From Exhibit 3.3.34, it is noted:

- Fifteen (15) different strategies were observed in English language learner classrooms.
- Use of visual aids was the most frequent strategy observed at 15 percent.
- Using slow and simple language was the second most frequent strategy observed, with 11 percent of the classrooms using the strategy.
- The least frequently observed strategy was allowance for non-participation.
- Other strategies observed at least 10 percent include positive feedback, verbal cues, and direct teaching of vocabulary.

In order to determine training and support in terms of professional growth ELL teachers in TUSD received, the auditors reviewed the professional development offered to ELL for 2013-14. Exhibit 3.3.35 provides this information.

Exhibit 3.3.35

ELL Professional Development Offerings
Tucson Unified School District
2013-14

Professional Development	Total Participants
AZELLA Stage II-V Placement Training (7 sessions)	159
AZELLA Kinder Placement Training (6 sessions)	112
ELD Itinerant Teachers Meeting	6
Dual Language PD	6
Teachers New to Avenues: ELP Standards	43

Exhibit 3.3.35 (continued) ELL Professional Development Offerings Tucson Unified School District 2013-14	
Professional Development	**Total Participants**
Teachers New to Avenues Basic Avenues Materials (2 sessions)	72
Secondary ILLP Training	19
New Secondary ELD Teachers Workshop	6
Teachers New to Avenues: E-Assessment Basics and Data Driven Instruction	39
DL Ensuring Greater Rigor—Veteran teachers	38
Elementary K-5 ILLP Training (4 sessions)	91
Achieving Success—New Teachers	34
Student File PHLOTE Documentation Compliance Training (3 sessions)	122
4 Hour ELD Lesson Planning Workshop	25
Elementary ELD Itinerant Teachers Meeting (3 sessions)	34
Spring 2014 AZELLA Reassessment (5 sessions)	201
Avenues eAssessment Data Analysis & Interventions	60
Multi-Leveled ELD on Secondary Classrooms	14
Guided Reading Planning	27
Danielson Framework for Teaching (27 sessions)	619
PELL Meeting	5
Move On When Reading Literacy Training (2 sessions)	325
Data from LAP Department	

From Exhibit 3.3.35 auditors determined there were 22 unique opportunities for district ELL teachers to receive professional development. There were over 2,000 attendees at the sessions. The sessions with the most attendance included the Danielson Framework for Teaching, the Move On When Reading Literacy Training, Spring AZELLA Training, the Fall AZELLA training, the PHLOTE Document Compliance Training, and the Kinder AZELLA training. The topics related to compliance and documentation constituted the largest number of offerings.

The auditors also reviewed data regarding the highly qualified status of ELL teachers as well as the number of positions vacant or with long-term substitutes for the 2013-14 year. Of the 105 non-highly qualified teachers in the district, five were ELL teachers, for a percentage of 19. 6 percent. Of the 35 vacant or long-term substitute positions in the district, three were ELL, for a nine percent rate. The district has a recruitment plan in place to recruit and retain ELL teachers (see Findings 1.4 and 3.5).

The following are comments relate to the English language learner programs from interviews with board members, district staff, and community members:

- "We have Title II money for ELL PD specifically." (District Administrator)
- "We use desegregation money to provide for a stand-alone ELD class at elementary levels." (District Administrator)
- "If a school has less than 20 ELL students in three grade spans we provide an ILLP or an 'IEP' for ELL and the mainstream teacher provides language for the ELL students." (District Administrator)
- "In order for us to use Achieve and Imagine like the regular classrooms, we look at results to correlated AZELLA. They correlate to the Common Core. It is not correlated for us yet." (District Administrator)
- "If the desegregation money went away, it would hurt the ELL program. The state provides Group B money but it is much less than deseg money." (District Administrator)

- "The academic success of ELL is always a challenge. They are always low on *AIMS*." (District Administrator)
- "There is a flat line on *AZELLA* as ELL with disability never pass it. We never make progress." (District Administrator)
- "The challenge for ELL is always compliance and it is a challenge to ensure schools are in compliance with accountability." (District Administrator)
- "Our ELD students test poorly, but read well." (Building Administrator)
- "With the ELD block, it is hard to get the students the credits they need to graduate." (Building Administrator)
- "During our classroom observations we look for student and teacher engagement, energy. We also look for probing questions." (Building Administrator)
- "We are a dual language school because we have teachers deeply invested in dual language. Not all campuses do." (Building Administrator)
- "This four-hour model that the state requires for English language learners is ridiculous. There is no linguistic support for students and they are missing out on the content areas of math, science, and social studies." (District Administrator)
- "Everyone has had SEI training. But to say it is widely adopted---that is up for discussion." (District Administrator)

In summary, the Language Acquisition Program in Tucson Unified School District identifies approximately six percent of its students as English Language Learners. The district offers three service delivery models to serve students. The majority of students are served in the ELD self-contained classroom model, which requires four hours of structured language arts learning. Additionally, many students are served with an Individual Language Learning Plan to meet their language needs through a variety of classroom interventions. Dual Language or Bilingual programs are offered at eight schools in the district. Given the variety of delivery systems for ELL in the district, there are multiple issues of equity for the ELL students. It takes an average of 2.54 years for English language learners to be reclassified within the Tucson Unified School District, as the average reclassification rate for the district was approximately 35 percent. The dropout rate for ELL students is higher than the district dropout rate, and the graduation rate for ELL students is much lower than the district graduation rate. Professional development has been designed for teachers working with ELL students, but the majority of the offerings and attendance focused on testing and compliance rather than improvement strategies. Not all of the ELL teaching staff are highly qualified, and there are still vacant positions for this year. The most challenging aspect regarding the Language Acquisition Program in TUSD for ELL students is closing the achievement gap in reading and math. In reading, there are three grade levels at which the achievement gap will never close at the current rate ELL students are achieving. Even though reducing the achievement gap is brighter in mathematics than reading, the least number of years to close the gap for any grade level is 12.1 years. Thus, TUSD must improve services to ELLs in order to reduce the inequity demonstrated by the data and for ELLs to be college and career ready.

Summary

The Tucson Unified School District provides for gifted education, special education, and English language learners through a variety of models in the district. Not all of the models are offered at every school though the district provides transportation for students to attend the school in order to receive the service. The district has several board policies addressing equity and equal opportunity for learning and non-discrimination. The policies fail to provide specific guidance for the design and delivery of instruction in the programs to ensure student success. In addition, the ESL/Bilingual program uses a curriculum separate from the general curriculum, while special education material is considered to be supplemental, and gifted and talented is considered differentiated. Auditors identified multiple inconsistencies and inadequacies in a number of practices of these programs. Specifically, inequities were noticed in identification of ethnicities in special education and GATE. Discipline,

retention, graduation, and student achievement raised concern as to the equal opportunity for all students to be successful. An expectancy that every student was capable of achieving and will learn was lacking.

Finding 3.4: The district lacks a formal professional development plan to increase teacher growth, provide the necessary support for curriculum implementation, and support school improvement and student achievement.

A sound professional development program is necessary for maintaining and advancing the proficiency of educational leaders, instructional staff, and support personnel, as well as the orientation of new employees. District leaders committed to improving student achievement recognize the need for professional development for all employees of the district. Long-term change requires focused professional development planning and plans. Professional development activities are an integral part of the program through policy and comprehensive, long-range plans. Funding for professional development programs should be identifiable within the district budget. Professional development policy and planning include participant evaluation of the various trainings and also provide a means of assessing the effect of professional development on student outcomes. Systems that do not provide adequate professional development for all staff lack an effective means to promote staff growth and organizational change necessary to improve student achievement.

To determine the presence and effectiveness of professional development in the Tucson Unified School District, auditors reviewed board policy, administrative regulations, district and campus improvement plans, employee job descriptions, employee evaluation documents, staff/faculty handbooks, the Unitary Status Plan, and other documents provided by the district. They also interviewed district personnel regarding professional development plans and opportunities.

Auditors found board policy related to professional development. Auditors also found references to professional growth in the Tucson Unified School District Consensus Agreement for 2013-2014, the 2013-2014 TUSD Continuous Improvement Plan, in various job descriptions, in some campus staff/faculty handbooks, and in campus-level professional development schedules. Auditors located specific professional development requirements in the Unitary Status Plan for TUSD employees.

From their review, the auditors determined that while the district provides some professional development activities, the individual campuses are responsible for much of the professional development that occurs in the district. They further found that professional development activities vary from campus to campus, with little common focus. The Tucson Unified School District does not have a comprehensive professional development plan to provide direction for systemic development of all district staff, or to ensure that all professional development requirements of the Unitary Status Plan are met (see Exhibit 3.4.3).

To determine the status of the design of professional development in the Tucson Unified School District, auditors reviewed the documents listed in Exhibit 3.4.1.

Exhibit 3.4.1

List of Professional Development Documents Reviewed
Tucson Unified School District
January 2014

Document Reviewed	Date
TUSD Board Policy	April 2012
Arizona Department of Education - Professional Development	2014
Consensus Agreement	2013-14
Unitary Status Plan	February 2013
TUSD Continuous Improvement Plan	2013-2014
Campus Goals and Mission Statements	Various

Exhibit 3.4.1 (continued) List of Professional Development Documents Reviewed Tucson Unified School District January 2014	
Document Reviewed	**Date**
Campus Staff/Faculty Handbooks	2013-14
School Improvement Plans	2013-14
Campus Professional Development Schedules	2013-14
Business Leadership Team Plan	December, 2013
Teacher/Principal Evaluation Process	2013
TUSD Budget	2011-12 through 2013-14
National Staff Development Survey Results – Pima County, AZ	2009
ADE CSPD Professional Development Grant	2011
Technology Strategy	2012-2015
Unitary Status Plan Budget Summary	2014
Professional Development Budget	2011-12 through 2013-14
Communications Plan	2013-14
Professional Development Evaluations	Various
Professional Development Courses Related to Desegregation Plan	2012-2014
Professional Development Courses TUSD	2011-2014
Professional Development Attendance	2011-2013
Professional Development Procedures, Courses, and Payment	No Date
Professional Development - Current Governing Board Members	2010-2014
Job Descriptions	Various

The following documents made reference to professional development:

- *Board Policy GCI: Professional Staff Development* states, "Employees are encouraged to participate in professional meetings, conferences, and approved in-service activities for the purpose of professional growth. As far as possible, Tucson Unified School District funds will be budgeted for these purposes."
- *Board Policy ADF-R: Intercultural Proficiency* says, "TUSD provides opportunities for staff to gain knowledge about different cultural groups. Teachers receive training to help them use students' family, language, and culture as foundations for learning. Teachers receive training to help them work with culturally and linguistically diverse students and parents. *Professional development of all employees is designed:* To provide educational programs in human relations, racial/ethnic relations and human rights. To provide educational programs for staff to develop the skill necessary to relate knowledgeably and sensitively to people of different racial and ethnic origins. To provide educational programs for staff on integration of multicultural curriculum materials into existing programs."
- *Board Policy IHAA: English Instruction* includes, "The Administrative Regulation will establish a plan for language education which shall include the training and professional growth of employees involved in the educational programs and activities governed by this policy."
- *TUSD Continuous Improvement Plan Standard 1* states in ACTION STEP Leverage of all PD Resources, "All Professional Development resources are coordinated to ensure leverage and alignment with district and student achievement initiatives."
- *Business Leadership Team Plan* under Personnel Focus requires "…establishing professional development regarding existing, refined, and/or new operational protocol and standards that enhance services in TUSD."

- *Unitary Status Plan* references professional development in the areas of student assignment, administrative and certificated staff, and discipline.

Job descriptions were examined to determine the role of personnel in the professional development process for the Tucson Unified School District.

Exhibit 3.4.2

Professional Development Responsibilities in Job Descriptions
Tucson Unified School District
January 2014

Job Title	Professional Development Responsibility
Superintendent	"Organizes District programs for effective teaching and learning."
Deputy Superintendent	"Plans and develops Curriculum and Instruction and Professional Development budget requirements."
Assistant Superintendent High School Leadership	"Provides differentiated professional development to all high school principals."
Assistant Superintendent – Elementary and K-8 School Leadership	"Provides differentiated professional development to all elementary and K-8 principals."
Executive Director – Exceptional Education	"Plans and directs professional development to staff in collaboration with appropriate personnel to meet the needs of exceptional and special-needs population students."
Director – Professional Development	"Directs the coordination of District-wide staff development; eliminates duplication and promotes efficient use of resources. Directs professional development with appropriate personnel to implement culturally responsive pedagogy and instruction as appropriate. Collaborates with the Deputy and Assistant Superintendents to direct the design and delivery of administrative, certificated, and classified professional development. Directs and coordinates district wide training with administrators and certified staff for programs including, but not limited to, Advanced Academic Courses, Professional Learning Communities, Unitary Status Plan (USP) and provides expertise, training, and resources necessary to ensure successful professional development for all TUSD personnel."
Director – Fine Arts	"Ensures that department's professional development offerings are geared towards meeting district goals."
Director – Health Services	"Provides health related training for Teachers and other staff members…"
Director of Interscholastics	"Provide professional development opportunities for site administrators, coaches and support staff."
Directors – African American Student Services; Mexican American Student Services; Native American Student Services	"Initiates and conducts student/parent/community departmental and other District staff in-services and programs as required or needed."
Director – Asian Pacific American Student Services	"Under the supervision of the Deputy Superintendent and/or the Curriculum, Instruction, and Professional Development Department the Director will participate in the evaluation of models that meet the academic needs of Pan Asian American students."
Director – Advanced Learning Experiences	"Attends, participates, and presents at workshops, conferences, professional development opportunities, and school and community meetings pertaining to Advanced Learning Experience programs."

Exhibit 3.4.2 (continued) Professional Development Responsibilities in Job Descriptions Tucson Unified School District January 2014	
Job Title	**Professional Development Responsibility**
Director – Culturally Responsive Pedagogy	"Directs educational approaches and practices which create and support inclusive learning environments utilizing learner centered approaches that emphasize students' cultural assets, backgrounds, social conditions, and individual strengths, while engaging families of students as partners in the learning process."
Director – Guidance, Counseling and Student Service/Prevention Programs	"Develop, plan and coordinate professional development, evaluation, orientation, training, and workshops to counselors, other administrators, principals, and teachers."
Director – Language Acquisition	"Provide vision and leadership to support student achievement and… determin[e] professional development areas and interfac[e] ELL programs with district goals and initiatives."
Director – School Improvement	"Direct school improvement teams in the alignment of professional development for the effective implementation of the Turnaround Model."
Director – Alternative Middle School Programs	"Conduct weekly professional development for alternative programs staffs."
Directors of Elementary Schools; Middle Schools; High Schools	"Coaches others in developing and improving school climate and culture."
Director of Staff Services to Governing Board Office	"Supervises, trains, evaluates and directs daily operational functions. Conducts orientation for new Governing Board members regarding operation and activities of the Board Office."
Director – Transportation	"Directs hiring and training of transportation employees."
Principal Assistant Principal	"Personally models and supports professional growth for all…Develops personal growth plans for self and all staff…Ensures quality staff development at school site…Creates and supports learning communities… Uses and models the use of technology…Models behaviors of a lifelong learner."
Instructional Staff Development Specialist	"Coordinates and provides guidelines and training to classified employees working with, or instructing students, such as Teacher Assistants, Instructional Specialists, Intervention Technicians, and Tutor/ Advisors. Provides professional development to para-professionals on areas such as proper lifting, discipline, implementation of behavior plans, positive reinforcement and other areas relevant to working with students with disabilities."
Professional Development Specialist	"Designs, implements, and evaluates professional development program(s) for TUSD classified staff."
Staff Development and Multicultural Curriculum Integration Coordinator	"Provides professional development and sustains opportunities for Educators to ensure that TUSD students are taught and master the skills needed to compete and function in the global society. "
Teacher Mentor	"This position serves as a facilitator, coach, resource, and advocate for teachers, and will provide professional development opportunities as appropriate."
Coordinator – New Teacher Induction	"…develops and implements a teacher induction system to provide multi-year support for new teachers, building professional knowledge…"
Certified Teacher	"Demonstrate commitment to continuous learning."

As noted in Exhibit 3.4.2:

- The Director of Professional Development has primary responsibility for a professional development program in the Tucson Unified School District.
- Other director level positions differ by department as to their role in professional development for the district.

Personnel evaluation instruments provided additional expectations related to professional development.

- Principal Evaluation Process Standard 2 indicates, "An education leader promotes the success of every student by advocating, nurturing and sustaining a school culture and instructional program conducive to student learning and staff professional growth."
- Teacher Evaluation Process Standard #9: *Professional Learning and Ethical Practice* states, "The teacher engages in ongoing professional learning and uses evidence to continually evaluate his/her practice, particularly the effects of his/her choices and actions on other learners, families, other professionals, and the community, and adapts practice to meet the needs of each learner."

The auditors reviewed the Unitary Status Plan for professional development references related to the plan. Exhibit 3.4.3 outlines those references.

Exhibit 3.4.3

Unitary Status Plan Professional Development References
Tucson Unified School District
January 2014

Page #	Professional Development References
6	**I.D.7. General Provisions:** The Parties & Special Master shall review all professional development deadlines
9, 10	**II.E.3. Magnet Programs:** Magnet School Plan - (vi) ensure that administrators and certificated staff in magnet schools and programs have the expertise and training necessary to ensure successful implementation of the magnet. (ix) provide necessary training and resources to magnet school and program administrators and certificated staff
13	**II.J. Student Assignment:** Professional Development 1. By Oct 1 of 2013-14, District shall ensure that all administrators, certificated staff, and other staff involved in student assignment and/or enrollment process receive training on new student assignment process and procedures.
14	**II.K.1.p. Student Assignment:** A list or table of all formal professional development opportunities offered in the District over the preceding year pursuant to the requirements of this Section, by opportunity description, location held, and number of personnel who attended by position.
16	**IV.B.3. Administrators & Certificated Staff:** Hire or designate a director-level employee to coordinate professional development and support efforts. This employee shall be responsible for: (a) hiring or designating trainers for PD; (b) PD available at multiple times and at diverse locations; (c) coordinating district level PD; (d) assisting school sites in required PD; (e) managing New Teacher Induction Program; (f) developing and implementing support program for underperforming/struggling teachers; and (g) developing and implementing leadership program for African American and Latino administrators.
19	**IV.E.2. Assignment of Administrators & Certificated Staff:** Provide additional targeted training to staff members involved in hiring and assignment.
20	**IV.E.6. Assignment of Administrators & Certificated Staff:** Develop a plan to support first year teachers serving in schools where student achievement is below district average. The plan shall include professional development targeted toward the specific challenges these teachers face.
22	**IV.I.1. Professional Support:** Amend New Teacher Induction Program to provide new teachers foundation to become effective. Hire New Teacher Mentors.

Exhibit 3.4.3 (continued) Unitary Status Plan Professional Development References Tucson Unified School District January 2014	
Page #	**Professional Development References**
22	**IV.I.2. Professional Support:** Develop plan & implement strategies to support underperforming or struggling teachers regardless of length of service.
23	**IV.I.4. Professional Support:** Appropriate training for all site principals to build PLCs
23	**IV.J.1. Administrators & Certificated Staff:** Plan to ensure all administrators and certificated staff have copies of Order and are trained on elements and requirements prior to 2013-2014 school year.
23	**IV.J.2. Administrators & Certificated Staff:** Designate or hire trainers for all certificated staff, administrators, and para professionals to provide professional development to effectively implement pertinent terms of this Order.
24	**IV.J.3. Administrators & Certificated Staff:** Ongoing professional development to include: a. District's prohibitions on discrimination or retaliation on basis of race and ethnicity; b. practical & research-based strategies…; c.other training contemplated herein. Shall be offered on a regular basis, both integrated into instructional days and in dedicated professional development time during the summer or school year, as appropriate.
24	**IV.J.4. Administrators & Certificated Staff**: Targeted professional development pursuant to evaluations as in need of improvement.
24, 25	**IV.J.5. Administrators & Certificated Staff:** Provide all personnel involved in any part of hiring process with annual training on diversity, competitive hiring process, District's non-discrimination policies, state and federal non-discrimination law. This is in addition to annual professional development requirement.
25	**IV.J.6. Administrators & Certificated Staff:** Opportunity for administrators and certificated staff who demonstrate best practices in their classrooms or schools to coach, mentor, or collaborate with others.
26	**IV.K.1.n. Administrators & Certificated Staff:** Description of New Teacher Induction Program by race, ethnicity, and school site; o. Description of teacher support program including data regarding numbers and race or ethnicity of teachers in the program; p. copy of leadership plan to develop African American and Latino administrators; and q. for all training and professional development information on type of opportunity, location held, number of personnel attending by position; presenter, training outline, and documents distributed.
28	**V.A.2.d.iv. Quality of Education:** Provide professional development to administrators and certificated staff to identify and encourage African American and Latino students, including ELL students, to enroll in ALEs.
30	**V.A.3.a.iv. Quality of Education:** Require all GATE teachers to be gifted-endorsed or to be in the process of obtaining gifted endorsement.
30	**V.A.4.iv. Quality of Education:** Provide professional development to train all AAC teachers using appropriate training and curricula, such as that provided by College Board.
31	**V.A.5.d. Quality of Education:** Encourage school personnel, including counselors and teachers, through professional development, recognition, evaluation and other initiatives, to identify, recruit, and encourage African American and Latino students including ELL student to apply.
32	**V.E.1.b. Student Engagement and Support:** Professional development and training for administrators and certificated staff to teach socially and culturally relevant curriculum and engage African American and Latino students.
36	**V.E.4.c. Student Engagement and Support:** Director of Culturally Responsive Pedagogy & Instruction shall implement a professional development plan for administrators, certificated staff, and paraprofessionals on how best to deliver courses of instruction and to engage AA and Latino students.
36	**V.E.5.a. Student Engagement and Support:** Provide all administrators and certificated staff with training on how to create supportive and inclusive learning environments for AA and Latino students with emphasis on curriculum, pedagogy and cultural responsiveness. Hire or designate individuals to assist in providing ongoing support and training.

Exhibit 3.4.3 (continued) Unitary Status Plan Professional Development References Tucson Unified School District January 2014	
Page #	**Professional Development References**
38	**V.E.7.f. Student Engagement and Support:** Student support services staff who are part of academic intervention teams shall be trained to implement specific academic intervention plans and on use of data systems used to monitor academic behavioral progress.
40	**V.E.8.f. Student Engagement & Support:** Student support services staff who are part of academic intervention teams shall be trained to implement specific academic intervention plans and on use of data systems used to monitor academic behavioral progress.
42	**V.F.1.j. Student Engagement & Support:** District shall provide as part of its annual report: list or tables of any certificated staff who received additional certification pursuant to requirements of this Section
43	**V.F.1.t. Student Engagement & Support:** District shall provide as part of its annual report: for all training and professional development required by this Section , information by type of training, location held, number of personnel who attended by position, presenter, training outline or presentation, and any documents distributed.
46, 47	**VI.E.1-5. Discipline:** Provide necessary training for Restorative Practices
49	**VI.G.1.g. Discipline:** District shall provide as part of Annual Report: details of each training on behavior or discipline held over the preceding year, including the dates, length, general description of content, attendees, providers, agenda, and any handouts.
54	**IX.B.4. Facilities & Technology:** The District shall include in its professional development for all classroom personnel, as more fully addressed in Section (IV)(J)(3), training to support the use of computers, smart boards and educational software in the classroom setting.
55	**IX.C.1.e. Facilities & Technology:** The District shall provide as part of its Annual Report: for all training and professional development provided by the District, as required by this Section, information on the type of training, location held, number of personnel who attended by position, presenter, training outline and documents distributed.
55	**X.A.3. Evidence-Based Accountability:** District shall require all administrators, certificated staff, and where appropriate, paraprofessionals, to undertake training on the EBAS.
Data Source: TUSD Unitary Status Plan	

Exhibit 3.4.3 notes:

- The Unitary Status Plan references professional development in sections related to Student Assignment, Administrative and Certificated Staff, and Discipline.
- The Unitary Status Plan further references professional development in subsections related to magnet programs, professional support, quality of education, student engagement and support, facilities and technology, and evidence-based accountability.

Auditors looked at district records of professional development activities related to the Unitary Status Plan. Exhibit 3.4.4 shows the professional development provided for the current school year and the participant roster figures.

Exhibit 3.4.4

Unitary Status Plan Professional Development activities for 20-2014
Tucson Unified School District
January 2014

Course Title	Course Hours	Personnel Enrolled
Culturally Relevant Courses Lesson Plan Development	25	5
Culturally Relevant Courses PLC	11	12
*Grant Tracker Training (7 sessions, 6 topics)	1.5	76
Life Skills Alternative to Suspension Program - Job alike	11.5	0
Mandatory Magnet Site Coordinator Training Parts 1-5 (7 sessions, 5 topics)	7	159
**Multicultural and Global Literature in the Classroom (3 sessions, 3 topics)	3	31
PBIS #1 - Getting Started/Learning Supports Coords (3 sessions)	2.5	45
PBIS #2 - Implementation/Learning Supports Coords (2 sessions)	2	34
PBIS #3 - Using Data Effectively/Learning Supports Coordinators	2	35
Student Assignment (3 sessions)	1	1,653
(SIIS) Student Identification and Intervention System Pilot Training #2	2	18
SIIS Training - WatchPoint & Intervention Documentation	2	11
Understanding the Unitary Status Plan (3 sessions)	1	3,331
Total Participants		**5,410**
Note: *Grant Tracker Sessions: African American Studies, Student Services, New Employees, LSCs (2 sessions), GT LSCs , Paid Interveners **Multicultural & Global Sessions: AA, Span Mex, Nat Am/Russian, Arabic, Portuguese/Korean, Japanese, Chinese		
Data Source: Excel List of PD for Desegregation Order (Dropbox)		

Exhibit 3.4.4 notes:

- Thirty-four (34) professional development sessions are offered during the course of the school year, with 24 different course topics covered during those sessions.
- A total of 5,410 employees are noted as participants in the 34 sessions to date.
- One-hour courses on Student Assignment and Understanding the Unitary Status Plan have the greatest enrollment with 1,653 and 3,331 participants, respectively.

Auditors reviewed campus goals and mission statements, school improvement plans, and staff/faculty handbooks for references to professional development as a means of improving student achievement. Exhibit 3.4.5 shows references to professional development in those three campus documents.

Exhibit 3.4.5

Professional Development References in Campus Documents
Tucson Unified School District
January 2014

Document	Documents Available for Auditor Review	Documents w/ Prof Dev References	Documents w/ No Prof Dev References	Documents w/ Limited Prof Dev Reference
Campus Goals & Mission Statements	23	3	20	--
School Improvement Plans	91	65	15	9 - PLC only 2 - Title I Tchrs only
Staff/Faculty Handbooks	21	5	16	--
Data Source: Documents provided to auditors in Dropbox by district.				

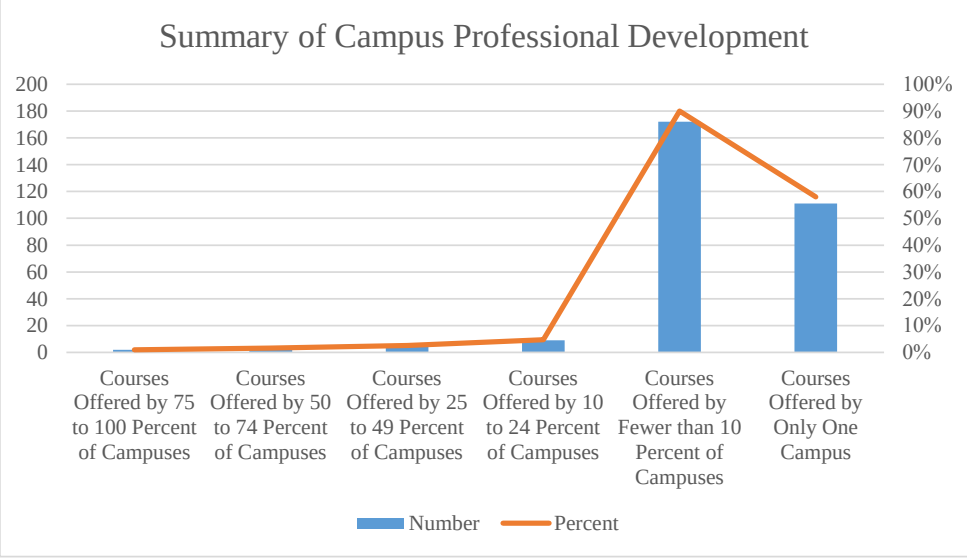
As noted in Exhibit 3.4.5:

- Twenty-three (23) of 91 campuses provided campus goals and missions for review, and of those only three made reference to professional development or learning.
- Seventy-six (76) of 91 school improvement plans made some reference to professional development; nine (9) referred only to professional development in relation to Professional Learning communities, and two plans referenced professional development only for Title I teachers.
- Twenty-one (21) of 91 campuses provided staff/faculty handbooks for review, and of those only five made reference to professional development.

Auditors examined individual campus professional development schedules and calendars for the 2013-14 school year. Of 91 campuses, 81 professional development schedules were available for review. For the 81 campuses reviewed, 191 different professional development activities were noted. Exhibit 3.4.6 shows a summary of common professional development activities offered by campuses across the Tucson Unified School District, and Exhibit 3.4.7 lists the most prevalent professional development activities (see Appendix B for individual campus information).

Exhibit 3.4.6

Summary of Campus Professional Development activities for 2013-14
Tucson Unified School District
January 2014



As noted in Exhibit 3.4.6:

- Only two professional development activities, or one percent, were offered by at least 75 percent of the campuses.
- Three activities, or two percent, were offered by at least 50 percent of the campuses.
- Five activities, or three percent, were offered by at least 25 percent of the campuses.
- Nine activities, or five percent, were offered by at least 10 percent of the campuses.
- One hundred seventy-two (172), or 90 percent, of the activities were offered by fewer than 10 percent of campuses.
- One hundred eleven (111), or 58 percent, of the professional development activities were offered on only one campus.

Exhibit 3.4.7

Prevalence of Campus Professional Development activities for 2013-14
Tucson Unified School District
January 2014

Prof Development Sessions Offered on Multiple Campuses	# of Campuses Offering Training	% of Campuses Offering Training
C. Danielson Training	78	96
301 PLC	71	88
AIMS	46	57
ATI	48	59
Curr Dev/Planning	8	10
Data Analysis	44	54
Dept/Team Mtgs	15	19
Grade Level/Team Mtgs	21	26
Interventions	11	14
Math	12	15
Mission/Vision/Goals	11	14
PBIS	21	26
PLC	33	41
Student Engagement	9	11
SuccessMaker	23	28
Teachscape	39	48
Title I Update/Planning	17	21
Unitary Status Plan	9	11
Writing Prompts/Scoring	15	19
Data Source: TUSD Campus Professional Development calendars, schedules, and plans.		

As noted in Exhibit 3.4.7:

- Charlotte Danielson (teacher evaluation) training was the most prevalent course offered, with 78 campuses (96 percent) noted.
- Curriculum development and planning was the least prevalent course offered, with eight campuses (10 percent) noted.
- Only five common activities were offered on at least 50 percent of campuses.

Based on TUSD board policy, district and campus improvement plans, job descriptions, principal and teacher evaluations, campus professional development schedules, and other documents provided, auditors determined that policy guidance was inadequate to direct professional development efforts. They further determined that district planning documents were inadequate to provide direction for the district professional development program. Job descriptions and evaluations were adequate, with the Director of Professional Development assuming primary responsibility for the development and administration of the district professional development program, while evaluations provided expectations for ongoing professional growth. Campus professional development schedules and calendars indicate the lack of district focus and oversight related to professional development sessions, as evidenced by large numbers of professional growth activities occurring on only one campus.

The audit uses 18 criteria for assessing the adequacy and effectiveness of professional development programs. Exhibit 3.4.8 presents the audit characteristics and the auditors' ratings of those criteria for Tucson Unified School District. Specific explanations for each rating follow the exhibit.

Exhibit 3.4.8

Audit Characteristics of a Comprehensive Professional Development Plan
And Auditors' Assessment of District Approach
Tucson Unified School District
January 2014

Characteristics	Auditors' Rating	
	Adequate	Inadequate
Policy		
1. Has policy that directs staff development efforts.		X
2. Fosters an expectation for professional growth.	X	
3. Is for all employees.		X
Planning and Design		
4. Is based on a careful analysis of data and is data-driven.		X
5. Provides for system-wide coordination and has a clearinghouse function in place.		X
6. Provides the necessary funding to carry out professional development goals.	X	
7. Has a current plan that provides a framework for integrating innovations related to mission.		X
8. Has a professional development mission in place.		X
9. Is built using a long-range planning approach.		X
10. Provides for organizational, unit, and individual development in a systemic manner.		X
11. Focuses on organizational change—staff development efforts are aligned to district goals.		X
Delivery		
12. Is based on proven research-based approaches that have been shown to increase productivity.	Partial	
13. Provides for three phases of the change process: initiation, implementation, and institutionalization.		X
14. Is based on human learning and development and adult learning		X
15. Uses a variety of professional development approaches.	X	
16. Provides for follow-up and on-the-job application necessary to ensure improvement.		X

Exhibit 3.4.8 (continued) Audit Characteristics of a Comprehensive Professional Development Plan And Auditors' Assessment of District Approach Tucson Unified School District January 2014		
Characteristics	**Auditors' Rating**	
	Adequate	**Inadequate**
17. Expects each supervisor to be a staff developer of staff supervised.	Partial	
Evaluation		
18. Requires an evaluation of process that is ongoing, includes multiple sources of information, focuses on all levels of the organization, and is based on actual change in behavior.		X
Total	**3**	**15**
Percentage	**17%**	
Partial ratings are counted as inadequate		

Exhibit 3.4.8 shows that the district's professional development plan satisfied three, or 17 percent, of the 18 audit criteria. Two criteria were rated partially adequate and therefore did not receive credit. A program or plan is considered adequate if it meets 70 percent of the audit criteria. Therefore, auditors rated the professional development plan as inadequate. The following comments provide explanations for the ratings in Exhibit 3.4.8.

Criterion 1: Policy (Inadequate)

Policy GCI: Professional Staff Development encourages but does not require employees to participate in professional development activities. *Board Policy ADF-R: Intercultural Proficiency* and *Board Policy IHAA: English Instruction* also address professional development but only in the context of their respective areas. There is no policy that directs the district to develop a comprehensive professional development program.

Criterion 2: Expectation for professional growth (Adequate)

As noted above, there are limited policies that address professional development. However, the district continuous improvement plan speaks to professional development, stating, "All Professional Development resources are coordinated to ensure leverage and alignment with district and student achievement initiatives." Personnel evaluations also include expectations for ongoing professional growth, as noted in the principal evaluation: "An education leader promotes the success of every student by advocating, nurturing and sustaining a school culture and instructional program conducive to student learning and staff professional growth." The teacher evaluation states, "The teacher engages in ongoing professional learning…" Further, the district allows for early release of students each Wednesday to provide time for the purpose of professional training.

Criterion 3: For all employees (Inadequate)

Policy does not speak to an expectation for all personnel and professional growth. The plans shared with the auditors are vague regarding professional development for personnel other than instructional employees.

Criterion 4: Data-driven (Inadequate)

Campus professional development activities related to data analysis were noted in 54 percent of the campus plans and schedules. However, there was no documentation presented to support the use of the analyzed data to inform future decisions related to professional development.

Criterion 5: System-wide coordination with clearinghouse function (Inadequate)

In order to meet adequacy, there would need to be records for campus initiated professional development activities and records maintained for all personnel at the district level (to include para-professionals, maintenance and grounds crews, and all other service personnel). Additionally, professional development activities would go through the clearinghouse in order to avoid duplication of efforts and/or dates. Professional development

records shared with the auditors were for district level training and were presented in an Excel format, indicating that a clearinghouse function does not exist for TUSD.

Criterion 6: Necessary funding (Adequate)

Although *Board Policy GCI: Professional Staff Development* states, "As far as possible, Tucson Unified School District funds will be budgeted for these purposes," professional development funding is evident in Title II allocations and the Desegregation Plan budget. The 2013-14 Unitary Status Plan Budget shared with auditors indicated a total of $7.3 million for professional development, with $1.9 million designated as desegregation and $5.3 million designated as non-desegregation funding. The Title II-A budget for 2013-14 shared with auditors included $2.8 million for professional development and technology.

Criterion 7: Plan providing a framework (Inadequate)

There is no single plan that outlines a framework to support this criterion. Integration of specific strategies is further addressed by Criterion 13, which speaks to initiation, implementation, and institutionalization. Criterion 13 was also found to be inadequate.

Criterion 8: Professional development mission (Inadequate)

A mission statement for professional development was not found in board policy or district goals, indicating a lack of direction from the board.

Criterion 9: Long-range planning (Inadequate)

The only example of long-range planning was indicated in the Technology Strategy 2012-2015, which speaks only to professional development related to technology and technology implementation.

Criterion 10: Systematic approach (Inadequate)

Professional development activities are planned and implemented by the district and school sites, with school sites primarily responsible for their own growth. Professional Development Academic Trainers, Teacher Mentors, and other designated personnel are utilized as professional development trainers, but opportunities for training vary by campus. Interviews with district personnel indicate that district training typically occurs during the summer months, while campuses are responsible for most trainings during the school year. Campus documents presented to the auditors indicated varying numbers and types of trainings offered.

Criterion 11: Aligned to district goals (Inadequate)

District goals are silent on the topic of professional growth, so this criterion is found to be inadequate. TUSD Continuous Improvement Plan Standard 1 includes as an action step, "All Professional Development resources are coordinated to ensure leverage and alignment with district and student achievement initiatives." And the Business Leadership Team Plan under Personnel Focus stipulates, "…establishing professional development regarding existing, refined, and/or new operational protocol and standards that enhance services in TUSD." District mission and goals, however, do not address a professional development program for Tucson Unified School District.

Criterion 12: Research-based (Partially Adequate)

Professional development activities and training session lists shared with the auditors indicate that topics and training models such as the Danielson Framework are research-based. However, based on training activities found in the campus professional development plans (see Appendix B), sessions also included grade level and department meetings, as well as titles unique to individual campuses. This criterion was determined to be only partially adequate.

Criterion 13: Initiation, implementation, and institutionalization (Inadequate)

No evidence was presented to address these three stages of change.

Criterion 14: Adult learning (Inadequate)

Some of the professional development offerings include strategies such as staff collaboration, application in the classroom, and varied approaches to presentation. However, of follow-up support, review of progress in implementation, and evaluation to see the worth of new learning are missing.

Criterion 15: Variety of approaches (Adequate)

Campus professional development schedules provided to auditors indicate several approaches utilized to deliver professional development. During campus visits, principal interviews revealed the use of book studies, on-line learning, and professional learning community time and collaboration.

Criterion 16: Follow-up and on-the-job application (Inadequate)

In the analysis of documents provided auditors found no evidence of a systematic approach to monitor the application of new knowledge. While new teachers are provided with on-the-job application, evidence was not presented to indicate that all personnel are included. Interview data support this determination.

Criterion 17: Supervisor as staff developer (Partially Adequate)

Supervisors as professional developers are noted in current job descriptions. Although the superintendent job description includes only "Organizes District programs for effective teaching and learning," the current superintendent conducts professional training for district administrators. A sample of supervisors as professional developers include:

- Assistant Superintendent—High School Leadership—"Provides differentiated professional development to all high school principals."
- Directors of Elementary Schools, Middle Schools, High Schools—"Coaches others in developing and improving school climate and culture."
- Principal & Assistant Principal—"Personally models and supports professional growth for all…"

Criterion 18: Evaluation (Inadequate)

Auditors were presented with evaluations of some district professional development sessions completed by participants of the sessions. However, no evidence of an evaluation process that is ongoing, includes multiple sources of information, focuses on all levels of the organization, and is based on actual change in behavior was presented to the auditors for review.

Auditors interviewed district personnel to determine the nature of professional development in the Tucson Unified School District. The following comments were noted:

- "There is no systemic plan for professional development." (District Administrator)
- "We need more consistency in professional development. Too much inconsistency. It varies from building to building." (District Administrator)
- "Summer professional development was an opportunity but not mandatory." (Campus Administrator)
- "We need strategic alignment for professional development. I have been asked to create a district PD plan. Up until this year it was a frivolous task. They were not aligned until this year. Now I can write a comprehensive district plan." (District Administrator)
- "This year the other district training has been the Danielson model for appraisals. With the exception of EEI, Danielson, and Teachscape, there has been no other professional development across the district." (District Administrator)
- "There isn't a lot of well-advertised district professional development. But our new superintendent is trying to revive district-focused professional development." (Campus Administrator)
- "We have weekly professional development with the superintendent teaching us." (Campus Administrator)

- "There has been a lack of professional development for teachers on how to work with district students. We don't focus on culturally responsive practices to help teachers." (District Administrator)
- "Ethnic/multi-cultural training is severely needed in the schools to get people to understand other cultures." (Campus Administrator)
- "Wednesday PD is an area of weakness—they vary in times and content. Sometimes they are just a staff meeting." (Campus Administrator)
- "Each school turns in professional development plans to the supervisors describing what is going to be done for the year. It is site-based and not district controlled. They do everything from A to Z, all over the place." (District Administrator)
- "On Wednesdays [schools] are involved in site-based training and we do not know the effectiveness of this. We do not collect evaluations of our professional development." (District Administrator)
- "TUSD devotes individual professional development time after school on Wednesdays for teachers, yet instruction remains the same. There needs to be changes." (Community Member)
- "Professional development is like a huge piece of Swiss cheese. As an administrator, I have tried to plan professional development to support district initiatives, but if initiatives between Title I and the district don't match, it creates tension. We would get more bang for our bucks if things were better aligned." (Campus Administrator)

In summary, auditors found that professional development is occurring in the Tucson Unified School District at the district and campus levels to varying degrees and that some components of a professional development plan are in place. However, the current components do not provide for focused, ongoing training for all employees of the district. Additionally, there is no vehicle to ensure that initiation, implementation, institutionalization, and evaluation occur and that student performance increases as a result of improved staff performance.

Finding 3.5: The district has been under court order for more than 34 years to create a unitary system that provides equity and equal opportunity for all students. Efforts to achieve those ends have been ineffective. Practices have perpetuated a two-tier system of haves and have-nots student groups.

The objective of educational equity efforts is to produce comparable academic outcomes for all students. In order to produce such outcomes, students need to have equal access to programs and services, and equitable support that address their unique needs.

In order to determine if students had equal access and equitable support in Tucson Unified School District, the audit team reviewed files that included court documents, policies, plans, test data, program participation, and performance outcomes. Auditors also interviewed central office administrators, principals, teachers, parents, and community members and visited district schools to observe classroom activities.

The audit team found that the district was the losing defendant in desegregation suits filed in 1974 and, as a result, has been under a court-supervised desegregation order for most of the years since the filings. The court has given adequate general and specific guidance as to what must be done to provide equity and equal access to all district students, in particular African American and Hispanic students, plaintiffs in the 1974 suits. In spite of the guidance, the data show—and court records substantiate—that the district has failed to provide evidence of efforts to implement the court's directives.

Data reviewed by the audit team show that male, economically disadvantaged and exceptional education students and English language learners were retained in grade at higher rates than other students. These same groups, along with African American and Hispanic students, were under-represented in desirable Advanced Learning Experiences, such as honors, Advanced Placement, and gifted and talented courses, and have not had equal access to the district's prestigious University High School. Achievement pass rates for some student groups and achievement gaps have expanded. Dropout rates have increased and graduation rates have declined. In general, these conditions have persisted over the five years since the district was temporarily granted unitary status in 2008 (later revoked by court order). Finally, auditors determined that leadership, infrastructure, and

support for equity and equal access have been either inadequate or ineffective, as indicated by a lack of central office direction with regard to staffing, budgeting, data management, and magnet schools.

In summary, the district design for equal access and equity is extensive but inadequate, and actions have been ineffective in implementing the court's orders.

An exhaustive list of equity and equal access documents consulted by auditors is provided in Finding 3.3. However, the following are key documents reviewed by the audit team to determine if the district staff had adequate guidance to develop and implement the plans necessary to provide equity and equal access for students:

- *Brief, Fisher, Mendoza, et al. v. Tucson Unified School District,* Nos. 10-15124, 10-15375, 10-15407, (9th Cir. 1980).
- *Mendoza v. United States.,* 623 F.2d 1338 (9th Cir. 1980), *cert denied, 450 U.S. 912 (1981).*
- *Unitary Status Plan, Fisher, et al v. Tucson Unified School District,* 74-cv-00090-DCB (D. Ariz., 2013). This document contains detailed requirements regarding equity and equal access for the district's students.
- *Unity Status Plan, Case 4:74-cv-00090-DCB Document 1450-1, filed 02/20/13.*
- *Unitary Status Plan Annual Report 2012-2013, Fisher, Mendoza, et al. v. Tucson Unified School District,* 74-cv-00090-DCB (D. Ariz., 2014).
- *Board Policy ADF: Intercultural Proficiency* provides direction for programs that "support…respect for…rights and…freedoms for all, regardless of race, gender, socioeconomic status, linguistic proficiency, language, ethnicity, national origin, religion, age, disability, sexual orientation, or gender identity/expression."
- *Board Policy GBA: Equal Opportunity* states, "Discrimination against an otherwise qualified individual with a disability or any individual by reason of race, color, religion, sex, sexual orientation, age, or national origin is prohibited. Efforts will be made in recruitment and employment to ensure equal opportunity in employment for all qualified person."
- *Board Policy IKE: Promotion, Retention, Acceleration and Appeal* states that with regard to English language learners, "The District will employ…interventions…in a way that language considerations will not be a factor in any retention decision."
- *Board Policy JG: Equal Education Opportunities & Anti-Harassment* grants students "[t]he right…to participate fully in classroom instruction [regardless] of race, color, religion, sex, sexual orientation, age, national origin, and disability, or any other reason not related to the student's individual capabilities."
- *Board Policy JK: Student Discipline* states, "To ensure fairness, a student whose conduct may warrant discipline, suspension or expulsion will be provided due process as required by law."

While guidance is extensive, it did not satisfy audit policy criteria (see Finding 1.1). Further, given the context of long-standing court orders to provide equity and equal opportunity and the court-documented lack of success on the part of leaders and staff in accommodating those requirements, auditors concluded that existing policy statements lacked the force and direction necessary to motivate and guide district employees to take required actions. In view of these findings, policy statements were inadequate.

The district had many plans (Finding 1. 2), but the one most impacting equity and equal access is the court-mandated and governing board-approved Unitary Status Plan. This document prescribes in detail actions to be accomplished, numerical goals to be achieved, and the accountability data that must be submitted to the court on a fixed schedule. Though the plan is extensive, the audit concluded that is incomplete, because, in many instances, it is a plan that requires preparation of supporting plans. Therefore, the design is incomplete and inadequate without the supporting plans.

Given the status of policy and plans, auditors determined that, in its present state, the design for student equity and equal access is inadequate.

To assess the delivery of equity and equal access in the district, auditors sampled several pertinent areas of district operations. The results of those samplings are described below.

Ethnic Diversity of Students and Teachers

The court-ordered Unitary Status Plan states, "The District shall seek to enhance the racial and ethnic diversity of its administrators and certified staff through its recruitment, hiring, assignment, promotion, pay, demotion, and dismissal practices and procedures." This requirement recognize that educators who reflect the diversity of the student body create a more culturally sensitive environment, provide role models for students, and contribute to students' sense of belonging. Exhibit 3.5.1 compares the ethnicity of the teaching staff to that of the most prominent student ethnic groups over recent school years.

Exhibit 3.5.1

Ethnic Distribution of Students and Teachers
Tucson Unified School District
2009-2013

Year	African American Students	African American Teachers	Asian American Students	Asian American Teachers	Hispanic/ Latino Students	Hispanic/ Latino Teachers	Native American Students	Native American Teachers	White Students	White Teachers
2009-10	7.6	3.6	2.8	1.3	56.2	24.1	4.5	0.9	29.8	68.3
2010-11	5.7	3.5	2.5	1.4	60.6	23.9	3.9	1.1	24.9	67.8
2011-12	5.6	3.3	2.6	1.8	61.3	24.4	3.8	1.0	24.1	66.9
2012-13	5.6	3.5	2.4	1.8	62.3	24.8	3.7	1.0	23.3	67.2

Sources: Appendix D, Unity Status Plan, Case 4:74-cv-00090-DCB Document 1450-1, filed 02/20/13 and e-mail, subject: Teacher Demographics (3), from the Desegregation Director's office, 02/28/14.

Exhibit 3.5.1 shows that, during school years 2009-10 through 2012-13, disparities between the ethnic composition of the major student groups and teachers remained unchanged. Specifically, the following conditions are evident:

- African Americans make up approximately 5.6 percent of students and 3.5 percent of teachers.
- Asian Americans make up approximately 2.5 percent of students and 1.8 percent of teachers.
- Hispanics are the largest student group at roughly 61 percent but make up only 24 percent of the teaching staff.
- Native Americans comprise approximately four percent of students and one percent of teachers.
- Whites make up approximately 24 percent of students and 67 percent of the teachers.

The data show that, over the past few years, the district staff has not reflected the diversity of the students served.

District employees made the following comments to auditors regarding staff diversity:

- "We have enough money to implement the [Unity Status Plan, but] all of the pieces to manage it are not in place….We need good people in high positions [to implement the Plan]....It's the politics of adding staff that prevents us from getting the people we need….There is a huge resistance to hiring people…. [That's why] we are not complying with the Unity Status Plan…." (District Administrator)
- "Hiring bonuses were taken out of the recruiting plan." (District Administrator)
- "We need to start growing our own minority leadership in the district." (Instructional Support Staff)

Representation of Student Groups in Advanced Learning Opportunities, Disciplinary actions, and Dropout and Graduation Rates

Next, auditors turned their attention to sampling areas that reflect equity and equal access for students. The results of those samplings are reflected in the charts and tables presented as exhibits in the remaining sections of this finding. Readers should keep the following in mind while reviewing those exhibits:

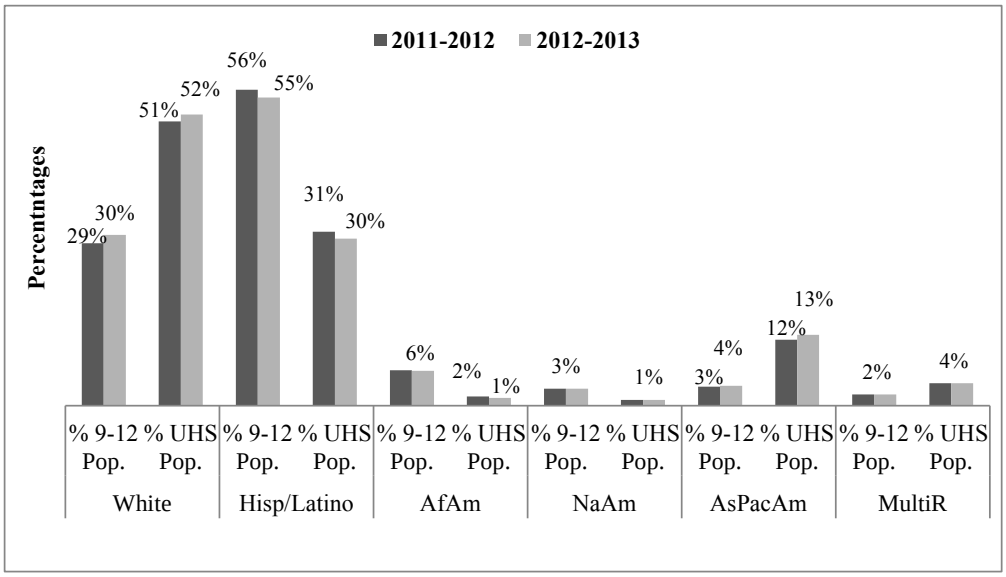
- All percentages have been rounded based on conventional rounding procedures.
- In charts where a percentage appears over two or more columns, it indicates that the percentages for the years represented are approximately equal due to rounding.
- Most bar charts in this finding cover three or more years, but only two percentages appear above the set of bars; they are percentages for the first and last school years of the period represented in the chart.

Equal Access to High Level Educational Opportunities

The Quality of Education section on the Unitary Status Plan identifies University High School (UHS) for special measures to ensure that students have equal access to that institution and are retained therein. UHS, grades 9-12, is the district's "exam school" (admission by examination). To determine the representation of various student subpopulations at UHS, auditors compared the ethnicity of the overall district enrollment to the ethnicity of students enrolled at UHS. Exhibit 3.5.2 shows the results of those comparisons for school years 2011-12 and 2012-13.

Exhibit 3.5.2

Comparison of Grades 9-12 Student Enrollment to University High School Enrollment
Tucson Unified School District
2011-2013



Source: Appendix 7 of the Annual Report…[on the Unity Status Plan], Case 4:74-cv-00090-DCB Document 1549-8, filed 01/31/14.

Exhibit 3.5.2 compares the ethnic composition of TUSD enrollment in grades 9-12 to the ethnicity of students at UHS during school years 2011-12 and 2012-13. Results show that:

- During 2011-12, White students comprised 29 percent of the district enrollment in grades 9-12 and 51 percent of the UHS enrollment. In 2012-13, Whites comprised 30 percent of the enrollment in grades 9-12 and 52 percent of the UHS enrollment.
- For both years:
  - Hispanic/Latino students were about 55 percent of the student population in grades 9-12, but only 30 percent of the UHS student body.

- African Americans constituted six percent of the grades 9-12 district enrollment and one or two percent of the UHS enrollment.
- Native Americans were three percent of the district enrollment in grades 9-12 and one percent of the UHS enrollment.
- Multi-racial students constituted two percent of the district's grades 9-12 enrollment and four percent of UHS enrollment.

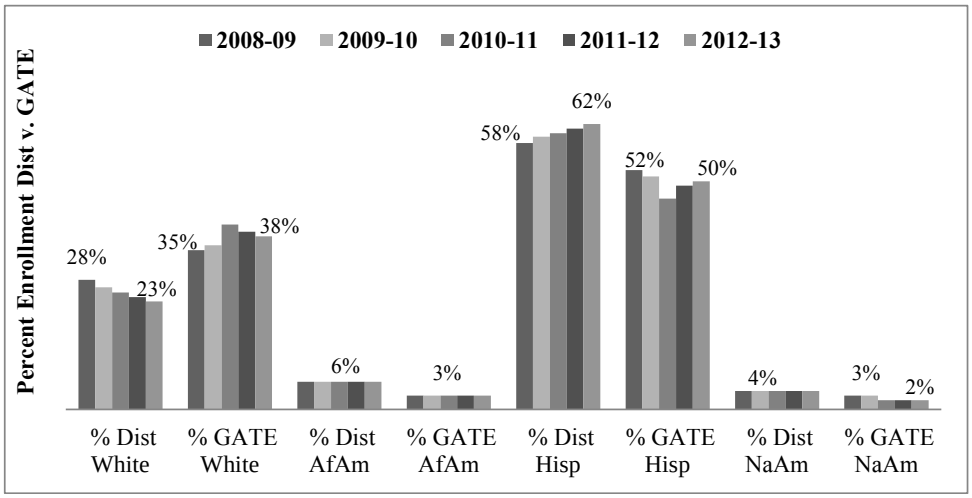
- Asian/Pacific Americans comprised three and four percent of district enrollment, respectively, during 2011-12 and 2012-13, and 12 and 13 percent of the UHS enrollment during those years.
- The following student groups were overrepresented during both years at UHS: Whites (by approximately 20 percentage points) and Asians (by nine percentage points). For those years, Hispanics were underrepresented by 25 percent.

In response to an inquiry regarding the court order to make UHS more accessible to all students, especially to qualified students from groups that have been de facto, traditionally excluded, one board member said, "We are lowering the standards to allow kids to enter into one of our best schools in the district. We should not be lowering standards. I think that's a shame."

Advanced Learning Experiences (ALE) include such programs as gifted and talented (GATE), honors, Advanced Placement (AP), and the International Baccalaureate (IB). Auditors analyzed student participation in selected ALE to determine if it was representative of the overall student population. Exhibits 3.5.3 through 3.5.10 show the results of comparing overall district enrollment to the student participation in ALE. Exhibit 3.5.3 shows the participation of one set of student groups in GATE programs.

Exhibit 3.5.3

Gifted and Talented Program Enrollment: Set 1
Tucson Unified School District
2008-2013



Sources: Advanced Learning Experiences - Selected Statistics for the 2013-14 Curriculum Audit, January 28, 2014, Department of Accountability and Research, TUSD (Excel spreadsheet).

Exhibit 3.5.3 shows the following with regard to representation of White, African American, Hispanic, and Native American students in GATE programs for school years 2008-09 through 2012-13:

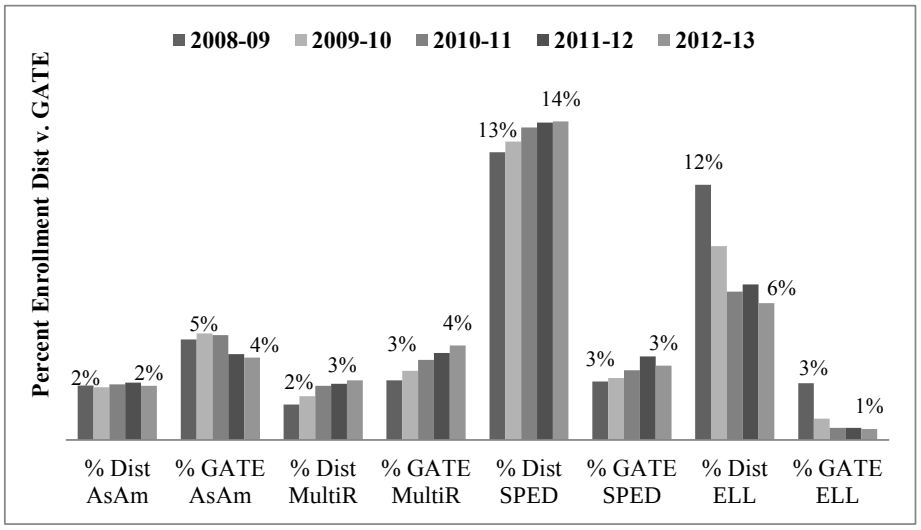
- Enrollment in GATE was not representative of the ethnicity of the student population.
- At the beginning of the five-year period, 2008-09, White students were overrepresented by approximately seven percentage points; their overrepresentation during the last year was 15 percentage points.

- Hispanics were underrepresented by six percentage points during the first year and by 12 points during the last year.
- African American and Native American students were slightly underrepresented each year.

Exhibit 3.5.4 shows the participation of a second set of student groups in the GATE program. Note that exceptional education (SPED) students are included in the chart. Auditors have no expectation that SPED students will be represented in the GATE program in the same proportion as their presence in the general student population. The reason is that some conditions that qualify students for SPED status have adverse effects on educational performance. However, all SPED students were included in the analysis of proportional participation because privacy laws and regulations prevent the identification of individual students and their qualifying conditions.

Exhibit 3.5.4

Gifted and Talented Program Enrollment: Set 2
Tucson Unified School District
2008-2013



Sources: Advanced Learning Experiences - Selected Statistics for the 2013-14 Curriculum Audit, January 28, 2014, Department of Accountability and Research, TUSD (Excel spreadsheet).

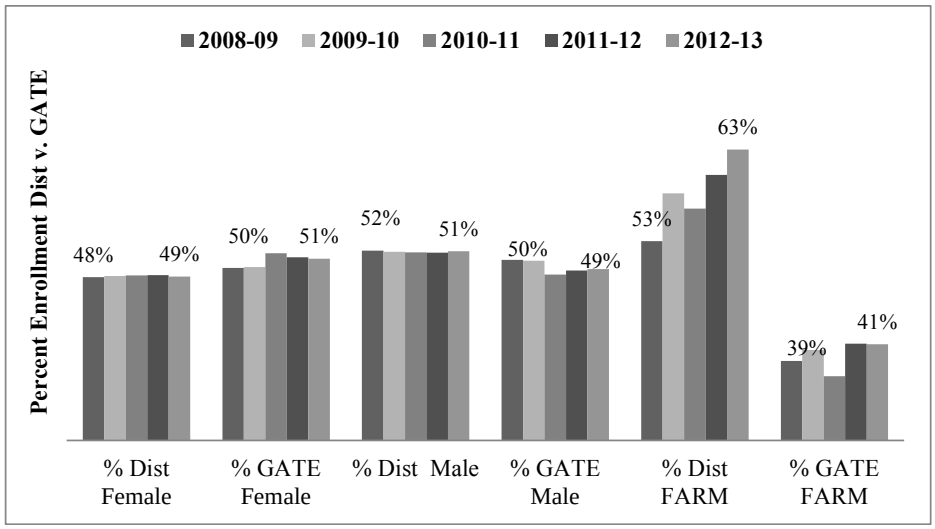
Exhibit 3.5.4 shows the following with regard to the representation of Asian American, Multi-racial, and exceptional education students, as well as English language learners, in GATE programs during school years 2008-09 through 2012-13:

- Enrollment was not representative of the ethnicity of these student groups.
- Asian American and Multi-racial students were overrepresented; exceptional education students and English language learners were underrepresented.

Exhibit 3.5.5 shows the participation of a third set of student groups in the GATE program.

Exhibit 3.5.5

Gifted and Talented Program Enrollment: Set 3
Tucson Unified School District
2008-2013



Sources: Advanced Learning Experiences - Selected Statistics for the 2013-14 Curriculum Audit, January 22, 2014, Department of Accountability and Research, TUSD (Excel spreadsheet).

Exhibit 3.5.5 highlights the following concerning district enrollment and GATE representation of female, male, and economically disadvantaged (FARM) students from 2008-09 through 2012-13:

- GATE participation of male and female students was consistent with their representation in the general student population.
- FARM students continued to be underrepresented, and their representation remained static even as their percentage of the district population increased from 53 percent to 63 percent.

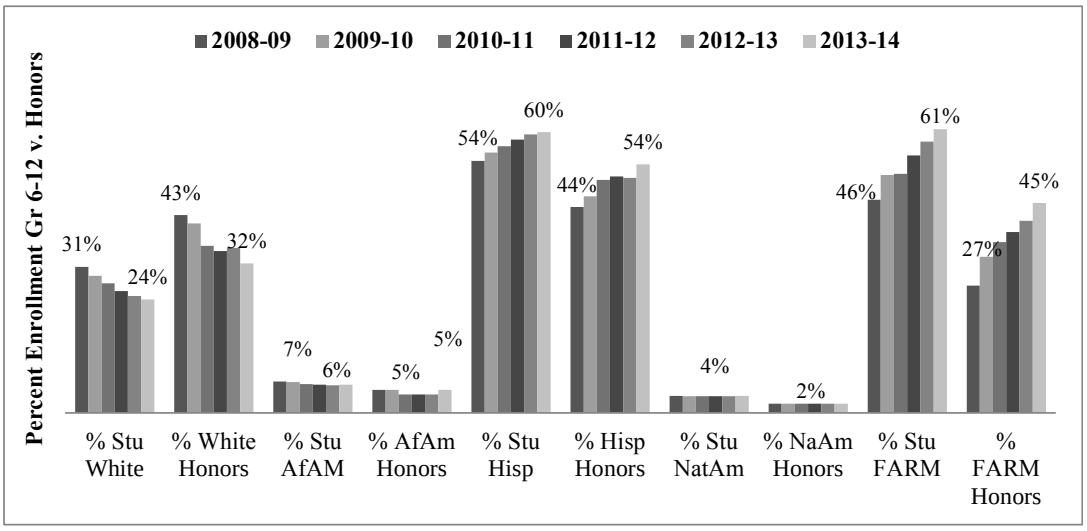
Overall, enrollment in the GATE program was not representative of student groups that constitute the district population. White, Asian, and Multi-racial students were overrepresented, while English language learners as well as economically disadvantaged, African American, and exceptional education students were underrepresented. A community member said of the GATE program, "Minority students in TUSD have always been discriminated against because they were minority…because they spoke a language other than English and because their English was not as proficient as some desired….[T]he tests used for placement in gifted classes have been biased culturally….."

Auditors found that the GATE program had multiple delivery models (pull-out, clustering, and self-contained classrooms) that varied across schools without an identifiable rationale. A district administrator told auditors, "There is nothing in writing to identify the rationale for the current [distribution of Advanced Learning Experiences among schools (e.g., gifted and talented and honors programs, AP, and the International Baccalaureate)]." Further, those varied models did not generate consistent student achievement results (see Finding 3.3).

Honors programs available to students in grades 6 through 12 reflected patterns of over- and under-representation similar to those auditors identified in the GATE program. Exhibits 3.5.6 and 3.5.7 show the participation of selected groups in the honors program.

Exhibit 3.5.6

Honors Program Enrollment: Set 1
Tucson Unified School District
2008-2014



Sources: Advanced Learning Experiences - Selected Statistics for the 2013-14 Curriculum Audit, January 22, 2014, Department of Accountability and Research, TUSD (Excel spreadsheet).

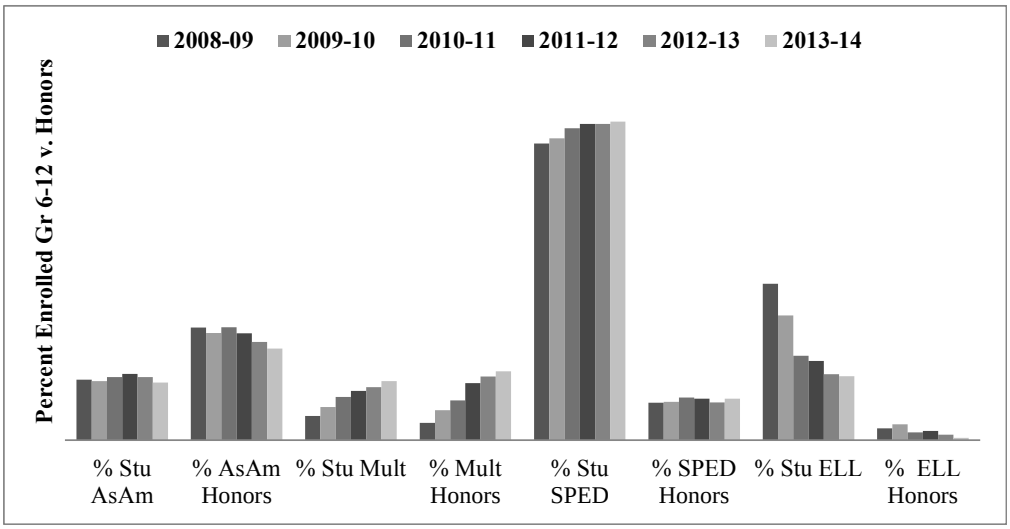
Exhibit 3.5.6 shows the following with regard to the representation of White, African American, Hispanic, Native American, and economically disadvantaged (FARM) students in the honors program for school years 2013-14:

- Honors enrollment was not representative of overall student demographics.
- White students were overrepresented by approximately 12 points throughout the five-year period, even as their representation in the overall district population declined.
- African American and Native American students were slightly underrepresented (by one or two percentage points) during each year.
- Hispanics were underrepresented by 10 percentage points at the beginning of the period; the representation gap narrowed to six points by the last year.
- Underrepresentation for FARM students narrowed from 19 points in the first year to 16 percentage points in the last.

Exhibits 3.5.7 show the participation of other relevant groups in the honors program.

Exhibit 3.5.7

Honors Program Enrollment: Set 2
Tucson Unified School District
2008-2014



Sources: Advanced Learning Experiences - Selected Statistics for the 2013-14 Curriculum Audit, January 22, 2014, Department of Accountability and Research, TUSD (Excel spreadsheet).

Exhibit 3.5.7 shows the following with regard to the representation of Asian American, Multi-racial, and exceptional education (SPED) students, as well as English language learners (ELL), in the honors program for the school years 2008-09 through 2013-14:

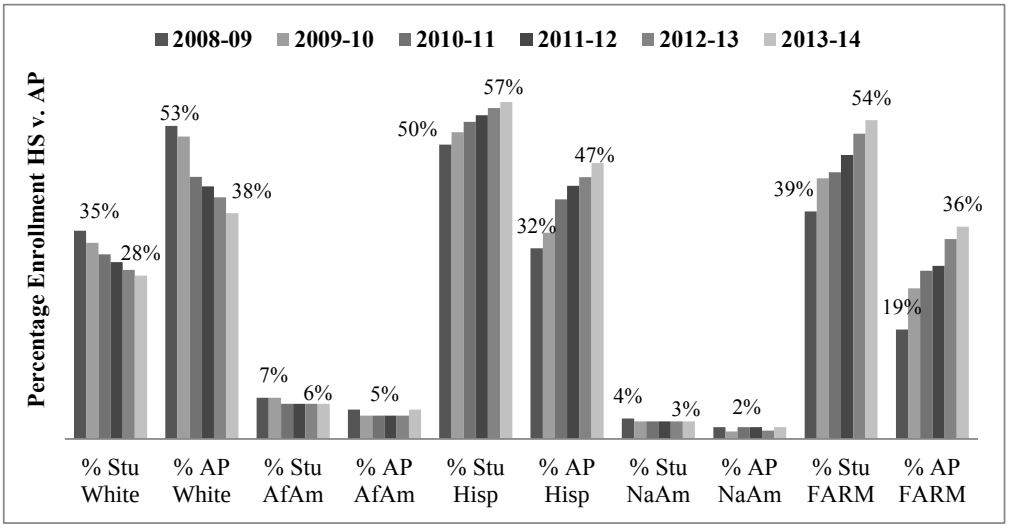
- Honors enrollment was not representative of the ethnicity of the overall student population in grades 6 through 12 for all groups.
- District enrollment of Asian American students in grades 6 through 12 remained constant at three percent, while Honors enrollments for those students declined by one percentage points.
- SPED students and ELL were underrepresented for the entire period.

In summary, White students were overrepresented in the honors program while ELL, Hispanic, exceptional education, and FARM students were substantially underrepresented.

The district offers Advanced Placement (AP) courses at its high schools. Auditors reviewed data to determine if enrollment in AP courses was representative of ethnic groups in the general student population and if those groups had similar levels of success on course examinations. Exhibits 3.5.8 and 3.5.9 compare overall student enrollment in grades 11 and 12 to enrollment in AP courses for those same grades. (Caution: AP enrollment percentages incorporate duplicate counts because a student may enroll in one or more AP courses.)

Exhibit 3.5.8

Advanced Placement Course Enrollment: Set 1
Tucson Unified School District
2008-14



Sources: Advanced Learning Experiences - Selected Statistics for the 2013-14 Curriculum Audit, January 22, 2014, Department of Accountability and Research, TUSD (Excel spreadsheet).

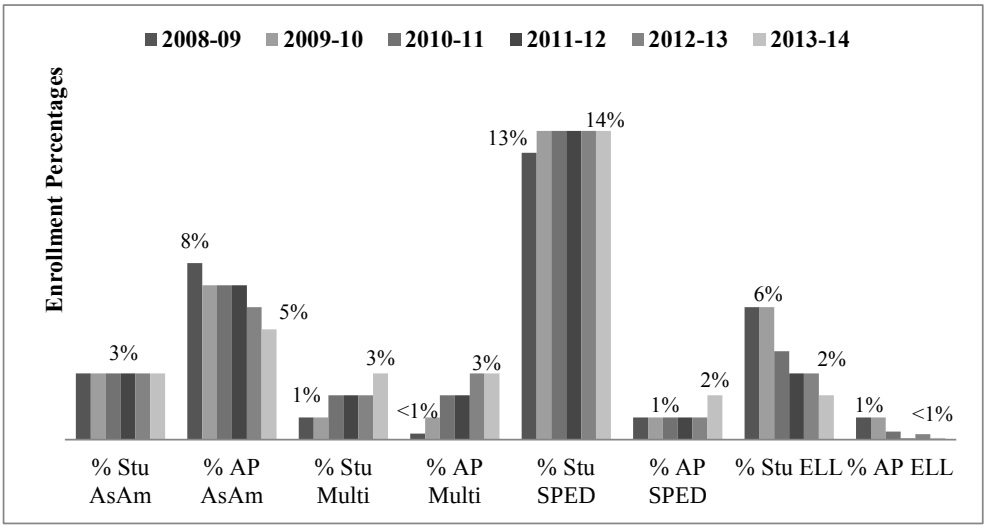
Exhibit 3.5.8 shows the following with regard to the representation of White, African American, Hispanic, Native American and economically disadvantaged (FARM) students enrolled in grades 9 through 12 AP courses during school years 2008-09 through 2013-14:

- Whites were overrepresented by 18 percentage points at the beginning of the period and by 10 percent age points in the final year.
- African American and Native American students were consistently underrepresented by one or two percentage points.
- Hispanics were under-represented, by 18 percentage points at the beginning of the period and by 10 percentage points at the end of the period.
- FARM students were underrepresented by approximately 18 percentage points for the entire period.
- There was little change in the relative representation of groups in the AP program.

Exhibit 3.5.9 compares the overall student enrollment in grades 9 through 12 to the enrollment of a second set of student subgroups in AP courses for those same grades.

Exhibit 3.5.9

Advanced Placement Course Enrollment: Set 2
Tucson Unified School District
2008-2014



Sources: Advanced Learning Experiences - Selected Statistics for the 2013-14 Curriculum Audit, January 22, 2014, Department of Accountability and Research, TUSD (Excel spreadsheet).

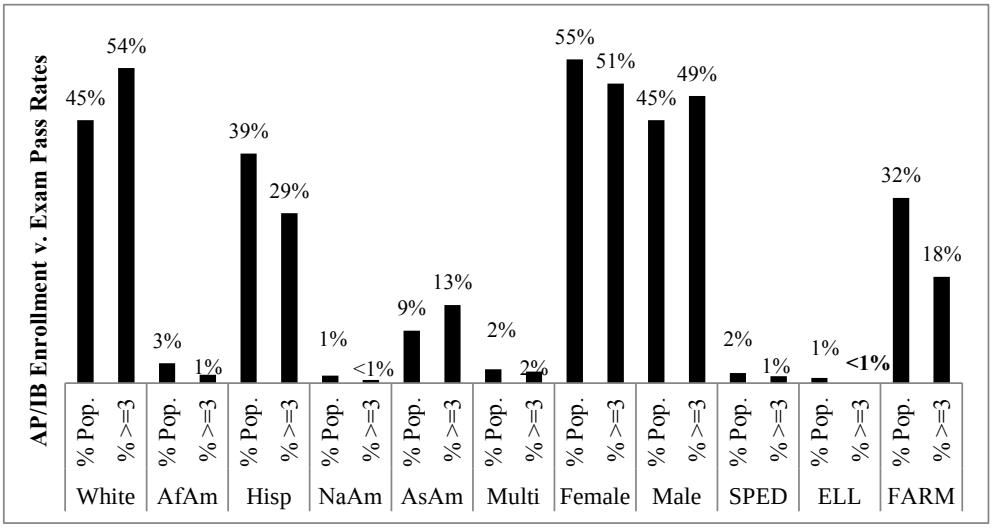
Exhibit 3.5.9 shows the following with regard to the representation of Asian American, Multi-racial, and exceptional education students (SPED) and English language learners (ELL) in AP courses during school years 2008-09 through 2013-14:

- High school enrollment of Asian Americans was constant at three percent; their AP over-representation of five percentage points in the first year declined to two percentage points in the last.
- Multi-racial student participation was consistent with their high school enrollment.
- SPED were underrepresented by approximately 12 points throughout. ELL were also underrepresented, in range of one to five points.
- In most instances, the relative representation of groups changed little or not at all.

Auditors also reviewed the performance of ethnic groups on *AP/IB* examinations. Exhibit 3.5.10 displays the following data for minority and non-minority students in grades 11 and 12 during school year 2012-13: overall district enrollment, enrollment in AP/IB courses, and pass rates on *AP/IB* examination. Pass rates are calculated using the percentage of students within each subgroup who scored 3 or above on a 5-point scale, making them eligible for college credit.

Exhibit 3.5.10

Advanced Placement and International Baccalaureate Examination Pass Rates
Tucson Unified School District
2012-13



Source: Advanced Placement Course Enrollment and Exam Score >= 3 - Selected Statistics for the 2013-14 Curriculum Audit, January 22, 2014, TUSD (Excel spreadsheet).

Exhibit 3.5.10 shows the following with regard to 2012-13 *AP/IB* enrollment and pass rates for ethnic and gender groups, exceptional education students (SPED), English language learners (ELL), and economically disadvantaged students (FARM):

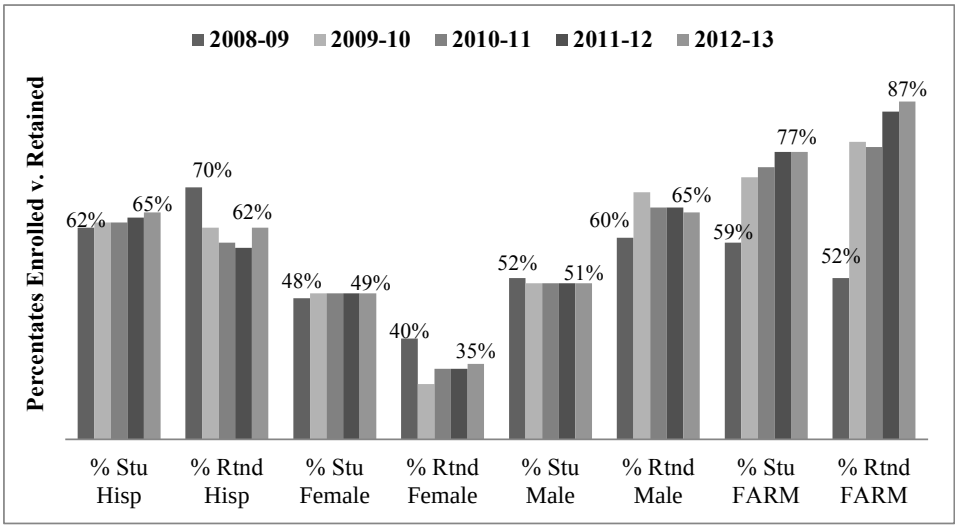
- Among ethnic groups, White students had the highest enrollment and pass rates at 45 and 54 percent, respectively; Hispanic students had the second highest enrollment and pass rates at 39 and 29 percent, respectively.
- Asian students ranked third with an enrollment rate of nine percent and a 13 percent pass rate.
- ELL, African American, Native American, Multi-racial, and SPED students had the lowest enrollment and pass rates, all at three percent or less.
- Females had higher enrollment rates than males (55 percent versus 45 percent) and slightly higher pass rates than males (51 percent versus 49 percent).
- FARM students constituted 32 percent of the enrollment and had a pass rate of 18 percent.
- White and Hispanic students had the highest enrollment and pass rates.

Retentions in Grade

Retaining a pupil in grade can promote or jeopardize the student's educational success. Retentions can also reflect bias or indicate that students are not receiving the full benefit of necessary or customary support services. To identify retention trends, auditors reviewed statistics for the five most recent school years. Exhibits 3.5.11 through 3.5.13 compare district enrollment to retention rates for various student groups. Percentages reflect students who were enrolled on the last day of the school year, returned the following year, and remained in the same grade.

Exhibit 3.5.11

Retention Rates: Set 1
Tucson Unified School District
2008-13



Source: Student Retention (Grades K-8) - Selected Statistics for the 2013-14 Curriculum Audit, January 22, 2014, TUSD (Excel spreadsheet).

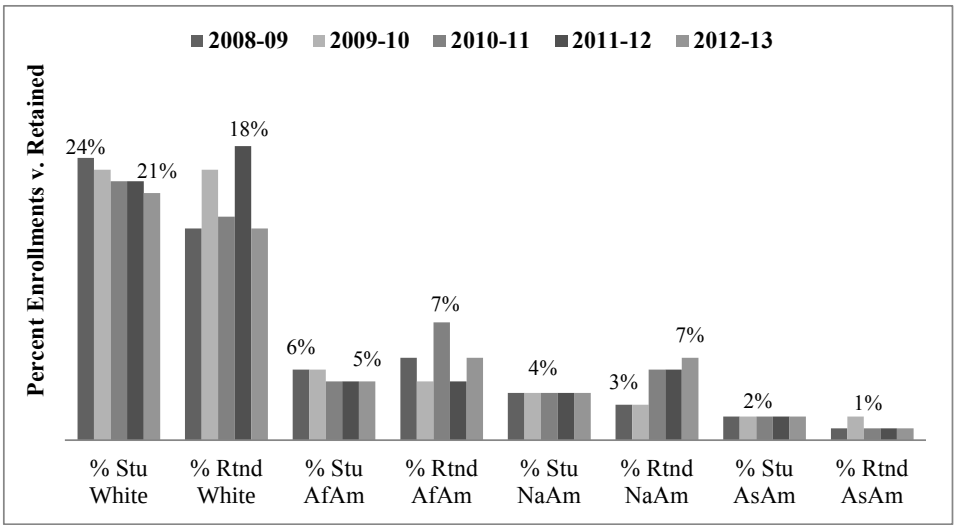
Exhibits 3.5.11 shows the following with regard to district enrollment and retention rates for Hispanic, male, female, and economically disadvantaged (FARM) students for school years. 2008-09 through 2012-13, for kindergarten through grade 8:

- Hispanic students were overrepresented by eight percentage points in 2008-09; that declined to three percentage points by 2012-13.
- Female enrollment remained almost unchanged, while their underrepresentation in retentions increased from eight percentage points in 2008-09 to 14 points in 2012-13. During the same period, male overrepresentation in retentions increased to 14 percentage points.
- FARM students were overrepresented by seven points during the first year; by the last year, overrepresentation had risen to 10 percentage points.

Exhibits 3.5.12 compares district enrollment to retention rates for a second set of student groups.

Exhibit 3.5.12

Retention Rates: Set 2
Tucson Unified School District
2008-13



Source: Student Retention (Grades K-8) - Selected Statistics for the 2013-14 Curriculum Audit, January 22, 2014, TUSD (Excel spreadsheet).

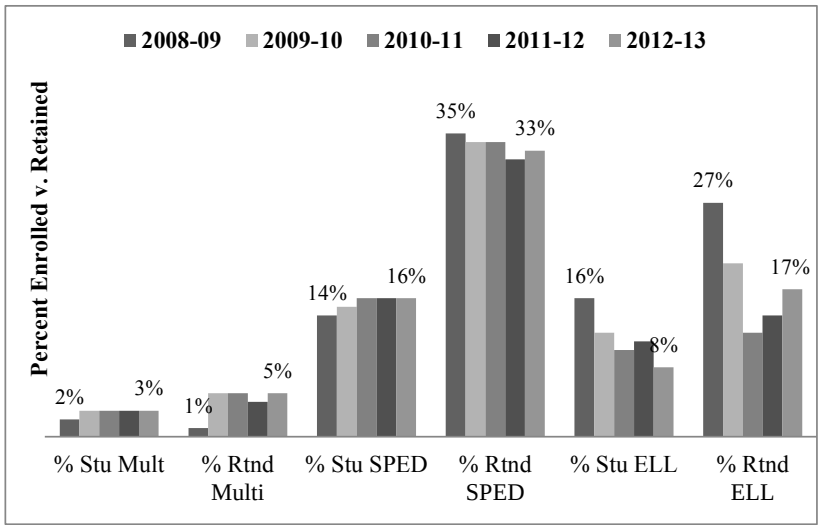
Exhibits 3.5.12 shows the following with regard to district enrollment and retention rates for Whites, African Americans, Native Americans, and Asian Americans for school years 2008-09 – 2012-13, kindergarten through grade 8:

- Although there were spikes over the years, retention rates for White, African American, and Asian American students were the same at the beginning and end of the review period, 18, seven, and one percentage points, respectively.
- Whites and Asian Americans were slightly underrepresented in retentions, while African Americans and Native Americans were slightly overrepresented.
- Native American students experienced a gradual rise in retention rates.

Exhibits 3.5.13 compares district enrollment to retention rates for a third set of student groups.

Exhibit 3.5.13

Retention Rates: Set 3
Tucson Unified School District
2008-13



Source: Student Retention (Grades K-8) - Selected Statistics for the 2013-14 Curriculum Audit, January 22, 2014, TUSD (Excel spreadsheet).

Exhibits 3.5.13 shows the following with regard to district enrollment and retention rates for Multi-racial and exceptional education (SPED) students and English language learners (ELL), for 2008-09 through 2012-13, kindergarten through grade 8:

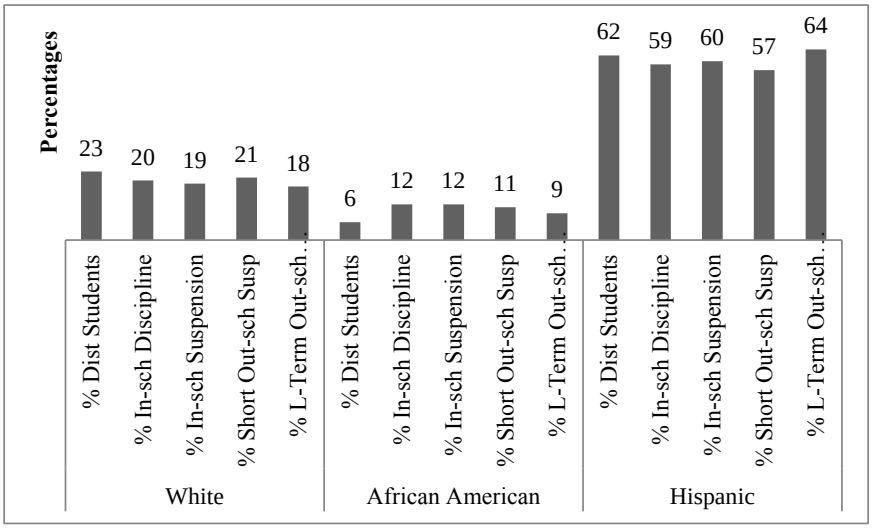
- Multi-racial retention rates increased slightly, but the group was not greatly overrepresented.
- SPED students were substantially overrepresented compared to the district's SPED enrollment; the SPED retention rate fell by just two points over five years.
- Retention rates for ELL also declined by ten points over the 5-year period. Recent trends show that ELL enrollments declined as retention rates increased.
- There was little or no improvement in retention rates for these groups.

Overall, Exhibits 3.5.11 through 3.5.13 show that retention rates for most groups have been static, males and economically disadvantaged (FARM) students were substantially overrepresented, African Americans and Native Americans were slightly overrepresented, and White and Asian Americans were slightly underrepresented in retentions.

Auditors analyzed disciplinary actions for evidence of overrepresentation. Exhibits 3.5.14 and 3.5.15 contain the results of those analyses.

Exhibit 3.5.14

Disciplinary Rates: Set 1
Tucson Unified School District
2012-13



Source: Document 1549-10, Appendix 9, Unitary Status Plan Report, filed by TUSD with the District Court of Arizona, 01/31/14.

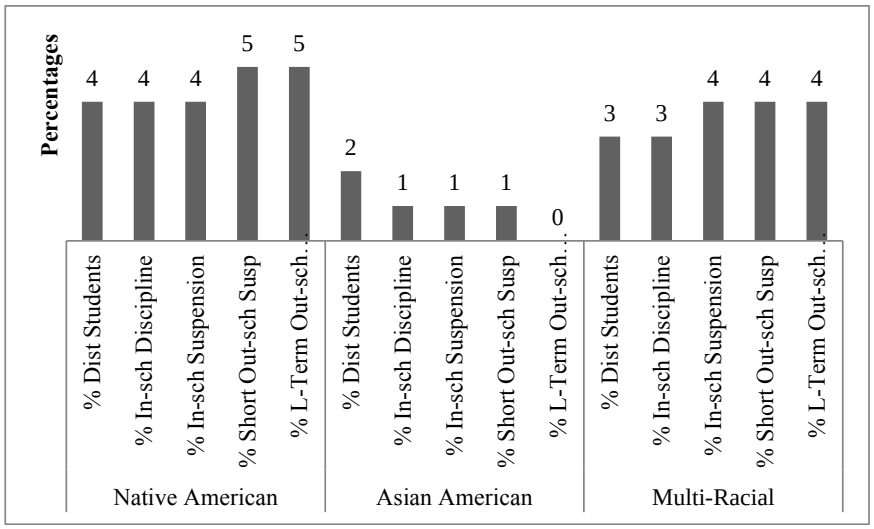
Exhibit 3.5.14 displays school year 2012-13 district enrollment rates and disciplinary rates for White, African American, and Hispanic students and supports the following observations:

- Whites comprised 23 percent of the district's enrollment, 20 percent of in-school disciplinary actions, 19 percent of in-school suspensions, 21 percent of short out-of-school suspensions, and 18 percent of the long-term, out-of-school suspensions. Overall, White students were slightly underrepresented compared to their percentage of the district's student population.
- African Americans constituted six percent of the student population but approximately 12 percent of all disciplinary actions except long-term, out-of-school suspensions.
- Hispanics constituted 62 percent of the student population and were slightly underrepresented in all disciplinary actions, except long-term, out-of-school suspensions, where they were overrepresented by two percentage points.

Exhibit 3.5.15 compares enrollment and disciplinary rates for the second set of student groups.

Exhibit 3.5.15

Disciplinary Rates: Set 2
Tucson Unified School District
2012-13



Source: Document 1549-10, Appendix 9, Unitary Status Plan Report, filed by TUSD with the District Court of Arizona, 01/31/14.

Exhibit 3.5.15 contains 2012-13 district enrollment rates and disciplinary rates for Native American, African American, and Multi-racial students and supports the following observations:

- Overall, disciplinary rates for the three groups tended to be in line with their representation in the overall student population.
- Native American and Multi-racial students tended to be slightly overrepresented in the more severe disciplinary actions that potentially remove the student from access to the curriculum.

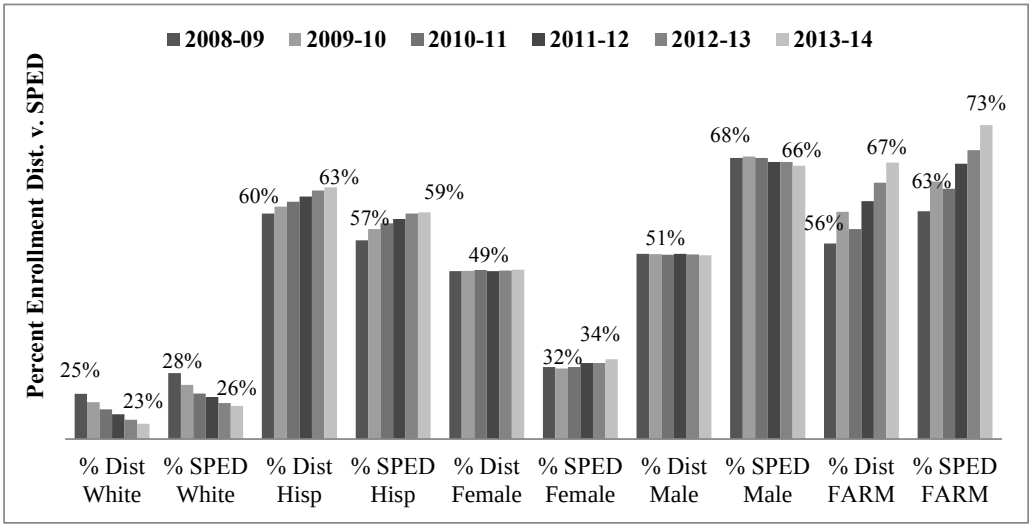
Exhibits 3.5.14 and 3.5.15 indicate that disciplinary rates for Native American, Asian American, and Multi-racial students were consistent with their representation in the larger student population. White students were slightly underrepresented. Hispanics were slightly underrepresented except in long-term suspensions. In most instances, African Americans were disciplined at twice their rate in overall student population

Exceptional Education

Inappropriate exceptional education (SPED) placements can also impede student access to the full benefits of the curriculum (see Finding 3.3). Accordingly, the audit team reviewed selected district statistics on the SPED population. Exhibits 3.5.16 and 3.5.17 compare district enrollment to the SPED population.

Exhibit 3.5.16

Exceptional Education Rates: Set 1
Tucson Unified School District
2008-2014



Source: TUSD SPED Ethnicity and Gender and SPED Monitoring Report, January 29, 2014, (Excel spreadsheet).

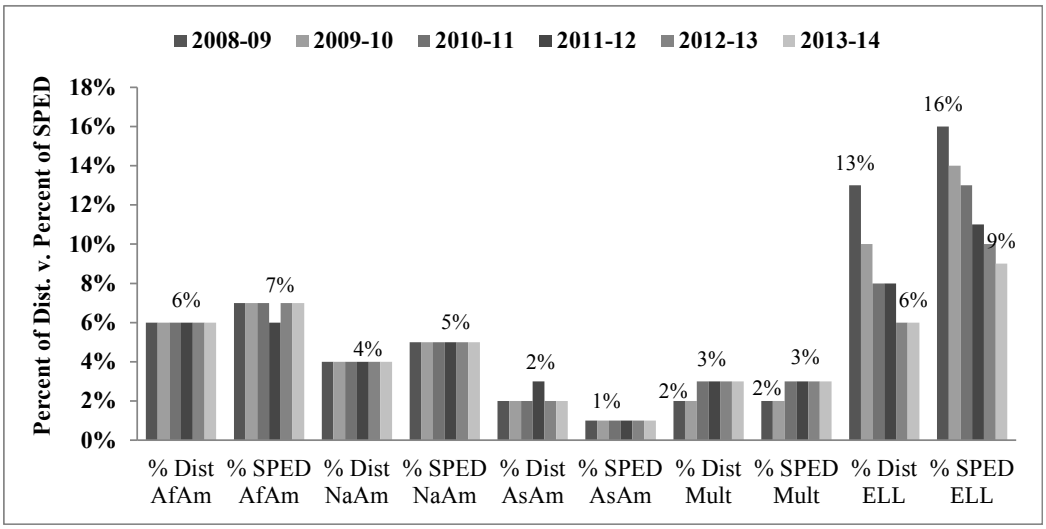
Exhibit 3.5.16 shows the following with regard to district and exceptional education (SPED) enrollments for White, Hispanic, female, male, and economically disadvantaged (FARM) students during school years 2008-09 through 2013-14:

- Except for FARM students, there was little movement of rates in the general student or SPED populations. Movement was confined to a range of three percentage points or less.
- Hispanic students were slightly under-represented.
- Females were underrepresented in a range of 17 to 15 points, with the range narrowing in recent years. Males were overrepresented in that same range.
- The percentage of FARM students in the district population and their rates of placement in SPED programs increased by approximately 10 percentage points each.

Exhibit 3.5.17 compares district enrollment to a second set of exceptional education student subpopulations.

Exhibit 3.5.17

Exceptional Education Rates: Set 2
Tucson Unified School District
2008-2014



Source: TUSD SPED Ethnicity and Gender and SPED Monitoring Report, January 29, 2014, (Excel spreadsheet).

Exhibits 3.5.17 shows the following with regard to the district and exceptional education (SPED) enrollments for African American, Native American, Asian American, and Multi-racial students along with English language learners (ELL) from 2008-09 to 2013-14:

- Except for ELL, representation of these groups in the overall student and special populations remained stable; over- or under-representation did not exceed two percentage points.
- The district ELL and SPED ELL populations declined by seven percentage points each; ELL were overrepresented in SPED programs by approximately three percentage points during the review period.

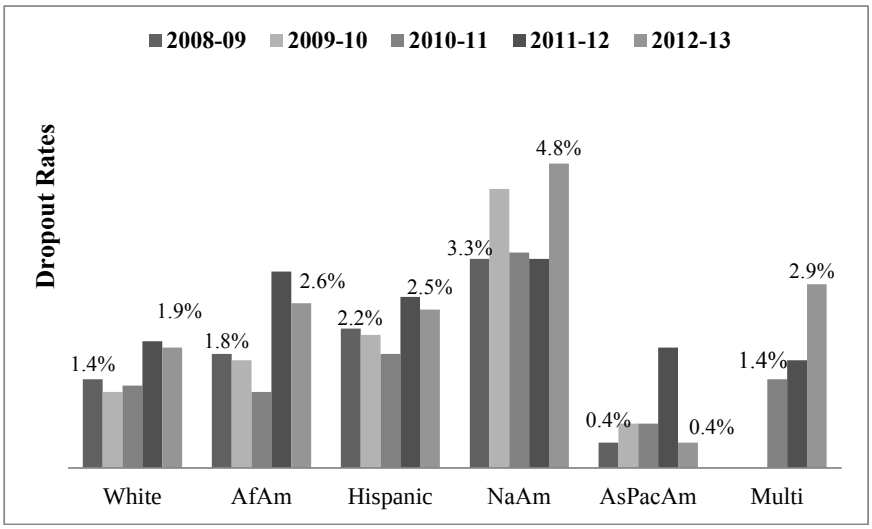
To summarize, male, FARM, and ELL students were overrepresented to varying degrees, from substantially to slightly. Hispanic students were slightly underrepresented. There was progress in reducing SPED placements for Hispanic students.

Dropout and Graduation Rates

Exhibit 3.5.18 displays dropout rates for the district's ethnic groups.

Exhibit 3.5.18

Dropout Rates by Ethnic Group
Tucson Unified School District
2008-2013



Source: TUSD Dropout and grad rates 4- and 5-year history through 12-13 (Excel spreadsheet).

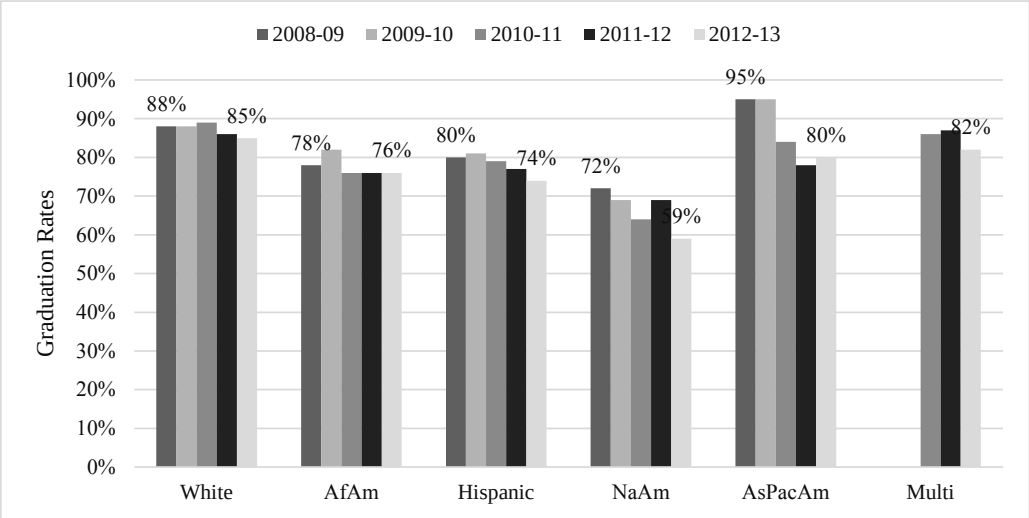
Exhibit 3.5.18 displays the following dropout rates for White, African American, Hispanic, Native American, Asian/Pacific American, and Multi-racial students, from 2008-09 to 2012-13.

- Rates increased for all groups except Asian/Pacific Americans, whose rate was the same (0.4 percent) at the beginning and end of the review period.
- The chart contains no Multi-racial student data for the first two years of the period because that designation was not used until school year 2010-11.

Increases in dropout rates have an inverse impact on rates graduation rates. Exhibit 3.5.19 displays graduation rates by ethnic group.

Exhibit 3.5.19

Graduation Rates by Ethnic Group
Tucson Unified School District
2008-2013



Source: TUSD Dropout and grad rates 4- and 5-year history through 12-13 (Excel spreadsheet).

Exhibits 3.5.19 displays four-year graduation rates for White, African American, Hispanic, Native American, Asian/Pacific American, and Multi-racial students for school years 2008-09 through 2012-13. The following are pertinent observations:

- Graduation rates declined for all student groups over the review period.
- The largest declines were experienced by Native Americans (13 percentage points) and Asian/Pacific Americans (15 percentage points).

Five-year graduation rates for the period from 2008-09 to 2011-12 (not shown in the exhibit) are more favorable, but even those data show declines for all student groups.

Most of the important equal access and equity trends identified in Exhibits 3.5.2 through 3.5.19 are summarized below in Exhibit 3.5.20.

Exhibit 3.5.20

Summary of Equity and Access Trends
Tucson Unified School District
2008-13

Student Group	Representation in activities								
	University High School	Gifted & Talented	Honors	Advanced Placement	Retention in Grade	Discipline actions	Special Ed Placement	Dropouts	Graduation
White	O++	O+	O++	O++	U	U+	O	+0.5%	-3%
Asian/Pacific American	O++	O	O	O+	U	U	U	NC	-15%
Multi-racial	O	O	E	E	O	O	E	+1.5%	-4%
African American	U++	U	U	U	O	O+	O	+0.8%	-2%

Exhibit 3.5.20 (continued)
Summary of Equity and Access Trends
Tucson Unified School District
School Years 2008-09 through 2012-13

Student Group	Representation in activities								
	University High School	Gifted & Talented	Honors	Advance Placement	Retention in Grade	Discipline actions	Special Ed Placement	Dropouts	Graduation
Hispanic/Latino	U++	U++	U+	U++	U	U	U	+0.3%	-6%
Native American	U	U	U	U	O	O	O	+1.5%	-13%
Economically Disadvantaged		U++	U++	U++	O++		O+		
English Language Learners		U+	U	U	O++		O		
Special Education		U++	U++	U++	O++				

Legend: O3< = Overrepresented by three percent or less. O>3 = Overrepresented by more than three percent. O>8 = Overrepresented by more than eight percent. U3< = Underrepresented by three percent or less. U>3 = Underrepresented by more than three percent. U>8 = Underrepresented by more than eight percent. E = representation is neither over nor under. NC = No substantial change over the five-year period.

Exhibit 3.5.20 summarizes the following trends for the period from 2008-09 through 2012-13, with some information from 2013-14:

- White and Asian/Pacific students were overrepresented in academically favorable Advanced Learning Experiences (ALE) and underrepresented in retentions and disciplinary actions.
- In all programs, Multi-racial students tended to be overrepresented or have representation consistent with their percentage of the district's student population.
- The following groups tended to be underrepresented in ALE and overrepresented in retentions and disciplinary actions: African Americans, Native Americans, economically disadvantaged (FARM), English language learners (ELL), and exceptional education students (SPED).
- Dropout rates increased and four-year graduation rates declined.

Closing Achievement Gaps

The board's first strategic goal commits the district to closing achievement gaps among student groups. The goal includes this statement: "Each TUSD school will eliminate the Achievement Gap." In order to help the district gauge the magnitude of this task, the audit team used a formula to calculate the number of years needed to close achievement gaps among major ethnic and other relevant groups at current rates of progress (called "years to parity" in this report). These calculations were based on the audit team's analysis of *AIMS* test scores in reading and mathematics for the five-year period from 2008-09 through 2012-13. Where group comparisons include Multi-racial students, the data are for school years 2009-10 through 2012-13. The Multi-racial classification did not exist prior to 2009-10.

Years to parity calculations are contained in tables at Appendix C and are summarized in the exhibits that follow in this section. The appendix also includes detailed explanations of the calculation methodology.

Simply stated, years to parity estimates were prepared by calculating, for a grade and subject, the gap between two groups at the beginning and end of a five-year period (2008-09 through 2012-13) to determine the annual rate of change of the lagging groups during that period. That rate change was then divided into the gap at the end of the period to determine the number of years necessary to close the gap, provided no interventions influence the annual rate of change. In these calculations, the leading group was high-scoring White students, with only three exceptions. The lagging groups were, in the majority of instances, African Americans, Asian Americans, Hispanics, Native Americans, Multi-racial students, English language learners (ELL), economically

disadvantaged students (FARM), and exceptional education students (students with disabilities or SPED). The data in the appendix tables and exhibits that follow (Exhibits 3.5.21 through 3.5.34) must be used with the following cautions:

- Calculations were based on the average change in pass rates during the five-year period from 2008-09 through 2012-13. These rates may increase or decline with each new testing period, and the years to parity calculations must be revised annually.
- For comparisons in grades 4 and 5, bar charts represent 2009-10 through 2012-13 (four years of data) because Multi-racial students had the highest pass rates in those years and grades; there were no Multi-racial data for 2008-09, since that classification did not exist.
- Students in each group change over the years and cohort analysis is the tool of choice for monitoring the progress of a single group through the grades.
- As higher levels of achievement are reached, gains are harder to realize.
- The years to parity analysis is but one indicator of the success of current initiatives in eradicating achievement gaps.

Note: Achievement, years to parity, and related issues concerning exceptional education (SPED) students and English language learners (ELL) were discussed in Finding 3.3 and will not be repeated in this finding.

Reading

Exhibit 3.5.21 compares 2008-09 and 2012-13 pass rates for White students on the *AIMS* reading tests. It also shows: (1) annualized pass rate growth over the five years and the additional percentages of White students needing a passing score to close the achievement gap with the leading group in 2012-13, in those few instances where White students did not have the highest pass rates.

Exhibit 3.5.21

White Students: *AIMS* Reading Tests, Grades 3-8 and 10
Pass Rates, Pass Rate Growth, and Rate Gains to Close Achievement Gaps
Tucson Unified School District
2008-09 and 2012-13

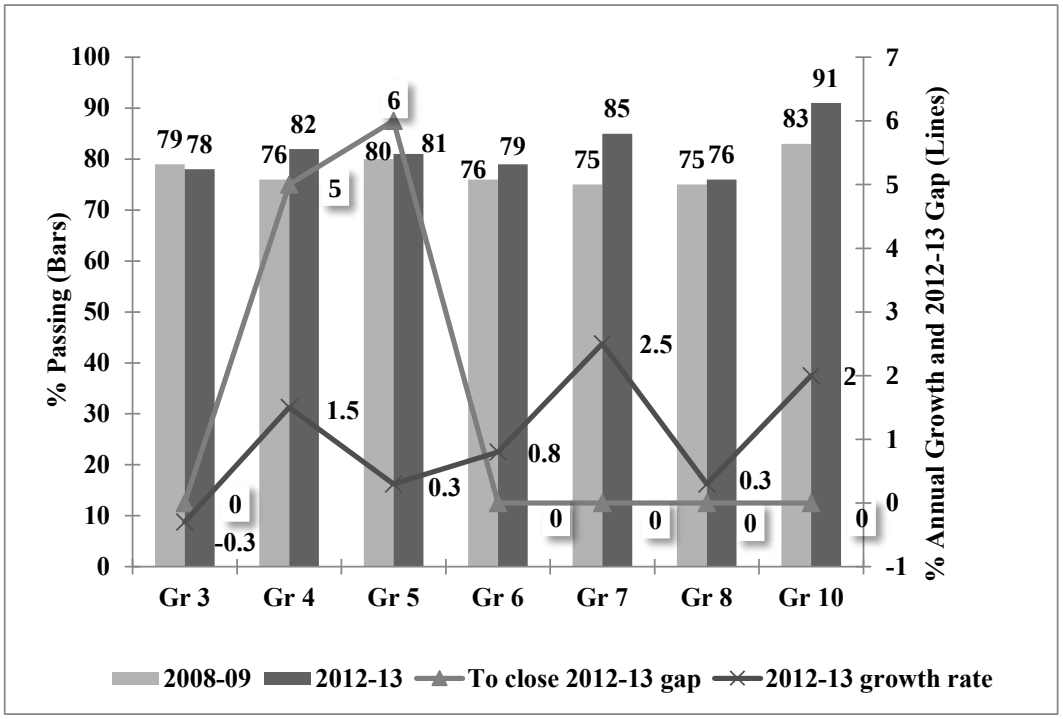


Exhibit 3.5.21 depicts selected trends on the *AIMS* reading tests for White students, by grade, during the period 2008-09 through 2012-13:

- Bars are read against the left-hand scale. The first set of bars indicates that in grade 3, 79 percent of students scored proficient or better in 2008-09; the rate declined to 78 percent in 2012-13. Collectively, the bars for all grades indicate increased proficiency rates, slight or substantial, in all grades, except grade 3.
- The trend line marked by triangles and shaded numbers (read against the right-hand scale) shows the additional percentages of students that were necessary to close achievement gaps with the leading group in 2012-13: five percentage points in fourth grade and six points in fifth grade. Zeroes are shown for the remaining grades because White students had the highest pass rates for those grades in 2012-13.
- Asterisks (*) beside grades 4 and 5 indicate that the achievement gaps in those grades between Whites and the leading Multi-racial group will never close at current rates of progress. (Progress was determined by computing the annualized pass rate growth or decline over the period 2009-10 through 2012-13).
- Annualized growth or decline of pass rates is shown on the "X" trend line (read against the right-hand scale) and indicates that the rates for White students grew at less than two percentage points in five of seven grades. Growth rates ranged from a minus 0.3 percentage points in the third grade to 2.5 percentage points in seventh grade.

Reminder: for grades 4 and 5, the bars represent 2009-10 and 2012-13 because Multi-racial students had the highest pass rates in those grades and there were no Multi-racial comparison data for 2008-09, since that classification did not exist.

Exhibit 3.5.22 compares 2009-10 and 2012-13 pass rates for Multi-racial (MR) students on the *AIMS* reading tests. It also shows the additional percentages of MR students who needed a passing score to close the achievement gap with the leading group in 2012-13, and annualized growth rate of pass rates on the tests.

Exhibit 3.5.22

Multi-racial Students: *AIMS* Reading Tests, Grades 3-8 and 10
Pass Rates, Pass Rate Growth, and Rate Gains to Close Achievement Gaps
Tucson Unified School District
2009-10 and 2012-13

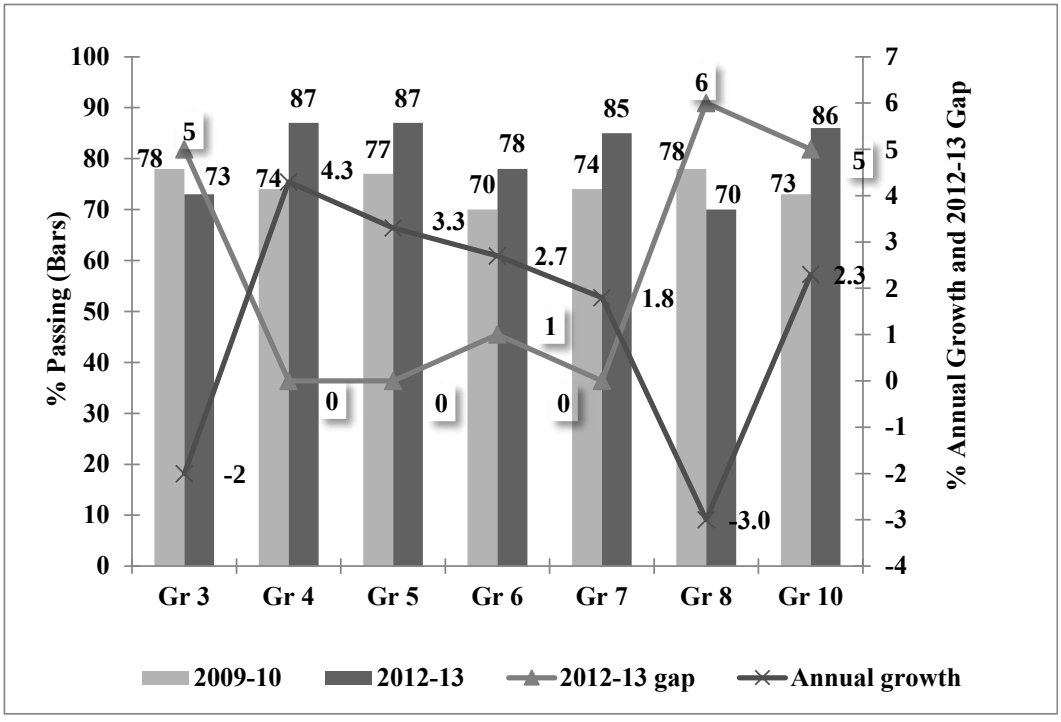


Exhibit 3.5.22 depicts selected trends on the *AIMS* reading tests for Multi-racial (MR) students, by grade, during the period 2009-10 through 2012-13:

- The bars (read against the left-hand scale) indicate pass rate declines in grade 3 and 8 and increases ranging from eight points in sixth grade to 13 points in grades four and ten.
- The "triangle" trend line with shaded numbers (read against the right-hand scale) shows the pass rate gains required to achieve parity with the leading group in 2012-13.
- In grades 4 and 5 that percentage is zero because MR students were the lead group; in seventh grade, it is zero because MR students achieved parity with the leading group.
- In other grades, percentages required to achieve parity with the leading group (Whites) were as follows: grades 3 and 10, five points; sixth grade, one point; and eighth grade, six points. The asterisk (*) beside grade 3 indicates that the achievement gap will never close at the annualized pass rate growth for the four-year period.
- Annualized pass rates growth are shown on the "X" trend line (read against the right-hand scale) and indicate that MR students had low to negative annualized growth rates, ranging from a plus 4.3 percentage points in grade 4 to a minus three percentage points in grade 8. The negative rate in the third grade indicates a widening gap between MR student and the leading group (Whites) that will never close at the 2012-13 growth rate of minus two percentage points.

Exhibit 3.5.23 compares 2008-09 and 2012-13 pass rates for African Americans on the *AIMS* reading tests, along with the additional percentages of African American students who needed a passing score to close the achievement gap with the leading group in 2012-13 and the annualized growth of pass rates on the tests.

Exhibit 3.5.23

African American Students: *AIMS* Reading Tests, Grades 3-8 and 10
Pass Rates, Pass Rate Growth, and Rate Gains to Close Achievement Gaps
Tucson Unified School District
2008-09 and 2012-13

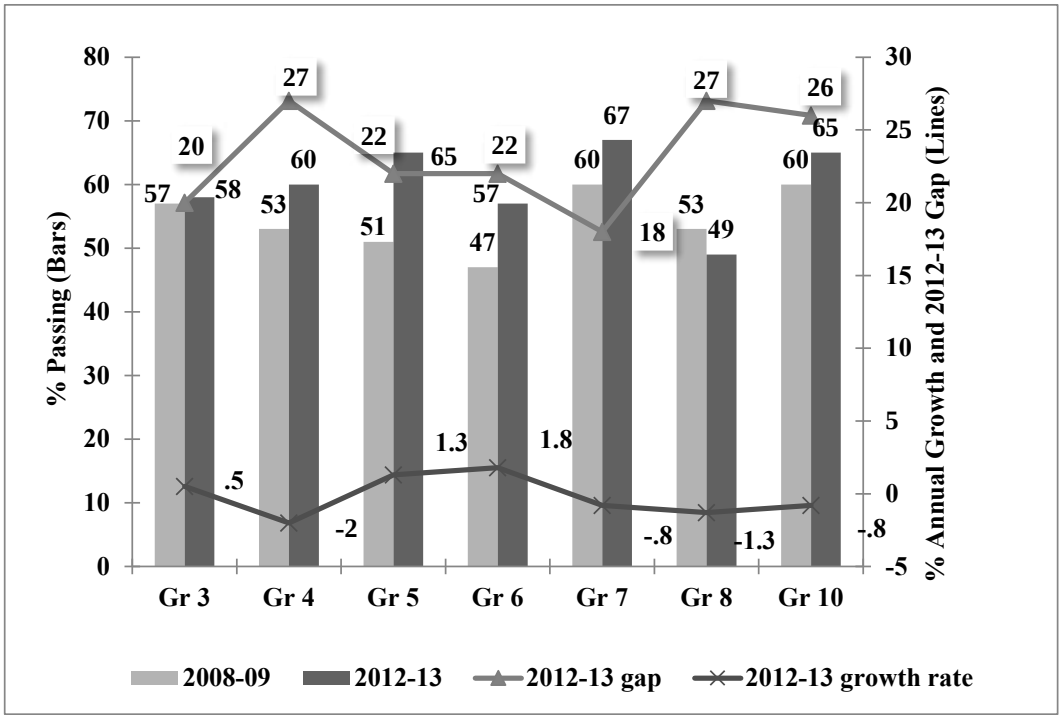


Exhibit 3.5.23 depicts selected trends in the performance of African American students, by grade, on the *AIMS* reading tests during the period 2008-09 through 2012-13:

- The bars (read against the left-hand scale) indicate low pass rates with small to moderate increases in most grades except the eighth; pass rate increases range from one point in third grade to 14 points in fifth grade.
- The "triangle" trend line with shaded numbers (read against the right-hand scale) shows the percentage growth in pass rates required to achieve parity with the leading group in 2012-13. Those rates ranged from 18 points in the seventh grade to 27 in grades 4 and 8.
- The asterisks (*) beside grades 4, 7, 8, and 10 indicate that achievement gap will never close at the annualized pass rate growth for the period.
- Annualized pass rate growth is shown on the "X" trend line (read against the right-hand scale) and indicates that African American students had low to negative annualized growth in pass rates, ranging from a minus two in fourth grade to a plus 1.8 percent in sixth grade. The negative rates in grades 4, 7, 8, and 10 indicate a widening gap between African American student and the leading groups that will never close at 2012-13 rates of progress.

Exhibit 3.5.24 compares 2008-09 and 2012-13 pass rates for Asian students on the *AIMS* reading tests and also shows additional percentages of Asian students who needed a passing score to close achievement gaps with the leading group in 2012-13, and annualized pass rate growth.

Exhibit 3.5.24

Asian Students: *AIMS* Reading Tests, Grades 3-8 and 10
Pass Rates, Pass Rate Growth, and Rate Gains to Close Achievement Gaps
Tucson Unified School District
2008-09 and 2012-13

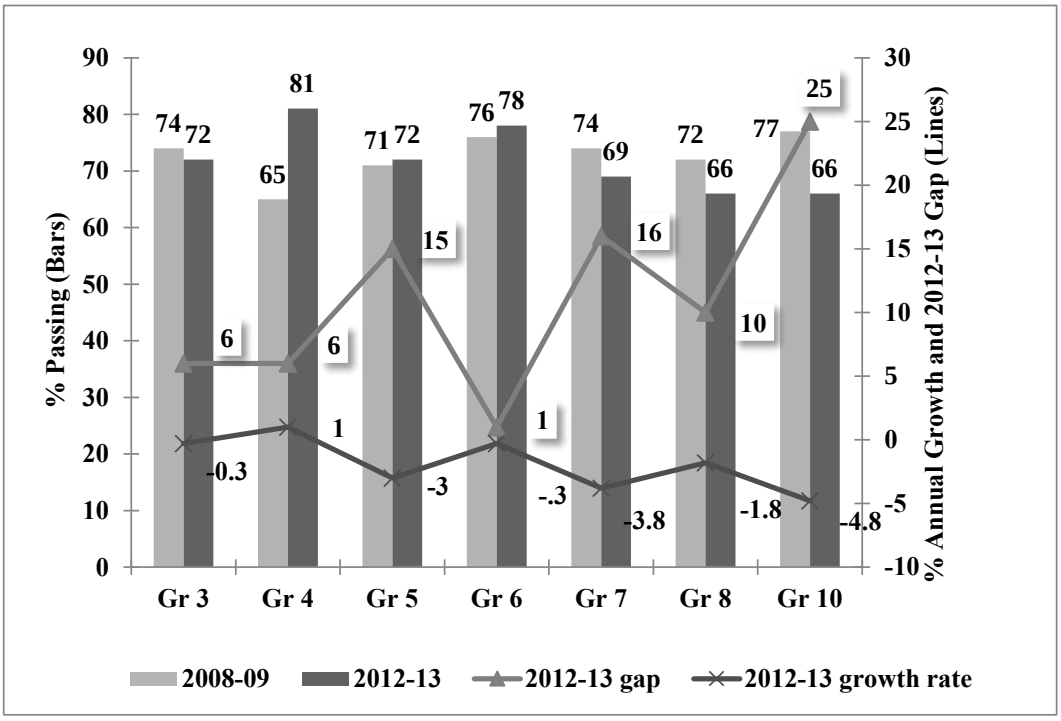


Exhibit 3.5.24 depicts selected trends for Asian students, by grade, on the *AIMS* reading tests during the period 2008-09 through 2012-13:

- The bars (read against the left-hand scale) indicate pass rates above 65 percent; rising pass rates in grades 4, 5, and 6; but declining rates in the remaining grades.

- The "triangle" trend line and shaded numbers (read against the right-hand scale) show that to achieve parity with the leading group in 2012-13, Asian students needed six percentage points in the third and fourth grades, 15 points in fifth grade, one point in sixth grade, 16 points in seventh grade, 10 points in eighth grade, and 25 points in tenth grade. These parity needs were based on the annualized growth in pass rates during the review period.
- Annualized pass rate growth is shown on the "X" trend line (read against the right-hand scale) and indicates that Asians had low to negative rates, ranging from one point per year in fourth and sixth grades to a minus 4.8 points in tenth grade. Negative rates indicate a growing gap between Asian student and the leading groups that will never close at 2012-13 growth rates.

Exhibit 3.5.25 compares 2008-09 and 2012-13 pass rates for Hispanic students on the *AIMS* reading tests. It also shows the additional percentages of Hispanic students who needed a passing score to close the achievement gap with the leading group in 2012-13, and annualized growth of pass rates.

Exhibit 3.5.25

Hispanic Students: *AIMS* Reading Tests, Grades 3-8 and 10
Pass Rates, Pass Rate Growth, and Rate Gains to Close Achievement Gaps
Tucson Unified School District
2008-09 and 2012-13

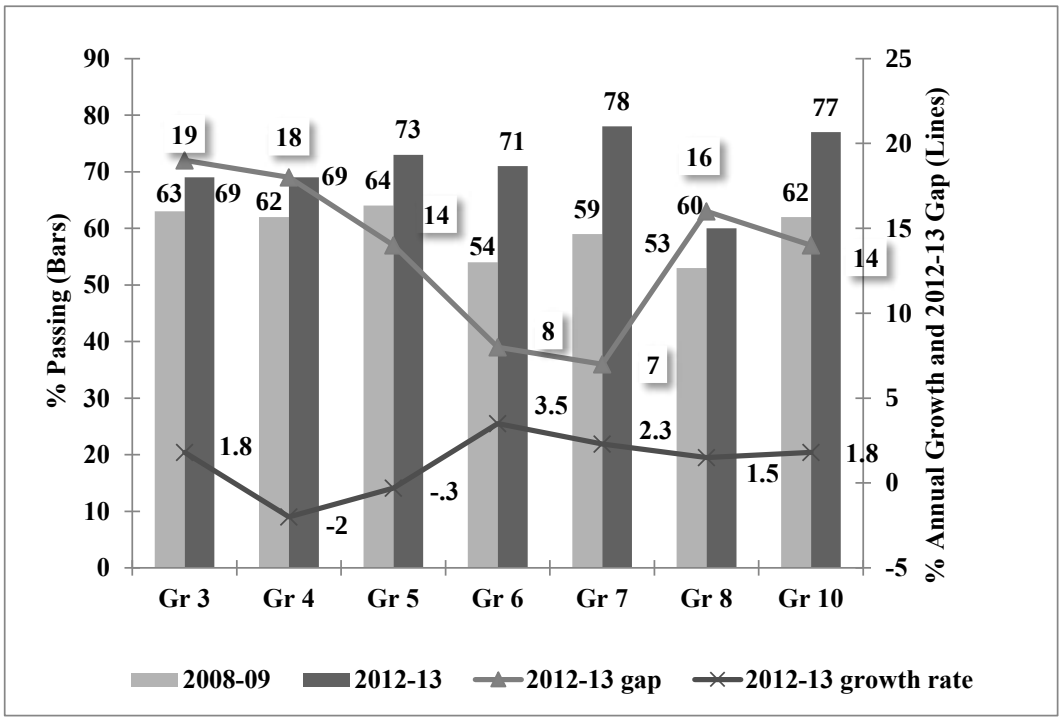


Exhibit 3.5.25 depicts selected trends on the *AIMS* reading tests for Hispanic students, by grade, during the period 2008-09 through 2012-13:

- The bars (read against the left-hand scale) indicate that all pass rates increased; those increases ranged from a low of six percent in third grade to a high of 19 percent in seventh grade.
- The "triangle" trend line and shaded numbers (read against the right-hand scale) show that to achieve parity with the leading group in 2012-13, Hispanic students needed the following growth in pass rates: 19 percentage points in grade 3, 18 points in grade 4, 14 in the fifth and tenth grades, eight points in sixth grade, seven points in seventh grade, 16 points in the eighth grade, and 14 points in grade 10.
- Annualized pass rate growth is shown on the "X" trend line (read against the right-hand scale) and indicates that Hispanics had low to negative growth, ranging from a minus two points in fourth grade,

to a high of 3.5 percentage points in sixth grade. Negative rates at grades 4 and 5 indicate growing gaps between Hispanics and leading groups that will never close at 2012-13 growth rates.

Exhibit 3.5.26 compares 2008-09 and 2012-13 pass rates for Native American students on the *AIMS* reading, as well as the percentages of Native American students who needed a passing score to close the achievement gap with the leading group in 2012-13, and annualized growth of pass rates.

Exhibit 3.5.26

Native American Students: *AIMS* Reading Tests, Grades 3-8 and 10
Pass Rates, Pass Rate Growth, and Rate Gains to Close Achievement Gaps
Tucson Unified School District
2008-09 and 2012-13

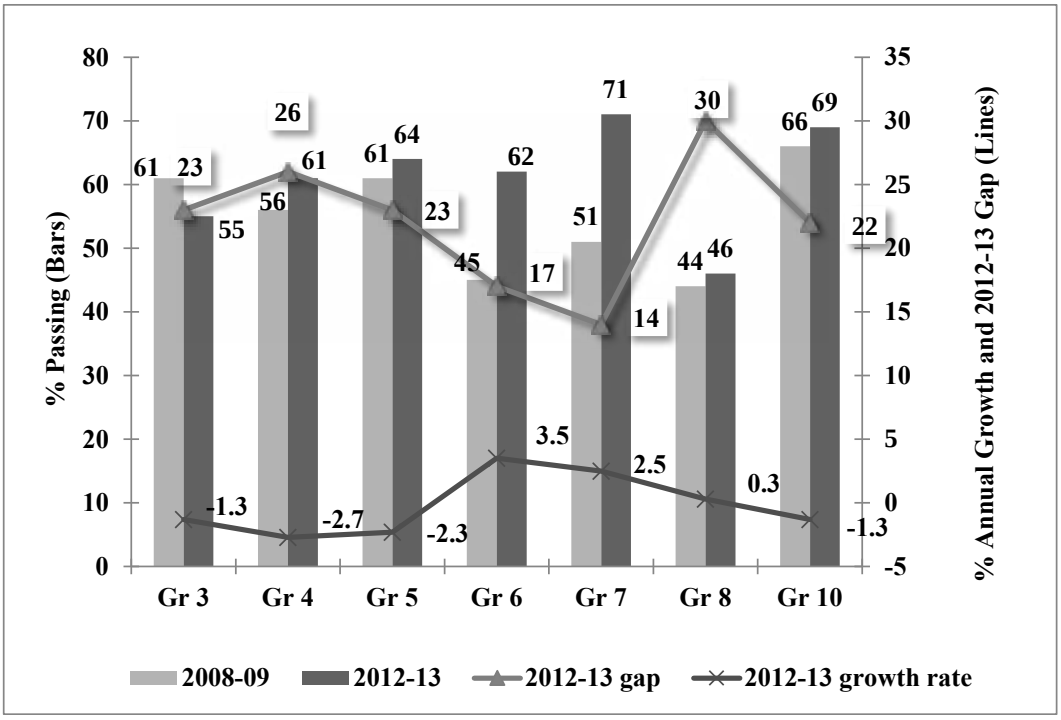


Exhibit 3.5.26 depicts selected trends on the *AIMS* reading tests for Native American students, by grade, during the period 2008-09 through 2012-13:

- Bars (read against the left-hand scale) show that pass rates for all grades, except third grade, increased, some substantially (e.g., 20 percentage points in grade 7), others modestly (e.g., two points in grade 8).
- The "triangle" trend line (with shadowed numbers and read against the right-hand scale) shows that to close gaps with leading groups, Native Americans needed to gain between 14 percentage points in grade 7 and 30 points in grade 8. Asterisks (*) beside grades 3, 4, 5, and 10 indicate that achievement gaps will never close at the pass rate growth in 2012-13.
- Annualized pass rate growth is shown on the "X" trend line (read against the right-hand scale) and indicates that Native Americans had low to negative annual pass rate gains, ranging from a minus 2.7 percentage points in fourth grade to a positive 3.5 points in grade 6. Negative rates indicate growing gaps between Native American students and the leading group that will never close at 2012-13 growth rates.

Exhibit 3.5.27 compares 2008-09 and 2012-13 pass rates for economically disadvantaged (FARM) students on the *AIMS* reading tests. It also shows the additional percentages of FARM students who needed a passing score to close achievement gaps with the leading groups in 2012-13, and annualized growth of pass rates.

Exhibit 3.5.27

Economically Disadvantaged Students: *AIMS* Reading Tests, Grades 3-8 and 10
Pass Rates, Pass Rate Growth, and Rate Gains to Close Achievement Gaps
Tucson Unified School District
2008-09 and 2012-13

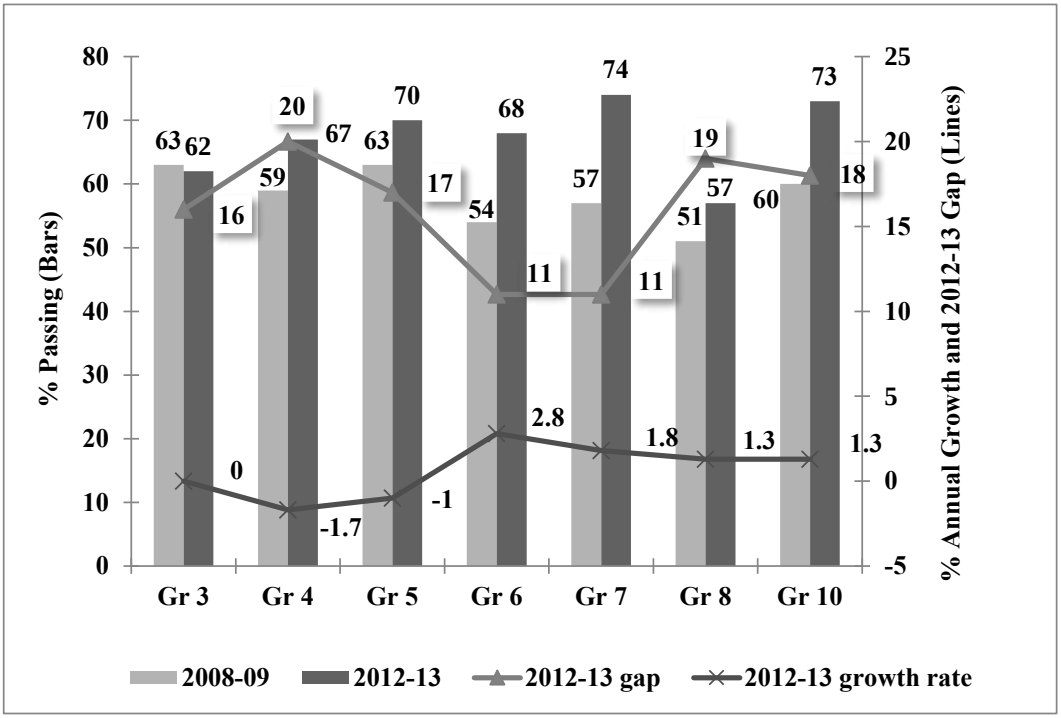


Exhibit 3.5.27 depicts selected trends for economically disadvantaged (FARM) students, by grade, on the *AIMS* reading tests for 2008-09 through 2012-13:

- Bars (read against the left-hand scale) show that with the exception of grade 3, pass rates for all grades showed improvement, from 17 points in grade 7 to six in grade 8.
- The "triangle" trend line (with shadowed numbers and read against the right-hand scale) shows that to close gaps with leading groups, FARM students needed to gain between 20 percentage points in grade 4 and 11 points in grades 6 and 7. Asterisks (*) beside grades 3, 4, and 5 indicate that achievement gaps will never close at 2012-13 growth in pass rates.
- Annualized pass rate growth is shown on the "X" trend line (read against the right-hand scale) and indicates that FARM students had low to negative annual growth rates during the period. They ranged from a minus 1.7 percentage points in fourth grade to 2.8 points in sixth grade. Negative rates indicate growing gaps between FARM students and the leading groups that will never close at 2012-13 growth in pass rates.

Mathematics

Exhibit 2.5.28 compares 2008-09 and 2012-13 pass rates for White students on the *AIMS* mathematics tests. The exhibit also shows the additional percentages of White students who needed a passing score to close achievement gaps with the leading group in 2012-13, and annualized growth of pass rates.

Exhibit 3.5.28

White Students: *AIMS* Mathematics Tests, Grades 3-8 and 10
Pass Rates, Pass Rate Growth, and Rate Gains to Close Achievement Gaps
Tucson Unified School District
2008-09 through 2012-13

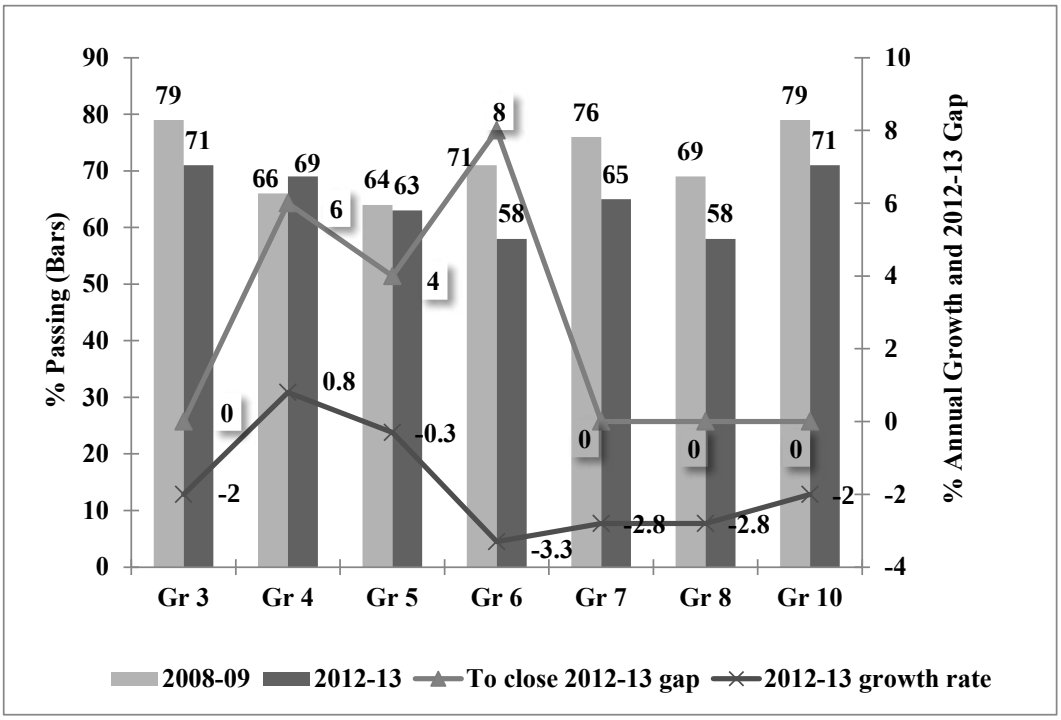


Exhibit 2.5.28 depicts selected trends for White students, by grade, on the *AIMS* mathematics tests during the period 2008-09 through 2012-13:

- Bars (read against the left-hand scale) show that pass rates declined in all grades except fourth grade. Most pass rates were at or below 70 percent.
- The "triangle" trend line (with shadowed numbers and read against the right-hand scale) shows that White students had the highest pass rates or were at parity in grades 3, 7, 8, and 10 (as indicated by zeroes (no achievement gaps)). In grades 4, 5, and 6, the pass rates necessary to close achievement gaps with the leading groups in 2012-13 were six percentage points in grade 4, four points in grade 5, and eight points in grade 6.
- Asterisks (*) beside grades 4 and 5 (e.g., Gr 4*) indicate that the achievement gaps in those grades will never close at the pass rate growths documented during the period.
- Annualized pass rate growth is shown on the "X" trend line (read against the right-hand scale). White students had low to negative annual growth rates that ranged from 0.8 percentage points in fourth grade to a minus 3.3 points in sixth grade. Negative rates indicate growing gaps between White students and leading groups that will never close at 2012-13 growth in pass rates.

Exhibit 3.5.29 compares 2009-10 and 2012-13 pass rates for Multi-racial (MR) students on the *AIMS* mathematics tests. It also shows the additional percentages of MR students who needed a passing score to close achievement gaps with leading groups in 2012-13, and annualized growth of pass rates.

Exhibit 3.5.29

Multi-racial Students: *AIMS* Mathematics Tests, Grades 3-8 and 10
Pass Rates, Pass Rate Growth, and Rate Gains to Close Achievement Gaps
Tucson Unified School District
2009-10 through 2012-13

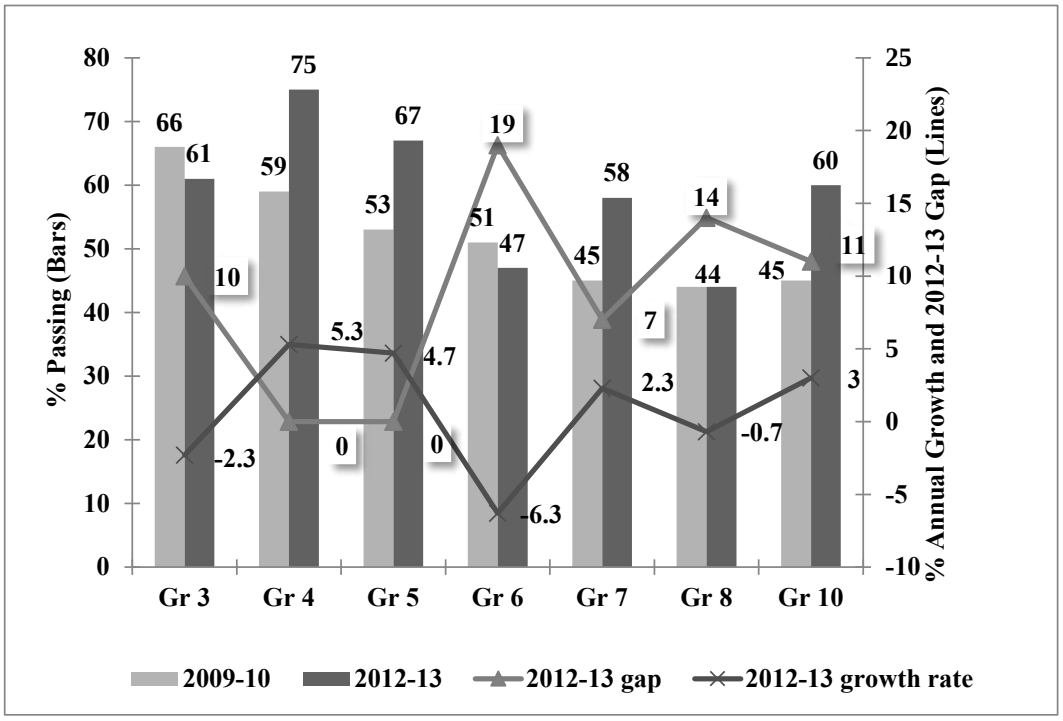


Exhibit 3.5.29 depicts selected trends for Multi-racial (MR) students on the *AIMS* mathematics tests, by grade, during the period from 2009-10 through 2012-13:

- The bars (read against the left-hand scale) show pass rate declines in grades 3 and 6. Increases range from 16 points in fourth grade to 13 points in grade 7. There was no change in grade 8.
- The "triangle" trend line with shaded numbers (read against the right-hand scale) shows the percentages of gains required to achieve parity with the leading group in 2012-13. In grades 4 and 5, zeroes indicate that MR students were the leading group. In other grades, percentages required to achieve parity with the leading group ranged from 19 points in sixth grade to seven points in seventh grade.
- The asterisks (*) beside grades 3, 6, and 8 indicate that achievement gaps will never close at the 2012-13 annualized growth in pass rates.
- Annualized pass rate growth is shown on the "X" trend line (read against the right-hand scale) and indicates that MR students had moderate to negative growth rates, ranging from plus 5.3 percentage points in fourth grade to a minus 6.3 points in grade 5. Negative rates indicate achievement gaps that are growing for MR students and will never close at 2012-13 pass rate growth.

Exhibit 3.5.30 compares 2008-09 and 2012-13 pass rates for African Americans on the *AIMS* mathematics tests, along with the additional percentages of African American students who needed a passing score to close achievement gaps with leading groups in 2012-13, and annualized growth of pass rates.

Exhibit 3.5.30

African American Students: *AIMS* Mathematics Tests, Grades 3-8 and 10
Pass Rates, Pass Rate Growth, and Rate Gains to Close Achievement Gaps
Tucson Unified School District
2008-09 through 2012-13

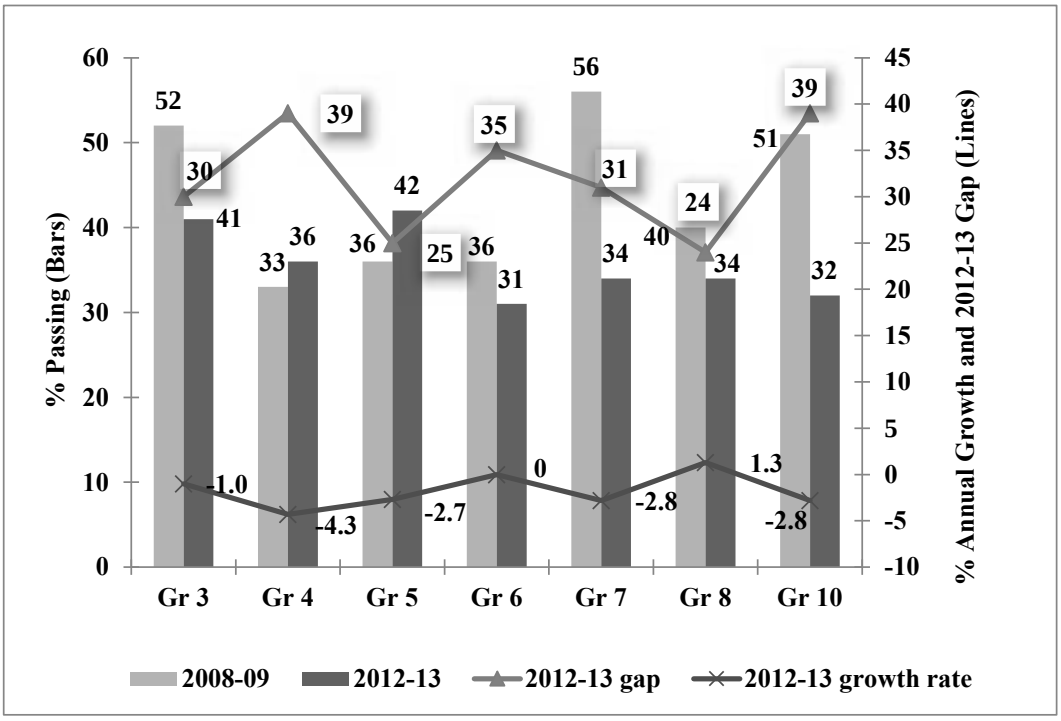


Exhibit 3.5.30 depicts selected trends for African American students on the *AIMS* mathematics tests, by grade, during the period from 2008-09 through 2012-13:

- The bars (read against the left-hand scale) indicate pass rates below 42 percent in 2012-13 in all grades and that pass rates declined in five of seven grades.
- The "triangle" trend line with shaded numbers (read against the right-hand scale) shows the percentages of gains required to achieve parity with leading groups in 2012-13. They ranged from 39 points in grades 4 and 10 to 24 points in grade 8. The asterisks (*) beside all grades, except grade 8, indicate achievement gaps that will never close at the 2012-13 pace of pass rate growth.
- Annualized pass rate growth is shown on the "X" trend line (read against the right-hand scale) and shows low to negative rates, ranging from a minus 4.3 percentage points in grade 4 to plus 1.3 points in grade 8. Negative rates indicate achievement gaps for African Americans that will never close at the 2012-13 pace of pass rate growth.

Exhibit 3.5.31 compares 2008-09 and 2012-13 pass rates for Asian students on *AIMS* tests in mathematics. It also shows the additional percentages of Asians who needed a passing score to close achievement gaps with leading groups in 2012-13, and annualized pass rate growth.

Exhibit 3.5.31

Asian Students: *AIMS* Mathematics Tests, Grades 3-8 and 10
Pass Rates, Pass Rate Growth, and Rate Gains to Close Achievement Gaps
Tucson Unified School District
2008-09 through 2012-13

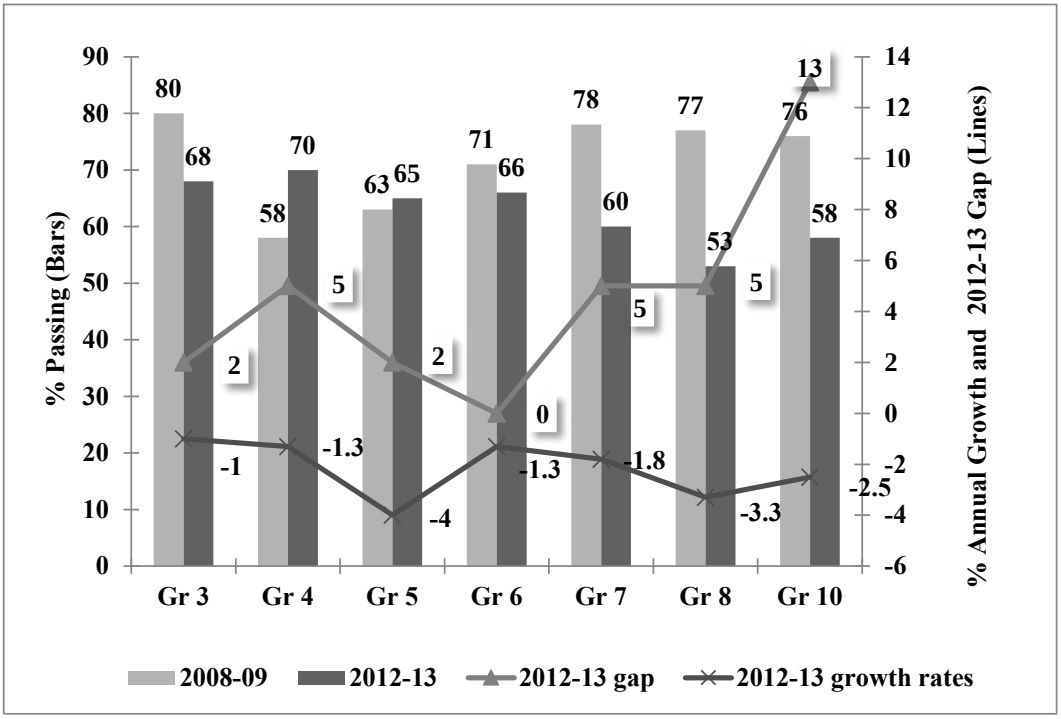


Exhibit 3.5.31 depicts selected trends for Asian students on the *AIMS* mathematics tests, by grade, during the period from 2008-09 through 2012-13:

- The bars (read against the left-hand scale) indicate that most pass rates declined in a range of five percentage points (grade 6) to 24 points (grade 8).
- The "triangle" trend line and shaded numbers (read against the right-hand scale) show that to achieve parity with the leading group in 2012-13, Asian students needed thirteen (grade 10) percentage points or less, except in sixth grade where they were the leading group. Asterisks (*) beside grades indicate the achievement gap will never close at pass rates growth for the period.
- Annualized pass rate growth is shown on the "X" trend line (read against the right-hand scale) and shows all negative rates, ranging from a minus one percentage point in third grade to minus four points in fifth grade. Negative rates indicate achievement gaps for Asians that will never close at the pass rates shown on the chart.

Exhibit 3.5.32 compares 2008-09 and 2012-13 pass rates for Hispanic students on the *AIMS* mathematics tests. It also shows the additional percentages of Hispanics who needed a passing score to close achievement gaps with leading groups in 2012-13, and annualized pass rate growth.

Exhibit 3.5.32

Hispanic Students: *AIMS* Mathematics Tests, Grades 3-8 and 10
Pass Rates, Pass Rate Growth, and Rate Gains to Close Achievement Gaps
Tucson Unified School District
2008-09 through 2012-13

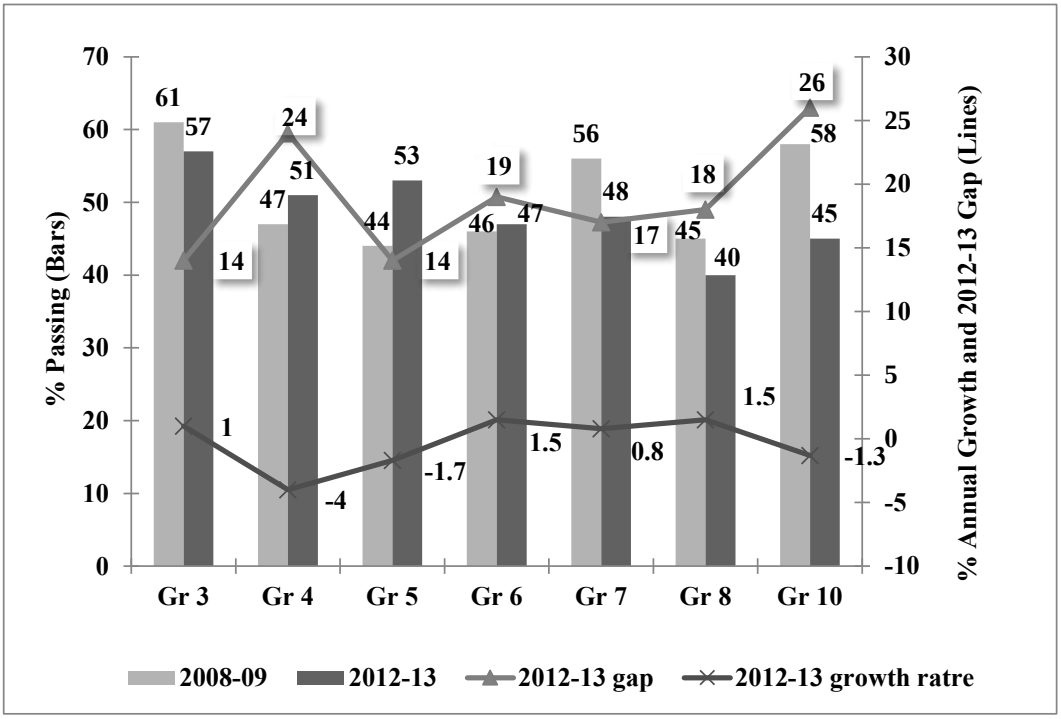


Exhibit 3.5.32 depicts selected trends for Hispanic students on the *AIMS* mathematics tests, by grade, during the period 2008-09 through 2012-13:

- The bars (read against the left-hand scale) indicate that pass rates declined in grades 3,7,8, and 10 but increased in grade 4 (four percentage points), grade 5 (nine points), and grade 6 (one point). All 2012-13 pass rates were below 58 percent.
- The "triangle" trend line and shaded numbers (read against the right-hand scale) show that to achieve parity with the leading group in 2012-13, Hispanic students needed from 14 to 26 percentage points. Asterisks (*) beside grades 4, 5, and 10 indicate that achievement gaps will never close at annualized pass rates for the period.
- Annualized pass rate growth is shown on the "X" trend line (read against the right-hand scale) and shows that rates ranged from minus four percentage points in grade 4 to a plus 1.5 points in grades 6 and 8. Negative rates indicate achievement gaps for Hispanic students that will never close at annualized pass rates for the period.

Exhibit 3.5.33 compares 2008-09 and 2012-13 pass rates for Native American students on the *AIMS* mathematics tests, along with the additional percentages of Native American students who needed a passing score to close achievement gaps with leading groups in 2012-13, and annualized growth of pass rates on the tests.

Exhibit 3.5.33

Native American Students: *AIMS* Mathematics Tests, Grades 3-8 and 10
Pass Rates, Pass Rate Growth, and Rate Gains to Close Achievement Gaps
Tucson Unified School District
2008-09 through 2012-13

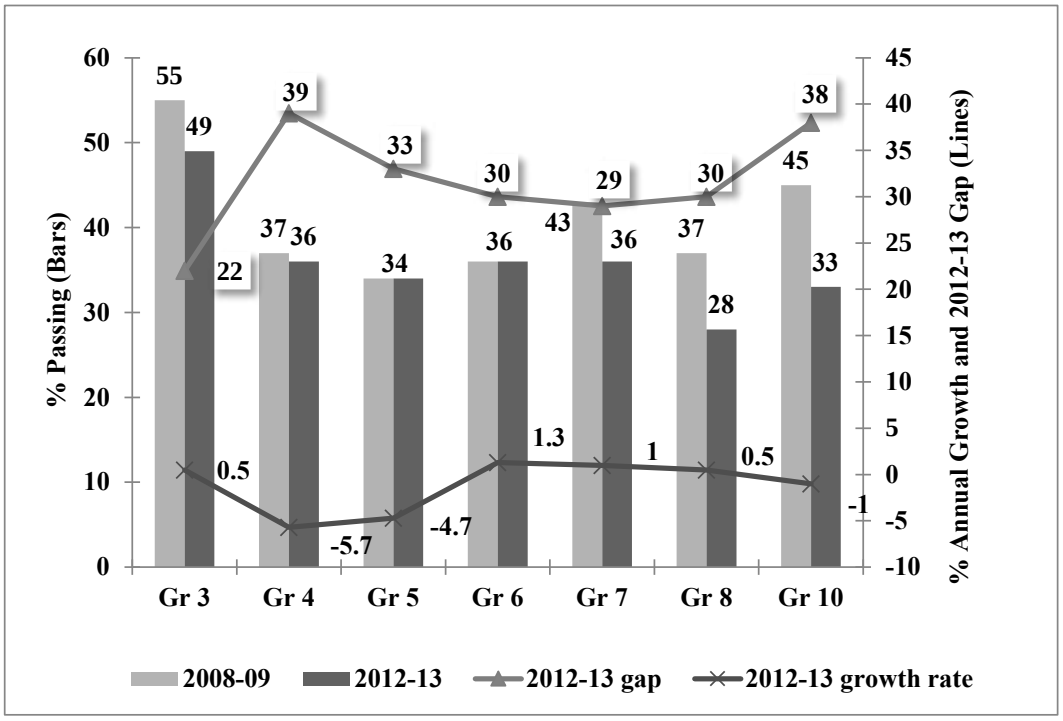


Exhibit 3.5.33 depicts selected trends for Native American students on the *AIMS* mathematics tests, by grade, during the period from 2008-09 through 2012-13:

- Bars (read against the left-hand scale) show no pass rate growth for grades 5 and 6; pass rates declined for the remaining grades. Most 2012-13 pass rates were below 38 percent.
- The "triangle" trend line with shadowed numbers (read against the right-hand scale) shows that to close gaps with the leading groups, Native Americans needed to gain between 22 percentage points (third grade) and 39 points (fourth grade). Asterisks (*) beside grades indicate that achievement gaps will never close at pass rate growth for the period.
- Annualized pass rate growth is shown on the "X" trend line (read against the right-hand scale) and shows that rates ranged from minus 5.7 percentage points in fourth grade to 1.3 percentage points in sixth grade. Negative rates indicate achievement gaps for these students that will never close at pass rate growth for the period.

Exhibit 3.5.34 compares 2008-09 and 2012-13 pass rates for economically disadvantaged (FARM) students on the *AIMS* mathematics tests. It also show the additional percentages of FARM students who needed a passing score to close achievement gaps with leading groups in 2012-13, and annualized growth of pass rates on the tests.

Exhibit 3.5.34

Economically Disadvantaged Students: *AIMS* Mathematics Tests, Grades 3-8 and 10
Pass Rates, Pass Rate Growth, and Rate Gains to Close Achievement Gaps
Tucson Unified School District
2008-09 through 2012-13

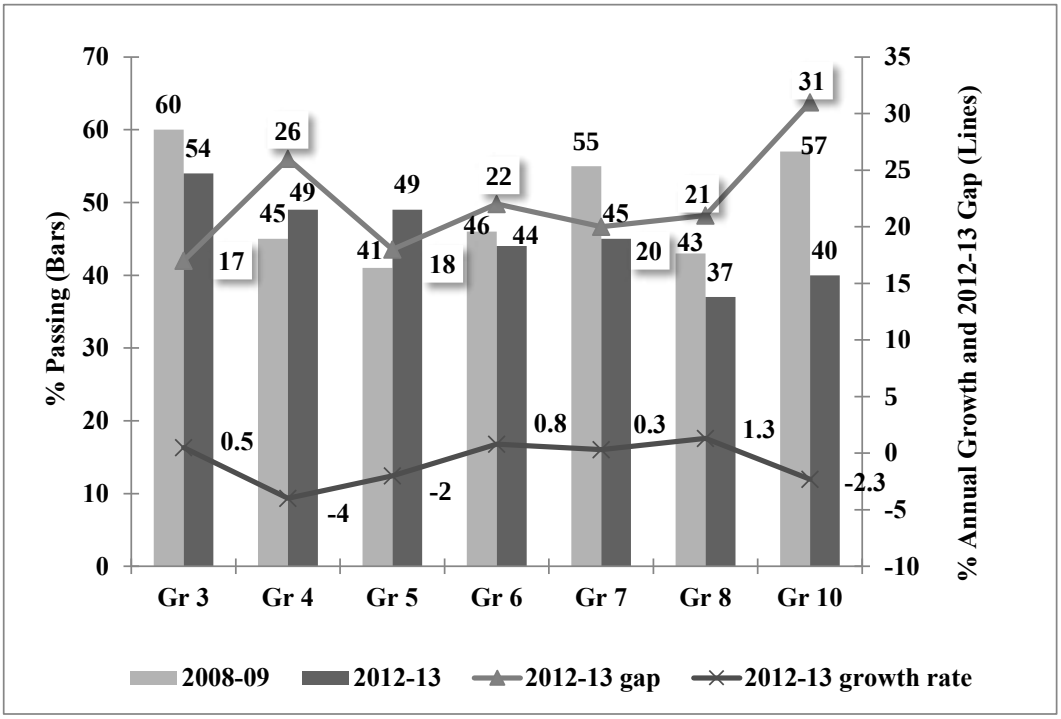


Exhibit 3.5.34 depicts selected trends on the *AIMS* mathematics tests for economically disadvantaged (FARM) students, by grade, during the period 2008-09 through 2012-13:

- Bars (read against the left-hand scale) show that the pass rate declined in all grades, except grades 4 and 5. Pass rates in 2012-13 were below 55 percent.
- The "triangle" trend line with shadowed numbers (read against the right-hand scale) shows that to close the gaps with the leading group, FARM students needed to gain between 17 percentage points (third grade) and 31 points (tenth grade). Asterisks (*) beside grades 4, 5, and 10 indicate achievement gaps that will never close at pass growth rates for the five-year period.
- Annualized pass rate growth is shown on the "X" trend line (read against the right-hand scale) and indicates that rates ranged from minus four percentage points in fourth grade to a plus 1.3 points in eighth grade. Negative rates identify achievement gaps that will never close at the annualized growth in pass rates for the period.

The following observations summarize the performance trends noted in Exhibits 3.5.21 through 3.5.34 for student groups on the *AIMS* mathematics and reading tests, during the period 2008-09 through 2012-13 (2009-10 through 2013 for Multi-racial students):

- The annualized pass rate declined for most groups in most grades and was low or in negative territory. Negative annualized pass rates for lagging groups mean that achievement gaps with the leading groups will never close without an effective intervention.

- Positive pass rate gains were less than two percentage points for most groups in most grades.
- White students were the leading group in reading and mathematics for most grades. Multi-racial students were the leading group on both tests in grades 4 and 5. Asian students were the lead group on the sixth grade mathematics test.
- The pass rate on reading tests increased for White students, except in grade 3. Mathematics pass rates for White students declined on all tests, except in grade 4.
- African American reading test pass rates improved in most grades, but ranged between 57 and 67 percent. The exception was grade 8, in which the rate declined to 49 percent. In 2012-13, mathematics pass rates were under 37 percent in most grades.
- Asian students experienced pass rate declines in most grades and both subjects. Mathematics rates were below 70; reading pass rates ranged from 66 to 81 percent.
- Reading pass rates for economically disadvantaged (FARM) students improved, except in grade 3, with pass rates in the range of 57 to 74 percent. Most mathematics rates were below 50 percent and declined, except in grades 4 and 5.
- Hispanics pass rates in reading pass rates improved to levels at or above 70 percent; in 2012-13, mathematics pass rates in grades 6 through 10 declined below 50 percent.
- For Multi-racial students, pass rates improved in most grades and both subjects. Reading pass rates were above 70 percent; mathematics rates trended above 60 percent.
- Native Americans' pass rates in mathematics were stagnant or declined, with most below 37 percent. Reading pass rates improved, but most were below 65 percent in 2012-13.
- Of 98 grade-group combinations reviewed by auditors, 60 (61 percent) lagging groups were identified that can never close achievement gaps with leading groups, given the growth (or decline) of pass rates during the period from 2008-09 through 2012-13 (see Exhibit 3.5.35).

Exhibits 3.5.21 through 3.5.34 highlighted achievement gaps among student groups in reading and mathematics that will never close at the annualized growth in test pass rates documented for the period 2008-09 through 2012-13. Exhibit 3.5.35 summarizes those findings.

Exhibit 3.5.35

***AIMS* Tests in Reading and Mathematics:**
Achievement Gaps That Will Never Close
Tucson Unified School District
January 2014

Lagging Student Groups	Reading	Mathematics
	Grades	
African Americans	4, 7, 8, 10	3, 4, 5, 6, 7, 10
Asian Americans	3, 5, 6, 7, 8, 10	3, 4, 5, 7, 8, 10
English Language Learners	3, 8	4, 5, 6
Economically Disadvantaged	3, 4, 5	4, 5, 10
Exceptional Education	3, 4, 5	3, 4, 5, 10
Hispanics	4, 5,	4, 5, 10
Multi-racial	3	3, 6, 8,
Native Americans	3, 4, 5, 10	4, 5, 10
Whites	4, 5	4, 5
Source: Appendix C and some from Finding 3.3		

Exhibit 4.3.35 summarizes achievement gaps on *AIMS* reading and mathematics tests that will never close given pass rate growth trends for the period from 2008-09 through 2012-13 (2009-10 through 2013 for Multi-racial students). The table shows that:

- Mathematics is the most frequently cited subject in which gaps are not closing.
- African American and Asian American students were the most frequently cited groups for which gaps are not closing.

A district administrator told auditors, "[The Unitary Status Plan] and Title I overlap with students....We need to close achievement gap with the groups. One department cannot do it, we need to work together."

Overall, trends identified here are not moving in directions that would close achievement gaps.

Management Aspects of Equity and Equal Opportunity Requirement

There was a perception among some long-time observers of the district that little had changed over the years with regard to equity and equal access. A district administrator summed up the sentiments of many stakeholders interviewed by the audit team: "The inequalities that I see today are no different than those I experienced as a child in this district. We have not put policies in place or provided professional development to help teachers deal with the differences within our student population." One might ask why the district has not made more progress on those goals, after more than thirty years of being under court supervision to provide equal access and equity and allocated millions of dollars to do so. Based on interviews with auditors, it is apparent that some district stakeholders either do not understand the concepts of equity and equal access (as a legal requirement) and/or are not committed to it. Here is a sampling of comments:

- "[W]e do not have enough discussions about [equity and the Unitary Status Plan]….What I feel is [that] equity is uncomfortable for others on the board. When we try to [discuss] it, there is disagreement on what we implement." (Board Member)
- "The Unitary Status Plan has so many components. It's supposed to be systemically adopted….[It] is not a cafeteria plan." (Community Member)
- "There are major financial issues in buildings because of how they have chosen to use their money and staff; [it was] impossible to provide equity when all were doing their own thing." (District Administrator)
- "Equity is a challenge in our district….I don't think, as a district, we really want to deal with these issues." (District Administrator)
- "The one thing I would change? Equity. Some schools have Title I funds and deseg[regation] funds and this allows them to have more things and people." (School Administrator)
- "The teachers understand [the Unitary Status Plan] and have read it. They do not agree with a lot of it." (School Administrator)
- "The teachers are aware of the plan, but they do not understand." (School Administrator)
- "Title I funds discriminate against the other children. So, [I] find ways to use those funds for [all students]." (School Administrator)
- "Our district has not taken the issue of diversity seriously….I just want us, as a district, to implement the Unitary Status Plan with fidelity….I don't think we hold principals accountable [for that]…This is the first year that [we have had] serious talk about holding teachers accountable." (District Administrator)

In April 2008, the District Court of Arizona found that TUSD had "failed to monitor, track, review, and analyze the ongoing effectiveness of its programmatic changes to achieve [equity and equal access for minority students]" (Dept. of Justice Brief for the Ninth Circuit Court of Appeals, Document Nos. 10-15124, 10-15375, 10-15407). In other words, management arrangements for those efforts were not in place. Auditors sought to determine the state of such arrangements since the court's 2008 finding.

Because the USP requires extensive reports to the court on the status of district desegregation efforts, auditors asked key staff members to describe the data collection system that supports those requirements. Some staff members lacked knowledge of who coordinated the data collection and how data were collected. One district administrator said, "Is there a data plan for the USP?….Different people are responsible for different parts and we do not have all data and evidence in one place. The Desegregation Office comes closest." Another district administrator told auditors, "[A]ll of the pieces necessary to manage [implementation of the USP] are not in place…It's really hard to wrap [one's] arms around what everybody [responsible for elements of the USP] is doing." Through interviews, the audit team learned that a program management approach had been employed initially to coordinate USP implementation and reporting, but that methodology had been recently abandoned without a replacement.

Through a review of job descriptions, auditors learned that the Desegregation Director had overall responsibility for USP oversight, including planning, budgeting, implementation, policy recommendations, and collection, analysis, and reporting of data to the court on implementation progress. However, the director had only a small, part-time staff that was to be disbanded in the near future, even though the director's responsibilities were to remain unchanged. Another district administrator, with responsibility for implementing a critical element of the USP, told auditors of not having sufficient staff to carry out the duties of the position. Auditors noted that the USP mandates many positions, including directors, but not staff support for those positions. Further, there had been no study to determine appropriate support staffing for key positions required by the USP.

There were also indications of inconsistent, ineffective, and absent leadership for equity and equal opportunity efforts. For example, "There have been three major different directions [of equity leadership] in five years," said one district administrator. Another told auditors, "We have an Equity Department for the first time this year." However, a third district administrator said, "The Equity Department has a large staff, but no accountability. I'm not sure what they do." Yet, auditors had no trouble finding a missions and functions manual that contained the departmental organization chart, job descriptions, personnel locations, work schedules, principal satisfactions surveys, contacts, and other data documenting accountability for staff actions.

Leadership for magnet schools was also an issue. The magnet school study mandated by the USP stated in part, "Tucson Unified School District has lost its vision and purposeful implementation of magnet schools" (Comprehensive District Evaluation of Magnet Programs, TUSD, September 2013, p. 5). The evaluation report also cited a "lack of district-level understanding of magnets…[and] support…." A district-level administrator informed auditors, "Magnet schools were without leadership for 15 years. Until this year, each principal decided on the theme for his school and the themes changed with the leaders. Magnet program students were not tracked for coherent curriculum delivery." Although there are directives and plans to rectify these problems, estimates indicate that implementation will take years.

As for budgets, "The desegregation money has been an issue," said one district administrator. "We have a $64 million budget with $10 million for OCR compliance. Past practice was a free for all with deseg[regation] money and not really [implementing the court order]. We are now matching the spending with the needs to be met from USP" (see Finding 5.1).

Auditors concluded that if the aforecited documents, interviews, and observations are indicative of the district's entire effort to create equity and equal access for students, implementation of those efforts has been and is ineffective.

Summary

In spite of the fact that the district has been under court order to provide equity and equal access for more than 30 years, an adequate design for those efforts—the Unitary Status Plan—is in the first year of implementation, and many necessary and required supporting plans and infrastructure have not been completed or put into place. Therefore, auditors concluded that the overall design for equity and equal access is inadequate.

Delivery of equal access and equity is also ineffective. The composition of the staff was inconsistent with the district's policy commitment to diversity and the court's requirement for it. Enrollments in the Advanced Learning Experiences (ALE) (e.g., University High School and Advanced Placement, honors, and gifted and

Talented courses) did not reflect the ethnic and gender characteristics of district students. The same is true for disciplinary actions, retentions in grade, and exceptional education placements. Achievement gaps existed among students groups, and many of them cannot be closed at current growth rates in the percentages of students performing satisfactorily on *AIMS* tests. Given these facts, the audit team concluded that delivery of equal access and equity in the Tucson Unified School District is ineffective.

STANDARD 4: The School District Uses the Results from System-Designed and/or -Adopted Assessments to Adjust, Improve, or Terminate Ineffective Practices or Programs.

A school system meeting this audit standard has designed a comprehensive system of assessment/testing and uses valid measurement tools that indicate how well its students are achieving designated priority learning goals and objectives. Common indicators are:

- A formative and summative assessment system linked to a clear rationale in board policy;
- Knowledge, local validation, and use of current curricular and program assessment best practices;
- Use of a student and program assessment plan that provides for diverse assessment strategies for varied purposes at all levels—district, school, and classroom;
- A way to provide feedback to the teaching and administrative staffs regarding how classroom instruction may be evaluated and subsequently improved;
- A timely and relevant data base upon which to analyze important trends in student achievement;
- A vehicle to examine how well specific programs are actually producing desired learner outcomes or results;
- A data base to compare the strengths and weaknesses of various programs and program alternatives, as well as to engage in equity analysis;
- A data base to modify or terminate ineffective educational programs;
- A method/means to relate to a programmatic budget and enable the school system to engage in cost-benefit analysis; and
- Organizational data gathered and used to continually improve system functions.

A school district meeting this audit standard has a full range of formal and informal assessment tools that provide program information relevant to decision making at classroom, building (principals and school-site councils), system, and board levels.

A school system meeting this audit standard has taken steps to ensure that the full range of its programs is systematically and regularly examined. Assessment data have been matched to program objectives and are used in decision making.

What the Auditors Expected to Find in the Tucson Unified School District No. 1:

The auditors expected to find a comprehensive assessment program for all aspects of the curriculum, pre-K through grade 12, which:

- Was keyed to a valid, officially adopted, and comprehensive set of goals/objectives of the school district;
- Was used extensively at the site level to engage in program review, analysis, evaluation, and improvement;
- Was used by the policy-making groups in the system and the community to engage in specific policy review for validity and accuracy;
- Was the foci and basis of formulating short- and long-range plans for continual improvement;
- Was used to establish costs and select needed curriculum alternatives; and
- Was publicly reported on a regular basis in terms that were understood by key stakeholders in the community.

Overview of What the Auditors Found in the Tucson Unified School District No. 1:

This section is an overview of the findings that follow in the area of Standard Four. Details follow within separate findings.

The auditors found that though Tucson Unified School District students are frequently assessed, there is no district assessment and program evaluation plan to provide direction for diagnostic or prescriptive assessment of student progress or to guide instructional decision making. Board policy and other governing documents did not specifically address explicit expectations related to the purposes, design, and delivery of formative and diagnostic assessment tools and program evaluation in the district.

Tucson Unified School District uses a variety of assessments to monitor student progress in reading/language arts, mathematics, science, and, to a lesser extent, social studies. Auditors found that there is little formal formative or summative assessment in the other content areas. The scope of the assessment is inadequate to provide sufficient data for instructional decision making in all areas of the curriculum and at all grade levels.

The auditors also found that TUSD is administering the *ATI* as a benchmark assessment, but there is no comprehensive plan that focuses the implementation of benchmark assessments, which are being used as periodic indicators of student progress. No data were provided that documented the alignment of the *ATI* benchmark assessments with teaching and learning using valid and reliable alignment methodology (e.g., backward and forward alignment studies). No data were provided that focused on the design, development, implementation or communication of any district developed formative assessments. The overall approach to formative data use was inadequate.

TUSD students have demonstrated improvement in their assessment proficiency rates over time but performance remains below state and national averages.

Auditors found that TUSD curricular and instructional programs are not formally monitored, or evaluated for effectiveness. They also found that direction for program evaluation and the use of evaluation is inadequate in board policy and district planning.

Finding 4.1: There is no written district level comprehensive student assessment and program evaluation system plan to guide decision making for the improvement of student achievement.

An effective student assessment and program evaluation system ensures that students are being assessed appropriately and that the information gleaned from those assessments is utilized to make informed decisions that positively impact student learning. An effective system provides information that can be used at all levels of the district, from officials making large-scale budgeting decisions, to principals allocating resources, to individual teachers modifying instruction for individual students. When a school district lacks an effective student assessment and program evaluation plan, the decision makers lack the data needed to make informed decisions and instead must rely on instinct or past practice.

An effective assessment and program evaluation system includes a clear plan for how students are assessed and how the information will be used. The plan expects that students are assessed in all content areas, in not only a summative fashion, but also in a formative fashion that provides instructors with the diagnostic information needed to adapt and improve instruction for their students. Additionally, an effective assessment system provides procedures and information for evaluating larger academic programs to determine their effectiveness so that they can be continued, modified, or terminated. The desired impact of an effective student assessment and program evaluation system is the ongoing improvement of student achievement over time.

To determine the scope and adequacy of the district plans for student assessment and program evaluation, auditors reviewed board policy, job descriptions, assessment and program evaluation plans, curriculum documents, assessment materials, and data pertaining to student assessment and program evaluation. The auditors also interviewed district administrators, campus administrators, instructional support staff, teachers, and board members to gain further information regarding the district's student assessment and program evaluation system.

Auditors found that while Tucson Unified School District students are assessed regularly and an annual assessment calendar exists, there is no district assessment and program evaluation plan to provide written direction for student assessment and program evaluation. Board policy and other governing documents lacked explicit assessment expectations related to the purposes of, needs for, or use of assessments. Board policy does not adequately address the role of assessment data in school-level decision making, including instructional decision making. No board policies were found that specifically required the use of program evaluation data in making instructional decisions.

Exhibit 4.1.1 lists the district's board policies that relate to student assessment and program evaluation.

Exhibit 4.1.1

Board Policies Referencing Student Assessment and Program Evaluation
Tucson Unified School District
January 2014

Policy Number/ Document Title	Content
IKA	*Policy IKA: Grading/Assessment Systems* requires teachers to "Balance the need for on-going assessment for instructional purposes with reporting student progress/achievement by giving a grade."
IKA-R	*Policy IKA-R: Grading/Assessment Systems* requires teachers to base "subject grade… upon pupil mastery of the content of the course. The teacher will establish a reasonable standard for average achievement in each of the subjects."
IKE	*Policy IKE: Promotion, Retention and Acceleration of Students* states that student shall "Progress through the grades by demonstrating growth in learning and by meeting or exceeding the grade-level standards established by the State and District."
IKE-R	*Policy IKE: R: Promotion, Retention, Acceleration and Appeal* states that "every teacher shall make the decision for promotion or retention of students... The teacher(s) of each student will begin the process for possible retention by leading the intervention process, including the following… Documenting the interventions, tests and academic progress, discussions with parents and other resources." It provides an appeals process.

Four policies were found that require procedures to determine student competencies on state mandated curriculum (*Policies IKA, IKA-R, IKE,* and *IKE-R)*; however, these polices mainly deal with student grading and student report cards (Finding 1.1). No policies were found requiring district assessments to go beyond that which is required for state accountability, or creating a system that is differentiated or more rigorous than external high stakes assessments. Policies related to assessment and curriculum contain no direction for formative assessment instruments. No polices were presented to auditors that direct the development of a district program evaluation process or link new programs to district planning initiatives, improvement plans, or long-range planning. There is no expectation in policy that staff disaggregate data at the school, classroom, or subgroup level for the purpose of determining curriculum effectiveness or for differentiation or modification of curriculum or programs. One point was awarded this criterion. No policy was provided that required reports to the board about program effectiveness.

The auditors expected to find explicit statements in board policy regarding the need for a comprehensive student assessment system that includes, at minimum, formative and summative assessment in all areas, requirements for program evaluation, use of data to measure curriculum effectiveness, and regular reports to the board regarding program effectiveness. No student assessment or program evaluation plan was provided to the auditors.

Though requested, the auditors were not provided with a written district-level comprehensive student assessment and program evaluation system plan. High level district administrators acknowledged that the district did not have a comprehensive student assessment and program evaluation system plan. Documents reviewed indicated

that TUSD also does not have a comprehensive district-wide planning document that addresses teaching and learning.

TUSD does have the district-level Continuous Improvements Plans (CIP) required for districts and schools to qualify for Title I and other grant funds. That plan requirement focuses on one year at a time. TUSD also has an assessment calendar that lists all of the assessments that are required or expected to be administered during the school year. To review current direction for student assessment and program evaluation and to guide TUSD planning efforts, the auditors reviewed the TUSD CIP for 2013–14, which, though not an assessment or program evaluation plan, does make some references to assessment planning and program evaluation in limited areas. The auditors also reviewed the TUSD testing calendar for 2013-14.

To determine adequacy, the auditors utilized the criteria contained in the Curriculum Audit Characteristics of a Comprehensive Student Assessment Plan and Program Evaluation Planning. For the district's assessment and program evaluation planning to be considered adequate, 11 of the 15 characteristics must be present and adequate.

The characteristics and audit team's analysis are displayed in Exhibit 4.1.2.

Exhibit 4.1.2

Characteristics of a Comprehensive Student Assessment Plan
And Program Evaluation Planning and Auditors' Assessment of District's Approach
Tucson Unified School District
January 2014

Characteristic (The plan…)	Auditors' Rating	
	Adequate	Inadequate
1. Describes the philosophical framework for the design of the student assessment plan and directs both formative and summative assessment of the curriculum by course and grade in congruence with board policy. Expects ongoing formative and summative program evaluation; directs use of data to analyze group, school, program, and system student trends.		X
2. Includes an explicit set of formative and summative assessment procedures to carry out the expectations outlined in the plan and in board policy. Provides for regular formative and summative assessment at all levels of the system (organization, program, and student).		X
3. Requires that formative, diagnostic assessment instruments that align to the district curriculum be administered to students frequently to give teachers information for instructional decision making. This includes information regarding which students need which learner objectives to be at the appropriate level of difficulty (e.g., provides data for differentiated instruction).	Partial	
4. Provides a list of student assessment and program evaluation tools, purposes, subjects, type of student tested, timelines, etc.	X	
5. Identifies and provides direction on the use of diverse assessment strategies for multiple purposes at all levels—district, program, school, and classroom—that are both formative and summative.		X
6. Specifies the roles and responsibilities of the central office staff and school-based staff for assessing all students using designated assessment measures and for analyzing test data.		X
7. Specifies the connection(s) among district, state, and national assessments.		X
8. Specifies the overall assessment and analysis procedures used to determine curriculum effectiveness.		X
9. Requires aligned student assessment examples and tools to be placed in curriculum and assessment documents.		X

Exhibit 4.1.2 (continued)
Characteristics of a Comprehensive Student Assessment Plan
And Program Evaluation Planning and Auditors' Assessment of District's Approach
Tucson Unified School District
January 2014

Characteristic (The plan…)	Auditors' Rating	
	Adequate	Inadequate
10. Specifies how equity issues will be identified and addressed using data sources; controls for possible bias.		X
11. Identifies the components of the student assessment system that will be included in program evaluation efforts and specifies how these data will be used to determine continuation, modification, or termination of a given program.		X
12. Provides for appropriate trainings for various audiences on assessment and the instructional use of assessment results.		X
13. Delineates responsibilities and procedures for monitoring the administration of the comprehensive student assessment and program evaluation plan and/or procedures.		X
14. Establishes a process for communicating and training staff in the interpretation of results, changes in state and local student achievement tests, and new trends in the student assessment field.		X
15. Specifies creation of an assessment data system that allows for the attribution of costs by program, permitting program evaluations to support program-based cost-benefit analyses.		X
Total	**1**	**14**
Percentage of Adequacy	**7%**	

Note: A partial rating is counted as inadequate.

Exhibit 4.1.2 shows that auditors found one of the 15 characteristics to be adequate in their review of the TUSD CIP and the 2013-14 TUSD Assessment Calendar. One characteristic was partially met. The Curriculum Audit minimum standard for an adequate rating requires that 11 of the 15 characteristics be present in the plans or other governing documents. Therefore, the combination of district documents reviewed in the absence of a comprehensive assessment and evaluation plan was rated as inadequate. While the auditors found that 14 of the 15 characteristics were not met, there is documentation that, to varying degrees, partially meets several of the characteristics. Detailed information regarding each characteristic is provided below:

Characteristic 1 (Inadequate):

Neither board policy nor any of the documents reviewed provided a philosophical framework for student assessment (see Finding 1.1 and Exhibit 4.1.2).

Characteristic 2 (Inadequate):

The plans reviewed do not include explicit procedures for formative assessment, nor do they suggest the recommended instruments, outline the steps for administering them, or detail how any data resulting from formative assessments should be used to inform instructional planning. Benchmark assessments are required as outlined in the assessment calendar, but no additional sufficient information is provided in the two planning documents.

Characteristic 3 (Partially Adequate):

The TUSD CIP and assessment calendar reference assessments, but no mention is made of their purpose and whether the references are inclusive of formative assessments. Auditors did find evidence, through interviews and classroom observations, that some diagnostic assessments are used in the district.

Characteristic 4 (Adequate):

The TUSD Assessment Calendar lists the current tools used to assess student progress, subjects for which they are available, and a calendar of assessment. The CIP also references assessment for special populations, such as bilingual/English language learners and special education students.

Characteristic 5 (Inadequate):

Though reference is made to assessments for English learners and students with disabilities in the planning documents and the Assessment Calendar shows that many assessments for diverse learners are administered, none of the planning documents provided direction on the use of diverse assessment strategies for multiple purposes at all levels—district, program, school, and classroom—that are both formative and summative.

Characteristic 6-11 (Inadequate):

Auditors found no specific reference or inference to these characteristics in either the TUSD CIP or the assessment calendar.

Characteristic 12 (Inadequate):

The CIP did include an action step to provide training on understanding school district assessment results but specifics were lacking regarding the training.

Characteristic 13-15 (Inadequate):

Auditors found no specific reference or inference to these characteristics in either the TUSD District Improvement or Strategic Plans.

Comments regarding the school district's assessment polices and planning included the following:

- "[There is]…No process for [determining the] impact of Title I funds in schools on student achievement." (District Administrator)
- "There is no clear data transition plan (for moving from Pre-K programs to Kindergarten)." (District Administrator)
- "There is no school district policy for assessment. We follow the state testing calendar, and create a supplemental calendar for district assessments." (District Administrator)
- "We have no guidelines for formative assessments, but the use of FAs is highly encouraged." (Instructional Specialist)

Summary

Assessments can provide a wealth of information to a school system. While TUSD students are being assessed and data are being collected and disseminated, the auditors found that the planning for student assessment and program evaluation is inadequate. There is no written comprehensive assessment and program evaluation plan for the TUSD. Further, TUSD lacks language within its board policy to appropriately govern student assessment and program evaluation direction, and though the TUSD CIP makes references to assessment and program evaluation, its content is inadequate to clearly direct the student assessment and program evaluation system.

Finding 4.2: The scope of the student assessment program is inadequate to provide sufficient data for instructional decision making in all areas of the curriculum at all grade levels.

Student assessment data provide the foundation for decisions regarding curriculum design and delivery through evidence of student achievement across grade levels and content areas. These data provide districts with the means to evaluate the effectiveness of the curriculum by analyzing the extent to which students have reached desired performance levels. Absent data from all courses and every grade level, district leadership cannot adequately evaluate instructional models and educational programs within the district. An effective program requires that student achievement is formally evaluated in every course taught within the system and at every grade level. When the scope of assessment does not meet this standard, the board, staff, students, and parents will not have the evidence they need to determine student learning progress and the status of educational programs in the district.

The auditors examined documents provided by the district staff to determine the scope of formal assessment in the Tucson Unified School District (TUSD), including district policies, assessment plans, assessment calendars, lists of course offerings, and lists of tests administered. The auditors also interviewed district administrators, district curriculum support staff, principals, teachers, board members, and community members to gather information about the scope of the district's assessment program.

While the school district uses a variety of assessments to monitor student progress, auditors found that the scope of the assessment is inadequate to provide sufficient data for instructional decision making in all areas of the curriculum and at all grade levels. Auditors found that formal district-wide assessment is primarily focused on the core content areas. Non-tested areas and levels were more likely to lack formal assessments.

Board policy does not require assessment of all subjects taught at all grade levels. When auditors reviewed board policy and assessment planning in Finding 4.1 they found that the district lacks a comprehensive student assessment and program evaluation system plan to guide decision making for improvement of student achievement. Both policy and planning were inadequate, and there were no documents that satisfied the Curriculum Audit expectation that policy and plans expect formal assessment of students in all content areas at all grade levels.

The TUSD assessment program contains both state-mandated and locally developed assessments. The state-mandated assessment is named Arizona's Instrument to Measure Standards (*AIMS*). *AIMS* is a standards-based assessment that measures student proficiency based on the Arizona Academic Content Standards in writing, reading, mathematics, and science. The *AIMS* assessment is also used to meet *NCLB* requirements. *AIMS-A* is the standards-based assessment that is used to measure the proficiency of students with significant cognitive disabilities on Arizona's Alternate Academic Content Standards in reading, mathematics, and science. The Stanford Achievement Test, 10th edition (Stanford 10), a norm-referenced assessment, is required by state statute in reading, language arts, and mathematics in second grade through high school. English language proficiency standards are measured by the state-mandated Arizona's English Language Learner Assessment (*AZELLA*).

The district also administers benchmark assessments developed in support of the Galileo assessment and curricular program approved by Arizona that have been developed by Assessment Technology Incorporated (*ATI*). TUSD uses *ATI* resources to support schools that are providing supplemental academic support resources to low performing students. The *ATI* assessments are administered as benchmark assessments to provide information to teachers, principals and central office staff as well as parents regarding the progress of students during the school year leading up to the administration of the *AIMS* assessments. The *ATI* assessments are administered quarterly in reading, math, and writing beginning at grade 2 and continuing through grade 12. *DIBELS* (Dynamic Indicators Basic Early Literacy Skills), a criterion-reference measure, is administered in grades K-3. TUSD has also developed Curriculum Assessments (CAs) in reading, writing, math, science, and social studies, which are administered three to four times a year (depending on grade level and content area) to students in grades 3-11. At the high school level, TUSD has also implemented Benchmark Assessments (BAs), which are administered three times a year in core content areas. In addition, schools are being encouraged to develop their own Curriculum Based Assessments (CBAs), which are to be used by all teachers in a school at each grade level. As of January 2014, nearly half of the schools in the TUSD are administrating CBAs.

Exhibit 4.2.1 provides descriptions of the state-mandated and locally adopted tests that are administered to students in TUSD.

Exhibit 4.2.1

Description of Formal Assessments
Tucson Unified School District
January 2014

Test	Subject Area	Frequency	Grade(s)	Description
ACT	College Entrance	Annually	11-12	College admissions test.
Achieve 3000	English/Spanish	Twice per year	2-8	Assessments for participants in designated dual language programs in grades 2-8 and at Pueblo High School
AIMS	Reading/Mathematics Writing Science	Annually Annually Annually	3-8, 10-12 5, 6-7, 10-12 4, 8-10	Required state assessments used for district, state and federal accountability and reporting
AP	Art History, Music Theory, Studio Art 2D, Studio Art 3D, English Language & Composition, English Literature & Composition, Comparative Government & Politics, European History, Human Geography, Macro-economics, Micro-economics, Psychology, U.S. Government & Politics, U.S. History, World History, Calculus AB, Calculus BC, Computer Science A, Statistics, Biology, Chemistry, Environmental Science, Physics B, Physics C: Electricity & Magnetism, Physics C: Mechanics, French Language, German Language, Latin: Vergil, Spanish Language, Spanish Literature	Annually	11-12	Assesses achievement in Advanced Placement high school courses and can be used to award college credit or college course exemption.
ATI	Reading and Mathematics	Quarterly	2-12	Benchmark assessments that are used to monitor student academic progress during the school year on a quarterly basis
Avenues	Language Arts	Four times a year	1-5	Assessments aligned to Arizona's content standards administered to ELLs

Exhibit 4.2.1 (continued)
Description of Formal Assessments
Tucson Unified School District
January 2014

Test	Subject Area	Frequency	Grade(s)	Description
AZELLA	Language acquisition	Twice a year	K-12	Assessment for all ELLs, ELLARs, RECL1s, RECL2s and non-proficient WthPAR students and new PHLOTE students entering the school district
Diagnosis Reading Assessment 2 (DRA2)/EDL2	Reading	Three times a year	K-5	Used to diagnose reading strengths and weaknesses for all students participating in dual language programs
DIBELS benchmark testing	Reading	Three times a year	K-3 and students who did not pass *AIMS* reading in grades 4 and 5	Reading assessment administered to all bilingual education students after they take the DRA2
English/ Spanish Writing Samples	Writing	Twice a year	K-5	All student participating in designated dual language programs
EXPLORE		Annually	8	
Language Assessment Scales	Oral language in Spanish	Twice per year	K-5	All students participating in designated dual language programs
PACE Teaching Strategies		Three times a year	K	Observational system for assessing children in the context of everyday experiences to find out what they know and can do
PSAT	College Readiness	Annually	10	Assesses college readiness and academic aptitude.
Stanford 10	Reading, Mathematics, and Language Arts	Annually	2 and 9	Norm-referenced achievement
SAT	College Entrance	Annually	11-12	College admissions test.
Visions, Levels A, B and C		Unit assessment administered seven times a year	Middle and high school	Diagnostic test

Auditors noted the following about the assessments listed in Exhibit 4.2.1:

- Both criterion- and norm-referenced assessments are administered in TUSD.
- The state-mandated *AIMS* test includes state-developed criterion-referenced assessments in reading and mathematics in grades 3-8 and 10-12; writing in grades 5, 6-7, and 10-12; and science in grades 4 and 8-10.

- The locally-adopted *ATI* benchmark assessments are administered four times a year in grades 2-12 in mathematics and reading.
- Several college preparatory exams are administered, including the *PSAT* in grade 10, *AP* exams in grades 11-12, and *ACT/SAT* in high school.
- ELLs and students in dual language programs are assessed for language proficiency and dual language fluency using a variety of assessments, including *Achieve 3000, AZELLA*, *DRA2*, English/Spanish writing samples, and the *LAS.*

Exhibit 4.2.2 summarizes the scope of the assessment in Exhibit 4.2.1 by noting whether the assessment is mandated at the state or district level, if the assessment is required for dual language program participants, or if the assessment is optional.

Exhibit 4.2.2

Matrix of Formal Assessments by Grade Level
Tucson Unified School District
January 2014

	Grade Level													
	PK	**K**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
ACT													O	O
Achieve				L	L	L	L	L	L	L				
AIMS					S	S	S	S	S	S		S	S	S
AP													O	O
ATI				D	D	D	D	D	D	D	D	D	D	D
Avenues														
AZELLA		L	L	L	L	L	L	L	L	L	L	L	L	L
Diagnostic Reading Assessments 2/ELD		L	L	L	L	L	L							
DIBELS		L	L	L	L	O	O							
English/Spanish Writing Samples		L	L	L	L	L	L							
EXPLORE										D				
Language Assessment Scales		L	L	L	L	L	L							
PACE Teaching Strategies	D													
PSAT											O			
Stanford 10			S								S			
SAT													O	O
Visions														
S = State-mandated assessment, D = District-mandated assessment, L=Assessments used in designated dual language schools, and O = optional assessments														

Auditors made the following observations about Exhibit 4.2.2:

- All students in grades 2-8, 10-12 have required assessments in reading using (either or both) *AIMS* and the *ATI*.
- All students in grades 2-8, 10-12 have required assessments in mathematics using *AIMS* and the *ATI*.
- All students in grades 4 and 8-10 have required assessments in science using *AIMS*.
- Among the state and district mandated assessments, there are no required social studies assessments.

After reviewing the types of assessments administered, auditors determined the adequacy of the scope by tallying the number of courses for which a formal assessment was administered. Only required assessments were used in this comparison. No teacher-generated assessments were considered for inclusion in this comparison. Exhibits 2.2.1 through 2.2.3 provided the number of subject areas and classes taught as a part of the curriculum.

Exhibit 4.2.3 shows the assessment scope by subject area for grades K-5. Exhibit 2.2.1 served as the basis for the list of content taught in grades K-5 schools in TUSD. To be considered adequate, the scope of the taught curriculum that is assessed must be at least 100 percent for the four academic core areas and 70 percent for the remaining areas of the taught curriculum.

Exhibit 4.2.3

Scope of Grades K-5 Curriculum Areas Formally Assessed
Tucson Unified School District
January 2014

Content Areas	Number of Courses Offered	Number of Courses Assessed	Percent of Courses Assessed
Core Content Areas			
English Language Arts/Reading	6	6	100
ELD Language Arts/Reading	6	6	100
Mathematics	6	6	100
Science	6	1	17
Social Studies	6	0	0
SCOPE – Core	**30**	**19**	**63%**
Non-Core Content Areas			
Art	6	0	0
Physical Education	6	0	0
Music	6	0	0
SCOPE – Non-Core	**18**	**0**	**0**
OVERALL SCOPE	**48**	**19**	**40%**

Exhibit 4.2.3 indicates that:

- Only 19 of 48 courses (40 percent) in the K-5 curriculum are formally assessed. Therefore, the overall scope of the K-5 assessment program is inadequate to monitor achievement across the subject areas taught.
- Reading/English language arts and mathematics are assessed in 100 percent of the courses offered. These areas do meet the audit criterion of 100 percent assessment for core academic areas. Only 17 percent of the science courses are assessed, which is below audit standards. For the core subject areas, only 63 percent of the subjects are assessed, which is below the audit standard of 100 percent
- None of the courses in social studies are formally assessed at any grade level.

Exhibit 4.2.4 displays a summary of the TUSD curriculum assessment program in grades 6-8. To be considered adequate, the scope of the taught curriculum that is assessed must be at least 100 percent for the four academic core areas and 70 percent for the remaining areas of the taught curriculum. Exhibit 2.2.2 served as the basis of the curriculum covered at the middle school level.

Exhibit 4.2.4

Scope of Grades 6-8 Curriculum Areas Formally Assessed
Tucson Unified School District
January 2014

Content Areas	Number of Courses Offered	Number of Courses Assessed	Percent of Courses Assessed
Core Content Areas			
English Language Arts*	7	7	100
Mathematics*	6	6	100
Science*	3	1	33
Social Studies*	3	0	0
SCOPE – Core	**19**	**14**	**74%**
Non-Core Content Areas			
World Languages*	9	0	0
Fine & Perform Art	25	0	0
Health & P.E.	6	0	0
Electives*	18	0	0
SCOPE – Non-Core	**58**	**0**	**0**
OVERALL SCOPE	**77**	**14**	**18%**
*= does not include courses found on the high school list			

Exhibit 4.2.4 illustrates that:

- Seventy-four (74) percent of the 19 middle school core areas are formally assessed. Therefore, the overall scope of the grades 6-8 assessment program is inadequate to monitor achievement in the subject areas taught. To meet audit standards, 100 percent of the core courses should be assessed.
- English language arts and mathematics meet the audit criterion of 100 percent formal assessment.
- Overall, the scope of assessment for middle schools is 18 percent, which is inadequate.

Exhibit 4.2.5 summarizes the scope of assessment in the curricular areas in grades 9-12. To be considered adequate, the scope of the taught curriculum that is assessed must be at least 100 percent for the four academic core areas and 70 percent for the remaining areas of the taught curriculum. Exhibit 2.2.3 served as the basis of the curriculum covered at the high school level.

Exhibit 4.2.5

Scope of Grades 9-12 Curriculum Areas Formally Assessed
Tucson Unified School District
January 2014

Content Areas	Number of Courses Offered	Number of Courses Assessed	Percent of Courses Assessed
Core Content Areas			
English Language Arts	40	40	100
Mathematics	17	17	100
Science	33	8	24
Social Studies	19	3	16
SCOPE – Core	**109**	**68**	**62%**
Non-Core Content Areas			
World Languages	29	6	21
Fine & Perform Art	81	4	5
Health & P.E.	10	0	0
Career & Tech Ed	86	80	93
Electives	11	0	0
SCOPE – Non-Core	**217**	**90**	**41%**
OVERALL SCOPE	**326**	**158**	**48%**

Exhibit 4.2.5 indicates that:

- One hundred fifty-eight (158), or 48 percent, of the 326 high school core course offerings are formally assessed. Therefore, the overall scope of the grades 9-12 assessment program is inadequate.
- English language arts and mathematics meet the audit criterion of 100 percent formal assessment.
- Of the remaining core areas, 24 percent of science and 16 percent of social studies courses are assessed.

Exhibit 4.2.6 summarizes the overall scope of assessment in the TUSD.

Exhibit 4.2.6

Overall Scope of Grades K-12 Curriculum Areas Formally Assessed
Tucson Unified School District
January 2014

Grade Levels	Number of Courses Offered	Number of Courses Assessed	Percent of Courses Assessed
Core and Non-Core Content Areas			
K-5	48	19	40
6-8	77	14	18
9-12	326	158	48
Overall Scope	**451**	**191**	**42%**

When combined, 191 of the 451 total K-12 course offerings in TUSD are formally assessed, for a 42 percent scope of curriculum assessed. The district does not meet the minimum audit criterion of 70 percent. Therefore, auditors found that the overall scope of assessment was inadequate to yield data regarding student progress in mastering content for use in instructional decision making and program evaluation.

Summary

The scope of formal student assessment in the Tucson Unified School District is inadequate when viewed across all grade levels and curriculum offerings. Only 42 percent of the curriculum offerings in the district are formally assessed. At the elementary level, the scope of assessment for the core areas of English language arts/reading and mathematics is 100 percent and the scope for science is 17 percent. No assessments were identified for the core area of social studies or the non-core areas at the K-5 level. In grades 6-8, courses in English language arts/reading and mathematics are fully assessed at 100 percent, with the remaining core areas of science and social studies falling short of the audit criterion of 100 percent (33 percent for science and zero percent for social studies). The overall scope of assessment for grades 6-8 was 18 percent. The scope of assessment in grades 9-12 is adequate for English/language arts and mathematics but is otherwise inadequate in all other core areas.

The majority of courses in the district lack formal assessments that would provide sufficient data for instructional decision making in all areas of the curriculum at all grade levels.

Finding 4.3: Use of data is an emerging practice both at district and school levels, but there is no systemic use of data for program evaluation.

The use of data from a variety of sources is essential for sound curriculum management and responsible decision making in planning for various district functions as well as for classroom instructional planning. Critical assessment resources include formative, benchmark, and summative student test data; survey and follow-up studies; audits and reviews; and teacher/administrator evaluations. Formative types of school-based feedback such as classroom visit data and information gleaned from collaborative team analysis of student and staff work can also inform decision making at important junctures. The resulting data from these various sources serve as a basis for improving instruction to facilitate student achievement, as well as to inform such work as appropriate comprehensive strategic planning, staff development and program evaluation planning, and developing data-driven budget prioritization.

In effective districts the overall assessment program is ongoing and systematic. Administrators and teachers demonstrate a clear understanding of how students are assessed on required testing instruments, including the standards, types of questions, and level of the concepts, skills, and knowledge students must master to be successful. In those school systems, test results are well understood so that all administrators and teachers know how to analyze important trends in the instructional program, as well of areas of strength and weakness by classroom, groups of students, and individual students. Each teacher and school leader makes frequent use of assessment data to design classroom instruction aimed at improving student achievement. Surveys and program evaluations, where they are used, provide additional information regarding needs identification that can significantly impact decisions at the district and school levels

The audit team reviewed School Continuous Improvement Plans (CIP), job descriptions, web-based data resources, program evaluation documents, and other documents that reflect ways in which the district uses data. They interviewed stakeholders (board members, administrators, teachers, staff, and community members) regarding the use of data and made observations in each of the district's school buildings. The auditors found many examples of effective data use in the district, and many of the district's principals and teachers were actively engaged in improving their knowledge and skills in understanding the nature of test data and using data to make curricular and instructional decisions.

Student data are readily available through the TUSD STATS system. This system includes many sources of data, including purely summative data such as *AIMS*, *SAT10*, and *ACT*, as well as more frequent progress monitoring or benchmark data such as *DIBELS*, *ATI*, and grades. Additional data available include attendance, enrollment, and graduation and dropout rates. The auditors heard many positive comments regarding the importance of TUSD STATS to school personnel, such as

- "The data I need is just a click away!" (School Administrator)
- "The district is very data rich." (District Administration)

- "The Assessment and Research Department is a huge strength. I use it constantly. I take my iPad when I go into classrooms. I can monitor everything…IF [the classroom] has Wi-Fi." (School Administrator)

Formative Assessments

The first component of the auditors' examination of the use of formative assessment is a rating of the presence of the minimal components of a formative assessment system. Exhibit 4.3.1 lists the audit criteria and provides the auditors' rating of the presence of each criterion in TUSD use of formative assessment data. There are 15 points possible on this rubric. For a school system to be rated as adequate requires a score of 12 or more of the possible 15 points (80 percent).

Tucson Unified School District has implemented an assessment system for grades 2-10 in reading and math, although it has not consistently been used district-wide as explained in The *ATI* Data Analysis Protocol Guidebook for Instructional Staff:

> "Prior to 2007 TUSD implemented *ATI* assessments built around an articulated curriculum. After 2007 the use of *ATI* was made optional as schools were given wide discretion in the choice and implementation of curriculum and assessment. In 2012 as part of the Unitary Status Plan (USP) the district was required to identify an assessment for most schools. *ATI* Galileo was chosen as the assessment tool for the district because it was already in use in many schools and many staff were familiar with it's [sic] use.
>
> The *ATI* assessments for the 2013-14 school year were changed from a benchmark to comprehensive format to allow for both prediction of *AIMS* performance and an additional growth data point for teacher evaluations. These district-wide formative assessments are aligned with Common Core Standards in second and ninth grades as well as tenth grade at University High School. In third through eighth grades and tenth grades at all other high schools, the assessments are dual purpose and are aligned with both Arizona and Common Core Standards."

The auditors conducted an analysis of the *ATI* Galileo formative assessment systems using the minimal components for formative assessment analysis (frame 1) as described in the Curriculum Management Improvement Model (CMIM). Exhibit 4.3.1 displays this information and the auditors' ratings on each of the five criteria for the district's formative assessments.

Exhibit 4.3.1

Formative Assessment Analysis Frame 1: Minimal Components
Tucson Unified School District
January 2014

Point Value	Criteria	Auditors' Rating
1. Formal formative student assessments for all curriculum standards/objectives are available for teacher use in determining students' initial acquisition of learning		
0	No district formative student assessments to determine initial acquisition of learning are in place for any of the curriculum standards.	
1	Formative assessments to determine students' initial acquisition of learning are in place for some of the curriculum, including at least two or three academic core areas at a minimum of six grade levels.	X
2	Formative student assessments to determine initial acquisition of learning are in place for all required core academic courses (mathematics, language arts, science, and social studies) in grades 2-12.	
3	Formative assessments are in place to determine students' initial acquisition of learning for all required and elective subject areas and all grades/courses.	

Exhibit 4.3.1 (continued) Formative Assessment Analysis Frame 1: Minimal Components Tucson Unified School District January 2014		
Point Value	**Criteria**	**Auditors' Rating**
2. Informal formative assessments are available for all appropriate course/grade standards/objectives for teachers to use prior to teaching a standard to determine if students possess necessary prerequisites (the concepts, knowledge, and skills that are required before students can successfully master the intended standard or objective)		
0	No district formative student assessments to determine prerequisite knowledge of learning are in place for any of the curriculum standards.	
1	Formative student assessments to determine student prerequisite knowledge of learning are in place for some of the curriculum, including at least two or three academic core areas, at a minimum of six grade levels.	X
2	Formative student assessments to determine student prerequisite knowledge of learning are in place for all required core academic courses (mathematics, language arts, science, and social studies) in grades 2-12.	
3	Formative student assessments to determine student prerequisite knowledge of learning are in place for all required and elective subject areas and all grades/courses.	
3. Informal formative assessments for all standards/objectives are in place for teachers to use prior to teaching a standard to determine prior student mastery		
0	No district formative student assessments to determine students' prior mastery of learning are in place for any of the curriculum standards.	
1	Formative student assessments to determine prior mastery of learning are in place for some of the curriculum, including at least two or three academic core areas at a minimum of six grade levels.	X
2	Formative student assessments to determine students' prior mastery of learning are in place for all required core academic courses (mathematics, language arts, science, and social studies) in grades 2-12.	
3	Formative student assessments to determine students' prior mastery of learning are in place for all required and elective subject areas and all grades/courses.	
4. Pools of informal student assessment items for all curriculum standards/objectives are available for teachers to use during their ongoing instruction to diagnose students' current status of learning—both initial acquisition and sustained mastery		
0	No district item pools for informal district formative student assessments are available for teachers' use as part of their ongoing instruction around the standards.	
1	Item pools for informal formative student assessments are available to determine student learning for some of the curriculum including at least two or three academic core areas at a minimum of six grade levels.	X
2	Item pools for informal formative student assessments are available to determine student learning for all required core academic courses (mathematics, language arts, science, and social studies) in grades 2-12.	
3	A variety of informal formative student assessments are available to determine student learning for all required and elective subject areas and all grades/courses.	

Exhibit 4.3.1 (continued) Formative Assessment Analysis Frame 1: Minimal Components Tucson Unified School District January 2014		
Point Value	**Criteria**	**Auditors' Rating**
5. Formative student assessments are treated as diagnostic tools rather than summative tools		
0	Formative student assessments are generally seen as summative in nature or the distinction between the two is not reflected in their use.	
1	Some formative student assessments are used appropriately, but most are seen and/or used as summative instruments. Grades are often assigned for scores.	
2	Many formative student assessments are being used appropriately, but there is some use of the assessments in a summative way. In some cases, grades are assigned for scores.	
3	Formative student assessments are generally used appropriately as diagnostic tools. No grades are given on the assessments; rather, teachers use the information from these assessments to guide their instructional decisions regarding each student's needs.	X
	Total Points	**7**

From the data shown in Exhibit 4.3.1, the following observations can be made regarding each of the five criteria:

Criterion 1: The district does provide formative assessments to determine initial acquisition of learning in grades 2-10 for mathematics and reading. If formative assessments were provided for all core subject areas, the rating score would have been a 2.

Criterion 2: Informal formative assessments to determine student prerequisite knowledge of learning, which can be created from items in a database, are in place for grades 2-10 for mathematics and reading.

Criterion 3: Informal formative assessments to determine student prior mastery of learning are in place for grades 2-10 in mathematics and reading.

Criterion 4: Both short and long pools of informal assessment items are available for teachers to use during their ongoing instruction via *ATI* Galileo.

Criterion 5: In a large number of schools, auditors observed evidence of teacher use of the Galileo formative assessment systems to diagnose the extent to which individual students or groups of students are learning. This criterion received the highest rating of the five criteria.

As noted in Exhibit 4.3.1, with a score of seven points, or 47 percent, the current formative assessment system does not meet the minimum score of 12 points, or 80 percent, needed to meet the requirements for adequacy.

When asked about formative assessments, representative comments from district administrators, principals, and parents included the following:

- "We have no guidelines for formative assessments, but the use of FAs is highly encouraged." (Instructional Specialist)
- "They are using school-created assessments, or teacher created assessments, and everyone is all over the place." (Curriculum Personnel)
- "By its nature, *ATI* lends itself to a prediction model and predicts the success on the *AIMS*." (District Administrator)
- "*ATI* Galileo benchmarks are used to monitor student growth, but we don't trust the data so we write our own and also use our own benchmarks." (Teacher)

- "The benchmark assessments really help keep our instruction focused and enable teachers to group students according to their needs. *ATI* is a wonderful resourse [sic]." (Teacher)

Summative Data and Use

Summative student outcome data have four broad functions in a school district:

- Evaluating the success of the district's programs,
- Monitoring and adjusting the delivery of the curriculum,
- Measuring the learning outcomes of groups of students, and
- Measuring the learning outcomes of individual students.

Administrators and teachers in TUSD regularly use summative data to gauge the success of their schools. The training in data interpretation and use that the district's principals have recently received provides them with increasing sophistication in using summative data from *AIMS* and *ATI* to understand their schools' test results and student performance. The training has provided skills in looking at student performance in various disaggregations: over multiple years, by demographic group, compared to other school buildings, and by student risk level. Information available through TUSD STATS contained examples of state summative assessment data listed by student with indications of the student's success by learning objective. In some schools students are using data notebooks to track their own performance on district assessments such as *DIBELS* and *ATI*.

Comments made to auditors during interviews and building observations suggest that while focus is being placed on the importance of using data, there is still substantial variation in the level of application of those skills in different buildings.

Summative student data are available through the TUSD STATS system. This system includes many sources of data, including purely summative data such as *AIMS*, *SAT10*, and *ACT*, as well as more frequent progress monitoring or benchmark data such as *DIBELS*, *ATI*, and grades. Additional data available include attendance, enrollment, and graduation and dropout rates.

The auditors conducted an analysis of the summative student assessment data use as described in the Curriculum Management Improvement Model (CMIM). Exhibit 4.3.2 displays this information and the auditors' ratings on each of the five criteria for the district's use of summative assessment data.

Exhibit 4.3.2

Characteristics of Summative Student Assessment Data Use for an Adequate Instructional Approach Auditors' Ratings of District Approach Tucson Unified School District January 2014

Characteristic	Auditors' Rating	
	Adequate	Inadequate
1. Provides teachers with student achievement data for each student in their class(es). Data from prior years' assessments are available by student, so every teacher has data for their new students at the beginning of the year or course.	X	
2. Identifies for the teacher the individual student's summative data for every objective, his or her respective level of achievement for that objective, and where he or she is within that level. Data include group or subgroup levels of achievement for a given concept/standard.	X	
3. Presents the student's summative achievement data for every objective within the context of the district's sequence of objectives or pacing chart.	X	

Exhibit 4.3.2 (continued) Characteristics of Summative Student Assessment Data Use for an Adequate Instructional Approach Auditors' Ratings of District Approach Tucson Unified School District January 2014		
Characteristic	**Auditors' Rating**	
	Adequate	**Inadequate**
4. Presents teachers with longitudinal data for each student, organized by class roster, and specifies the gain required to close any identified achievement gaps. This information is intended to assist teachers in moving each student to grade-level performance over the course of his/her education within the district.	X	
5. Identifies formative student assessment instruments that teachers may use prior to teaching targeted concepts, knowledge, or skills to diagnose individual student mastery of those targeted objectives based on summative achievement data from one or more years. This allows teachers to determine whether students are making desired progress over time.		X
Total	**4**	**1**
Percentage of Adequacy	**80%**	

From the data shown in Exhibit 4.3.2, the following observations can be made regarding each of the five criteria:

Criterion 1: The district does provide student data to teachers, principals and other instructional personnel. The data are easily accessible and disaggregated by learning standard.

Criterion 2: The district does provide the individual student's summative data for every objective, his or her respective level of achievement for that objective, and where he or she is within that level. Data do include group or subgroup levels of achievement for a given concept/standard.

Criterion 3: The district does present the student's summative achievement data for every objective within the context of the district's sequence of objectives or pacing chart.

Criterion 4: The district does present teachers with longitudinal data for each student, organized by class roster, and identifies specific high need areas to close any identified achievement gaps.

Criterion 5: The information provided from the data system did not identify formative student assessment instruments that teachers may use prior to teaching targeted concepts, knowledge, or skills to diagnose individual student mastery of those targeted objectives based on summative achievement data from one or more years.

As noted in Exhibit 4.3.2, with a score of four points, or 80 percent, the current summative assessment data use does meet the minimum score of 80 percent needed to meet the requirements for adequacy.

Although the district was found to have adequate summative data use, during interviews, comments were made to auditors reflecting wide variation in perception of data use throughout the district.

- "How we look at data and accountability has been hit and miss." (District Administrator)
- "(Schools) have always had the data but it was not part of the institutional culture to focus and use data for instruction and decision making. This is a major focus with principal training this year." (District Administrator)
- "Teachers don't look at data because they don't have the tools to do it." (District Administrator)
- "Our students use data notebooks." (School Administrator)
- "Our teachers aren't really looking at that data to see what is going to provide assistance to the students, in mastering those skills and objectives." (District Administrator)

- "Our school does not embrace a culture where students use data to monitor their own academic performance." (Building Administrator)
- "There is not a way that we don't use it [data]." (School Administrator)
- "Working with data is transforming our culture." (School Administrator)

Use of Program Evaluation Data

It was determined in Finding 4.1 that Tucson Unified School District does not have a formal plan or expectation for program evaluation. The TUSD STATS webpage presents evaluations written prior to 2005, but only one recent evaluation was provided to auditors. The Analysis of PACE Program Efficacy (undated) was identified as a pilot, but can serve as a model for future program evaluations. The district employs personnel capable of conducting evaluations, but comments made during interviews highlighted the district's lack of expectations for evaluation to be conducted.

- "We have not been tasked very often to do program evaluation." (District Administrator)
- "We don't have a program evaluation person." (District Administrator)
- "I have never seen a cycle for program review or evaluation." (District Administrator)
- "Can't find any program evaluations that have been done." (District Administrator)

Summary

The auditors found that the district documents and board policies did not adequately address any of the characteristics of a comprehensive student assessment and program evaluation plan. The district lacks a comprehensive student assessment and program evaluation plan to guide decision making for improved student achievement; the scope of the assessment system is inadequate (see Findings 4.1 and 4.2). The district has focused its formative assessment system on the *ATI* Galileo assessment systems. The formative assessment system in place meets 47 percent of the audit's formative assessment criteria (80 percent is a passing score). Auditors noted inadequate board policy guidance to provide direction to a comprehensive student assessment and program evaluation system and the absence of a cohesive assessment and program evaluation plan and a formative assessment system. Although the auditors found the district moving toward using data more consistently, there is significant variation among schools and staff members regarding data usage. The transition of *ATI* to a comprehensive benchmark assessment for predicting *AIMS* performance has modified the original formative intent.

Finding 4.4: Assessment trends show improving proficiency rates for Tucson Unified School District students; however, performance remains below state and national averages.

Student assessment data enable a school system's staff to evaluate the effectiveness of the written curriculum, as well as the instructional methods used to improve student achievement. The school committee, district and school staffs, parents, and students use comparative assessment data to determine how effective schools and the district have been in educating students in comparison to national and state performance averages. These data also enable the analyses of program effectiveness. Effective school systems are able to document high achievement among all students. It is expected that an analysis of test scores will indicate a consistent pattern of improvement over time. Without such data, leaders do not have the information necessary to assess the quality and consistency of student learning, program effectiveness, and organizational performance. Additionally, leaders do not have a sound basis for decisions about the design and the delivery of curriculum.

To identify proficiency goals and trends, the audit team reviewed state and district policies and plans, test data reports, and related documents. Auditors also interviewed school board members, members of the district administration, teachers, and parents. Auditors found that student proficiency rates, as measured by state assessments, are low and consistently below state averages. Students are not making sufficient progress to achieve the proficiency goals identified in TUSD Continuous Improvement Plan 2013-14. Overall, data trends show small increases in the majority of grades and subjects, but the gap between district and state proficiency rates remains consistent.

The district compiled data on a variety of assessments. After reviewing those data, the audit team elected to focus on three assessments: *Arizona's Instrument to Measure Standards* (*AIMS*) for third through tenth grade, the *Stanford Achievement Test Series, Tenth Edition* (*SAT 10*) for second through ninth grade, and the *ACT* college readiness assessment for students in high school. *AIMS* are high-stakes criterion-referenced assessments used at the state and national levels to measure district success and are completed by the majority of the students, and therefore provide the broadest information about performance. The *SAT 10* is a state mandated norm-referenced assessment that tests students on reading, language, and math. *ACT* measures student performance in English, math, reading, and science at or near the end of the Tucson Unified School District experience. Auditors also completed an analysis comparing *AIMS* results for schools against the percentage of low socioeconomic students in the school. This analysis helps to identify schools that perform well in spite of the challenges poverty poses. Auditors organized recent data from these assessments into a series of exhibits designed to highlight the salient conditions and trends of the greatest benefit to curriculum managers.

Student Performance on *AIMS* Exams

AIMS exams are used by Arizona to satisfy the *Elementary and Secondary Education ACT (ESEA)* accountability requirements and are therefore reported at four proficiency levels: Falls Far Below, Approaches the Standard, Meets the Standard, and Exceeds the Standard. The 2012-13 Superintendent Goals identified continuing the achievement goals in reading and writing and increasing student achievement in mathematics by improving the district passing rate at all levels on *AIMS* by 10 percent as the achievement goal. The TUSD Continuous Improvement Plan 2013-14 set specific proficiency targets by grade for reading and math. In addition, Arizona revised statute A.R.S. § 15-211 (A) has a goal of having all grade 3 students reading proficiently at grade level.

AIMS examines student achievement in the following subjects and grades:

- Reading, grades 3 through 8 and high school;
- Mathematics, grades 3 through 8 and high school;
- Writing, grades 5 though 7 and high school; and
- Science, grades 4, 8, and high school.

A complete list of school-level *AIMS* proficiency rates in reading and math is provided in Exhibits 4.4.1 and 4.4.2. There is variation in proficiency by year, subject, school, and grade.

The percentage of students meeting or exceeding reading standards is delineated in Exhibit 4.4.1 below.

Exhibit 4.4.1

Percentage of Students Meeting or Exceeding Standards in Reading
Tucson Unified School District
2009-10 through 2012-13

School Name/ Grade	2009-10							2010-11							2011-12							2012-13						
	3	4	5	6	7	8	10	3	4	5	6	7	8	10	3	4	5	6	7	8	10	3	4	5	6	7	8	10
State	73	72	72	78	77	74	77	76	75	79	81	82	71	78	75	75	78	80	84	72	80	75	77	79	80	85	72	83
District	67	65	68	66	66	63	73	68	70	73	71	72	60	74	66	71	74	70	74	61	78	67	72	74	72	78	63	80
Agave																			NA	NA					NA	93	NA	
Alternative 2 (TAP)																												
Blenman	54	62	56					67	63	66					57	68	67					59	69	65				
Bloom	58	76	67					73	64	74					53	70	71					84	67	74				
Bonillas	74	73	60					66	81	78					78	71	80					65	76	62				
Borman	86	79	90					82	85	87					88	86	85					82	89	91				
Borton								68							75	69						72	82	66				
Brichta	65	73	67					65	72	80					69	71	73					59	83	74				
Carrillo	65	74	68					75	81	69					73	83	80					76	83	88				
Carson				63	67	65					60	71	59					68	63	60					63	68	46	
Catalina Magnet							63							58							57							68
Cavett	56	55	57					52	68	63					49	63	61					51	58	67				
Cholla Magnet							63							61							67							75
Collier	88	74	77					66	81	71					88	73	82					93	89	72				
Corbett	61	56	67					68	61	68					66	61	79					60	74	65				
Cragin	45	59	60					60	56	75					55	65	60					64	63	52				
Davidson	50	48	78					58	53	61					71	56	64					52	82	74				
Davis	74	67	70					68	64	82					79	72	73					67	87	72				
Dietz	53	66	65					65	54	59					63	68	61					69	65	65				
Direct Link I								0	0	0	100				0		NA	NA		NA		NA	NA		NA	NA	NA	
Direct Link II																												
Dodge Magnet				90	91	89					87	92	87					92	91	91					86	94	90	
Doolen				59	58	55					68	69	55					64	72	54					64	78	64	
Drachman	58	46	53	53				87	59	62	65				82	68	63	75				70	70	68	71			
Dunham	76	82	74					58	76	85					52	71	94					59	63	72				
Erickson	55	60	62					71	63	67					79	63	66					73	64	68				

Exhibit 4.4.1 (continued)
Percentage of Students Meeting or Exceeding Standards in Reading
Tucson Unified School District
2009-10 through 2012-13

School Name/ Grade	2009-10							2010-11							2011-12							2012-13						
	3	4	5	6	7	8	10	3	4	5	6	7	8	10	3	4	5	6	7	8	10	3	4	5	6	7	8	10
Fickett Magnet	64	64	60	72	70	73		58	56	65	75	75	66		58	64	72	76	76	59		57	72	75	70	80	68	
Ford	80	57	69	50				81	72	71					73	86	76					56	64	83				
Fort Lowell/ Townsend				46	54	61					58	52	53		47	59	63	52	64	55		45	56	65	69	75	54	
Fruchthendler	95	86	92					85	93	92					81	84	94					91	82	92				
Gale	86	94	89					82	91	94					90	91	82					92	89	89				
Gridley				85	85	81					82	88	72					78	86	79					82	81	77	
Grijalva	62	50	54					66	69	69					69	61	69					66	65	74				
Henry	64	55	86					83	78	94					68	84	95					68	76	89				
Henry (Hank) Oyama	65	57	66					55	65	63					56	60	77					59	49	67				
Hohokam				52	48	39					56	57	49					55	58	44					50	61	44	
Holladay	66	76	59					69	75	68					52	78	70					59	70	68				
Hollinger	69	65	65					58	86	80					60	76	83					61	84	80				
Howell	73	64	62					60	65	66					65	67	70					76	71	69				
Howenstine							40							59							50							44
Hudlow	82	60	81					67	74	75					80	65	71					78	80	71				
Hughes	85	85	88					82	85	91					82	87	91					77	88	89				
Kellond	62	70	68					80	69	86					64	82	74					83	90	84				
Laura N Banks	70	75	68					67	56	93					54	62	68					75	57	70				
Lawrence	57	49	70					63	71	68					52	46	60	45				48	64	55	69	65		
Lineweaver	81	87	69					82	86	76					82	85	76					84	81	80				
Lynn/Urquides	55	58	59					55	63	68					50	64	72					44	55	66				
Lyons	78	60	74					68	78	70					57	74	82					75	72	76				
Magee				77	88	77					81	83	76					83	80	71					77	88	66	
Maldonado	64	61	57					55	70	78					51	63	68					54	59	63				
Mansfeld				71	64	65					72	73	62					71	72	62					76	76	57	
Manzo	72	55	59					53	62	65					47	62	77					54	75	59				
Marshall	77	74	80					82	83	81					60	70	70					50	71	69				

Exhibit 4.4.1 (continued)
Percentage of Students Meeting or Exceeding Standards in Reading
Tucson Unified School District
2009-10 through 2012-13

School Name/ Grade	2009-10							2010-11							2011-12							2012-13						
	3	4	5	6	7	8	10	3	4	5	6	7	8	10	3	4	5	6	7	8	10	3	4	5	6	7	8	10
Maxwell				60	49	51					62	58	37					65	58	44					60	74	42	
McCorkle PreK-8															56	58	75	70				53	60	66	81	79		
Menlo Park	58	53	66					81	53	64					69	64	56					67	60	71				
Meredith									0	0	0				NA	NA	NA	NA	NA	0		NA	NA	NA	NA	NA	NA	
Miles - E. L. C.	75	82	65	79	83	71		69	75	85	74	77	83		74	74	86	87	86	74		77	78	76	82	86	71	
Miller	72	59	65					85	59	68					54	71	69					56	67	70				
Mission View	48	53	69					43	65	75					59	57	66					54	51	62				
Myers-Ganoung	48	41	61					58	47	76					53	53	70					57	67	76				
Naylor				52	42	44					64	61	48		66	75	59	61	75	52		47		60	55	67	55	
Ochoa	52	50	57					61	58	55					52	46	70					57	62	70				
Palo Verde Magnet							71							67							73							75
Pistor				71	66	67					74	76	61					72	78	66					70	79	67	
Project MORE																												
Pueblo Gardens	80	76	76		70	59		71	88	66	85	80	41		69	87	86	55	63	75		71	65	83	76	78	46	
Pueblo Magnet							71							67							68							68
Rincon							62							68							75							76
Robins	79	70	78					79	78	73					82	88	74	83				87	75	82	79	85		
Robison	67	44	39					65	63	50					46	68	67					72	54	80				
Rose	71	72	83					67	79	79					70	76	85	83				70	78	80	86	93		
Roskruge Bilingual Magnet	50	45	63	68	65	55		70	56	71	76	79	60		82	58	63	73	76	68		72	75	76	86	85	71	
Sabino							90							93							94							92
Safford Magnet	32	70	57	55	52	56		44	36	73	62	65	49		63	67	50	69	70	55		70	65	75	65	77	57	
Sahuaro							89							86							87							88
Santa Rita							76							76							76							78

Exhibit 4.4.1 (continued)
Percentage of Students Meeting or Exceeding Standards i nReading
Tucson Unified School District
2009-10 through 2012-13

School Name/ Grade	2009-10							2010-11							2011-12							2012-13						
	3	4	5	6	7	8	10	3	4	5	6	7	8	10	3	4	5	6	7	8	10	3	4	5	6	7	8	10
Schumaker	65	70	70					75	74	82					53	78	74					64	73	85				
Secrist				78	76	76					77	85	73					73	79	73					79	87	73	
Sewell	89	86	82					80	69	81					72	77	81					73	91	83				
SolengTom	93	92	90					90	89	98					88	92	95					90	91	100				
Southwest Alternative																												
Steele	72	76	66					64	76	64					68	72	72					62	69	69				
Tolson	76	54	63					74	77	70					84	76	83					61	75	67				
Tucson Magnet							81							79							83							84
Tully	59	62	58					71	71	77					72	63	72					69	73	78				
University							100							100							100							100
Utterback Magnet				63	69	67					68	71	55					66	69	48					64	74	52	
Vail				64	77	63					69	76	66					71	77	66					77	81	68	
Valencia				61	64	44					68	64	48					69	67	48					71	73	59	
Van Buskirk	45	62	82					48	56	79					56	53	83					52	68	71				
Vesey	66	69	66					61	76	70					64	72	78					64	66	77				
Wakefield				53	50	51					67	67	51					61	73	56					73	69	54	
Warren	77	71	51					79	69	63					43	80	66					65	72	85				
Wheeler	71	82	83					91	84	91					64	89	84					78	86	80				
White	72	66	70					65	70	77					71	70	74					78	75	74				
Whitmore	75	73	81					79	71	90					78	83	75					71	83	88				
Wright	55	51	54					63	63	51					47	72	57					66	71	62				

The following observations can be drawn from the 2013 *AIMS* data in Exhibit 4.4.1:

- Sixty-nine (69) percent of schools were below state proficiency rates on the third grade reading *AIMS*.
- Sixty-four (64) percent of schools were below state proficiency rates on the tenth grade reading *AIMS*.

The percentage of students scoring proficient or above in mathematics for each school is shown in Exhibit 4.3.2 below.

Exhibit 4.4.2

Percentage of Students Scoring Proficient or Above in Mathematics
Tucson Unified School District
2009-10 through 2012-13

School Name	2009-10							2010-11							2011-12							2012-13						
Grade	**3**	**4**	**5**	**6**	**7**	**8**	**10**	**3**	**4**	**5**	**6**	**7**	**8**	**10**	**3**	**4**	**5**	**6**	**7**	**8**	**10**	**3**	**4**	**5**	**6**	**7**	**8**	**10**
State	65	53	59	57	58	57	58	68	65	63	59	61	54	60	69	67	63	61	62	57	60	68	64	63	63	65	58	62
Tucson Unified	55	51	48	33	39	41	50	60	54	49	38	41	36	50	59	58	54	42	43	38	52	60	55	55	48	50	43	52
Agave				NA	NA	NA						NA	NA						NA	NA					NA	57	NA	
Alternative 2 (TAP)						NA							NA															
Blenman	36	51	23					66	54	46					50	60	59					51	52	52				
Bloom	47	63	37					56	50	46					43	58	38					65	47	50				
Bonillas	70	55	56					52	59	49					62	69	49					62	51	38				
Borman	67	60	68					75	66	62					81	83	58					76	81	68				
Borton								54							70	81						67	79	54				
Brichta	51	33	32					45	56	36					43	65	47					39	64	60				
Carrillo	61	70	64					72	56	61					75	74	66					76	70	73				
Carson				27	31	40					28	39	24					34	24	33					29	32	25	
Catalina Magnet							32							31							29							35
Cavett	42	53	40					35	39	31					41	46	41					37	33	42				
Cholla Magnet							40							39							37							43
Collier	77	76	58					66	69	57					80	44	60					90	58	50				
Corbett	50	46	58					55	51	55					59	51	61					56	61	44				
Cragin	30	38	37					41	34	50					43	35	48					54	37	35				
Davidson	36	19	60					36	43	50					62	27	46					33	68	38				
Davis	66	44	45					62	53	49					69	45	45					50	68	48				
Dietz	47	52	36					58	35	39					57	43	48					53	49	45				
Direct Link I	NA	NA		NA	NA	NA		NA	NA	NA	NA	NA	NA		NA		NA	NA		NA		NA	NA		NA	NA	NA	
Direct Link II																												
Dodge Magnet				77	75	77					73	81	65					69	76	80					72	84	74	
Doolen				35	38	34					51	38	38					53	49	41					46	61	51	
Drachman	46	14	24	6				77	49	36	42				82	46	39	50				68	53	53	36			
Dunham	60	68	64					50	52	56					33	71	77					49	41	60				
Erickson	62	49	38					67	46	46					83	52	50					69	52	41				
Fickett Magnet	50	49	38	43	45	52		55	41	49	41	46	43		50	67	55	47	43	33		50	52	58	44	49	43	

Exhibit 4.4.2

Percentage of Students Scoring Proficient or Above in Mathematics
Tucson Unified School District
2009-10 through 2012-13

School Name	2009-10							2010-11							2011-12							2012-13						
Grade	**3**	**4**	**5**	**6**	**7**	**8**	**10**	**3**	**4**	**5**	**6**	**7**	**8**	**10**	**3**	**4**	**5**	**6**	**7**	**8**	**10**	**3**	**4**	**5**	**6**	**7**	**8**	**10**
Ford	68	46	49	30				58	55	46					64	64	57					56	51	60				
Fort Lowell/ Townsend				19	27	36					24	31	23		41	62	35	31	31	39		37	41	42	40	50	27	
Fruchthendler	85	81	83					67	80	89					71	67	80					80	65	69				
Gale	88	88	82					88	83	78					82	85	70					90	75	78				
Gridley				53	61	61					54	64	54					51	62	58					65	57	62	
Grijalva	53	43	40					59	57	43					62	57	57					63	57	62				
Henry	51	42	59					71	72	71					73	78	67					58	55	71				
Henry (Hank) Oyama	42	28	38					38	33	27					52	57	49					43	38	40				
Hohokam				24	22	17					27	27	23					37	25	22					21	30	24	
Holladay	50	46	40					71	57	46					40	67	43					45	44	34				
Hollinger	61	61	45					55	71	48					54	57	72					55	70	57				
Howell	51	58	47					61	54	46					61	50	43					66	65	47				
Howenstine							23							27							17							12
Hudlow	58	53	59					52	44	50					69	51	53					63	68	57				
Hughes	79	60	63					79	75	76					69	82	80					69	63	80				
Kellond	39	59	48					70	51	56					60	66	50					71	62	79				
Laura N Banks	55	55	36					64	39	42					59	59	51					63	44	42				
Lawrence	48	53	49					54	60	44					38	37	45	29				46	31	30	52	25		
Lineweaver	73	71	57					70	69	59					76	73	65					86	73	70				
Lynn/Urquides	50	43	38					62	47	41					52	54	52					41	40	38				
Lyons	57	38	48					38	56	26					36	45	52					53	49	52				
Magee				45	66	65					48	53	52					49	51	45					47	56	50	
Maldonado	64	48	39					37	51	49					43	47	40					39	30	34				
Mansfeld				26	32	42					29	36	43					37	33	38					54	45	39	
Manzo	56	34	24					30	41	19					16	18	38					46	30	43				
Marshall	71	58	62					68	57	56					47	54	60					31	52	44				
Maxwell				26	24	32					32	24	12					37	26	17					43	41	24	
McCorkle PreK-8															46	44	31	28				46	31	38	58	36		

Exhibit 4.4.2

Percentage of Students Scoring Proficient or Above in Mathematics
Tucson Unified School District
2009-10 through 2012-13

School Name	2009-10							2010-11							2011-12							2012-13						
Grade	**3**	**4**	**5**	**6**	**7**	**8**	**10**	**3**	**4**	**5**	**6**	**7**	**8**	**10**	**3**	**4**	**5**	**6**	**7**	**8**	**10**	**3**	**4**	**5**	**6**	**7**	**8**	**10**
Menlo Park	53	40	38					81	38	50					69	67	33					57	58	60				
Meredith	NA	NA	NA	NA	NA	NA			NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	0		NA	NA	NA	NA	NA	NA	
Miles - E. L. C.	57	64	65	32	77	69		59	54	67	41	45	69		65	55	61	53	51	44		63	72	52	45	65	43	
Miller	69	51	42					83	52	43					48	59	44					60	45	54				
Mission View	50	41	56					43	50	65					55	46	46					46	26	56				
Myers-Ganoung	48	33	69					59	55	60					69	43	61					65	48	54				
Naylor				19	25	35					37	31	25		74	75	48	49	51	35		65		46	43	53	44	
Ochoa	36	41	31					64	23	30					35	51	33					37	53	58				
Palo Verde Magnet							48							39							59							47
Pistor				27	39	40					31	40	33					40	47	39					47	51	43	
Project MORE																												
Pueblo Gardens	78	69	62	64	27	32		71	81	55	62	60	22		49	85	77	33	21	60		60	37	67	54	52	13	
Pueblo Magnet							38							34							31							32
Rincon							38							48							49							47
Robins	59	52	64					68	50	42					78	64	51	44				76	53	54	33	31		
Robison	67	22	24					65	37	25					48	44	46					58	33	55				
Rose	66	59	76					63	80	73					66	68	73	75				57	63	67	86	90		
Roskruge Bilingual Magnet	37	38	63	32	26	27		63	36	47	47	42	31		73	38	42	48	45	33		67	70	57	48	58	41	
Sabino							82							85							86							81
Safford Magnet	27	60	30	19	24	32		31	20	51	22	28	28		54	37	25	46	35	35		45	35	42	50	51	45	
Sahuaro							67							73							71							68
Santa Rita							49							42							43							40
Schumaker	61	47	47					70	62	35					46	64	57					58	61	54				
Secrist				40	54	52					44	53	58					39	51	49					49	63	60	
Sewell	72	62	58					72	53	56					77	70	46					71	80	70				
SolengTom	80	78	75					86	81	89					79	80	82					78	79	88				
Southwest Alternative																												

Exhibit 4.4.2

Percentage of Students Scoring Proficient or Above in Mathematics
Tucson Unified School District
2009-10 through 2012-13

School Name	2009-10							2010-11							2011-12							2012-13						
Grade	**3**	**4**	**5**	**6**	**7**	**8**	**10**	**3**	**4**	**5**	**6**	**7**	**8**	**10**	**3**	**4**	**5**	**6**	**7**	**8**	**10**	**3**	**4**	**5**	**6**	**7**	**8**	**10**
Steele	67	60	30					38	58	28					58	66	42					50	58	49				
Tolson	53	32	43					68	57	30					72	56	59					51	43	47				
Tucson Magnet							49							52							48							53
Tully	52	48	47					64	67	54					67	65	65					61	61	56				
University							100							100							100							100
Utterback Magnet				28	31	38					32	26	27					35	35	25					37	47	34	
Vail				38	49	39					43	48	44					44	54	47					56	60	51	
Valencia				27	34	23					28	35	26					25	29	27					42	32	35	
Van Buskirk	38	58	73					44	50	78					42	49	65					58	42	68				
Vesey	37	55	45					57	55	48					54	57	57					62	57	55				
Wakefield				26	20	21					33	31	22					35	47	26					45	40	36	
Warren	56	41	18					44	44	40					41	74	34					62	55	44				
Wheeler	46	69	78					82	57	64					64	78	70					60	69	80				
White	54	45	44					65	47	48					72	57	50					70	67	65				
Whitmore	51	57	69					68	46	79					73	64	54					49	61	68				
Wright	58	47	40					65	54	29					51	65	43					63	61	64				

The following observations can be drawn from the 2013 *AIMS* data in Exhibit 4.4.2:

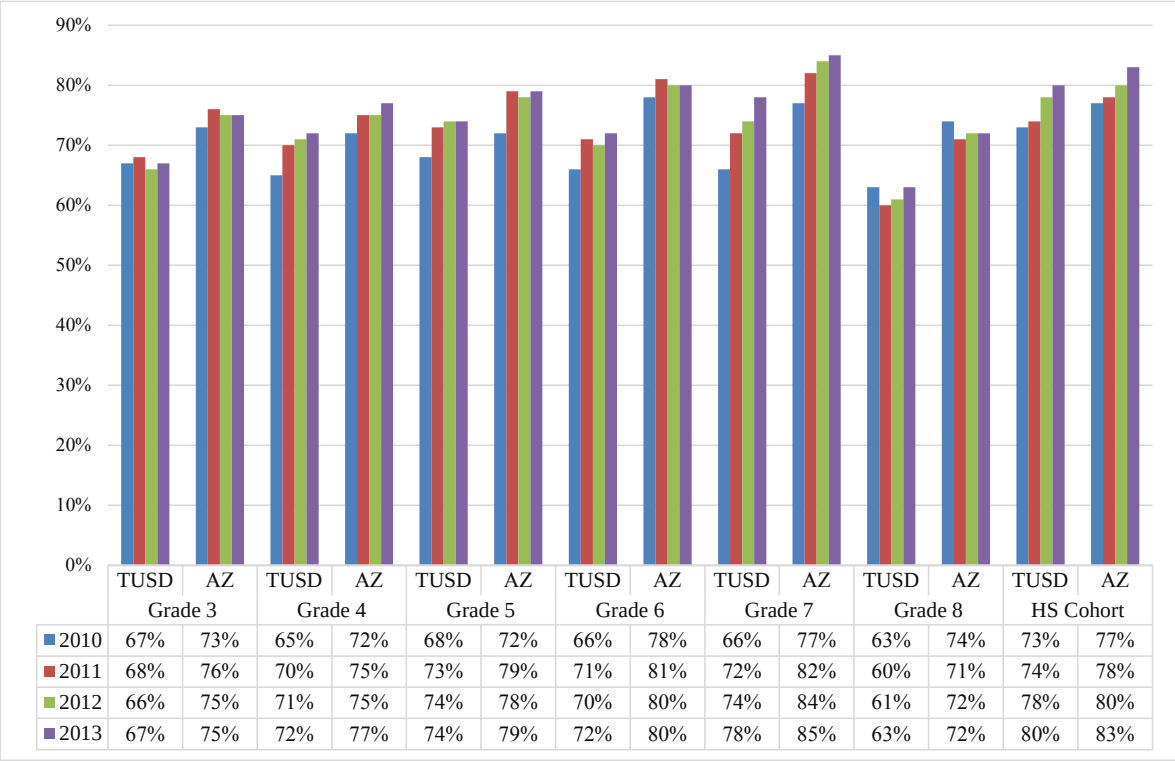
- Seventy-nine (79) percent of schools were below state proficiency rates on the third grade math *AIMS*.
- Seventy-five (75) percent of schools were below state proficiency rates on the tenth grade math *AIMS*.

Such widespread low performance indicates that while there are differing performance patterns between schools, the district as a whole experiences consistent difficulty supporting students to meet or exceed standards.

Exhibits 4.4.3 and 4.4.4 show the percentages of Tucson Unified School District students and all Arizona students who met or exceeded the standard, by grade level, for the past four years. Exhibit 4.4.3 reflects reading performance, and Exhibit 4.4.4 reflects performance in mathematics.

Exhibit 4.4.3

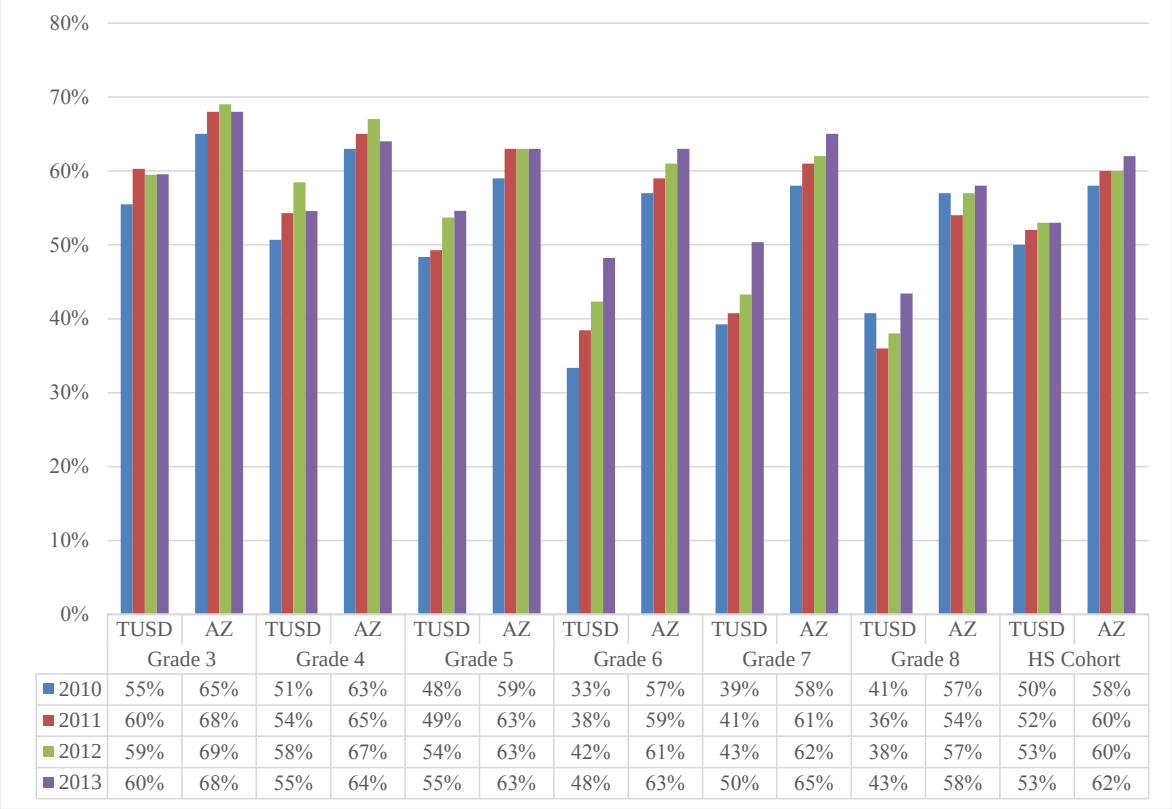
***AIMS* Examinations: Grade 3-10**
Comparison of District and State Student Reading Met Standard or Above Rates
Tucson Unified School District
2010-2013



	TUSD	AZ	TUSD	AZ	TUSD	AZ	TUSD	AZ	TUSD	AZ	TUSD	AZ	TUSD	AZ
	Grade 3		Grade 4		Grade 5		Grade 6		Grade 7		Grade 8		HS Cohort	
2010	67%	73%	65%	72%	68%	72%	66%	78%	66%	77%	63%	74%	73%	77%
2011	68%	76%	70%	75%	73%	79%	71%	81%	72%	82%	60%	71%	74%	78%
2012	66%	75%	71%	75%	74%	78%	70%	80%	74%	84%	61%	72%	78%	80%
2013	67%	75%	72%	77%	74%	79%	72%	80%	78%	85%	63%	72%	80%	83%

Exhibit 4.4.4

***AIMS* Examinations: Grade 3-10**
Comparison of District and State Student Math Met Standard or Above Rates
Tucson Unified School District
2010-2013



	TUSD	AZ	TUSD	AZ	TUSD	AZ	TUSD	AZ	TUSD	AZ	TUSD	AZ	TUSD	AZ
	Grade 3		Grade 4		Grade 5		Grade 6		Grade 7		Grade 8		HS Cohort	
2010	55%	65%	51%	63%	48%	59%	33%	57%	39%	58%	41%	57%	50%	58%
2011	60%	68%	54%	65%	49%	63%	38%	59%	41%	61%	36%	54%	52%	60%
2012	59%	69%	58%	67%	54%	63%	42%	61%	43%	62%	38%	57%	53%	60%
2013	60%	68%	55%	64%	55%	63%	48%	63%	50%	65%	43%	58%	53%	62%

The following observations can be made from Exhibits 4.4.3 and 4.4.4:

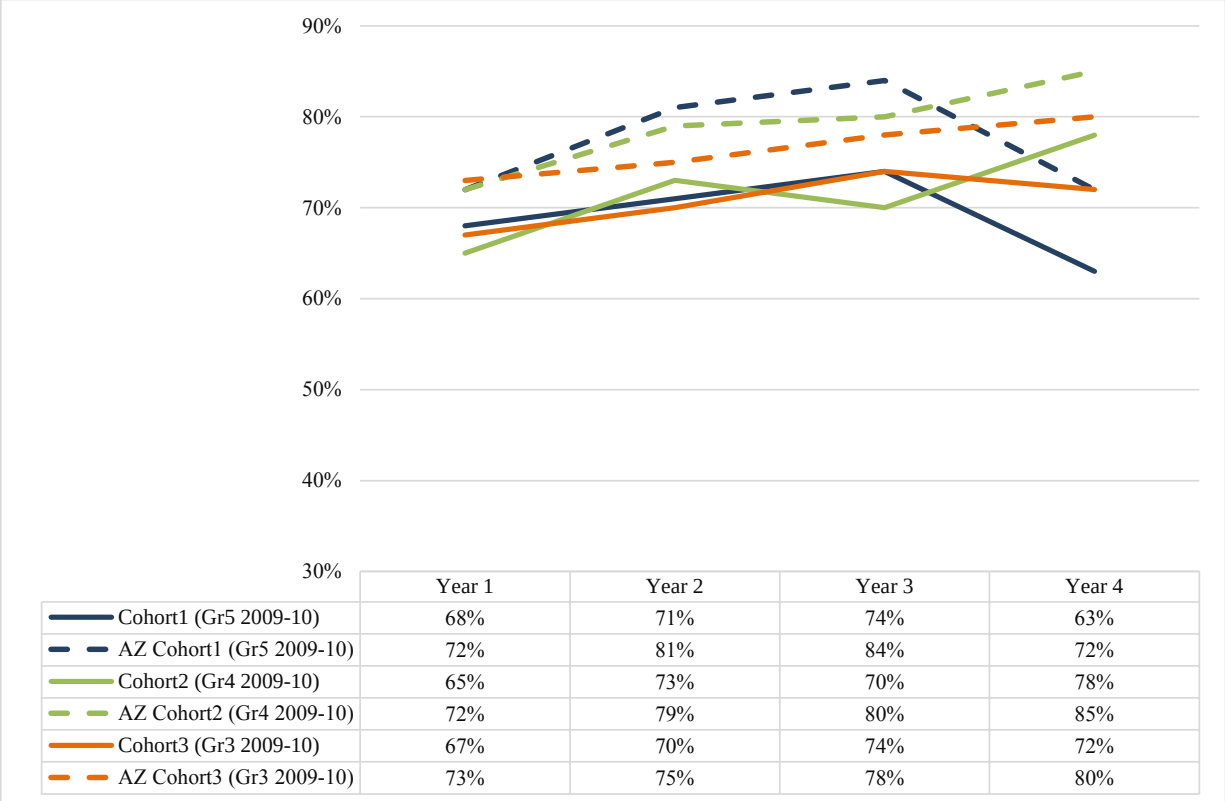
- All grades and all subjects except grade 8 reading reflect increased percentages of proficient students from 2010 to 2013.
- Proficiency rates at all grades and in all subjects are below statewide performance.
- TUSD's performance mirrors state trends more closely in reading than in mathematics.
- Proficiency percentages remain fairly consistent through the grades on reading, but in mathematics proficiency rates exhibit inconsistency through grade levels.
- The gap between district and state math proficiency rates has narrowed in grades 3-8.
- The gap between district and state reading proficiency rates has narrowed in grades 4, 6, 7, 8, and high school.
- The district failed to meet achievement targets outlined in the 2012-13 Superintendent Goals and in the Arizona Statute.

Exhibits 4.4.5 and 4.4.6 display the same information as the previous two exhibits, arranged by cohort groups.

The label "Cohort 1" refers to students who began fifth grade in 2009-10, and the line reflects the percentage of students scoring proficient or above through eighth grade. The label "Cohort 2" refers to students who began fourth grade in 2009-10, and the line reflects the percentage of students scoring proficient or above through seventh grade. The label "Cohort 3" refers to students who began third grade in 2009-10, and the line reflects the percentage of students scoring proficient or above through sixth grade. It should be noted that these data do not represent intact cohorts at the student level (students who were continuously enrolled in Tucson Unified School District for all four years) but rather longitudinal performance for grade level groups.

Exhibit 4.4.5

***AIMS* Examinations: Cohort Analysis**
Comparison of District and State Student Reading Met Standard or Above Rates
Tucson Unified School District
2010-2013



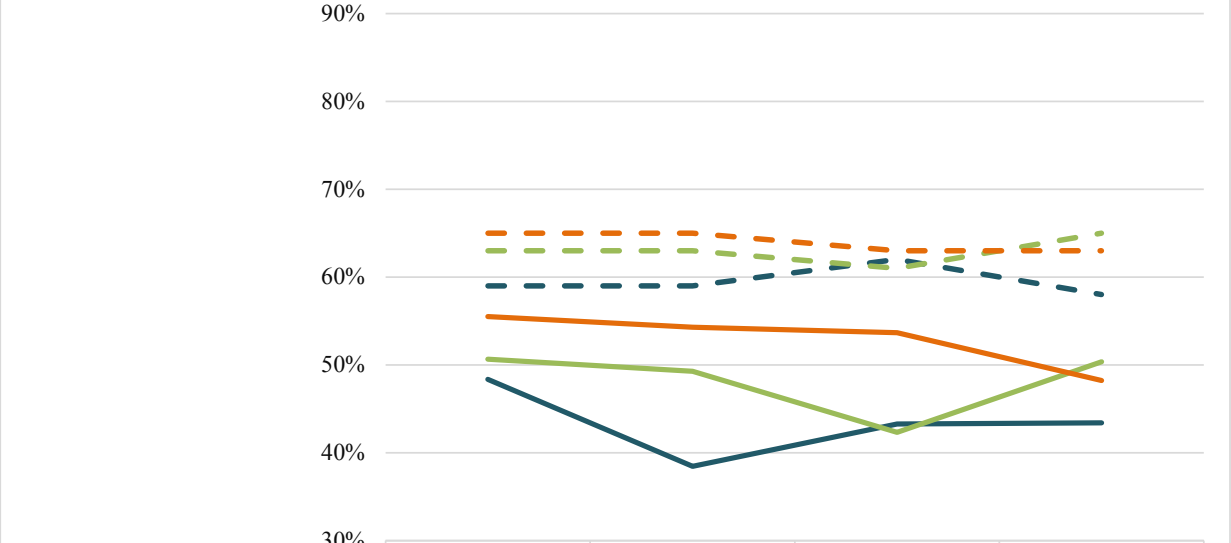
	Year 1	Year 2	Year 3	Year 4
Cohort1 (Gr5 2009-10)	68%	71%	74%	63%
AZ Cohort1 (Gr5 2009-10)	72%	81%	84%	72%
Cohort2 (Gr4 2009-10)	65%	73%	70%	78%
AZ Cohort2 (Gr4 2009-10)	72%	79%	80%	85%
Cohort3 (Gr3 2009-10)	67%	70%	74%	72%
AZ Cohort3 (Gr3 2009-10)	73%	75%	78%	80%

The following observations can be made from Exhibit 4.4.5:

- TUSD Cohorts 2 and 3 evidenced increases in the percentage of students meeting or exceeding reading standards from 2009-10 to 2012-13.
- The gap between the percentage of TUSD Cohort 2 students meeting or exceeding reading standards and the statewide cohort maintained from 2009 to 2013.
- The gaps between the percentages of TUSD Cohort 1 and 3 students meeting or exceeding reading standards and the statewide cohort increased from 2009 to 2013.

Exhibit 4.4.6

***AIMS* Examinations: Cohort Analysis**
Comparison of District and State Student Math Met Standard or Above Rates
Tucson Unified School District
2010-2013



	Year 1	Year 2	Year 3	Year 4
Cohort1 (Gr5 2009-10)	48%	38%	43%	43%
AZ Cohort1 (Gr5 2009-10)	59%	59%	62%	58%
Cohort2 (Gr4 2009-10)	51%	49%	42%	50%
AZ Cohort2 (Gr4 2009-10)	63%	63%	61%	65%
Cohort3 (Gr3 2009-10)	55%	54%	54%	48%
AZ Cohort3 (Gr3 2009-10)	65%	65%	63%	63%

The following observations can be made from Exhibit 4.4.6:

- TUSD Cohorts 1, 2, and 3 evidenced decreases in the percentage of students meeting or exceeding math standards from 2009-10 to 2012-13.
- The gaps between the percentages of TUSD Cohort 1, 2, and 3 students meeting or exceeding math standards and the relevant statewide cohorts increased from 2009 to 2013.

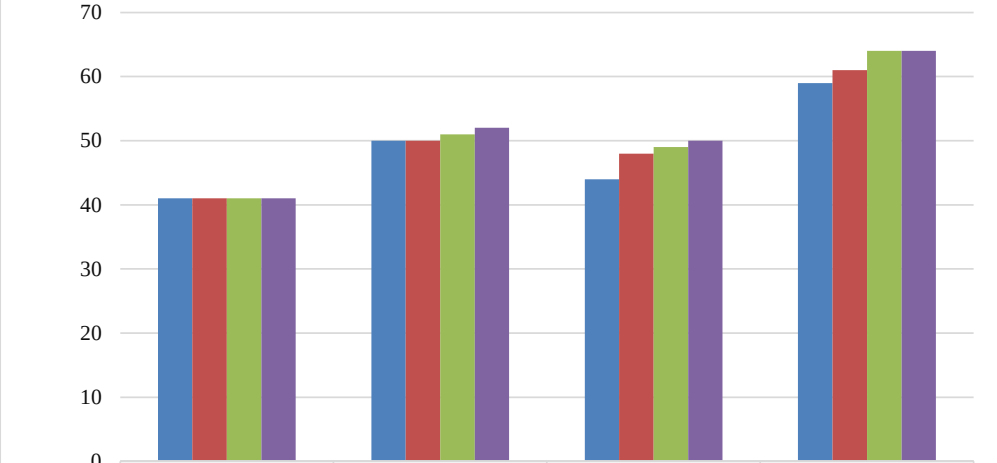
Student Performance on *SAT 10* Assessment

The *SAT 10* measures student academic knowledge in reading and mathematics and is administered each year to TUSD students in second grade through ninth grade. *SAT 10* performance is reported in norm-based scores that compare a student's performance with that of a representative sample of students across the United States. The comparison can be represented through a national percentile rank (NPR), where the 50th percentile represents the average performance nationally.

Exhibit 4.4.7 displays the national percentile rank of Tucson Unified School District students and all Arizona students in reading and mathematics by grade from 2009-10 to 2012-13.

Exhibit 4.4.7

***SAT 10*: Comparison of District and State Median Percentile Rank**
Tucson Unified School District
2010-2013



	TUSD	AZ	TUSD	AZ
	SAT 10 Mean Reading Percentile Rank		SAT 10 Mean Math Percentile Rank	
2010	41	50	44	59
2011	41	50	48	61
2012	41	51	49	64
2013	41	52	50	64

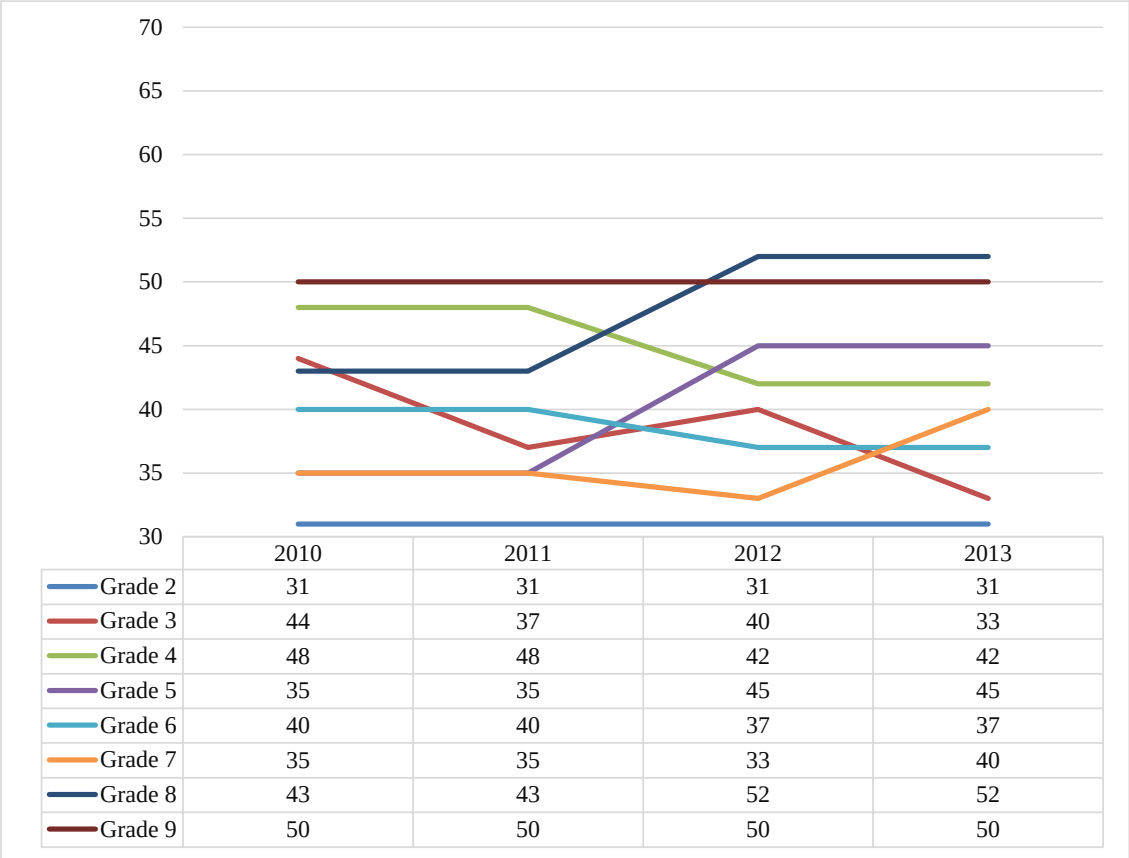
The following observations can be made from Exhibit 4.4.7:

- Mean *SAT 10* reading percentile rank for TUSD students has remained constant at 41 from 2009-10 to 2012-13.
- Mean *SAT 10* reading percentile rank for Arizona students has increased two points from 2009-10 to 2012-13.
- Mean *SAT 10* math percentile rank for TUSD students has increased six points from 2009-10 to 2012-13.
- Mean *SAT 10* math percentile rank for Arizona students has increased five points from 2009-10 to 2012-13.

Exhibit 4.4.8 displays the national percentile rank of Tucson Unified School District students in reading by grade from 2009-10 to 2012-13.

Exhibit 4.4.8

***SAT 10*: District Median Reading Percentile Rank by Grade**
Tucson Unified School District
2010-2013



	2010	2011	2012	2013
Grade 2	31	31	31	31
Grade 3	44	37	40	33
Grade 4	48	48	42	42
Grade 5	35	35	45	45
Grade 6	40	40	37	37
Grade 7	35	35	33	40
Grade 8	43	43	52	52
Grade 9	50	50	50	50

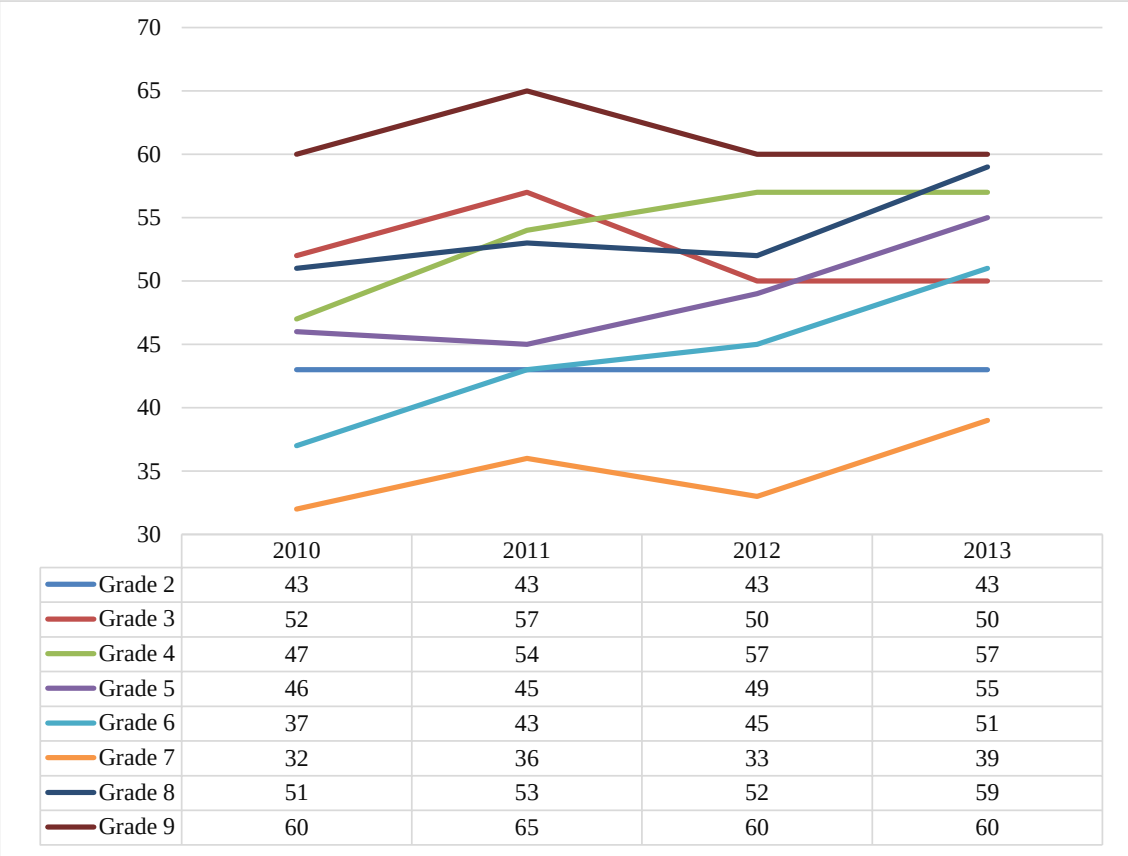
The following observations can be made from Exhibit 4.4.8:

- Median SAT 10 reading percentile ranks for TUSD students in fourth, fifth, seventh and eighth grades have increased from the 2009-10 level.
- Median SAT 10 reading percentile ranks for TUSD students in second and ninth grade are the same in 2009-10 as they are in 2009-10.
- Median SAT 10 reading percentile ranks for TUSD students in third and sixth grades have declined from the 2009-10 level.
- Students in eighth grade are above the national median percentile rank in reading.

Exhibit 4.4.9 displays the national percentile rank of Tucson Unified School District students in mathematics by grade from 2009-10 to 2012-13.

Exhibit 4.4.9

***SAT 10*: District Median Math Percentile Rank**
Tucson Unified School District
2010-2013



	2010	2011	2012	2013
Grade 2	43	43	43	43
Grade 3	52	57	50	50
Grade 4	47	54	57	57
Grade 5	46	45	49	55
Grade 6	37	43	45	51
Grade 7	32	36	33	39
Grade 8	51	53	52	59
Grade 9	60	65	60	60

The following observations can be made from Exhibit 4.4.9:

- Median SAT 10 math percentile ranks for TUSD students in fourth through eighth grades have increased from the 2009-10 level.
- Median SAT 10 math percentile ranks for TUSD students in second and ninth grade are the same in 2009-10 as they are in 2009-10.
- Median SAT 10 math percentile ranks for TUSD students in third grade has declined slightly from the 2009-10 level.
- Students in all grades but second and seventh are above the national median percentile rank in math.

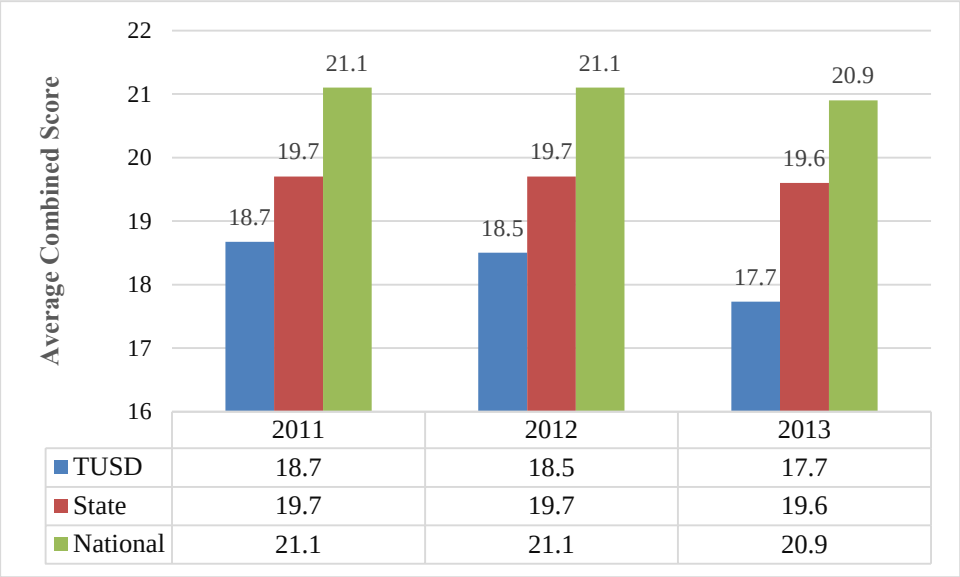
Student Performance on *ACT* Assessment

ACT measures student performance in English, math, reading, and science at or near the end of the Tucson Unified School District experience. TUSD students began taking the *ACT* in significant numbers in the spring of 2010 as the result of a partnership with the Arizona Department of Education and the Helios Foundation. Students are assigned a score in each area as well as a combined score.

Exhibit 4.4.10 displays the average combined *ACT* scores for the nation, the state, and Tucson Unified School District for the past three years.

Exhibit 4.4.10

***ACT* Composite: District, State, and National**
Tucson Unified School District
2011-2013



	2011	2012	2013
TUSD	18.7	18.5	17.7
State	19.7	19.7	19.6
National	21.1	21.1	20.9

The following observations can be made from Exhibit 4.4.10:

- Average combined *ACT* scores remained consistent between 2011 and 2012 at the national and state levels, but dropped slightly in 2013.
- Average combined *ACT* scores for TUSD have declined in each of the past three years.
- District average performance is consistently below national and state performance.
- The gap between district and state performance has almost doubled in the past three years, from -1 point to -1.9.

Exhibit 4.4.11

***ACT* Content Areas: Gap Between District and National Performance**
Tucson Unified School District
2011-2013

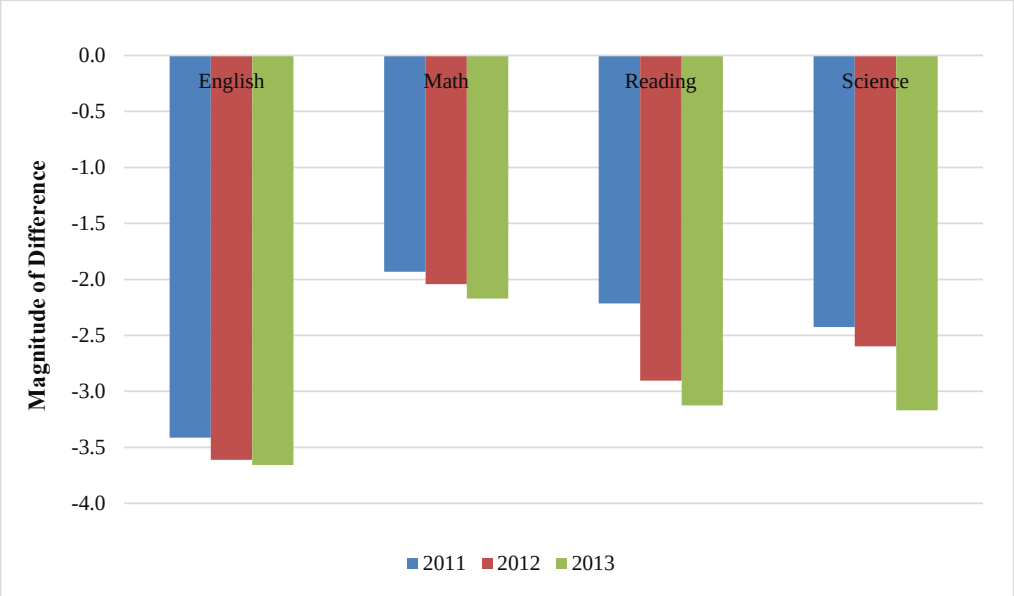


Exhibit 4.4.11 examines the gap between national *ACT* performance and TUSD performance in each of the content areas.

- All content areas reflect an increasing gap between district and national performance from 2011 to 2013.
- The largest gaps between TUSD and national *ACT* performance are in English (-3.7) and Science (-3.2).
- The smallest gap between district and national performance are in math (-2.2).

School Performance on Third Grade *AIMS* Exams by Percent of Low Socioeconomic Status

Educational researchers have frequently demonstrated that the percentage of students living in poverty or identified as economically disadvantaged is a predictor of student achievement. Consequently, observers often find that the highest achieving schools are the ones with the lowest percentage of economically disadvantaged students and the lowest achieving schools are those with the highest percentage of economically disadvantaged students.

In general, while this trend holds true for the Tucson Unified School District schools, auditors identified that there are numerous schools that are breaking this trend by showing relatively higher third grade proficiency rates than schools with similar populations. Third grade was selected in acknowledgement of the importance the Arizona legislature has placed on third grade reading proficiency. Exhibits 4.4.12 and 4.4.13 are scatter plots of the percentage of student assessment results that met *AIMS* standards for third grade reading and math, respectively, versus the percentage of students who are identified as low socioeconomic status. The data used to generate the chart, along with school names, can be found in Appendix H. The highest achieving schools fall to the top of the plot, while the highest economically disadvantaged schools fall to the right of the plot. The schools that are outperforming expectations are found in the top-right of the plot.

Exhibit 4.4.12

***AIMS* Third Grade Reading: Percent Meeting or Exceeding Standards**
By Percent Low Socioeconomic Status
Tucson Unified School District
2013

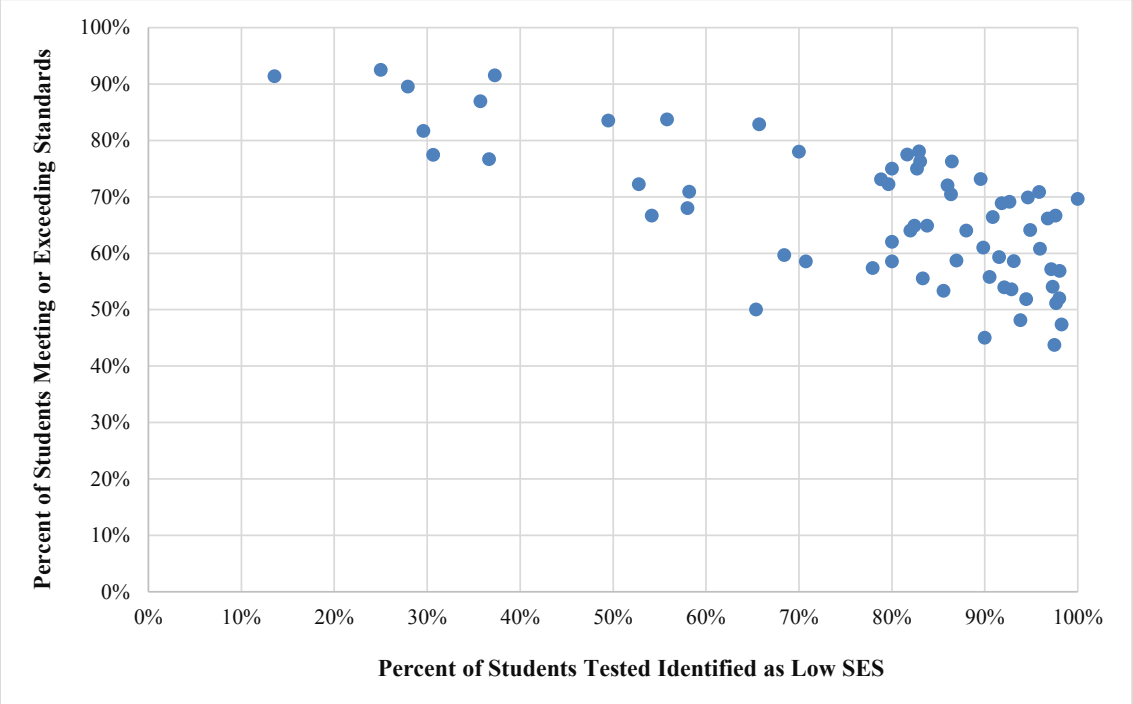
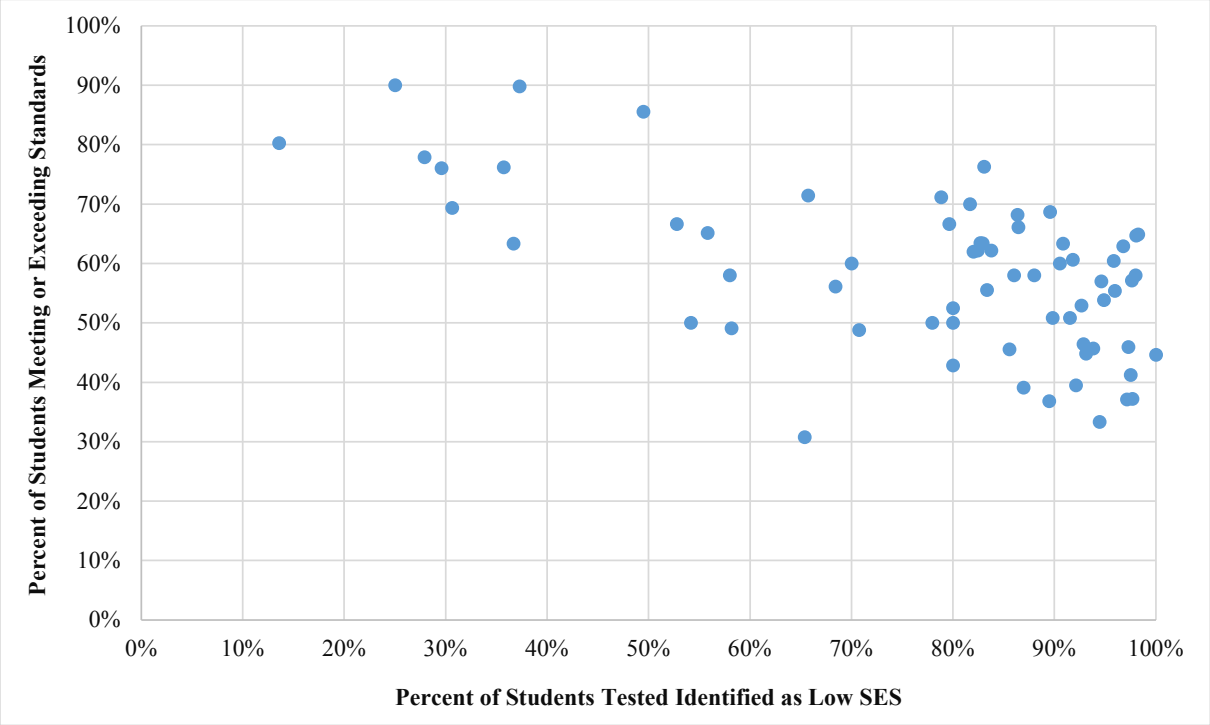


Exhibit 4.4.13

***AIMS* Third Grade Math: Percent Meeting or Exceeding Standards**
By Percent Low Socioeconomic Status
Tucson Unified School District
2013



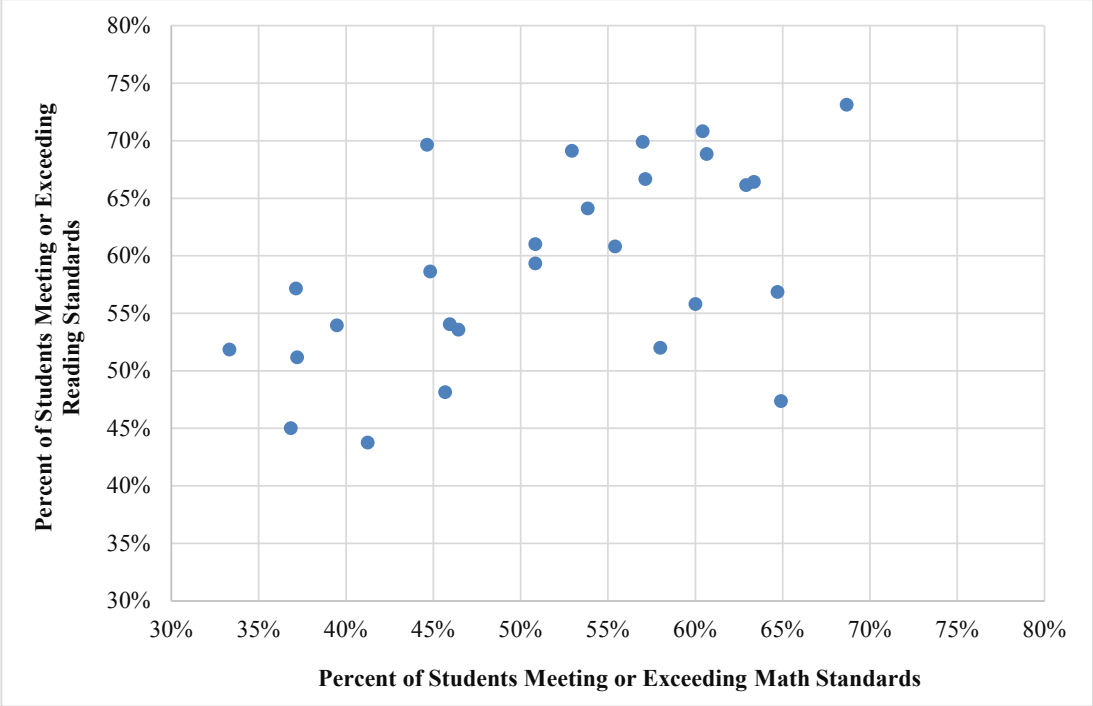
Auditors made the following observations about Exhibits 4.4.12 and 4.4.13:

- There is wide variation among percentages of students meeting or exceeding standards on third grade reading and math.
- Schools with lower percentages of students identified as low socioeconomic status have higher percentages of students meeting or exceeding standards on third grade reading and math.

Further clarification of the variations in student achievement can be seen in Exhibit 4.4.14, which is a scatterplot of the third grade reading and math performance for students at schools where at least 90 percent of students are identified as low socioeconomic status.

Exhibit 4.4.14

***AIMS* Third Grade Percent Meeting or Exceeding Standards:**
Schools at 90% Low Socioeconomic Status
Tucson Unified School District
2013



Auditors made the following observations about Exhibit 4.4.14:

- Among these schools with over 90 percent of students identified as low socioeconomic status, there is a 28-point range in reading and 36-point range in math, reflecting substantial variation between schools with similarly disadvantaged populations.
- The percentage of students meeting or exceeding standards in reading and math display a positive correlation.
- Third grade performance in reading is higher than math for 85 percent of these highest poverty schools.

Summary

A review of the broad sweep of the data displayed in Exhibits 4.4.1 through 4.4.14 reveals that student performance has improved from 2008 to 2013 in most grades and subjects. On the *AIMS* exams, Tucson Unified School District students have consistently performed lower than statewide averages. The performance gap between Tucson Unified School District and statewide grade level cohorts has widened in math; however, district cohorts have increased proficiency in reading more rapidly than their peers statewide. Conversely, *SAT 10* data indicate that Tucson Unified School District students are improving more in math than in reading, and that when compared to peers nationally, Tucson Unified School District students are achieving higher levels in math than in reading. Math is also the highest scoring content area for Tucson Unified School District students on the *ACT*, and displays the smallest gaps between student and state performance. Tucson Unified School District students have consistently performed lower than national and statewide averages on the *ACT*, and composite performance has declined over the past three years.

STANDARD 5: The School District Has Improved Productivity.

Productivity refers to the relationship between system input and output. A school system meeting this standard of the CMSi Curriculum Audit™ is able to demonstrate consistently improved pupil outcomes, even in the face of diminishing resources. Improved productivity results when a school system is able to create a consistent level of congruence between major variables in achieving enhanced results and in controlling costs.

What the Auditors Expected to Find in the Tucson Unified School District No. 1:

While the attainment of improved productivity in a school system is a complex process, caused in part by the lack of a tight organizational structure (referred to as "loosely coupled"), common indicators of a school system meeting this audit standard are:

- Planned and actual congruence among curricular objectives, results, and financial allocations;
- A financial data base and network that can track costs to results, provide sufficient fiduciary control, and be used as a viable data base in making policy and operational decisions;
- Specific means that have been selected or modified and implemented to attain better results in the schools over a specified time period;
- A planned series of interventions that have raised pupil performance levels over time and maintained those levels within the same cost parameters as in the past;
- School facilities that are well-kept, sufficient, safe, orderly, and conducive to effective delivery of the instructional program; and
- Support systems that function in systemic ways.

Overview of What the Auditors Found in the Tucson Unified School District No. 1:

This section is an overview of the findings that follow in the area of Standard Five. Details follow within separate findings.

Standard Five addresses issues of productivity within the system. The auditors found that the Tucson Unified School District is fiscally well managed in a business-like manner with strong internal controls. However, TUSD has been subject to diminishing funding, forcing significant cost-containment adjustments to stay within its allowable expenditure levels.

Moreover, ongoing budget constraints and competing resource demands limit the system's capacity to prepare, support, and deliver a high quality curriculum equally to every classroom. Budget development and decision making are not yet fully aligned to the district's curricular goals and essential priorities, nor are there adequate structures to facilitate cost-benefit analyses across the decentralized financial network to assure maximum productivity.

On average, many of the TUSD school buildings are about 60 years of age, and equality of educational environments was found to be uneven, with disparities in maintenance, modernity, and overall quality in environmental provisions. Planning for facilities improvement was found to be inadequate and heavily dependent upon funding availability from the State of Arizona.

Technology across schools was found to be seriously disparate, unequal, and obsolescent. TUSD students do not have the benefit of equal access to a quality technology curriculum or cutting edge equipment, programs, or applications.

The Tucson Unified School District contains an overabundance of program interventions, special initiatives, and activities designed to enhance schooling. A survey of principals revealed a total of no less than 170 interventions, consisting of instructional programs, supplementary programs, pull-out programs, and special programs or activities. The auditors found that many of these interventions compete with or substitute for the district curriculum without justification.

Historical autonomy at the school level has resulted in a number of programs being added to the curriculum as a means of enhancing student performance without the benefit of adequately documented objectives, appropriate measurement of results, monitoring, or oversight.

Limited strategies including conjecture and perception, were reported to the auditors as the means by which district staff currently determine what is the objective, what works and how, what helps improve learning, or what costs are incurred for such extensive alternatives.

Essentially, the Tucson Unified School District was found not to be in control in terms of congruity, focus, and unity of purpose in delivering an equitable and quality educational program. Fragmentation is widespread across the system, making it difficult to clearly define and unambiguously demonstrate unity of purpose in what the system stands for, what it believes in, and what it is trying to accomplish.

Finding 5.1: The district's budget development and financial decision making are not driven by curricular goals, strategic priorities, and assessment data, and allocations are structured in a manner that prevents measurement of the cost-effectiveness of program act**ivities and services.**

The budget is the major financial planning document for expressing in dollars the goals and priorities of the district and keeping the organization focused on productivity. As such, it should reflect a direct connection between the resources provided and the criticality of the goals toward which those resources are directed. System-wide productivity is enhanced by budgetary decisions that assure adequate resources to those program efforts that are aligned with district goals and priorities and that can demonstrate success in meeting them. Without this systematic linkage, officials can easily allow themselves to spread district fiscal resources too thinly, stray from the system's mission and focus, and end up serving the students and community ineffectively, inequitably, or inconsistently.

Budgeting and fiscal practices directly impact the resources available to support the educational program. Major responsibilities of district leadership are to assure that the budget is faithful to the mission, supports the goals, and incorporates consideration of the results of student assessment and program evaluation efforts to help assure efficacy. Leaders also are responsible for tempering budget decisions with the principle of equity and ensuring a data-based focus of resources to enhance student learning and system productivity. Their ongoing management of resources is expected to be consistent with budget decisions, state and federal laws, and generally-accepted principles of accounting.

The auditors reviewed board policies regarding budgeting and financial matters, the district budget for 2013-14, independent accountants' financial statements, and various other financial management documents as well as district planning documents found on the TUSD website. Interviews were conducted with board members, administrators, teachers, parents, and other community members to determine the budgetary processes used by the district and their degree of effectiveness. Auditors primarily inquired about fiscal operations and financial management practices as elements of system productivity and school accountability.

The general role of a school board in the budget process should be to adopt policies that guide the district operations and budget activities. Boards have the responsibility to provide adequate oversight to assure that priorities and goals are clearly identified, based on data, and communicated system-wide prior to budget planning. A board must then assure the public that financial resources are placed so as to support the mission and declared priorities, educational goals, and identified needs. Auditors reviewed board policies to identify direction related to budget development and management, but found only three relevant policy documents. The three policies of the Tucson Unified School District related to financial planning and budgeting are summarized below:

- *Board Policy DBC: Budget, Planning, Preparation and Schedule* explicitly declares that "each school year the Superintendent shall prepare and disseminate a budget preparation schedule to accomplish all required budgetary actions for the following school year. This schedule will, as a minimum, provide specific dates for the accomplishment of all state-mandated actions."

The expectation inherent in this statement is that there will be identifiable linkage between the budget and the district's planning documents, which communicate statements incorporating state-mandated actions.

- *Board Policy DD: Funding Proposals, Grants, and Special Projects* requires that the "Governing Board is to be kept informed of possible sources of state, federal and other funds for the support of the schools and/or for the enhancement of educational opportunities. The Superintendent is to apprise the Board of its eligibility for general or program funds and to make recommendations for Board action."
- *Board Policy DDA: Funding Sources Outside the School System* stipulates that the" District may submit proposals to private foundations and other sources of financial aid for subsidizing such activities as innovative projects, feasibility studies, long-range planning, research and development, or other educational needs. The District may also accept gifts/donations from outside sources which are not current or potential vendors. The disposition of unused funds from these sources shall be in accordance with law.

  The Governing Board may receive, hold, and dispose of any gift, grant, or bequest of property or equipment in accordance with state law and the intent of the instrument conferring title.

  The Superintendent has the authority to approve all grants from the Arizona Department of Education (ADE) and from the US Department of Education (DOE), regardless of the dollar amount.

  The following approval limits apply to all grants, other than ADE and US DOE:

  - $50,000.00 or less Superintendent (Approval)
  - Greater than $50,000.00 Governing Board Approval Required

  The Governing Board will receive quarterly summary reports of all grants approved, including the amount of each grant."

The auditors found that, except for *Policy DBC*, the district policies related to financial planning and budgeting offer minimal direction to the budget development and decision-making process. The auditors' expectation, missing in *Board Policy DBC*, is that active consideration of the goals, objectives, and priorities in the budget planning sessions and eventually in the board actions for budget adoption would be explicitly delineated.

The direction contained in *Policies DBC, DD,* and *DDA* is broad and offers no supporting information to suggest how the board would know if the budget proposed would or would not "achiev[e] the goals and objectives of the school district." No policy was found that addresses budget modifications following adoption and contains clear and explicit decision-making and procedural direction based on changing needs of the clientele and system.

District-provided documents related to budget planning and development included the following:

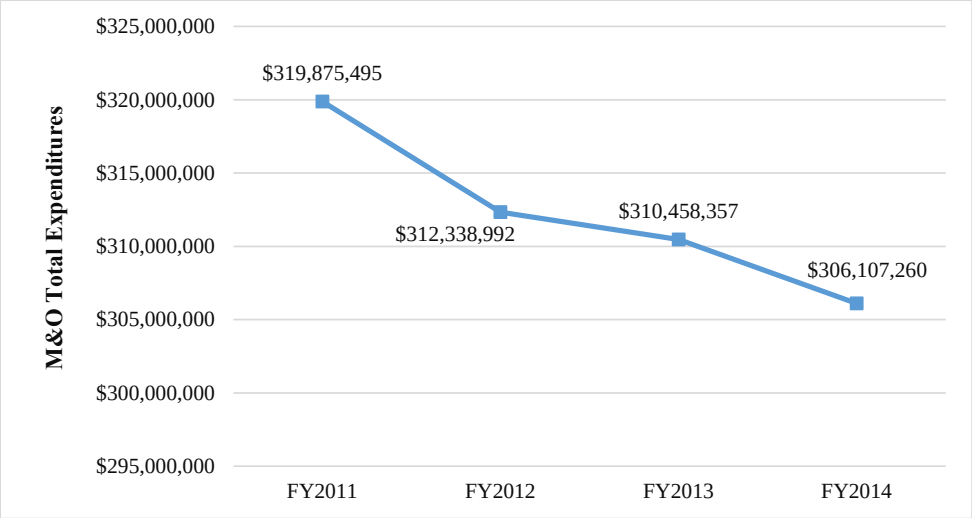
- A procedure for budget process and timelines (an Excel spreadsheet) and
- Annual Adopted Expenditure Budgets for 2011-2014.

The district budget is presented in a format consistent with *Policy DBC* and state requirements. The auditors found that the expenditure budget document presents little information for programs, and no information was found with interpretive guidance for readers in understanding the budget. The program explanations do not offer multi-year planning information but do outline clearly the current year and projected year data. No separate long-range financial plan was presented to auditors.

The auditors found that the district's maintenance and operations expenditure budgeting reflected diminishing financial resources over the past four budget cycles. The budgeted amounts for FY2011 to FY2014 are shown in Exhibit 5.1.1:

Exhibit 5.1.1

Budgeted M&O Expenditures FY2011-FY2014
Tucson Unified School District
January 2014



The auditors found that the amount budgeted for the four-year period in Exhibit 5.1.1 declined by $13,768,235, reflecting a decline in district enrollment. The budgeting process included some specially funded programs, including ESEA Title VIII funds in special education, and a K-3 Reading initiative that provided additional funds through a district override.

The auditors found very weak connections between funding allocations and student academic progress, program evidence of quantitative improvement (due to the use of over 150 "innovative" interventions), or equity-driven decisions for infrastructure improvements (see Findings 3.5, 4.3, 5.2, and 5.3).

The auditors learned that individual schools have taken steps to augment their district allocations with funds donated by parents and community agencies, special fundraising activities, or other local school initiatives. At least one elementary school, serving one of the more affluent areas of TUSD, reported that they had raised as much as $85,000 in a given year. The auditors did not find any board sanctions or limitations for such funds, which could exacerbate inequality of educational opportunities across schools.

The audit team interviewed board members, the superintendent, school principals, and various program administrators about budget planning, development, and decisionmaking. Information provided consistently pointed to a process that represents traditional, prior-year rollover[4] budget planning with minimal guidelines for prioritization of requests and needs-driven modifications.

A centrally planned, enrollment-based process that allocates, in the same weighted formula-driven manner, to all schools and budget programs was described to auditors. Budget planners are provided their current year level and preliminary enrollment data on which they are to base their budgets. After requests are examined by the Budget Manager, they are forwarded to the Deputy Superintendent, who compiles the requests for review and coordinates presentation of the proposals to the superintendent and governing board. The governing board is the final decision-making body in the budget development process. As confirmation of revenues is available, final budget data are developed by the budget department, revising funding requests and resubmitting them for final determination. The final administrative draft budget is presented in public hearing and is reaffirmed or modified and adopted by the governing board.

[4] In some cases, the amount budgeted from year to year in some categories was unchanged.

The auditors found that the budgeting process and documents were inadequate to connect the effectiveness of results to expenditures for various activities. No connection between the budget and the any long-range planning could be identified, but the system is currently engaged in a strategic planning process (see Finding 1.2).

Auditors found no formal steps in place for early identification or affirmation of goals and priorities by the board in order to formally incorporate these considerations within the budget development process. All interviewees confirmed that the budget planning is formula-driven and based on the previous year's allocations.

Interviews revealed various levels of interest in and concern about budget development, decision making, and the insufficiency of funds:

- "[The district] needs to control costs and make certain that it comes back to the quality of education for the kids. Perhaps consider breaking up the district to be able to best maintain the schools. When board members were asked about input into the budget and direction for priorities to be addressed, they indicated a variety of perceptions regarding board input." (Parent)
- 'Skimping on everything from facilities to books to toilet paper may be OK for a year or two, but having chronic budget issues every year will eventually degrade the education system." (Parent)
- '[There is a] need to make better decisions based more on how [things] affect the students' education not just by the budget.' (Parent)
- "District communications with parents are condescending and generally don't say what they're really about. The meetings to cut $10 million were announced as something else, that never-not once-made reference to budget cuts." (Parent)
- "Parents need more input in school funding/spending decisions. Fine arts need to be [kept in the] younger grades, such as violin in kinder-5th at all schools, more visual arts, etc." (Parent)
- "[District needs to improve] budget management, prioritizing the placement of funds with an emphasis on student needs - NOT administrative salaries." (Teacher)
- "Work orders for building needs take too long to complete, [and it's] too hard to get timely responses from some departments. Budget transfers and requisitions take way too long." (Principal)
- "Budgets and program [funds] are not equal between schools at same level." (Principal)

The audit team assessed the procedures and documents used in the budget development and management processes against the six audit components of a curriculum-driven or performance-based budget. Exhibit 5.1.2 lists the components expected in the budget development process and the auditors' ratings of the presence or absence of these in the district's budgeting approach.

Exhibit 5.1.2

Components of a Performance-Based Budget
And Adequacy of Use in the Budget Development Process
Tucson Unified School District
January 2014

Curriculum-driven Budget Criteria	Auditors' Rating	
	Adequate	Inadequate
1. Tangible, demonstrable connections are evident between assessment of operational curriculum effectiveness and allocations of resources.		X
2. Rank ordering of program components is provided to permit flexibility in budget expansion, reduction, or stabilization based on changing needs or priorities.	Partial	
3. Each budget request or submittal shall be described so as to permit evaluation of consequences of funding or non-funding in terms of performance or results.		X
4. Cost benefits of components in curriculum programming are delineated in budget decision making.		X
5. Budget requests compete for funding based upon evaluation of criticality of need and relationship to achievement of curriculum effectiveness.		X
6. Priorities in the budget are set by participation of key educational staff in the decision-making process. Teacher and principal suggestions and ideas for budget priorities are incorporated into the decision-making process as allocations are crafted.		X
Total	**0**	**6**
Percentage Adequate	**0%**	
Partial ratings are counted as inadequate.		

As can be gathered from the information in Exhibit 5.1.2, auditors considered one criterion of the six criteria to be partially present in the district's approach to budgeting. Further comments are provided on each criterion below.

Criterion One: Connections

While auditors were told by a few administrators that site plans and/or the district strategic plan figured into their decisions about budget requests, conscious connections with budget planning were not consistently or systematically occurring. No budget instructions or request forms presented information either requiring or suggesting this linkage.

Criterion Two: Rank Ordering

No documented rank ordering of requests was presented to auditors. A few principals reported that they engage their staffs in the final prioritization of building or program budget requests; other budget managers accomplish the prioritization of their particular budget items themselves. No forms for rank ordering and incremental presentation of requests at the council level were presented to auditors.

Criterion Three: Descriptions for Evaluation of Funding Consequences

Any descriptions of funding/non-funding consequences were reported to be oral comments to decision-makers (the Superintendent's Council) or brief informational memoranda provided upon request. No standardized forms were presented as customary elements of the budgeting process.

Criterion Four: Cost-benefits Analysis

Auditors were told that cost-to-benefit information was usually presented with proposals for new programs or intervention efforts but that cost-benefit analysis is not a systematic ingredient of budget requests for

continuation items or proposals for deletion of budget components. No forms were made available to auditors representing this step in budget planning.

Criterion Five: Competition on Basis of Needs and Effectiveness

Any competition among proposals that is based on needs analysis or effectiveness of the services represented in the proposal occurs informally either within the staff from which the proposal is presented or within the decision-making discussions at the Superintendent's Council. Such considerations are not formalized in an outlined procedure, and forms to present competing proposals were not available. The board does not characteristically engage in discussion of programs on a needs/criticality basis when the budget is presented to them.

Criterion Six: Decision-making Process Participation

Participation of key educational staff typically (but not always) occurs at the presenter's level (school, department, or program), or at the budget management level, when principals receive information about the planned budget. Principals and teachers were not found to be participants in setting priorities at the allocation level, which delimits their suggestions in setting those priorities. However, when principals are asked to reduce the school requests, according to interviews, many involve their staffs in that decision.

Summary

Without the benefit of formal assessment to verify program efficacy, there is no systematic linkage between funding and board-adopted priorities. Consequently, decision-makers can easily allow fiscal resource allocations indiscriminately without connections to the system's mission and focus. Without cost-effectiveness data on allocations for programs and service, the system could end up serving the students and community ineffectively, inequitably, or inconsistently.

Current budget development and decision-making processes of the Tucson Unified Schools are not yet fully adequate in assuring system-wide cohesion and productivity.

Finding 5.2: The need for facility improvements is a priority in spite of recent progress. Improved technology systems and software are needed for both operational effectiveness and quality teaching and learning; the minimal funding of these improvements is a major roadblock for the district and some schools. Similarly, the human resource services are lagging in recruitment and hiring processes to ensure that all teaching positions are filled with qualified personnel. Student transportation continues to improve in service and efficiency.

Effective school districts develop a strong support foundation of facilities and operations that enhance their ability to attain district and school goals and ensure quality teaching and learning as well as efficient management functions. Facilities that house both educational services for students and the operational functions of a school district establish an environment that either impedes or supports effective and efficient implementation of service delivery and administrative management. Particularly critical supports in meeting these needs are adequate facilities and technology systems based on quality planning for the wide range of needs to be addressed within those buildings. For example, inadequate space for effective classroom instruction, cluttered or crowded environments, poor technology and utilities functions, and lack of appropriate safety provisions can hinder teaching and learning as well as ongoing work by office staff and district leaders. Strong school systems ensure short- and long-term planning to enhance the quality of financial, facilities, human resource, pupil transportation, and technology support systems and operations.

Technology planning in effective school districts also leads technology implementation toward the facilitation of deeper, more meaningful 21st century learning. The integration of technology into curriculum and instruction is designed for technology to be used as a tool to increase student achievement. System expectations for the use of technology must be clearly defined, planned, modeled, monitored, and evaluated. Planning for the use of technology is the key to providing direction for the selection, adoption, implementation, and evaluation of technology as management support and an instructional tool.

To review all the facilities and operations planning and functions, the audit team undertook an extensive review of documents and conducted site visits, as well as interviews with board members, district and school personnel,

and parents. They first addressed the facilities planning process and results, followed by similar analysis of technology support services. They also reviewed financial and budgetary services, personnel practices, and student transportation services as critical system supports. In their review of these operational functions, the audit team included documents with direction related to the specific operations, particularly board policies, job descriptions, planning documents, data reports, and other related documents provided by the district staff. Additionally, for firsthand visual observations, the auditors visited all schools and some district office facilities. During these visits they particularly focused on maintenance and cleanliness, physical atmosphere, capacity for educational and other current uses, safety, and access by users to intended equipment and technology in the facilities. Finally, they reviewed the updated bond plans, master plan progress reports, and the technology budget report (2013-14).

Overall, school facilities were found to be adequately maintained, clean, and functional; several exceptions were observed, and most improvements needed are planned with access to necessary funding. Complicating (but not prohibiting) factors acknowledged by the auditors are the declines in student enrollment and state funding for schools, as well as the specificity of some requirements in the Unitary Status Plan. The auditors found that facility availability was adequate for administrative functions, although access to more consolidated venues of services could contribute to efficiency of operations and enhance ease of access to offices for providing services and enhancing collaboration. The need of highest urgency that emerged from the auditors' review of systems and operations was updating and expanding the technology systems and software to provide quality educational support to teachers and students in all schools and to reduce the inefficiencies in daily management of personnel and finance functions at both district and school levels. Slow processing of such actions as purchasing equipment or materials, hiring of staff, and receiving custodial and maintenance services is affected directly and indirectly by both the recent staff reductions caused by changes in state funding and the current weaknesses in the technological support systems.

The audit team first reviewed board policies for direction in the areas of facilities, finance and budget, student transportation, and technology systems.

Board policies that provide direction for the planning and management of facilities in the Tucson Unified School District are limited in number and do not address all aspects of planning and management. The two policies that include some planning direction, along with regulation direction, follow:

- *Board Policy FCB: Closing Schools* (and *Regulation FCBR*) lays out the process and considerations for decisions related to school closures and requirements for reporting decisions and progress.
- *Board Policy FD: Facility Planning and Development* requires that "design and construction of all new District facilities and renovation of all existing District facilities shall be performed under the direction of an architect or engineer ('Design Professional') …. The district will be responsible for a different inspector and code compliance officer."

Policy direction related to technology systems is focused on acceptable use by staff and students and some statements of expectation about the role of technology in instruction; no overall direction for technology services was clearly stated in policies. The following policies provide some indication of district expectation:

- *Board Policy EJA: Acceptable Use of Technology Resources* states,

  "Technology…is a valuable tool that supports teaching and learning through access to resources and information, learning activities, interpersonal communication, research, training and collaboration and dissemination of successful educational practices, methods and materials. Information technologies such as the Internet are an extension of school libraries and other media/resource centers provided with a goal of promoting resource sharing, research innovation, communication and opportunity for collaborative work. The Tucson Unified School District (TUSD) Governing Board supports the use of technology by staff that is consistent with the goals of the district."
- *Board Policy IJK: Library Programs* states that "The mission of the school library program is to support student achievement by promoting the habits of lifelong learning. The library, the intellectual hub of the school community, is where students and adults work and learn together, developing and

applying information literacy skills in ways that continually generate new interests and knowledge." The policy further lists the components of a comprehensive school library program, including on-line and reference subscriptions that support current curriculum and Internet access: "The teacher-librarian collaborates with the faculty to integrate information literacy with content area instruction and learning strategies across the curriculum, pre-K through grade 12."

- *Board Policy IJNDB: Use of Technology Resources in Instruction* states that the use of networks, databases, and any other computer-accessible sources of information services "shall be in support of education, research, and the educational goals of the District."
- *Board Policy IJNDB-R: Use of Technology Resources in Instruction* provides guidelines for the use of electronic information services including acceptable use by students and employees.
- *Board Policy IJNDB-R2: Use of Technology Resources in Instruction* states, "The One-to-One Laptop Initiative provides students with a tool to expand their learning opportunities."

The policies and/or regulations most relevant in the review of financial management, funding sources, and of decision making related to various support services follow:

- *Board Policy CBCA: Delegated Authority* assigns responsibility for hiring, evaluating, and approving certain types of grants or contracted services to the superintendent.
- *Board Policy DBC: Budget Planning* simply requires the superintendent to "prepare and disseminate" a budget preparation schedule.
- *Board Policy DDA: Funding Sources Outside the School System* requires board approval and summary reports for funds acquired in amounts exceeding $50,000.
- *Board Policy DJ: Purchasing Procedures* presents the requirements for competitive bids and proposals consistent with Arizona statues and rules and with TUSD policies. The accompanying *Regulation DJ-R* responds to and explains the procedures related to the policy. It addresses specific levels of procurement and identifies which administrators approve which procurements based on dollar amounts and types of services or products. It also defines what constitutes misappropriation.
- *Board Policy EB: Environment and Safety Program* directs priority attention to safety and roles of the district, schools, employees, and students. The policy is expanded in the accompanying *Regulation EB.*

Policy direction for student transportation services includes the following:

- *Board Policy EE: Student Transportation in School Buses* addresses requirements for approved routes, process for responding to student conduct on buses, delegation of disciplinary action to the offender's principals, and clarification of eligibility for bus transportation. It further states that students granted permission to attend schools other than the designated schools must provide their own transportation. Provisions for exception are included in attached information.

Relevant board policies directing personnel functions include:

- *Board Policy GA: Personnel Goals/Priority Objectives* includes expectations for the hiring of quality staff, providing support such as professional development, and utilizing an appraisal system that contributes to future growth of the employee.
- *Board Policy GBA: Equal Employment Opportunity* reiterates the expectation of non-discrimination.
- *Board Policy GCAA: Application for Position* explains the requirements for online job applications.
- *Board Policy GCAB: Filling of Vacancies* addresses the expected process for interviewing, participation and input into the interviews and decisions, information to be presented to the board in the hiring of administrative positions, and delegation of other procedures to the superintendent.
- *Board Policy GCAC: Negotiations* lays out the expectations related to negotiation of employee group contracts. Article II specifically notes the ultimate decision making to be the responsibility

of the governing board and prohibits reduction or deletion of board rights and responsibilities by the negotiation process and contracts.

- *Board Policy GCFC: Certification and Credentialing Requirements* requires all administrative and teaching applicants to provide certification documentation prior to being hired.

Additional policies and regulations address employee expectations for health and safety in the workplaces, appropriate practices in general, and approaches to resolution of problems in the areas designated.

Several other documents provided to the audit team addressed topics in the realm of facilities, operations, and especially technology. Most notable among those with some direction for the district were the following:

- Architectural Interior Building Assessment, 2005 (used in early stages of facilities review);
- Strategic Plan, 2011-12 (used for decisions on closures and mergers over past the two years);
- Master Plan, 2012-13 (to be updated regularly) and all accompanying reports and presentation documents;
- Facilities Condition Index (also updated regularly)- narrative and data sheets, including explanations of rubrics and scores;
- Portable Facilities Index criteria, 2013-14, including criteria for July 2014 Educational Suitability Scores for school sites;
- Facilities Information Report with Capacity, Utilization and Portables, 2013;
- TUSD Unitary Status Report (has fed into a variety of facilities and operations planning);
- Annual Bond Report, 2012-13 (framework for providing updated information regarding bond funds, progress, and problems as facilities work is implemented); and
- Technology Budget Report, 2013-14.

The following job descriptions also provide information related to expected duties and functions for a variety of positions with responsibility linked to facility, finance, personnel, transportation, and technology systems as operational support for the district and schools:

- Superintendent – includes broad responsibilities for administering board policies, "organizing district programs for effective teaching and learning" and directing "the activities and operations of district-wise business operations." Although dated 2004, most of the content in this document appeared to be congruent with what interviews indicated as current general functions of this position.
- Deputy Superintendent, Operations – among other functions, is " responsible for operational departments as assigned by the Superintendent of Schools, "leads the Business Leadership Team, oversees the Finance Department for compliance with federal and state laws, works in collaboration with the Chief Financial Officer to oversee internal audits of TUSD finances," works with the Superintendent to develop the TUSD budget, and "oversees the Human Resources department to ensure process are effective, efficient, and serve all major human capital functions for TUSD, including but not limited identifying, recruiting, and retaining quality employees." The position is also expected to "ensure district and school sites are properly maintained, safe, clean and orderly" and the Food Services are implemented effectively and in accordance with industry standards and guidelines for student eligibility for free and reduced meals. This deputy also oversees Technology Services, "ensuring technology needs… are appropriate and up-to-date" and that each department's planning process is aligned to the District mission, vision, values and goals.…[and] advises the Superintendent on financial and management issues related to the administrative and organizational effectiveness of the operational support systems; ensures collaboration with appropriate personnel so that the operational support systems are enhancing the educational process of the District; and directs and initiates resolution of organizational, fiscal and management problems related to areas of responsibility."

- Chief Operations Officer – "develops and executes the operational strategies in partnership with the Superintendent and the Executive Team"; leads the work of "operational, non-instructional departments such as Student Transportation, Custodial, Engineering, Facilities, Planning, and Energy/Natural Resource Conservation, material storage and distribution." The position is also expected to promote "stewardship of a 21st Century vision of learning."
- Director, Information Technology Infrastructure – "[d]irects IT infrastructure operations, strategic planning, services, and project implementation, including but not limited to voice and data telecommunications, networking, mobile technologies, data center operations, desktops/laptops, and server systems."
- Director, Instructional Technology – "[d]irects the coordination of District-wide instructional hardware and software deployments…[directs] the staff development for teachers to ensure they are able to successfully integrate technology into their curriculum in alignment with Arizona College and Career Ready Standards." The position also directs "designated programs to support student learning through the use of technology" and "appropriate personnel to provide technology services to classrooms,… assists the Assistant Superintendent's for Curriculum & Instruction with developing short and long range plans for the use of technology in instruction,..[and] directs and coordinates with appropriate personnel and departments for the purchase and deployment of computers, software, and interactive technologies into classrooms across the district."
- Principals – Job descriptions for all principals include the responsibility to ensure that "school facilities are safe, secure, and clean."

The auditors also noted that much explanation of expected actions regarding facilities, operations, technology, and safety are found in job descriptions of positions at the "front line." Among the many positions with responsibility at a direct management level are the following examples:

Facilities –

- Bond and Architecture Program Manager – manages bond program projects.
- Custodial Facilities Inspector – inspects district facilities to assure maintenance is performed in accordance with local, county, and "site-established standards."

Safety –

- Fire and Safety Systems Supervisor – "[s]upervises the installation, repair and maintenance of lock, door closer, electronic, fire and safety, equipment and systems.[C]oordinates the removal of hazardous material."
- Traffic Safety and Training Manager – manages the district's safety and security programs and related training programs; oversees safety of student transportation and school crossings.
- *School Safety and Security Manager* – manages the district-wide safety and security functions and oversees relevant assigned personnel.

Energy –

- Energy Projects Manager – "[a]dministers a comprehensive energy management program and assists with bond projects related to energy, water and waste."
- HVAC/Refrigeration Supervisor – " [m]anages the installation, maintenance and repair of heating, cooling, pneumatic, water treatment, sheet metal and refrigeration."

Operations and Transportation –

- Coordinator, Operations Solutions – investigates complaints from all sources regarding operations.
- Transportation Facility Manager - supervises the district's student transportation system operations and related personnel functions.

Technology –

- Director, Information Technology Infrastructure – "[d]irects IT infrastructure operations, strategic planning, services, and project implementation, including but not limited to voice and data telecommunications, networking, mobile technologies, data center operations, desktops/laptops, and server systems."
- Coordinator, Technology Services Organizational Development – "coordinates and facilitates planning and execution of departmental organization changes and transition activities…reports to Chief Information Officer and assists the CIO and senior managers in developing transition and change management plans regarding organizational structure and technology policies and procedures…. Serves as liaison with other Tucson Unified School District departments and entities with respect to changes to TUSD technology, organization and technology policies."
- Information Technology Project Manager- leads project teams, "collaborating at all levels of the school district to ensure project success," and manages project plans to meet time schedules and budget and technical requirements.
- Network Systems Integration Manager – monitors the schedules and maintenance of "mission critical equipment" and the district-wide telecommunications network.
- Administrative Network Manager – "[m]anages the installation, maintenance and operation of LAN/WAN Internet Services."
- Program Coordinator, SIS – manages the Student Information System software engineering, including design and technology for implementation.
- Support Systems Manager – manages tech services help, client service, technical and training needs of users, data verification for the Student Management System, data recovery, web systems, and Email Administration.

Facilities

According to documents reviewed by the audit team, Tucson Unified School District owns and maintains over 8,000,000 square feet of permanent building area and "approximately 410,000 square feet of portable classrooms." School facilities are about 60 years old on average.

The district's organizational chart indicates that the planning and management of facilities are under the cabinet leadership of the Deputy Superintendent of Operations, with the Chief Operations Officer overseeing facilities management and planning functions and the Chief Information Officer overseeing technology services. The job descriptions assigning responsibilities related to specific functions within district facility operations include several leadership, management, and staff positions with clearly designated roles. Primary district-level leadership roles are described in the job descriptions for the Superintendent, Deputy Superintendent of Operations, Chief Operations Officer, and Chief Information Officer. Additionally, auditors noted a clear expectation statement in job descriptions for all principals.

The auditors identified the Strategic Plan (2011) and the Master Plan (2012-13) with its accompanying data as sources of information relevant to current facility planning efforts intended to respond to both present and future needs. Though not currently applicable, the Strategic Plan was used to prepare for decisions about school closures and mergers in recent years; the Master Plan is the current "living document" driving facility decisions now and is intended to be integrated with the emerging Strategic Plan. The Unitary Status Plan contains some of the directive language leading to the current processes for facilities planning.

The Business Leadership Plan, compiled in December 2013, addresses four areas of comprehensive initiatives. One of the initiatives for Facilities Needs and Fixed Assets relates to the facilities and operations focus of this finding as well as to other documented priorities across the system:

- Initiative 13: Establish school sites and district facilities as tools for outstanding teaching and learning in the TUSD**.**

Reviewing the plans led auditors to focus on the Master Plan for facilities as the most relevant and comprehensive facilities planning document for analysis within this finding since it addressed the facility needs more specifically but also included considerable data that are expected to feed into the emerging strategic planning process. The audit expectation is that quality comprehensive facilities planning will reflect seven of the eight components listed in Exhibit 5.2.1 to be considered adequate in quality.

Exhibit 5.2.1

Comparison of Facility Planning Efforts to
Audit Components of Comprehensive Long-Range Facilities Planning
Tucson Unified School District
January 2014

Components of a Comprehensive Long-Range Facilities Plan	Auditors' Rating	
	Adequate	Inadequate
1. Philosophical statements that reflect community aspirations and the educational mission of the district and their relationship to short- and long-range facilities goals	X	
2. Enrollment projections that take into account any known circumstances that may change the pupil population	X	
3. The current organizational patterns of the district and identification of possible organizational changes necessary to support the educational program	X	
4. Identification of educational programs considered by designers of capital projects for renovation or addition of school facilities	X	
5. A detailed evaluation of each facility, including assessment of structural integrity, mechanical integrity and efficiency, energy efficiency, operations and maintenance, and health and safety requirements	X	
6. Prioritization of needs for renovation of existing facilities and the provision of additional facilities	X	
7. Cost analysis of potential capital projects to meet the educational needs of the district, including identification of revenues associated with capital construction	X	
8. Procedures for the involvement of all stakeholders of the school community in the development and evaluation of the long-range facilities plan	X	
Total	**8**	**0**
Percentage of Adequacy	**100%**	

The auditors found that all eight characteristics expected in quality facilities planning were present in the Facility Master Plan and its accompanying documents. The following comments explain the auditors' ratings in Exhibit 5.2.1:

Criterion 1: Philosophical statements that reflect community aspirations and the educational mission of the district are present and referenced in various sections of the documents; the stakeholder concerns and perspectives appear in several components of the planning documents. Comments regarding specific considerations in decision options reflect alignment with the values and philosophical statements.

Criterion 2: Enrollment projections take into account such factors as trends in student departure for neighboring districts, mobility factors, and the likely effects of school choice implementation by parents.

Criterion 3: The current organizational patterns of the district are depicted both in graphics and narrative, and the plan identifies possible organizational changes that could be necessary to support the educational program and student needs.

Criterion 4: Specific programs and student service needs are identified in the plan data in a way that they can be readily accessed and considered in the final decisions related to renovation, addition to, or closure of schools.

Criterion 5: The plans and the related documentation provide a detailed evaluation of each facility. The evaluations include structural integrity, mechanical integrity and efficiency, energy efficiency, operations and maintenance, and health and safety requirements.

Criterion 6: The accompanying reports and recommendations related to the Master Plan provided a prioritization of needs for renovation of existing facilities and possible merging of schools in response to declining enrollment and funding. The Facilities Condition Index clearly rates each facility on a range of characteristics to support prioritization.

Criterion 7: A comprehensive cost analysis of the possible projects to meet the educational and resource needs of the district, including mergers or closures, is presented with the Master Plan.

Criterion 8: The documents provide information on how all stakeholders of the school community have been and should continue to be involved in the recommendation, evaluation, and decision stages of the development of the long-range facilities plans .

Other documents reviewed by the auditors provided additional insight into the data for facilities planning and the challenges of implementing some resulting decisions. Most specifically, the Facilities Condition Index (FCI) (2012-13) provides information required to address the direction of the Unitary Status Plan approved by the federal court in February 2012. The plan requirement is to change the FCI Index "to include, at minimum: the location, number and condition of portable classrooms; and the existence and repair status of heating and cooling systems." According to the narrative accompanying the FCI, "in order to determine educational suitability, the District will perform an adequacy assessment to evaluate all schools to ensure Arizona state standards are met." Eight suitability categories with related scores were planned for use in evaluation of instructional space, after which the district will summarize each category score and develop a combined Educational Suitability Score (ESS). The index rates schools for adequacy in the following features:

1. Grounds
2. Parking lots and drives
3. Roofing
4. Structure
5. Environment
6. Building systems
7. Special systems
8. Technology and communication systems

Schools have been rated on each of the eight factors and assigned scores: 1 – poor, 2 – fair, 3 –acceptable, 4 – good, and 5 – excellent. Those rated "1" would represent schools with sufficient facility deficiencies to negatively impact education delivery, and those rated "2" would have minimal negative impact on education even with some deficiencies. (Further details on rubrics appear later in this finding under the Technology Services section.) Other ratings would indicate problems estimated to have no impact on classroom education.

The plan narrative explained the intent to amend the FCI by July 2013 to include the location, number, and condition of portable classrooms and status of heating and cooling systems; these changes are in the FCI document provided to the auditors. Then, by July 2014, the district will develop an Educational Suitability Score (ESS) for each school that addresses the following components:

1. "the quality of the grounds, including playgrounds and playfields and other outdoor areas, and their usability for school-related activities;
2. the library condition;

3. capacity and utilization of classrooms and other rooms used for school-related activities;
4. textbooks and other learning resources;
5. existence and quality of special facilities and laboratories (e.g., art, music, band and shop rooms, gymnasium, auditoriums, theaters, science and language labs);
6. capacity and use of cafeteria or other eating space(s); and
7. current fire and safety conditions and asbestos abatement plans."

The FCI also evaluates the conditions of support facilities across the district.

Using the amended FCI and ESS data, the district plans to revise and update the assessment of conditions biennially. Then,

> "Based on the results of the assessments using the FCI and the ESS, the District shall develop a multi-year plan for facilities repairs and improvements with priority on facility conditions that impact the health and safety of a school's students and on schools that score below a 2.0 on the FCI and/or below the District average on the ESS. The District shall give the next priority to Racially Concentrated Schools that score below 2.5 on the FCI."

Further data provided by the district included ages of buildings, designed capacity, current seat vacancies, bond funds spent on the facilities, and the number of portables on site. According to that undated report, the district still has over 300 portables on school sites:

- Elementary schools – 220,
- K-8 and middle schools – 50,
- High schools – 30, and
- Alternative schools – 3.

Several administrators commented on the problem of not being able to remove portables due to the costs involved and current funding limitations, so many are currently boarded up and not used.

Boarded up portable bathrooms at Grijalva Elementary

Disabled fire alarm sign with exposed wires

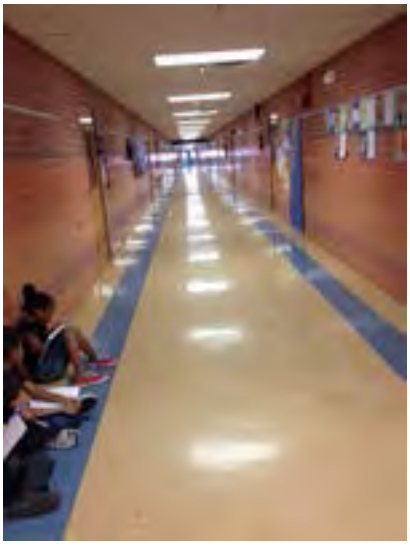
Audit teams visits to schools and other district facilities were conducted with a focus on maintenance, physical atmosphere, capacity for current use, safety, and access by users to intended equipment and technology in the facilities. The following represent the observations of the audit team:

1. **Maintenance and cleanliness** – Overall, most schools were seen to be satisfactorily maintained and clean and perceived as "adequate" or "good" by auditors visiting the sites. However, maintenance was observed to be "behind or poor" in 12 schools, heating and A/C systems were reportedly functioning either poorly or unpredictably in nine schools, and at least 10 schools were found to be less clean than

desirable. A few schools were seen to need repairs to flooring, broken windows, or roofing. Custodial staff shortage was mentioned by several principals during the auditors' visits; a few schools did not appear more than "acceptable" in cleanliness.

2. **Physical characteristics and atmosphere** – Most schools were observed to be in good condition, regardless of age, and several were noted as "excellent" in the physical appearance. Cluttered classrooms were noted in over 12 schools, and litter or trash was specifically observed in hallways or on the grounds of eight schools.
3. **Adequacy for current use** – Auditors found most schools adequate for their current uses. They noted difficult space provisions in some classrooms that had been part of open-classroom settings, occasional elevator problems in a multi-story building, and an undersized cafeteria that requires six lunch periods. Technology systems—both administrative and instructional—continue to be of high need in schools yet to rise on the priority list.
4. **Safety** – Overall, most schools appeared to be safe. However, the auditors observed the challenges of multiple entrances to secure in some schools, lock necessities in K-8 schools, flooring repair problems, air quality issues, the lack of fencing (at historical sites), and high school chemistry teachers having to change classrooms and pull chemicals on carts to their next classroom. The latter condition is considered a significant safety concern.
5. **Access by users to intended equipment and technology** – The auditors found this challenge to be one of the most prevalent in some schools. Too many schools do not have wi-fi access and students cannot readily do internet research. The technology operation systems and software are not of sufficient quality in many schools to support daily reporting and communication needs, along with the instructional use of technology (see Finding 3.5). Such work as processing purchase orders, monitoring various factors of student information, and accessing personnel information pose problems for several building administrators, as well as the district administrators with whom they need to communicate and coordinate data. Telephonic communication is also limited in several schools.

In summary, the observations during the auditors' visits to schools reflected similar results to the facilities FCI and ESS data reports used by the district in planning and prioritizing actions.



Van Buskirk Elementary School's clean hallway

Interviews also revealed several comments about facilities that auditors found relevant in the context of both facility planning and current facility conditions:

- "Historically the facility master plan was the only master plan in district. We are making it part of strategic planning for the district as a whole." (District Administrator)

- "The older buildings that are historic sites are a challenge when we want to undertake safety or other measures. We can't easily install a fence or anything like that without going through the Historical Society; they don't want fences." (District Administrator)
- "Capacity is an issue at some schools, and structure may not be present for some programs." (District Administrator)
- "Our facilities have suffered with the budget cuts. Our heating and cooling system has issues so the room temperatures are never adjusted right. We need paint and general clean-up, but that doesn't get done very often." (Building Administrator)
- "Facilities are suffering from a loss of custodians, partly due to state reduction in funding over recent years, not just a fault of the district." (Building Administrator)
- "We have cut both instructional and custodial support…now below state standards. Some buildings are underutilized but have greater needs for facilities help." (District Administrator)
- "Three years ago we closed five schools…closed nine in 2010. Facility conditions led to most of those decisions." (District Administrator)

In spite of the many facility challenges facing the district, auditors heard several comments expressing positive observations about progress in the current facilities work. Examples were:

- "The turnaround time for repairs of things such as a broken window is much better." (District Administrator)
- "There has been a marked improvement in the facilities in the last few years. (District Administrator)
- "The schools generally look OK, and that's because the school district has been using some of its own funds to keep things going." (District Administrator)

Technology Services:

The TUSD Information Technology Plan is required to be submitted to the Arizona Department of Education as part of sustaining eligibility for grant funding. The plan was used as an example of a departmental plan in Finding 1.2 and met the expectations of characteristics for a quality plan to guide district efforts. The TUSD Information Technology Plan was developed in 2012 to serve as a three-year plan and has contributed to the Business Leadership Team Plan (2013), particularly in relationship to that plan's "Initiative 12: Enhance or establish quality, technology-based, system automation to allow for better service and turnaround time." Similarly, the Technology Plan will become integral to components of the district's strategic plan as it is created in 2014.

The plan includes a three-tiered strategy for technology improvements. Section 2.2.1 summarizes precisely the general observations and conclusions of the auditors as they reviewed this function:

> "It was clear from internal assessments and feedback from staff, faculty, and the community that the technology foundation throughout TUSD was in dire need of improvement. Technology foundation includes essential components and mechanisms such as the network and telecommunications infrastructure, end-user computers and associated devices (for staff, faculty, and students), servers that support mission-critical software applications, IT security, disaster recovery, and even office copiers. Many equipment items in these categories were well past their projected end of life and in some cases were no longer supported by the manufacturer. Further, as everyone was well aware, the *capacity* of the technology foundation to support even *current academic and operational needs* – let alone projected needs – was far below what is minimally required. Finally, another essential part of the foundation is the *technology skills and competencies* that employees bring to their work. Therefore, the STPC and Cabinet's positions were to focus primarily on:
>
> - Replacing aging infrastructure and other foundation technology equipment;
> - Increasing the capacity of the technology foundation;

- Improving security, availability, sustainability, and recoverability;
- Improving communication with students and the community;
- Assessing and improving technology skills and competencies."

In addition to the evaluation of the technology services plan in Finding 1.2, the auditors also assessed the district's instructional technology planning activities and processes. An assessment of these using the audit criteria for instructional technology planning is presented in Exhibit 5.2.2. The characteristics listed as partially present cannot be counted as fully adequate when tallying the ratings.

Exhibit 5.2.2

Evaluation of the District's Instructional Technology Planning Using CMIM Criteria
Tucson Unified School District
January 2014

Criteria	Auditors' Rating	
	Adequate	**Inadequate**
1. Board policy or administrative regulation for instructional technology exists.		X
2. There is a clear statement of program philosophy/vision.	X	
3. A comprehensive view of technology exists.	X	
4. A needs assessment has been completed and evaluated.	Partial	
5. Measurable student goals and objectives exist.		X
6. An ongoing student assessment component exists.		X
7. An ongoing program assessment component exists.		X
8. There are comprehensive staff trainings with measurable standards for equipment, application, and technology.	Partial	
9. School site equipment standards exist.	X	
10. Internet access standards exist.	X	
11. The role of the school library is stated.	X	
12. An implementation budget has been identified.	X	
13. A maintenance budget has been identified.	X	
14. Technology site plans are aligned with district plans.		X
Total	**7**	**7**
Percentage Adequate	**50%**	

As indicated in Exhibit 5.2.2, the Tucson Unified School District Technology Plan meets seven (50 percent) of the 14 criteria. Seventy (70) percent is required for adequacy of instructional technology planning, based on audit standards. Although the district's technology plan serves well as an example of a departmental plan (Finding 1.2), the more precise and stringent characteristics for quality instructional planning are not evident in that plan or other related documents. The following was noted concerning the criteria:

Criterion 1: Policies related to instructional use of technology are present, though the policies are weak in clarity of overall expectations. (See *Policies IJND: Use of Technology Resources in Instruction*, with its accompanying regulation, and *IJK: Library Programs.*)

Criterion 2: A clear vision and program philosophy for technology services and for instructional technology are identified in the executive summary of the TUSD Technology Plan, and emphasized in several sections of the plan.

Criterion 3: A comprehensive view of technology is communicated, particularly in the executive summary, as well as in Section IV: New Initiatives.

Criterion 4: Although the district has conducted an inventory of equipment at school sites and evaluated the level of need on the basis of the Facilities Condition Index (see Exhibit 5.2.3), the needs assessment was not familiar to some administrators and had not been evaluated as such.

Criterion 5: Auditors were provided no measurable student goals and objectives for instructional technology. In fact, although references were found to some middle school and high school classes identified as Technology Cluster, no curriculum was found for any of the courses (see Finding 2.2).

Criterion 6: The auditors were provided no continuing, comprehensive student assessment for technology skills at any grade levels.

Criterion 7: The technology plan includes no program assessment component with either evaluation strategies or criteria.

Criterion 8: While there have been some staff development offerings at various sites, evidence of comprehensive staff trainings with measurable standards for equipment, application, and technology use is absent except for various statements of "intent" found is some school plans and in Initiative 9 of the Business Leadership Team Plan.

Criteria 9 and 10: School site standards and internet access standards are present in several forms and are informing facilities and technology planning.

Criterion 11: The role of the school library is stated in *Board Policy IJK: School Library Program,* which declares that the library, "the intellectual hub of the school community, is where students and adults work and learn together, developing and applying information literacy skills in ways that continually generate new interests and knowledge." The policy further lists the components of a comprehensive school library program, including on-line and reference subscriptions that support current curriculum and Internet access: "The teacher-librarian collaborates with the faculty to integrate information literacy with content area instruction and learning strategies across the curriculum, pre-K through grade 12."

Criteria 12 and 13: A budget for technology services has been developed, as has an estimated ongoing maintenance budget. However, the current deficits leave the planned budget in limbo until modifications can be processed and approved.

Criterion 14: No specific site-based technology plans were presented to the audit team. A few schools had general statements related to future plans in their school plans, but those details were insufficient to constitute site technology plans.

Given the absence of audit criteria in the various aspects of instructional technology, the following weaknesses become strategic roadblocks for technology services and the educational program: no specific and documented instructional technology plan is evident, no measurable student goals and objectives are present, and no ongoing student assessment of skills is undertaken in any formal manner.

As the audit team reviewed the technology system functions in the context of the district plan and the needs observed during TUSD site visits, they chose to consider the data in the Facilities Condition Index, where rating of all facilities' technology status was summarized. Rating rubrics are described for this assessment as follows and would refer to technology as a "building system" in application of the rubrics:

Excellent condition = 5

A facility or building system of the facility with a rating of value of "5" would be a building or element that is new or that has been renovated to as close to new as could be expected. The element that is new or that has been renovated to be as close to new as could be expected the facility should fully support and enhance the educational mission.

Good Condition = 4

A facility or building system of the facility with a rating of value of "4" would be a building or element that has been properly maintained or renovated to a condition that regular preventative maintenance and regular

life cycle replacement has kept the facility or building element is better than average condition. The facility should support the needs of the educational mission.

Acceptable Condition = 3

A facility or building system of the facility with a rating of value of "3" would be a building or element that has been maintained to a condition that regular preventative and attention to work orders keep the facility or element in acceptable condition. Along with regular life cycle replacement the facility can be maintained in acceptable condition. The facility should fully support and enhance the educational mission.

Fair Condition = 2

A facility or building system of the facility with a rating of value of "2" would be a building or element that has been maintained to a condition that it is usable but requires attention to work orders to keep the facility or element operational. The facility condition should have a minimal impact on the educational mission.

Poor Condition = 1

A facility or building system of the facility with a rating of value of "1" would be a building or element that has not been well maintained or has aged to the point that replacement should be considered prior to any renovation work. There will be no signs of preventative maintenance or life cycle replacement and there are numerous work orders trying to keep the facility or element viable. The facility condition would present challenges to accomplishing the educational mission.

Exhibit 5.2.3 summarizes the ranges of rating and numbers of ratings assigned in each range for technology services as a facility system in all types of buildings as reported in the Facilities Condition Index data:

Exhibit 5.2.3

Summary of Ratings on Technology Services in TUSD Buildings
Tucson Unified School District
2013-14

Rating Ranges	Elementary Schools	K-8 Schools	Middle Schools	High Schools	Alternative Programs	Support Facilities	Totals in Ranges
1-2	0	0	0	0	0	2	2
2.1-3	3	9	8	9	3	5	37
3.1-4	20	3	2	0	2	6	33
4.1-5	5	0	0	1	1	13	20
Range of Ratings per Type of Facility	**2.52-4.52**	**2.76-3.80**	**2.52-3.24**	**2.24-5.00**	**2.76-4.68**	**1.00-5.00**	
Source: TUSD Facilities Condition Index Data							

The FCI data reflect only two buildings with the lowest rating, and these are support facilities. Instructional facilities were rated in the ranges of 2.24-5, with only one school (Mary Meredith K-12) receiving a rating of 5. Most schools on the index were rated in the broad range of "adequate," which still left 32 schools in the low adequacy level and not yet in the "good" or "excellent" ratings.

Auditors also sought additional information about the impact of computer distribution across classrooms. According to a district survey of school programs (Fall 2013), the ranges of students-per-computer at schools are as follows:

- Elementary schools: from one student per computer to 25 students per computer;
- Middle schools: from one student per computer to 35 students per computer;
- K-8 schools: from two students per computer to nine students per computer;
- High schools: from two students per computer to 100 students per computer; and

- Other schools: from one student per computer to 12 students per computer.

During school visits, the audit team noted the use of computers in classrooms and the presence of computer labs. Several principals commented on their not yet being served with all their planned computer and technology improvements.

As the auditors visited classrooms, they observed the computers in use at the time of the visit. Although this observation is like a snapshot of the moment in time when they visited, they compiled the following summary of their collective observations about the percentages of classrooms in which computers were being used by students during the time of the visit.

Exhibit 5.2.4

Auditors' Observations of Computer Use in Classrooms
Tucson Unified School District
January 2014

Campuses	Classroom Computer Usage in Quintiles				
	0-20%	21-40%	41-60%	61-80%	81-100%
Elementary Schools	16	6	7	1	1
Middle Schools	1	0	3	0	2
High Schools	4	1	1	4	0
Other	4	1	2	0	1
Total	**25**	**8**	**13**	**5**	**4**

Exhibit 5.2.4 shows that:

- Computer usage at 25 of the observed schools was recorded in the lowest quintile, with 20 percent or fewer computers in use during the site visit. Elementary schools made up 16 (over half) of the 25 schools in this quintile.
- Computer usage at 13 of the observed schools was recorded in the middle quintile, with 41 to 60 percent computers in use during the site visit. Elementary schools made up seven (over half) of the 13 schools in this quintile.
- Computer usage at only four of the observed schools was recorded in the top quintile, with 81-100 percent computers in use during the time of the auditors' site visit.

When auditors sought information regarding the technology curriculum for students, they found the following courses listed for middle and/or high schools:

- Fundamentals Information Technology 1, 2;
- PC Management/Maintenance 1, 2, 3, 4;
- Computer Networking 1, 2, 3, 4;
- Software Development 1, 2, 3, 4;
- Computer Science 1, 2;
- AP Computer Science;
- Web Page Development 1, 2, 3, 4; and
- Information Technology Internship 1, 2.

Several other courses listed appeared to have likely links to instructional technology: Interactive Digital Media, Audiovisual Technology, Biotechnology, Technology Applications, and Graphic Arts/Design. However, no curriculum documents were provided to auditors for these courses.

During site visits the auditors observed that some functions dependent on technology infrastructure and support services are being negatively affected at the school level by outdated or incompatible components of the systems, computers, and software in use. They also noted inconsistencies and inequities in technology access (see Finding 3.5). While some schools and a few district services are experiencing upgrades as support funds come forward, there is an ongoing sense of high urgency noted among both tech service providers and users. Some staff at both schools and district offices reported processes being "excessively paper driven." Others told auditors about the basically positive function of the student information system but simultaneously described working with human resource information, financial data, and staff development data as "another story."

The auditors also reviewed the funding information for technology by reviewing the 2013-14 budget report for June 2013 – June 2014 for those services. In spite of some grants and other funding sources, the funding impediment to the improvement of technology services is evident: TUSD has experienced a $2,338,025 deficit in tech services, a $2,761,765 deficient in the regular education category, and a deficit in construction costs of over $5 million. As one district administrator commented, "Our tech budget is riddled with deficits."

Interviews provided numerous comments that contributed to the auditors' conclusion that technology improvements are at the top of the list for system improvement. A few examples of comments from a variety of district administrators were:

- "The foremost thing [for improvement] is the technology." (District Administrator)
- "I believe we could cut [the time requirements] in half if we had the tech support system." (District Administrator)
- "The tech information support system is a mess….There's much more manual work than anticipated with the USP work." (District Administrator)
- "I don't have the technological services and systems I need." (District Administrator)
- "We created our own PD software system to input data since the ones from finance and HR are not the same and do not interface. We have difficult time doing everything by hand. We are still working on this." (District Administrator)
- "The database (People Soft) is so large [that] a query could shut down the system. Large queries need to be run at night." (District Administrator)
- "You can't have a district this size with this many people and have antiquated technology." (District Administrator)
- "Because of the variability in technology dependability around the district, we have an agreement with principals that teachers can leave campus and go to local libraries to upload their [assessment] information." (District Administrator)
- "We have an archaic computer system." (District Administrator)

Interview feedback specifically related to informational services and technology equipment at school sites included the following comments:

- "Technology is back in the stone age. More information needs to be available to parents." (Parent)
- "There's a disconnect between the heavy duty behind-the-scenes tech work and who will talk to teachers and principals about how to use it." (District Administrator)
- "We cannot get budget updates to determine how much funding we have in the various categories. We are behind on budget transfers, etc. and having to wait till they get it done….by hand. The tech system is just not there." (Building Administrator)
- "Our technology is back in the stone age." (Teacher)
- "There are tech inequities: smart boards, computers, fundraising revenues from parent and community groups, etc. They surface and we can't always figure out why." (District Administrator)

- "The reason we have so much technology in our school is because we had the vision for technology use and were given money by the district and our parents to make it happen." (Building Administrator)

Auditors found that the information technology, related systems, and software were consistently identified as "a stumbling block that affects everything from the classroom to financial and human resource management." The systems are fundamental for effectiveness and efficiency, and those interviewees who have already experienced the improvements indicated an expectation that everyone and every facility needs the upgrades and related training on how to use the systems and software. Additionally, the technology funding sources do not meet the current and future needs for this support service. Among the few encouraging comments heard by auditors was information that wi-fi will be accessible in all schools by the end of this school year.

Student Transportation

For a district the size of Tucson Unified School District, organizing transportation requires ongoing information gathering about enrollment changes, daily passenger loads, and school schedules. Over recent years the school closures, mergers, and out-of district transfers have presented monumental challenges to transportation planning. Such changes require continuing district communication with schools and parents, but one indication of progress noted by the administration was that "there are now more outgoing than incoming calls with complaints."

According to district reports, the student transportation system now runs 271 buses for regular student routes; this is a decline in number of vehicles from 285 two years ago. Forty (40) percent of the runs are for special education students. Transportation serves over 10,000 students daily, and buses travel over 25,700 miles per day. Changes were made in the mid-day pre-K routes, and a variety of other modifications had to happen to bring the transportation system into order. Now the department reports the savings have come to $1.5 million. Continuing needs identified through interviews focus on hiring strong talent in the routing department. As one administrator commented, "Talent and effective systems will solve a lot …of problems [in transportation]."

Overall, the auditors found the transportation system to be improving and to have efforts targeted appropriately in consideration of school and student needs. Hiring of trained drivers and skilled staff to manage the routing was identified as the current primary need.

Finance and Personnel Services

Critical to efficient school practices in planning and hiring staff to perform the work of any unit are components of operations in budget, finance, and personnel functions. Auditors reviewed school plans and staffing information to identify budgetary allocations, purposes, and adequacy of staff – particularly teaching positions.

Due to the degree of vagueness in district and school improvement plans, samples of which listed no budget information and little staff information, the auditors inquired about these subjects in interviews. The underlying common comments focused on the loss of funding that reduced classroom staffing and custodial support. A few schools also had experienced a reduction in administrative positions, though two indicated they made up the money to hire full-time positions from sources other than the district budget (see also Finding 5.1.).

Recruiting and hiring personnel has been a major challenge. Some interviewees distributed the blame for slow processes and delays among a variety of causes: the USP demands for processing, the bargaining agreements and the requirements agreed to therein, slow information technology processing, limited success in recruiting activities, the delay in hiring schedules that lets candidates choose jobs elsewhere, and the lack of pay comparable to other districts. Additionally, the teacher turnover was noted by several principals as a critical problem, though this concern was not evident in all schools. These combined factors have led to numerous classroom teaching positions being filled by substitutes, sometimes not qualified for the content area or certificated for the grade level involved because of limitations in the substitute pool. Auditors were made aware of at least four classrooms that had not yet had a regular teacher by the January audit visit. They were also shown requests for positions and hires for classroom positions that have been filled by three or more substitute teachers during the first semester.

Auditors were told that some revisions in the hiring processes have been undertaken based on expectations in negotiated contracts and the Unitary Status Plan. Efforts are currently under way to seek modifications that

meet all requirements but do not impede the efficiency of hiring procedures. However, until these changes can be achieved, there is a strong likelihood that classrooms and school facilities will be particularly affected. Auditors were able to review some school budgets in the pursuit of understanding the funding component of the hiring process, but they were then told that these reports were not updated because of delays in processing information related to purchases, revenue changes, budget balances, and other necessary updates.

Overall, the functions of budget, finance, and personnel are not adequately supporting efficient and effective operations at the schools and are negatively impacting the quality of classroom learning for students in some classrooms and operational needs in some schools. The following interview comments focused on these problem areas:

- "TUSD must improve business practices in human resources, payroll, and business." (Building Administrator)
- "Trying to get someone hired is always an adventure. When it happens efficiently, you're always surprised." (District Administrator)
- "The low salary is a disincentive to recruitment of minorities." (Community Member)
- "With the budget cuts, we lost a counselor, assistant principals, and several teachers. But we were hit hardest in the custodial area." (Building Administrator)
- "We cannot get budget updates to determine how much funding we have in the various categories. We are behind on budget transfers…and having to wait till they get it done...by hand." (Building Administrator)
- "You may see some teachers leaving after one or two years, but if they get invested in the district they tend to stay." (Teacher)

Summary

Overall, school facilities were found to be adequately maintained, clean, and functional; several exceptions were observed and most improvements needed are planned with future access to necessary funding. Complicating (but not prohibiting) factors acknowledged by the auditors are the declines in student enrollment and state funding for schools, as well as the specificity of some requirements in the Unitary Status Plan (see Findings 3.5 and 5.1). Ongoing attention to cost-effective use of facilities to serve educational purposes is a priority (See also Finding 1.2). The auditors found that, for the most part, facility availability was adequate for district administrative functions, although access to more consolidated venues of services could contribute to efficiency of operations and enhance ease of access to offices for providing services and enhancing collaboration.

The need of highest urgency that emerged from the auditors' review of systems and operations was updating and expanding the technology systems, hardware, and software to provide quality educational support to teachers and students in all schools (see Findings 3.5 and 5.3) and to reduce the inefficiencies in daily management of personnel and finance functions at both district and school levels. However, the recent budget report for technology services reveals the funding "crisis" that is impeding intentions for improvements in service provisions at all levels of the district operations. Slow processing of such actions as purchasing equipment or materials, hiring of staff, and receiving custodial and maintenance services is affected directly and indirectly by both the recent staff reductions caused by changes in state funding and the weaknesses in the technological support systems. Hiring processes are in need of immediate modifications to expedite filling teaching vacancies with qualified personnel.

Further, the planning activities to support instructional technology failed to meet audit criteria for quality instructional technology services. Courses listed as technology-related offerings for students had no accompanying curriculum documents in the materials provided to the auditors.

Pupil transportation was deemed to have improved significantly in efficiency of resource uses and responsiveness to school and student needs.

A closing comment offered by one district administrator sums up the auditors' observations about several current operational support services: "…core systems in infrastructure and operations need to be upgraded." However, numerous interviewees expressed optimism based on the new district leadership's efforts to enhance centralization and cross-district coordination. As one principal added, "Operations and instructional [leaders] are working more closely together."

Finding 5.3 Program interventions to improve student achievement are numerous, mainly grant dependent, and based on preliminary planning processes. However, program interventions lack policy direction, measurable performance objectives, and evaluations necessary to determine their effectiveness.

Productivity in the context of educational settings refers to the ability of the organization to demonstrate improved results over time with the same or reduced resources. Typically, the success indicators for educational productivity are stated in terms of criteria such as improved student achievement as measured by specific assessments and similar results. New programs are initiated to address identified programmatic weaknesses, to serve students with special needs, and/or to enrich student experiences. Clear linkages between core curriculum and intervention programs create a coherent and focused approach to the development and implementation of intervention programs. To obtain desired results, an intervention program should be based on an identified problem or set of problems as determined from sound data, include measurable objectives, provide for a feedback loop for program modifications, and be linked to board policy and goals of the school and district. Intervention programs need to be well designed, adequately funded, fully implemented, and evaluated. A district with a coherent and focused approach toward program development and implementation will be more effective in meeting the needs of all students.

Effective intervention includes the following steps:

- Assess the current situation
- Diagnose and analyze data collected
- Identify the problem
- Propose and examine alternatives
- Select one of the better alternatives to address the problem
- Develop a formal plan for the design, deployment, and implementation of the alternative that includes goals and measurable objectives to address the problem
- Identify the staff proficiencies needed to implement the interventions, appropriate staff development around the proficiencies, and a clear communication plan
- Provide the fiscal and human resources needed to sustain the intervention
- Establish a formative and summative feedback evaluation and a plan for monitoring the ongoing deployment and ongoing implementation of the intervention
- Implement the plans with well-defined mechanisms for monitoring progress
- Evaluate the program with sound and appropriate techniques
- Modify or adjust the program as needed, based on data gathered during the evaluation process
- Implement, based on adjustment needed
- Reassess and continue monitoring performance results

The auditors conducted interviews with board members, administrators, teachers, parents, and other staff members regarding interventions implemented in the Tucson Unified School District. In addition, auditors reviewed board policies, the district Continuous Improvement Plan, School Improvement Plans, program surveys, and other documents related to district- and school-based interventions. Based upon their review, auditors determined that program interventions to improve student achievement are numerous, mainly grant

dependent, and based on preliminary planning processes. However, program interventions lack policy direction, measurable performance objectives, and evaluations necessary to determine their effectiveness.

Students using Success Maker at Vesey Elementary

The TUSD Continuous Improvement Plan outlines several strategies for improvement of student academic achievement through program interventions, especially through Tier II and Tier III differentiated instruction. Notable strategies include site-based resources, use of data to drive interventions, identification of student assessments, progress monitoring, tutoring, and technology-based interventions. Most strategies were labeled "in progress" or had implementation dates of September 2013 through May 2014. According to the district's Continuous Improvement Plan (Goal 1), TUSD will conduct a comprehensive needs assessment, evaluate all portions of the LEA plan against the identified priorities, ensure implementation of revisions, monitor use of resources to help improve student achievement, and evaluate the plan at the end of the year. The district is currently undergoing a change process and awaiting feedback from multiple audits to finalize identification of programs that best meet student needs.

In addition, required criteria for assessment of student support programs were clearly outlined in the Unitary Status Plan (Executive Summary pp.3-4). The plan's "preliminary information" section required that all program funding proposals include information on targeted populations, general need, rationale for program selection, expected outcome, monitoring process, and measurements of success. Specific criteria addressed efficacy of the program, coordination with existing programs, professional development planning, diagnosis of student needs, site selection process, targeted area (e.g., at-risk, behavior, attendance, academics), and cost-effectiveness and efficiency.

Auditors found that numerous programs have been selected for intervention purposes and that the major funding source for these programs was state and federal grants. The district reported that 8,732 currently enrolled students were served through intervention programs (as recorded in the Grant Tracker System). The majority (60 percent) of students in grant supported intervention programs (as outlined in Grant Tracker) were served through Learning Support Coordinator Services.

No board policies were found relevant to program interventions. Without board policy, the district lacks control of and direction for intervention program design, alignment with the curriculum and school/district goals, program implementation, and program evaluation. Given that the district is at the beginning of a change process, board policy is crucial to setting a clear direction for focusing program interventions.

The auditors provided individual schools with a Curriculum Audit Program Survey form (see Appendix B) to gather data on the kinds of interventions being used in the district. Auditors received input from 85 schools across 12 program areas. Auditors also reviewed a program survey administered by the district (Fall 2013) through

Survey Monkey. The district's survey requested school data on 170 programs in 12 categories. Taking into consideration the fact that numerous duplicates were reported on the surveys, auditors received approximately 1,035 program responses in the Tucson Unified School District. Categories and definitions for each type of program are included in Exhibit 5.3.1 and Exhibit 5.3.2.

Exhibit 5.3.1

Intervention Program Types and Definitions Used in District Program Survey

Category Number	Program Type	Definition
1	Tutoring	Tutoring services are provided outside the instructional day/minutes (11).
2	Fine Arts	Types of fine arts offered to students (11).
3	Student Support Services	Types of Student Support Services offered to students (17).
4	Exceptional Education	Types of Exceptional Education and Advanced Learning services offered to students (15).
5	Academic Intervention	Types of Academic Interventions offered to students (34).
6	Behavioral Intervention	Types of behavioral interventions offered to students (20).
7	Summer Program/ Transition	Types of Summer/Transition programs offered to students (6).
8	Before/After School Program	Types of before and after school programs offered to students (10).
9	Instructional and Instructional Support	Types of Instruction and Instructional Supports offered to students (20).
10	Interscholastics	Types of interscholastic programs offered to students (25).
11	Family Engagement	Types of Family Engagement offered to students (19).
12	Other	
Source: TUSD Program Survey implemented through Survey Monkey		

Exhibit 5.3.2

Intervention Program Types and Definitions Used in the Curriculum Audit Program Survey

Category Number	Program Type	Definition
1	Instructional	Teacher training and implementation of instructional strategies to enhance student achievement
2	Supplemental	Special events/experiences that occur during school to enhance the core curriculum for students
3	Character Education	Programs designed to develop habits of good judgment and character
4	Pull-Out	Programs that occur during the school day on a pull-out basis
5	Intervention	Non-pull-out programs focused to serve the needs of below grade level students (may occur after school, weekends, or summer)
6	Extracurricular	Occurs after school to supplement the core curriculum
7	Motivational	Awards/incentives to recognize accomplishment and enhance self-esteem

Exhibit 5.3.2 (continued) Intervention Program Types and Definitions Used in the Curriculum Management Audit Program Survey		
Category Number	**Program Type**	**Definition**
8	Guidance	Services to guide students in mapping educational plans
9	Counseling	Services to support emotional/attitudinal needs of students
10	Parent	Programs to educate and involve parents
11	Linkage	Partnerships with business, community, and higher education
12	Other	Any programs that fail to fit any of the categories above
Source: Curriculum Audit Program Survey		

The Curriculum Audit Program Survey also collected information including:

- Whether the program was district- or site-initiated,
- A description of the program,
- Targeted grade levels,
- Year of first implementation,
- Annual budget,
- Funding source of program,
- Curriculum objectives, and
- How the program was evaluated.

Based on the definitions for the 24 program types, the auditors selected 117 programs as representative intervention programs from two categories: Academic Interventions and Instructional Support. Representative intervention programs in these two categories are included in Exhibit 5.3.3.

Exhibit 5.3.3

Sample Intervention Programs District and School-based Offerings
Tucson Unified School District
January 2014

Program Name	District or Site	Target Grades/ Students	Year Implemented	Funding/ Source	Curriculum Objectives	Evaluation Type and Frequency
Summer Academic Program	S	10-12	2012-13	Title I $7000	Support targeted students in reaching grade level reading and math skills	A-Z Success Maker tutorial evaluations
Achieve 3000	S	10-12	2013	SIG $8900	Enhanced Reading Achievement	Quarterly Review of Student Achievement Data
Community Representative	S	10-12	2010	SIG $9000	Enhanced student achievement by assisting with outside factors that impede participation in school	Weekly Interaction with Principal

Exhibit 5.3.3 (continued)
Sample Intervention Programs District and School-based Offerings
Tucson Unified School District
January 2014

Program Name	District or Site	Target Grades/ Students	Year Implemented	Funding/ Source	Curriculum Objectives	Evaluation Type and Frequency
Credit Recovery and PLATO	D and S	10-12	2012	SIG, M&O and Deseg $75,000	Credit Recovery	Monitored Daily & Weekly Review of Student Progress
PLATO	D	10-12	2006	M&O .6 FTE	Bring students in line with cohort groups to graduation progress	Semester
Response to Intervention (RTI) Classes	S	10-12 Lowest 25%	2011 to present	SIG $266,500	Turnaround Strategy 7: Promote the continuous use of student data (such as from formative, interim, and summative assessments) to inform and differentiate instruction in order to meet the academic needs of individual students. Strategy 10: Implement a school-wide "Response to Intervention" model 021: Establish early-warning systems to identify students who may be at risk of failing to achieve high standards or to graduate	Various data analyses may result in a student's enrollment in an RTI course. Data reviewed include but are not limited to *ATI* Benchmark data and previous *AIMS* testing performance. Evaluation of effectiveness, which also results in completion of the RTI course is passing of *AIMS*.
Restorative Practices	D	10-12	2010		Assist students in the development and appreciation for being a member of personalized academic school community	Daily by LSC and Weekly by Principal
ALEKS	D	11-12	2012		Enhance math achievement	Quarterly Review of Student Achievement Data
Read Well	S	1-2	1	0	Phonemic Awareness	DIBELS scores
Title I Before/ After School Tutoring	S	1-4	2013-14	Title I $20,000	Improve reading skills & math skills	Success Maker tutorial software
Title I	D and S	1-4 Targeted Students	2013-14	Title I $60,000		Rdg A-Z, DRA/*ATI* DIBELS quarterly
21st Century Community Learning Centers	S	1-5	2010	ADE: 21st Century Grant $500,000	ELA and math; integration with project-based learning	School-wide assessment data

Exhibit 5.3.3 (continued)
Sample Intervention Programs District and School-based Offerings
Tucson Unified School District
January 2014

Program Name	District or Site	Target Grades/ Students	Year Implemented	Funding/ Source	Curriculum Objectives	Evaluation Type and Frequency
Cavett Academy After School Tutoring	S	1-5	2011	21st Century Grant	Arizona College and Career Ready Standards	DIBELS, DRA & *ATI* three times per year, progress monitoring twice a month. Annually – *AIMS* & Stanford Ten
Homework Club	S	1-5	2014	Tax credit money	Increase student achievement	*ATI* scores, DIBELS data, *AIMS*, unit assessments, etc.
Reading and Math Individualized Intervention	D	1-5	2013		State Core Curriculum	Quarterly Data Review
Success Maker	D	1-5	2013 at Cragin	District Each Teacher	To grow students academically one year	Success Maker reports
Success Maker	D and S	1-5	2010-11	Title I $100,000	Give students extra support to develop skills in reading and math – enrichment to develop the right brain	Monthly progress monitoring weekly SM reports
Success Maker Academic Support	D	1-5	2013-14	Unknown District Paid	Reading and math	Ongoing
Summer School	D and S	1-5	1981	Title I; 21st Century Grant $56,000	Improve student achievement in reading and mathematics	Student pre/post test measures
Tutoring	S	1-5	2011-12	State Tutoring Money	To increase student achievement in mastering state standards	District Quarterly Benchmarks
Tier III Interventions	S	1-7	2012	Title I $39,000	Deliver interventions for students not at grade level	DIBELS, *ATI* and classroom assessments; quarterly
Read Naturally	S	1-8	2004	Title I Read 1st	Tier 2 and 3 Intervention	Course Tests
Success Maker	D	1-8	2013	Title I	Math support	Pre and post, ongoing leveling
Before/After School Tutoring	S	1-8 Targeted Students	2012-2014	Title I $23,000	Reading, math achievement	Lesson plans, *ATI* testing, formative assessment, walk-throughs

Exhibit 5.3.3 (continued)
Sample Intervention Programs District and School-based Offerings
Tucson Unified School District
January 2014

Program Name	District or Site	Target Grades/ Students	Year Implemented	Funding/ Source	Curriculum Objectives	Evaluation Type and Frequency
Academic Interventions: Success Maker, ALEKS, My Virtual Reading Coach	S	2-12	2012-13	Secondary Leadership	Increase academic engagement	No program evaluation
Great Leaps Sound Partners	S	2-3	1	Title I	Reading fluency and comprehension	30 min. daily
Success Maker	D	2-3	2013		Reading Improvement	Success Maker has a built in evaluation component, *ATI*, DIBELS, *AIMS*, Stanford 10
Success Maker	D	2-3	2013-14	District grant from state	Provide interventions for students not at grade level	*AIMS*
Club Z Tutoring	S	2-5	2013-14	Title I Cost Coverage for 109 students	LA, Math	Monthly progress reports and quarterly *ATI* assessments and annual math & reading standardized assessments
Tutoring	S	2-5	2013-14	Title I $2000	Improve math and reading scores	Student Improvement
Achieve 3000	D	2-8	2011	Title I/Dual Language	Reading support	Pre and post, ongoing leveling
Summer School	S	2-8	2011	Title I, Grant $65,000	Math and reading	Daily, weekly, end of session data to determine student growth and progress
Tutoring	S	2-8	2010	Title I, Grant $65,000	Math and reading	Daily, weekly, quarterly data to monitor student growth and progress
After School Tutoring	S	3-5	2009	Title I $8000	Increase math and reading skills/scores	Weekly
Count Down to *AIMS* Tutoring	S	3-5	2014	Desegrega-tion $5000	Reading and math	*AIMS*
Tutoring After School	S	3-5	2010-11	None – Teachers do this on their own.	Improve reading and math skills	Twice a week. Meet with students and parents to let them know how they are progressing. *ATI*, DRA, Success Maker

Exhibit 5.3.3 (continued)
Sample Intervention Programs District and School-based Offerings
Tucson Unified School District
January 2014

Program Name	District or Site	Target Grades/ Students	Year Implemented	Funding/ Source	Curriculum Objectives	Evaluation Type and Frequency
Tutoring Reading and Math	S	3-8	2014	Title I $70,000	To enhance student achievement	
Rewards Reading	S	4-8	2004	Title I Read 1st	Tier 2 & 3 Intervention	Course Tests
Mexican American Student Services Saturday Math	D	5-12	2013	MASS	Improve student grades and academic achievement	
Title I Math Tutorial	D	6	2013	Title I $4000	Addresses deficiencies in mathematics including number sense and numerical operations	Twice each year. Based on student performance, changes may be made to the program.
ALEKS Math Online Intervention	D	6-7 students who scored in the bottom 25% on *AIMS* math assessment	2012	Title I	Improve student reading and math skills as measured by *AIMS*	Daily time and topic reports, weekly use reports and quarterly reports
Success Maker Math and Reading Tutoring Online Intervention Program	S	6-8 students who scored below mastery in reading or math on *AIMS* assessment	2011	Title I	Improve student reading and math skills and achievement	Daily progress reports and Quarterly reports
21st Century Grant	S	6-8	2013	Grant Money	Math and language arts standards	Semester Evaluations
21st Century Thunderbird Program	S	6-8	2012	21st Century Federal Government Grant: Title I $510,000	The program helps students meet state and local student standards in core academic subjects, such as reading and math; offers students a broad array of enrichment activities that can complement their regular academic programs; and offers literacy and other educational services to the families of participating children	Semester: Student satisfaction surveys, parent participation surveys, parent satisfaction surveys, teacher observations Yearly: program implementation evaluation
My Virtual Reading Coach	D	6-8	2012-13	District		Benchmark scores by semester

Exhibit 5.3.3 (continued)
Sample Intervention Programs District and School-based Offerings
Tucson Unified School District
January 2014

Program Name	District or Site	Target Grades/ Students	Year Implemented	Funding/ Source	Curriculum Objectives	Evaluation Type and Frequency
After School Tutoring	D	6-8	2013	Title I $50,000	Increase achievement in math and L.A.	Attendance Verification
Math and Reading Intervention Academic Specialist	S	6-8	2013	Title I, Deseg $82,418	Serve the needs for below level students	Site Walk-Through and Teacher Evaluation
Math Cats	S	6-8	2009	NA	Support students in meeting math standards	*ATI* – Quarterly Weekly formative class assessments *AIMS*-Yearly
Math Intervention	D	6-8	2012-13	Title I, M&O $83,019	All math standards not yet mastered	Benchmark scores by semester
Middle School Tutoring	S	6-8	2009	Tax Credit $7000	Reading, math, writing & study skills development	Attendance & Student Parent Feedback
Reading and Math Intervention Classes	D	6-8	2012	Title I $110,000	For students who reach proficiency on academic standards and state academic assessments	Title I evaluation each semester
Read 180	S	6-8 Exceptional Education Students	2010		To develop and apply reading comprehension skills across other curricular areas	Annually based on student growth data
Reading Intervention	D	7-8	2013	Title I $15,000	Addresses deficiencies in reading including vocabulary and elements of literature	Twice each year. Based on student performance changes may be made to the program.
Math Intervention	D	7-8 at-risk students based on math performance on *AIMS* & *ATI*	2013	Title I $25,000	Addresses deficiencies in mathematics including number sense and numerical operations	Twice each year. Based on student performance changes may be made to the program.
BOOST	S	9		Deseg $27,000	Math and writing identification and support	Yearly
Math Intervention	S	9	2012	SIG $55,000	Arizona state standards for Algebra 1	Students are evaluated three times a year using *ATI* Benchmarks.

Exhibit 5.3.3 (continued)
Sample Intervention Programs District and School-based Offerings
Tucson Unified School District
January 2014

Program Name	District or Site	Target Grades/ Students	Year Implemented	Funding/ Source	Curriculum Objectives	Evaluation Type and Frequency
Read 180	S	9	2011	SIG $58,000	Arizona standards 9th grade English	Students are evaluated using the Scholastic Reading Inventory twice a year and *ATI* Benchmarks three times a year.
Title I	D	9-10	2013	Title I $64,978	To improve student achievement by targeting struggling students using data analysis	Quarterly
21st CCLC, Cholla Afterschool Program	D and S	9-12	2010-11	21st CCLC Grant $82,000 (S) $8000 (D)	Building and sustaining comprehensive out of school time programs that provide high quality academic enrichment opportunities for all children, and that meaningfully engage adult family members in helping their children succeed academically	District Semester, ADE Annually
21st Century Learning Grant	S	9-12	2012	$500,000	To provide high quality academic enrichment opportunities for all children, and that meaningfully engage adult family members in helping their children succeed academically	Monthly
AIMS Tutoring	D	9-12	2006	State Grant	To promote student success on the *AIMS* tests by providing individual support	*AIMS* scores, semiannually

Exhibit 5.3.3 (continued)
Sample Intervention Programs District and School-based Offerings
Tucson Unified School District
January 2014

Program Name	District or Site	Target Grades/ Students	Year Implemented	Funding/ Source	Curriculum Objectives	Evaluation Type and Frequency
Credit Recovery	S	9-12 At risk of not graduating due to credit deficiency.	2011 to present	SIG $104,400	Credit Recovery for students to regain graduation status. Turnaround Strategy 021: Increase graduation rates through, for example, credit recovery programs, re-engagement strategies, smaller learning communities, competency-based instruction and performance-based assessments, and acceleration of basic reading and mathematics skills	Credits earned are reported in EDFacts and Progress Monitoring Tools. Software tracks credits earned, which are reported to the Registrar, C&I AP, and the SIG Coordinator as students complete courses.
Drop-Out Prevention	D	9-12	2000	District	Provide students support and resources to complete high school and earn a diploma	Weekly
PLATO Credit Recovery	S	9-12	2013	M&O $.4 FTE	Students will recover English course credit for classes previously failed	Annual evaluation, Credit checks of enrolled students
RTI Math	D	9-12	3	Title I $41,198		
RTI Reading	D	9-12	3	Title I $41,198		
Tutoring	S	9-12	1969	AZ State Tutoring Fund $64,978	To provide academic tutoring in reading, writing, and mathematics in order to improve student academic performance	4.5 weeks
Tutoring	S	9-12		Deseg $11,000	Response to Intervention	Yearly
Learning Support Coordinator	D	9-12 At Risk Students	2009	Central $45,000	Support struggling students through individual assistance, provide RP to resolve conflicts between students and students-teachers	Annual evaluation, Report logs (Semester)
After School Tutoring	S	9-12	2010	SIG $10,000	Students receive academic support in all curricular areas	Annual CIP

Exhibit 5.3.3 (continued)
Sample Intervention Programs District and School-based Offerings
Tucson Unified School District
January 2014

Program Name	District or Site	Target Grades/ Students	Year Implemented	Funding/ Source	Curriculum Objectives	Evaluation Type and Frequency
Student Assistance Program –SAP Program	S	9-12 Referred students	2013-14		Provide support so students can obtain services in order to eliminate academic barriers	Provide support for 2 students weekly with follow-up in 30 days
Breakfast Club Tutoring	S	9-12 Struggling Students	2013	NA	Provide intervention level services to students who are struggling	NA
ALEKS Online Math Intervention	D	9-12	2012-13		To backfill math concept knowledge in pre-algebra, algebra, and geometry. To master standards needed to pass the high school math *AIMS*	ALEKS has internal assessments and these are tracked. Teacher keeps observational data as well as ALEKS data to determine student progress. *ATI* and *AIMS* scores are compared for growth.
In-Outside Grant School Math Small Group Tutoring	S	9-12	2013-14	Central Title I	To gain prerequisite and requisite *AIMS* math skills	Tutor is observed by principal. *ATI* and *AIMS* scores.
Student Identification Intervention System	D	All identified students (HS)	2013-14		A team of support personnel meet with identified students to provide interventions, contact parents to eliminate barriers to academic success	Quarterly
After School Tutoring K-8	S	ELL students FFB, AS or Meeting on *AIMS*	1997 to present	Title I $27,000	To support and improve students who are below grade level in reading and math	Teacher and administrator evaluate weekly
Intervention Program	S	K and 4	2010	Title I $6000	Extra instruction to support students who did not Meet on *AIMS* reading	Student reading scores
Road to the Code	S	K-1	2003	Title I Read 1st	Tier 3 intervention	Course Tests
Learning Supports Coordinator	D	K-2	2011	Desegregation	Implementing an equitable and restorative school culture and climate	USP/Yearly
PALS	S	K-2	2004	Title I Read 1st	Tier 3 reading intervention	Progress monitoring
Read Well	S	K-2	2005	Title I Read 1st	Tier 3 reading intervention	Progress monitoring
Great Leaps	S	K-2, 3-5	2005	Title I Read 1st	Tier 2 & 3 intervention	Course Tests
Sound Partner	S	K-4	2006	Title I Read 1st	Tier 3 reading intervention	Progress monitoring

Exhibit 5.3.3 (continued)
Sample Intervention Programs District and School-based Offerings
Tucson Unified School District
January 2014

Program Name	District or Site	Target Grades/ Students	Year Implemented	Funding/ Source	Curriculum Objectives	Evaluation Type and Frequency
21st Century Grant	S	K-5	2011-12	Grant $510,000	Improve academic achievement and increase parent engagement	Annual monitoring of Grant objectives
21st Century Tutoring Program	S	K-5	2012-13	21st Century Grant $125,000	Tutoring, wellness, and enrichment	Semester Teacher Eval Annual review of meeting objectives as set in the grant
After School Tutoring	S	K-5	2014	Tax credit money $12,000	Math and reading	Student math and reading scores
After School Tutoring	S	K-5	2012	Tax Credit Money $5000	Instruction on targeted skills, standards for reading & math	Progress monitoring, benchmark data *ATI* and DIBELS
After School Tutoring	D	K-5	2013	Title I $15,000	CCRR for math and reading interventions	Ongoing data reviews, quarterly, yearly
Before and After School Tutoring	S	K-5		Title I $25 and hour	State core curriculum	Based on *ATI*/ DIBELS data
EAGLE'S Club	S	K-5	2011	District Funding	Provide safe before and after school care support with homework	Students in program is increasing
Extended Day	S	K-5	1981	Tax Credit $20,000	Physical, social, emotional, and intellectual development; instill appreciation for the arts	Student interest, quarterly
Good News Club	S	K-5	2012	NA	Reading support and character education emphasis	Pre and post survey, DIBELS and DRA
Homework Help – Dusenberry Library Volunteers	S	K-5	2012		Work on reading and math homework and reinforce grade level skills	Data on homework completion rates, parent surveys
Intervention Program	D	K-5	1	Title I $15,000	Student achievement	Student scores: Benchmark End of Year
Intervention Program	S	K-5	2010-11	General Fund	Differentiated instruction for students in need	Review of data
Leveled Book Room	S	K-5	2012	Magnet	Reading	Title I evaluation each semester
PLC Team After School Tutoring	S	K-5	2013-14		Teachers work after school providing interventions to support student achievement in meeting the CCSS	Teachers – Data - Weekly

Exhibit 5.3.3 (continued)
Sample Intervention Programs District and School-based Offerings
Tucson Unified School District
January 2014

Program Name	District or Site	Target Grades/ Students	Year Implemented	Funding/ Source	Curriculum Objectives	Evaluation Type and Frequency
Reading Intervention, Community Rep	S	K-5	2012	Title I $93,952	Improve student achievement, increase parent involvement	Student scores; Weekly
Reading Seed Program	S	K-5	8+ yrs.	Tax Credit $1500	Reading	Literacy Connects data collection annually
Reading Tutoring – Costco	S	K-5	2012		Instruction on targeted skills, standards	Progress monitoring, benchmark data *ATI*, and DIBELS
SES Tutoring Club Z	D	K-5	2013	Title I Central $50,000	Customized tutoring based on individual needs	Assessment Data
Success Maker, Waterford	D	K-5	2013	District	Reading and math	Monthly review of reports Students are assessed through the program
Tutoring	S	K-5	3	Tax Credit $6000	Reading skills K-3 Math skills 4-5	Quarterly – *AIMS*, Stanford 10, *ATI*, class tests
Tutoring	S	K-5	2011-12	Title I $4800	Guided tutoring	Semester
21st Century Grant After School Program	S	K-6	2013	21st Century Grant $120,000	To provide additional academic support in reading and math	Quarterly, teacher, student, parent surveys
Montessori Curriculum Blend with TUSD Core Academic Resources	D and S	K-6	2006	General Fund, Title I, Magnet $1,300,000	All Common Core standards & objectives (in addition to Montessori Grace & Courtesy Objectives)	Annual state testing, quarterly *ATI* and DIBELS Benchmarks, annual school quality surveys, weekly formative *ATI* assessments in math for grades 3-6.
Club Z Tutoring	D and S	K-8	2013	Title I	LA, math	Just implemented – unsure of how it will be evaluated
Homework Help After School Tutoring	S	K-8	2012	Title I $7200		
PLC DuFour	D and S	K-8	2006	District and Site	To enhance student achievement	Weekly communication

Exhibit 5.3.3 (continued)
Sample Intervention Programs District and School-based Offerings
Tucson Unified School District
January 2014

Program Name	District or Site	Target Grades/ Students	Year Implemented	Funding/ Source	Curriculum Objectives	Evaluation Type and Frequency
Restorative Process	S	K-8	2009		To promote reflection & healing in situations regarding conflict	Grant Tracker records
RTI MISS SAP	S	K-8	2010	District, Site	To enhance student achievement	
Saturday School	S	K-8	2012	Title I $5000		
Success Maker	D	K-8	2013		LA and math	Success Maker reports, student scores *ATI*, student *AIMS* scores, student DIBELS and DRA
Sunshine Girls	S	K-8	2009	NA	Reading and math academic support	Survey – pre and post
TUSD Induction Mentoring Program	D	K-12	2007-08	Title IIA	Increase Teacher Competencies	Annual Program Survey of Participants
Jump Start	D	Kinder	2012	Title I Central	LA	Kinder and Grade 1 DIBELS and DRA
Summer School	D and S	Tutoring students who are ELLs, FFB, AS in reading, writing, and math	1997 to present	Title I Language Acquisition Some funding from district and $25,000 from site	Continue to support ELLs who are Basic or Intermediate in reading, writing, and math Support all Title I students who are Approaching, FFB in academic areas	Teacher evaluates weekly and sends home a progress note after the 4th week. Program is 4 weeks for ½ day, daily.

Source: TUSD Program Survey (Survey Monkey) and Curriculum Management Audit Program Survey

Auditors noted the following observations based on Exhibit 5.3.3:

- Seventy-three (73), or 62 percent of the 117 selected intervention programs were reported as school initiated; 35 (30 percent) were reported as district initiated; nine (eight percent) were reported as both school and district initiated.
- Eighty-nine (89), or 76 percent of the 117 selected intervention programs were implemented in the last five years.
- Several of the selected intervention programs reported multiple funding sources for a total of 105 finding responses. Seventeen (17) programs did not report funding sources. Of the 105 responses, 71 (68 percent) were from grant sources (Title I, Title II, School Improvement Grants, 21st Century Grants, and other state and district grants). Title I was the funding source most often listed (51 responses), representing 49 percent of the total funding source responses and 72 percent of the grant funding responses.
- Curriculum objectives were reported in terms of both program objectives and student achievement objectives. Only 34 (29 percent) of objectives were deemed somewhat "measurable" in terms of improving student achievement. However, success in achieving "improvement" can be measured at

minimum levels and has little connection to achievement of predetermined goals. Seventy-seven (77), or 66 percent, of the reported objectives were too general as to be measurable, including 34 (29 percent) of the objectives being restatements of subject or standard areas only. Six (five percent) of programs reported no objectives at all.

- Many of the selected programs reported multiple evaluations, for a total of 169 responses. Seven programs did not report any evaluation type. Analysis of evaluation types for the selected intervention programs reveals that 66 (39 percent) were based on specific state or district assessments and 39 (23 percent) were based on other types (e.g., progress review, monitoring, surveys, and observation). The remaining 64 (38 percent) of reported evaluation types were non-specific and too general to classify (e.g., course tests, reading scores, student growth data, and student improvement).

The following are representative comments from staff interviews during the site visit.

- "Interventions are not effective – we need to improve instruction first and differentiation based on needs." (Teacher)
- "There is no plan to decide on the effects of intervention." (District Administrator)
- "We just pull kids for intervention based on special programs." (District Administrator)
- "Title has interventions. Equity has interventions. Every program has interventions and they are not connected." (District Administrator)
- "Any of our many interventions could be successful, but none are followed true to the program. We pick the pieces out of programs and do not get the benefit of the full program." (Teachers)

The TUSD Induction/Mentoring Program was selected for "productivity analysis" to exemplify how auditors assess an intervention by measuring it against planning, implementation, and assessment criteria.

The TUSD Induction/Mentoring Program was selected for analysis on the basis of its potential for improving both teacher retention and teacher quality, which will then impact student achievement. The TUSD Induction/Mentoring Program was identified as one of the few programs in the district that has overall district coverage, which could possibly serve as an example of intervention and program development across other district departments. Auditors also noted the program's longevity, now in its seventh year. Additionally, TUSD Induction/Mentoring Program was honored at the 2012 Celebration of Accomplished Teaching sponsored by Arizona K12 Center for Outstanding Program in the state. The funding for the program has come from the Title IIA program for all of its seven-year existence in the district.

The TUSD Induction/Mentoring Program originated in the 2007-08 school year as a pilot program intended to address low student performance in middle school. Those positions were in the lowest performing middle schools in the district and consisted of five mentors serving between 20-25 teachers. The next year, following the perceived success of the program and additional funding from the Arizona K12 Center, the program expanded across the district, serving 305 voluntary participants. Presently, there are 472 participants consisting of 227 first year teachers, 141 second year teachers, and 104 third year teachers. Participation is now mandatory for new teachers, and they are served by a cadre of 31 mentors.

While auditors heard many comments that the Induction/Mentoring Program was intended, in part, to increase teacher retention rates across the district, auditors were unable to locate any written documentation that this was the intent of the program. Since auditors were unable to triangulate this information, this analysis focuses solely on the Induction/Mentoring Program from the perspective of its ability and effectiveness to increase the competencies of teachers in the early stages of their careers, the first three years.

Auditors used seven criteria to determine whether an intervention is designed in such a way that it has a likelihood of successful implementation. For an intervention to receive an adequate design rating, at least five of the seven criteria must be made with full evidence. Exhibit 5.3.4 lists the criteria and the auditors' rating of the district's approach. A detailed discussion of the findings follows the exhibit.

Exhibit 5.3.4

Comparison of the TUSD Induction/Mentoring Program to Audit Intervention Design Criteria
Tucson Unified School District
January 2014

Intervention Design Audit Criteria	Auditors' Rating	
	Evident	**Not Evident**
1. The intervention relates to a documented district need—current situation had been assessed, diagnosed, and analysis data collected and considered in the selection of the intervention.	X	
2. There is evidence that a problem has been identified from data analyses, several alternatives proposed and examined, and one of the better alternatives to address the problem selected.	Partial	
3. A formal plan with goals and measurable objectives is in place to address the identified problem. Documentation exists to define the purpose of the intervention, why it addresses the system need/problem, and how it will impact student achievement. A plan for design, deployment, and implementation of the intervention is in place.	Partial	
4. Evidence exists that a strong deployment approach was designed, including identification of staff proficiencies needed to implement the intervention, appropriate staff development around the proficiencies, and a clear communication plan for appropriate audiences.	X	
5. Human, material, and fiscal resources needed to initiate the intervention (short-term) and to sustain the intervention (long-term) are identified and in place.		X
6. Formative feedback and summative evaluation criteria are identified and are tied to intervention goals, objectives, and expectations.		X
7. A plan for monitoring the ongoing deployment and implementation of the intervention is in place and involves appropriate individuals to carry out this plan.		X
Total	**2**	**5**
Percentage Evident	**29%**	
Partial ratings are counted as not evident.		

As can be noted in Exhibit 5.3.4, the district's program fully meets two of the seven audit criteria and is deemed inadequate for the intervention design plan. The only areas considered adequate were establishment of need and staff development.

The following is a discussion of what the auditors found regarding each of the design criteria as it related to the TUSD Induction/Mentoring Program.

Criterion 1: Establishment of Need (Evident)

Tucson Unified School District complies with the Arizona Induction Program Standards, which include an emphasis on "lifelong professional development." As part of these standards, TUSD developed a program that emphasizes collaboration between site-based administrators, central office administrators, mentor teachers, and mentees (teachers in their first three years of teaching), along with a formative assessment system of guidance for beginning teachers. Each component is designed to address typical concerns of beginning teachers and start them on a path of success in the teaching profession.

As part of the District Unitary Status Plan, the Induction/Mentoring Program is identified as one that shall be used to impact teacher performance:

> ***IV. ADMINISTRATORS AND CERTIFICATED STAFF; E. Assignment of Administrators and Certificated Staff***
>
> *6. By July 1, 2013, the District shall develop a pilot plan to support first-year teachers serving in schools where student achievement is below the District average. This plan shall include the criteria for identifying the schools in which the program will be piloted in the 2013-2014 school year and for evaluation by the Office of Accountability and Research. The plan shall include professional development targeted toward the specific challenges these teachers face.*

Additionally, anecdotal comments made from teachers and administrators express the need for a system of support to increase the likelihood that teachers will receive the structure needed to increase their competencies and remain in the profession. A sampling of comments appears below:

- "The Mentoring Program is more than just about teacher retention; it is also about highly effective teachers." (Instructional Support)
- "I have seen the thinking of educators [Mentors] change and become more aware of what teachers need to do to be supportive of the student." (Instructional Support)
- "Part of our job is to help our new teachers find their roles as leaders." (Instructional Support)
- "You may see some teachers leaving after one or two years, but if they get invested in the district they tend to stay." (Teacher)

Criterion 2: Selection of Alternative and Rationale (Partially Evident)

During the pilot year (2007-08) of the induction program, TUSD started with just five schools to determine if the program would meet its needs. After year one, it was determined that the system as a whole would benefit from the program's expansion, although no evidence was available to document the basis for this decision. To meet that need, the program was expanded to K-12, and a commitment was made to assist teachers in meeting the Highly Qualified Teacher mandate of *NCLB*. A Program Coordinator was hired in 2008-09, and job descriptions for mentors for all grade levels and subject areas were written.

There was no evidence presented to auditors that other alternatives were either presented or analyzed as to their ability to develop the skills of beginning teachers. Rather, the Induction/Mentoring Program was adopted based upon its availability from Arizona K12.

Criterion 3: Definition of Purpose, Direction, and Rationale (Partially Evident)

The TUSD Induction/Mentoring Program provides a complete description of the program goals and purposes. The program mission is a "Formal program for new teachers providing tailored support through one-on-one mentoring and professional development in order to advance teacher practices and improve student learning. The program is "[d]esigned to inspire, support, and challenge participants to accelerate their professional growth; increase student learning and achievement; advocate for equity for all students; develop into reflective practitioners; and develop into Teacher Leaders, who value collaboration and life-long learning."

Program goals and objectives exist for all roles within the Induction Program, including annual goals for mentors, mentees, program coordinators, and program director. Each set of goals (e.g., Professional Expectations for TUSD Mentors) is clarified by guidelines for accomplishment and deadlines to determine timeliness of progression through the induction process.

The issue becomes one of whether the program goals are simply self-fulfilling, or whether the goals and subsequent evaluation criteria are linked through data to student outcomes. For the first five years of the program, goals were linked to completion of activities of mentors and mentees. During the 2013-14 school year, the USP requires that student achievement outcomes also are linked to the program, through the inclusion of student *AIMS* scores as a measurable outcome of teacher proficiency:

- "By August 1, 2013, Accountability and Research (A&R) will conduct an analysis of the current *AIMS* scores (Spring 2013). This analysis will produce a list of schools performing below the District average in *AIMS* Reading; *AIMS* Math; and, overall *AIMS*. The list of schools will be provided to the Director of Professional Development."

While this mandate is required by the USP, this expectation does not appear in any of the Induction/Mentoring Program documents presented to auditors, nor was documentation presented to auditors through the Department of Professional Development that a system *AIMS* score monitoring to determine program effectiveness was presented to mentors or mentees.

Criterion 4: Staff Development and Communication Plan (Evident)

The district has made a commitment to the program by engaging in professional development to both develop the program and train participants in the skills needed for successful implementation. Staff development has consisted of programming from the New Teacher Center, Arizona K-12 Center, Arizona K12 summer Leadership Institute, Cognitive Coaching Techniques, and Fred Jones Trainings. Additionally, three mentors have recently been trained as trainers through the New Teacher Center Mentor Academy. This allows these three trained mentors to provide first year training to district mentors, thereby building capacity within the district for program sustainability.

Services are provided to mentees through a variety of means, including coaching, classroom observation scheduled trainings, and discussion groups. Mentor training is provided through Mentor Wednesday professional development. An annual calendar of trainings for mentors features weekly topics of interest as well as topics of general concern, such as the Danielson Framework, TeachScape, and Social and Emotional Learning.

Criterion 5: Provision of Resources (Not Evident)

Resources have been allocated since 2007 through district Title IIA funds. Funding for the past four years is as follows: 2010-11 ($3,873,321.00); 2011-12 ($3,055,730.00); 2012-13 ($2,954,378.00); 2013-14 ($2,866,712.00). While funding has varied over the past four years, and has actually decreased, this is a reflection of district budget cuts and limited new teacher hiring.

Evidence was not presented to auditors that described any system to determine whether the resources allocated to the program could or would be monitored in terms of a cost-benefit analysis. This is due, in part, to a failure of the program to establish student-based outcomes since the program's inception. Due to the lack of policy requirements for the development of intervention programs, and lack of planning requirements that link intervention outcomes to student achievement, it has been impossible to determine if outcomes linked to student achievement based on the Induction/Mentoring Program have occurred.

Criterion 6: Feedback and Evaluation (Not Evident)

Feedback and evaluation about the program are limited to regular discussions between participants and an annual survey that is distributed to mentees, mentors, and building principals. The annual survey is limited primarily to descriptive data pertaining to interaction frequency between mentors and mentees, the value of topics discussed, attendance at trainings, and visibility of mentors in buildings, as well as anecdotal comments about their successes and weaknesses. Auditors did not receive any design plans related to determining if and how the program actually increases new teacher competencies. Auditors recognize that such data are impacted by many variables, not just the Induction/Mentoring Program. However, student achievement, as cited in the Mission Statement, is a primary focus of the program, and evaluation data do not reflect this priority.

Comments from district staff indicate a lack of understanding among building leaders about the connectivity between the program activities and building level goals. A sampling of comments follows:

- "The mentoring teacher program does not work with building principals." (Building Administrator)
- "The Teacher Mentors work is random – we've got the right people, but not the right responsibilities. Mentoring is a hand holding and counseling. It isn't based on student needs, isn't based on curriculum, and is not based on assessment." (Building Administrator)

Criterion 7: Monitoring (Not Evident)

Evidence was presented to auditors that directs or requires the ongoing monitoring or assessment of the program activities. Such evidence includes discussion and communication between site administrators, mentors, and central office administrators. Likewise, guidelines and timelines for completion are provided to participants. However, all monitoring efforts revolve around monitoring of participant activities and few, if any, around determining progress toward overarching program goals.

The program goals assign the Director of Professional Development the responsibility for the evaluation of the program, plus all staff involved in the program. This one person has the responsibility to supervise and evaluate all 30+ mentors plus the program coordinator, which exceeds span of control expectations as described in Finding 1.3.

Overall, the program meets two of the seven audit criteria, and the intervention design is thus deemed inadequate. The only areas considered adequate were Staff Development and Establishment of Need.

The next area examined by the auditors was the intervention delivery. The auditors use six deployment and implementation criteria. For an intervention to receive an adequate delivery rating, at least four of the six criteria must be made with full evidence. Exhibit 5.3.5 lists the criteria and the auditors' rating of the district's approach. A detailed discussion of the finding follows the exhibit.

Exhibit 5.3.5

Comparison of the TUSD Induction/Mentoring Program to Audit Intervention Implementation Criteria
Tucson Unified School District
January 2014

Audit Criteria for Intervention Implementation	Auditors' Rating	
	Evident	**Not Evident**
1. A formal plan, with goals, measurable objectives, and processes, is in place and is being implemented.		X
2. Implementation of the intervention is both strategic and purposeful. The staff proficiencies needed to implement the intervention are clearly defined. Appropriate staff development based on these proficiencies takes place every year as new personnel are hired and as additional needs are identified. Continued goals for implementing the intervention and frequent progress reports are clearly communicated to all appropriate personnel.	X	
3. The human, material, and fiscal resources needed to initiate and sustain the intervention are identified and allocated.		X
4. Feedback from formative and summative evaluations that are tied to intervention goals, objectives, and expectations are systematically administered.	Partial	
5. Monitoring implementation of the intervention is taking place; responsibilities and procedures for monitoring are clearly defined and assigned to the appropriate individuals to carry out this plan.	Partial	
6. The intervention is being modified and adjusted as needed, based upon monitoring of formative and summative evaluation data, to ensure continued quality control.	X	
Total	**2**	**4**
Percentage Evident	**33%**	
Partial ratings are counted as not evident.		

As can be noted in Exhibit 5.2.5, the TUSD Induction/Mentoring Program, selected to help improve teacher competencies, meets two of the six criteria for sound intervention delivery.

The following is a discussion of what auditors found regarding each of the delivery criteria as it relates to the TUSD Induction/Mentoring Program.

Criterion 1: Plan Implementation (Not Evident)

The program has been in place since 2007. A mission and vision for the program is in place as well as annual goals for achievement. Processes for mentor selection, staff development of participants, and coordinated ongoing communication within the program are designed as an integral part of the program. The 2013-14 USP requirements that program goals be measured by student performance data were not included in any of the program plans, guidelines, or manuals distributed to program participants. This lack of interconnectedness between District USP expectations and the Induction/Mentoring program goals and outcomes represents a severe shortcoming of the program.

Criterion 2: Staff Development and Communication (Evident)

Participants in the program are selected based on qualifying criteria. Mentors are subject to both a written application, interview, and coaching "role play" activity to determine the suitability of the applicant. The job description for mentors describes minimum qualifications.

Staff development is provided to all program participants and varies based on participant needs. In the past, mentees were required to attend a minimum number of identified activities regardless of whether the training addressed their learning needs. This has been modified, and mentees now are recognized for participating in activities that meet their designed growth/goal area.

Mentors meet weekly for staff development. All mentors attend required preparation at the Mentor Teacher Academy for training in the use of formative assessment tools. Follow-up training in Cognitive Coaching is also required.

Criterion 3: Resource Adequacy (Not Evident)

As was noted in the design analysis, resources are provided through district Title IIA funds. Resources are provided to currently support 31 mentor teachers in the program as well as the Program Coordinator. Resources are adequate to meet current personnel and materials needs.

Auditors determined that due to the lack of accountability connecting the program outcomes (student achievement) to program goals, it would be impossible for the district to determine whether resources and funding are being productively used to support the program. Without a cost-benefit analysis indicating a relationship between program activities, goals, and outcomes, auditors determined that a budget in excess of two million dollars for each of the past four years is untenable.

Criterion 4: Assessment Data Available (Partially Evident)

All mentees are supported by a qualified and trained mentor. Part of the mentoring job involves monitoring areas of improvement and support needed by mentees. Review programs are developed and made available to mentees based on this data. For instance, classroom management workshops and Effective Elements of Instruction are offered to mentees, and attended based on mentee need.

Weekly staff development for mentors includes sharing of collected data from the mentors. Program coordinators then utilize this information to form future staff development topics for mentors.

In the absence of program evaluation criteria that are strongly tied to student learning, it is impossible to say whether ongoing formative and summative assessment techniques are used effectively to determine program effectiveness. Although recordkeeping of program activities takes place, evaluation is not linked to the overarching goals of impacting student learning.

Criterion 5: Monitoring (Partially Evident)

Job descriptions for the mentors and program coordinators all include monitoring responsibilities. Timelines and activity deadlines are utilized to organize and track completion. Sample mentor activities monitored include the following: Meet Regularly with Mentee; Complete a Self-Assessment Based on Mentor Standards;

Complete two Peer Coaching Observations per Semester; Complete One Video Recorded Teacher Collaboration Reviewed by Coordinator; Facilitate TUSD Induction/Mentoring Seminar or Study Group; Facilitate at least One Mentor Professional Development. Sample mentee activities monitored include the following: discussions with mentor three hours per week, videotaped lessons, attendance at trainings and workshops, and visitations to classroom of exemplary teachers.

According to the 2013-14 goals of the USP, increased monitoring is now in place focusing on the *AIMS* scores in the lowest achieving schools in the district. This increased scrutiny shows promise, but it is premature to tell whether this monitoring device will produce desired results.

As noted in Exhibit 5.3.4 above, overall supervision of the program, including staff supervision, is the responsibility of the Director of Professional Development. As this requirement severely exceeds span of control recommendations, monitoring of the program activities, staff, and program outcomes is seriously compromised.

Criterion 6: Program Modification Based Upon Data (Evident)

Program modifications and adjustments are made in the program, including:

- Each year mentor assignments are reviewed to create a balance of mentors with the needed content and grade level assignments of the mentees.
- Staff development is modified and created to meet the needs of the mentees.
- Mentor training is ongoing, based on data collected throughout the school year.
- District priorities are embedded into trainings based on the priorities each year

Likewise, with the implementation of the USP requirements for the 2013-14 school year, modifications to the program have been ongoing and consistent to attempt to meet the district needs over the life of the Induction/ Mentoring Program.

Overall, the deployment of the TUSD Induction/Mentoring Program was determined inadequate as to its effectiveness in improving teacher quality, which will then impact student achievement. Auditors determined that two of the six criteria were adequate. As a note, auditors also recognize that student achievement is impacted by many, many variables, of which a teacher induction program is only one.

The TUSD Induction/Mentoring Program was selected for analysis, in part, because of its overall district coverage, its cost, as well as its longevity. The goal of the TUSD Induction/Mentoring Program to increase student learning and achievement is not measured in any valid or convincing manner, so the goal is moot and unresolvable. Only survey data from principals and program participants are used to evaluate the program, but that falls substantially short of what is needed to determine whether or not the goal is achieved. This is a major shortcoming in the program since the quality control loop is incomplete and disconnected. While the USP required that measures be in place beginning July 1, 2013 to measure student achievement outcomes of targeted school buildings compared to the rest of the district, even these measures have not been communicated throughout the program and are not the present focus of program activities. As a model for other district interventions, it meets two of the seven audit criteria for intervention design, two of the six criteria for implementation and, in its present form, could not be used as a design model for other intervention programs in the district.

Summary

In summary, the auditors found that TUSD has a great number of intervention programs. The majority are grant funded and based in preliminary planning. Although the District Continuous Improvement Plan and the Unitary Status Plan provide guidance, district direction and control are lacking due to the absence of board policy relevant to program interventions. Indicators of lack of district direction are evident in the lack of measurable objectives and evaluations necessary to determine their effectiveness. The TUSD Induction/Mentoring Program also lacked many of the basic components needed in determining its adequacy as a district intervention. The primary issue is the lack of measurable, data-driven student achievement outcomes that will be utilized to determine both program and cost effectiveness (see Recommendation 9).

IV. RECOMMENDATIONS OF THE CMSI CURRICULUM AUDIT™ TEAM FOR THE IMPROVEMENT OF THE TUCSON UNIFIED SCHOOL DISTRICT NO. 1

Based on the three streams of data derived from interviews, documents, and site visits, the CMSi Curriculum Audit™ Team has developed a set of recommendations to address its findings shown under each of the standards of the audit.

In the case of the findings, they have been triangulated, i.e., corroborated with one another. In the case of the recommendations, those put forth in this section are representative of the auditors' best professional judgments regarding how to address the problems that surfaced in the audit.

The recommendations are presented in the order of their criticality for initiating system-wide improvements. The recommendations also recognize and differentiate between the policy and monitoring responsibilities of the board of education, and the operational and administrative duties of the superintendent of schools.

Where the CMSi audit team views a problem as wholly or partly a policy and monitoring matter, the recommendations are formulated for the board of education. Where the problem is distinctly an operational or administrative matter, the recommendations are directed to the superintendent of schools as the chief executive officer of the school system. In many cases, the CMSi audit team directs recommendations to both the board and the superintendent, because it is clear that policy and operations are related, and both entities are involved in a proposed change. In some cases, there are no recommendations to the superintendent when only policy is involved or none to the board when the recommendations deal only with administration.

Audit recommendations are presented as follows: The overarching goals for the board and/or the superintendent, followed by the specific objectives to carry out the overarching goals. The latter are designated "Governance Functions" and "Administrative Functions."

Recommendation 1: Review, revise, adopt, and implement current policies (governing board) and corresponding administrative regulations (superintendent) to obtain quality control with adequate elements of policy, planning, and organizational structures needed for sound curriculum management and to effectively accomplish the district's mission and goals.

Quality control lies at the heart of a well-managed educational system. School systems demonstrate quality control through a clear set of policies that establish direction, coherent planning processes focused on system goals, and a functional table of organization and related job descriptions that set the structure to support achievement of mission and goals. Auditors determined that Tucson Unified School District lacks sufficient mechanisms for quality control in the areas of policy, planning, and organizational structure to realize the district's strategic direction.

The auditors found the Tucson Unified School District's board policies, rules, and regulations to be inadequate in both content and specificity to guide all necessary aspects of curriculum management and the educational programs. Several policies in the curriculum management areas of control, direction, connectivity and equity, feedback, and productivity were either weak or absent.

The auditors' recommended actions address the primary needs in the area of policies as identified through audit analysis. Additional recommendations in this report also identify specific areas of policy weakness in each standard. The actions need to be addressed during the next six to 12 months in order to establish clear parameters for operations and job performance and to communicate expectations regarding the follow-up actions based on this report. The work to undertake extensive policy updating with the help of a consultant, combined with the information contained in this recommendation, should address the policy needs identified in the audit findings.

Governance Functions: The following actions are recommended to the Tucson Unified School District Governing Board:

G.1.1: Direct the superintendent to prepare and present for review and adoption drafts of new policies or revised policies that will meet the criteria outlined in Finding 1.1 and address policy deficiencies pointed out in the findings and accompanying recommendations within this report. Address these revisions as a priority in order

to establish clear direction for educational program management and sound operation of the district and its schools. Include localized expectations in addition to legal requirements in policies.

G.1.2: Establish an ongoing policy review and update schedule to avoid policies being outdated and ignored. Incorporate district and legal information as legislative changes occur, and include language needed to specify clearly the local board intent and emphasis.

G.1.3: Direct the superintendent to establish a mechanism to ensure all administrators' understanding of policies and the expectation that policies be followed throughout the district. Likewise, direct the superintendent to prepare administrative procedures for consistent implementation of policies.

Administrative Functions: The following actions are recommended to the Superintendent of the Tucson Unified School District:

A.1.1: Assist the board in implementing **G.1.1** through **G.1.3** above. Provide draft policy language that offers clarity of expectations where needed to meet the audit criteria in Finding 1.1 and other findings within the audit report. At a minimum, these revised or new policies should include:

- A policy requiring an aligned written, taught, and tested curriculum for all subject areas at all grade levels and a multi-grade scope-and-sequence document for each content area, covering all grade levels of the taught curriculum (see Recommendations 2 and 4);
- A policy on instructional expectations that includes the types of methods and practices expected in classrooms and is linked with teacher appraisals and school and district priorities and goals (see Recommendations 4, 5, and 6);
- A policy on planning that (a) outlines areas of expected planning across the system (e.g., curriculum management, staff development, student assessment and program evaluation, interventions, and budget development); (b) directs linkage between school and district plans; and (c) incorporates the criteria from the respective findings in this report (see Recommendations 2, 4, 5, 6, 8, and 9);
- A policy that requires planning, monitoring, and evaluation of all facilities on a systematic schedule/calendar and requires the use of resulting evaluation data in scheduling and prioritizing scheduled maintenance (see Recommendation 8);
- A student assessment policy that requires planning, implementation, and monitoring of all student assessment efforts on a systematic schedule/calendar and requires the use of resulting assessment data in program and instructional decisions (see Recommendation 6);
- A policy that requires planning, monitoring, and evaluation of all programs and intervention efforts on a systematic schedule/calendar and requires the use of resulting evaluation data in program and budget decisions (see Recommendations 7 and 9);
- A policy that requires a multi-year budget process that provides ongoing support for curriculum and program priorities and connects costs with program expectations and data-based needs (see Recommendation 7);
- A policy requiring the presence and annual updating of job descriptions for all positions in district employment (see Recommendation 3); and
- A policy requiring annual updating of the table of organization, with job descriptions for all positions represented on the table (see Recommendation 3).

A.1.2: Provide updated policies to all administrators, with copies available for staff at the work sites. Include policies and administrative regulations on the district website as soon as feasible to enable ready internal and external access to the most current policies and regulations. Destroy all policy manuals dated prior to the revised policies except for appropriate archival retention.

A.1.3: Include discussion of updated policies and regulations in administrative meetings as revisions are completed, highlighting particular areas of policy at the regular meetings; monitor for consistent implementation at all sites.

A.1.4: Establish a system to maintain policy congruence with current state and federal laws, regulations, and other requirements as well as accuracy of local board intent.

Recommendation 2: Modify planning processes and integrate plan documents to incorporate characteristics of effective planning practices and enhance cohesiveness of district and school documents to lead ongoing improvements of student achievement and organizational support functions. Ensure that plans are used regularly in decision making at all levels of the organization.

School districts seeking continuing improvements in all aspects of educational and organizational functions rely on effective planning processes as well as clearly articulated and well integrated plans. The planning processes provide the foundation for stakeholder involvement and staff commitments and can become the backbone of a district's climb to success. Integrating planning information demonstrates interdependence of the many components of successful school district and campus actions that lead to improved student learning. Within a district administration, the inclusiveness of planning and implementation processes and the integration of plans also contribute to high quality, collaborative leadership and efficient organizational functioning.

The auditors found that the Tucson Unified School District implements several planning processes and produces a range of plans. At the time of the audit, district leaders had begun a new planning process involving representation of all stakeholders from parents to employees, administrators, and board members. The intended result will be a comprehensive multi-year strategic plan that will incorporate many of the existing plans and provide integrated vision, goals, and actions across the system. Among the current plans that reportedly will be reviewed for incorporation into the new strategic plan are:

- Continuous Improvement Plans for both district and school levels to sustain eligibility for various Title funding resources;
- The Business Leadership Team Plan, and The Instructional Leadership Team Plan now being used as the transitional foundation for development of the new comprehensive plan;
- The Unitary Status Plan (also referred to as the "desegregation plan) and its sub-plans to finalize fulfillment of the federal court order requirements;
- Facilities master plans and other departmental plans; and
- The TUSD Information Technology Plan.

The audit team found the planning process adequate when they evaluated that process in conjunction with the present process for strategic planning. The district's current Continuous Improvement Plan and the sample of School Improvement Plans demonstrated most characteristics of quality plans to provide direction for improving student achievement. The Information Technology Plan was rated as adequate when examined against the characteristics expected in quality department plans. Auditors also learned that plans for departments or functions deficient in current plan documents (e.g., professional development and curriculum management) are intended to be included and woven into the new district plan. Auditors noted that while there is current evidence of some existing inter-planning linkage, all the processes and documents will benefit from further modifications and refinements during a comprehensive strategic planning process (see also Recommendations 4, 5, 6, and 8).

To support improvements in planning and the documented plans, several recommendations are offered for consideration by the district leaders.

Governance Functions: The audit team suggests that the Board of Trustees consider the following four actions:

G.2.1: Develop and adopt board policies requiring comprehensive planning for the school district leaders to determine priorities and direction. Include requirements for multi-year planning with annual and semi-

annual updates and progress reporting. Include the requirements for planning outlined in audit findings and recommendations.

G.2.2: Direct the Superintendent to complete a planning process that involves representation of and opportunities for input from all stakeholders, both internal and external. Establish the timeline for the process, including presentation of a draft strategic plan for public comment and review by the board.

G.2.3: Require that the new process result in a comprehensive plan document that (a) links to and incorporates the critical components of leadership, departmental, and school plans; (b) addresses all planned actions in the Unitary Status Plan; and (c) is designed to be a multi-year plan with semiannual and annual updates based on current data.

G.2.4: Formally adopt the new strategic plan as the district's direction for ongoing improvement of all educational and operational functions, services, and results.

Administrative Functions: The auditors suggest that the Superintendent and the leadership team consider the following five actions to support improvement of planning processes and documents:

A.2.1: In conjunction with **G.2.1** above, proceed with the current intent to develop a comprehensive, multi-year strategic plan to drive the work of all segments of the Tucson Unified School District.

A.2.2: Using the established timeline, present a draft plan for public comment and review by the board. Following that stage of review, submit the final draft of the resulting strategic plan for board adoption.

A.2.3: During the planning process and document preparation, ensure that the following guidelines are followed:

1. Audit criteria in Exhibits 1.2.2 through 1.2.5 are met, and all recommendations from the audit report are considered in preparing both the process and the product of the strategic planning efforts.
2. Identification of resources required for plan implementation includes continuing data research regarding human and financial resource needs so that the resulting plan is viable.
3. The plan is designed for multi-year implementation, with annual and semiannual updates and reports to the board.
4. Progress reports are disseminated for access by all staff and the public.
5. The Unitary Status Plan contents are incorporated into the new plan, along with the initiatives and action in the Instructional Leadership Team Plan and the Business Leadership Plan.
6. All other district, departmental, and school plans' components are considered for inclusion and integrated as deemed necessary and appropriate to attain cohesive system-wide functioning for ongoing improvement of operations and educational services.
7. Continue the emphasis on student learning and achievement throughout the planning process and within the resulting plan document.

A.2.4: Publicize the final draft of the strategic plan, including preparation of user-friendly plan summaries for general public information. To enhance the ongoing awareness of the strategies and actions to be undertaken, ensure that the plan contents are regularly addressed in leadership and staff meetings at all levels of the district organization.

A.2.5: Identify clearly the urgent priorities and the various tiers of priorities in communicating the planning results and establish practices to promote progress celebration as the plan is implemented.

Recommendation 3: Adopt a policy governing administrative functions and the management of job descriptions and the table of organization. Revise the Superintendent's Organizational Chart consistent with sound curriculum management principles for quality control. Configure personnel to reestablish quality control positions in curriculum design (development) and curriculum deployment (implementation) to ensure that the essential functions relating to curriculum design and delivery, assessments, data management and interpretation, professional development, and program evaluation are properly managed. Prepare and adopt a set of quality job descriptions to better define role responsibilities and supervisory functions.

Alignment between job descriptions, day-to-day operations, and the organizational chart was found to be inconsistent or missing entirely. Auditors found that TUSD lacks policies (see Finding 1.1) and procedures for governing administrative functions, managing the organizational chart with quality control (see Finding 1.3), and creating and maintaining job descriptions (see Finding 1.4). Job descriptions presented to auditors failed to have clear reporting relationships for supervision and congruity with system goals.

A few administrators supervise an excessive number of people (see Finding 1.3). Some important key functions relating to curriculum design and delivery and program evaluation are missing from the organizational chart and job descriptions. Crucial positions that provided quality control and important curriculum management functions were unreasonably eliminated some years ago by the decentralization of curriculum. Key curriculum responsibilities that have been neglected include a position in curriculum design that provides sound and clear direction to teachers about specific objectives to teach to mastery, a position to manage curriculum implementation, and a position to provide comprehensive feedback to parents, teachers, principals, and the Board about student achievement progress and needs.

TUSD is in need of bold, competent curriculum leadership and managed change so that classroom teachers and site-level administrators are not overwhelmed as rigorous college preparation curriculum is designed and implemented. In addition, the district is currently providing more interventions and specialty programs than it can rationally support, which fragments focus and connectivity (see Finding 5.3), indicating a strong need for curriculum aligned with accountability assessments, improved program planning and evaluation, improved instructional focus (see Finding 2.3), and instructional strategies leading to student mastery of key learning objectives .

Much better alignment is required between curriculum development and revision, professional development, and the use of feedback from assessments in an implementation effort that is better sequenced and paced for teacher application than was present at the time of the audit in late January 2014. Limited resources (see Finding 5.3) must be directed to the system's highest priorities, based on cost-effectiveness of programs and services.

The first step in closing achievement gaps between student groups and improving overall school and system performance on accountability measures is building a focused, functional, measurable, and valid curriculum with specific objectives aligned with accountability measures. Once this essential component is implemented, teaching is directed toward students' mastery of objectives with effective and research-based strategies. What is needed next is structuring an evaluation and assessment component to provide comprehensive feedback to teachers about individual student progress in mastery of objectives and to the board and community about the progress of district schools with quality teaching and learning. Without those components, the system is impeded from achieving its goals of excellence in education.

Job descriptions are clearly written summaries of duties and qualifications of persons employed by the school district. They provide information regarding the necessary background to qualify for specific jobs and how those positions function within the organization. The descriptions should include assignment of supervisory relationships and the critical components of the job duties. A clear set of job descriptions supports the district's internal and external communication by explaining who performs what duties within the organization. Adequately designed job descriptions also make graphic depiction of administrative relationships on the organizational chart more readily accomplished.

A district's chain of command is reflected in its organizational chart. It defines the role relationships between supervisors and subordinates, outlining a scalar relationship among district administrators and line and staff personnel. Adherence to the chain of command ensures that the authority of the board is channeled through the superintendent to all employees of the district.

The superintendent must see to it that valid and specific job descriptions are provided, and the board must adopt all job descriptions to ensure adherence to board policy and directions. To communicate graphically the responsibilities and functional relationships within a school system, a table of organization (organizational chart) and job descriptions must be present, aligned, current, and accurate.

In the Tucson Unified School District, the organizational chart does not meet all audit criteria for sound organizational management (see Findings 1.3 and 1.4). The Tucson Unified School District's organizational chart not only did not meet the Curriculum Audit criteria, but positions crucial to quality control in curriculum and instructional management were not found in the system.

The auditors found that TUSD was lacking a clear and comprehensive set of job descriptions that support the district's internal and external efficacy by explaining who performs what duties within the organization and how various positions interact to accomplish the board's expectations.

Deficiencies in meeting the characteristics outlined in Exhibits 1.3.2 and 1.4.1 result in serious gaps for executing quality control in curriculum design and delivery, assessment and program evaluation, and school improvement functions. The system's aspirations to improve quality of achievement were determined to be in jeopardy if these crucial responsibilities are not provided and put into action.

The auditors provide suggested steps needed in order to remedy the areas of deficiency noted in the audit analysis and recommend that these be initiated and accomplished within the next year, and sooner for any positions modified or added to the current administrative and staff team. These actions should be completed within two years to meet audit criteria.

Governance Function: The following actions are recommended to the Governing Board of the Tucson Unified School District:

G.3.1: Direct the superintendent to draft, for board review and adoption, a policy requiring that all positions and job descriptions are aligned with the current table of organization and are current, accurate, and adopted by the board. Job descriptions must meet audit criteria for clear specifications of responsibilities and relationships in the district (see Exhibit 1.4.2).

G.3.2: Direct the Superintendent to develop, for board review and annual adoption, an organizational chart that meets Curriculum Audit criteria for sound organizational management (see Exhibit 1.3.2).

Moreover, the revised organizational chart must reflect the central design and delivery of curriculum and congruence among all district functions related to student learning. A recommendation to the superintendent for revising the current organizational chart is provided in Exhibit R.3.1 below.

G.3.3: Direct the superintendent to begin the process of reviewing and updating job descriptions, resolving issues cited by the auditors (see also Finding 1.3), and assuring that all positions have duties and responsibilities directly monitored and evaluated by a supervisor. Make it clear in policy that different funding sources are not valid justifications for fragmenting curriculum management positions, duties, or responsibilities in order to build greater unity and congruity across the system.

G.3.4: Direct the superintendent to develop a plan of strategic reconfiguration and/or abandonment of currently allocated staff to realize no additional cost to the system for the two critical administrative positions in order to reestablish quality control in the instructional process for all schools. Adopt a job description for two new positions—a Director of Curriculum Design, and a Director of Curriculum Deployment—and adopt a revised job description for one reassigned position to create a Director of Curriculum Assessment and Program Evaluation as proposed by the superintendent (see Recommendation **A.3.3** and Exhibit R.3.1).

Direct the superintendent to implement the recommended modifications (see Exhibit R.3.1) to the district's organizational chart within current budgeted positions, ensuring that job descriptions are updated to reflect the changes in roles, responsibilities, and supervisory assignments and that appropriate structural changes are implemented for adequate and effective quality control and cost effectiveness.

Revise appropriate board policies to reflect the scope and responsibilities of the Assistant Superintendent for Curriculum and Instruction to plan, coordinate, implement, and evaluate the direction of the district-wide curriculum and these three positions essential for curriculum management quality control.

Administrative Functions: The following actions are recommended to the Superintendent of the Tucson Unified School District:

A.3.1: Assist the board in development of the policies and plans described in **G.3.1** through **G.3.4**, and present proposed draft policies to the board for adoption. Develop administrative regulations and procedures to implement the revised organizational chart (see Exhibit R.3.1). Revise current job descriptions for all district positions consistent with audit criteria for job descriptions outlined in Finding 1.3. First develop or update job descriptions for all positions depicted on the organizational chart.

A.3.2: Create, review, and update job descriptions to comply with the audit criteria illustrated in Exhibit 1.4.1 of this report. Establish and maintain an up-to-date inventory of these documents, and submit them to the Tucson Unified School District governing Board for adoption.

- Ensure qualifications include education, certification or licensure, experience, and knowledge, skills, and abilities appropriate to the position.
- Ensure that immediate links to chain of command elements are updated to match the revised table of organization; include both the title of the supervisor and the titles of subordinates.
- Assure that all functions, duties, and responsibilities are complete and appropriate to the position.
- Include statements supporting each position's relationship to the curriculum, as relevant. Include clear, complete statements of curricular linkages for positions with responsibilities closely associated with the curriculum and instructional program.

A.3.3: Finalize revisions of the job descriptions for the reassigned and new positions, and make recommended adjustments to the organizational chart (see Exhibit R.3.1 and the list of recommended modifications below), and submit the final organization chart to the board for review. Revise appropriate board policies to reflect the authority, scope, and responsibilities of the revised organizational chart positions. Present policies to the board for adoption. Create new administrative regulations outlining the duties of the new positions.

A.3.4: Update the district's organizational chart to meet the audit design requirements included in Exhibit 1.3.1 and address the deficiencies noted in Finding 1.3, especially focusing on the logical grouping of functions, scalar relationships, chain of command, and full inclusion of essential positions for quality control (see Exhibit R.3.1 below).

Include the following characteristics in the design of organizational chart:

- A span of control that requires direct responsibility for no more than 12 employees;
- No employee with more than one supervisor to avoid being placed in a compromised decision-making situation;
- Logical grouping of functions to keep tasks of a similar nature grouped together;
- A separation of line and staff positions;
- A scalar relationship that shows positions at the same level with similar responsibilities, authority, and compensation; and
- Full inclusion of all central functions that facilitate quality control in the organizational structure with respect to the essential functions of the school system.

A.3.5: Ensure that all organizational chart drafts and adopted documents bear the date of drafting and/or adoption and that the most recent revision replaces earlier versions in document collections and any other communication media, and include a table illustrating balanced or reduced costs for the organizational structure reconfiguration.

A.3.6: Annually provide the board with a review of the organizational chart and assurances that all job descriptions are available, listed, and currently adopted by the board.

A.3.7: Use the criteria in this audit report to redefine duties and responsibilities in job descriptions, especially in instructional management roles. Include the monitoring functions for fidelity in curriculum delivery, alignment of instructional resources to fit economically with the official adopted curriculum, curriculum management and assessment planning, teaching to mastery, and accountability roles.

A.3.8: Review and disseminate the revised and improved job descriptions and the revised organizational chart with all administrative staff to ensure consistent adherence to the chain of command and appropriate duties and responsibilities clarified for accountability of end results.

Exhibit R.3.1a

Proposed Revised Organizational Chart
Tucson Unified School District
January 2014

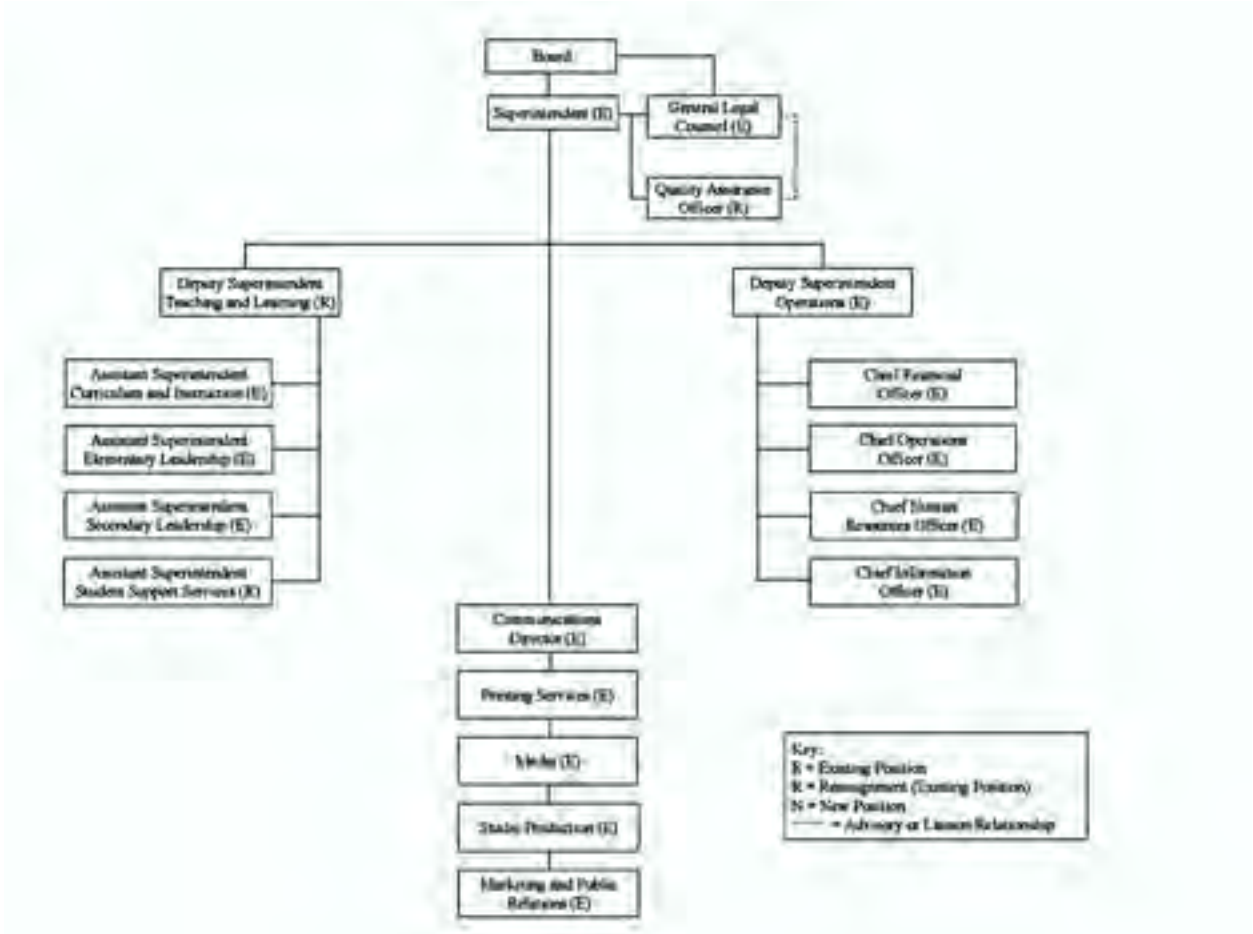


Exhibit R.3.1b

Proposed Revised Organizational Chart
Tucson Unified School District
January 2014

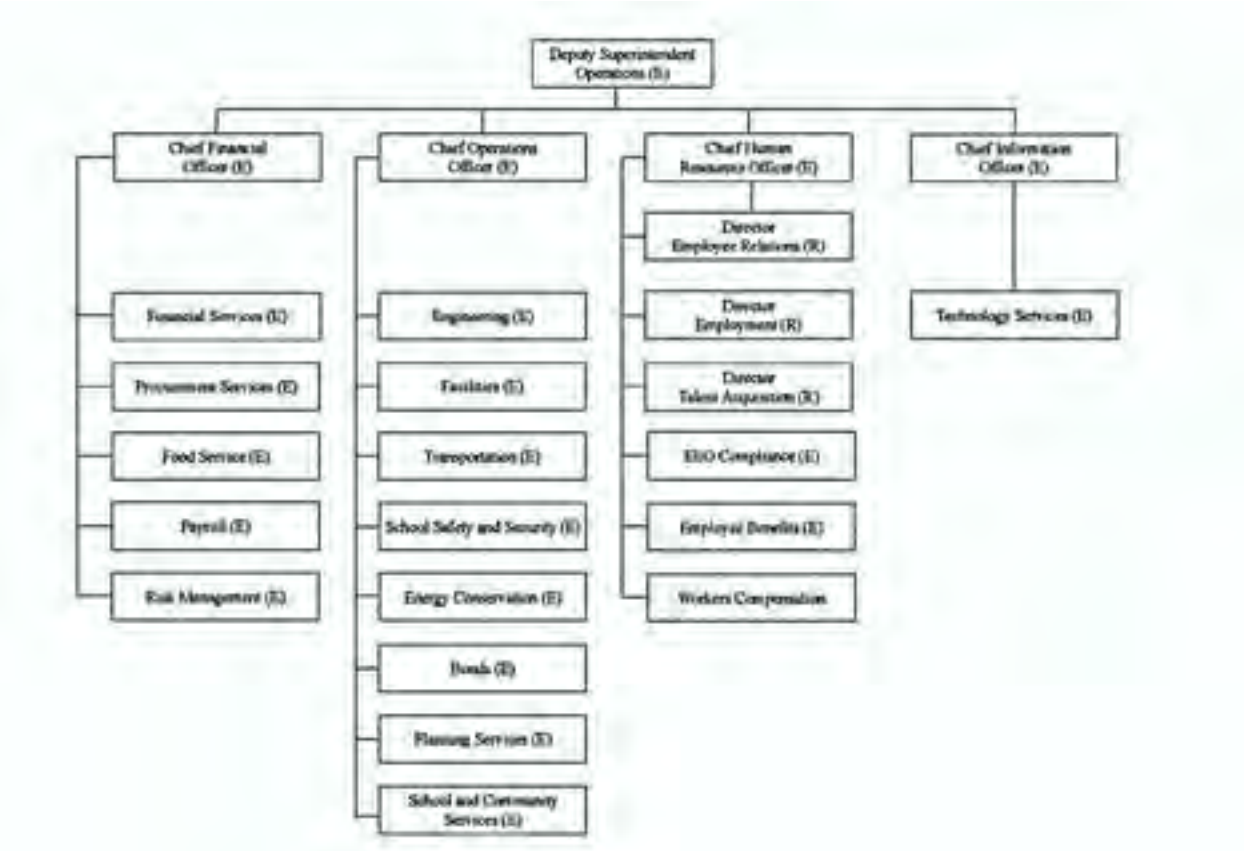


Exhibit R.3.1c

Proposed Revised Organizational Chart
Tucson Unified School District
January 2014

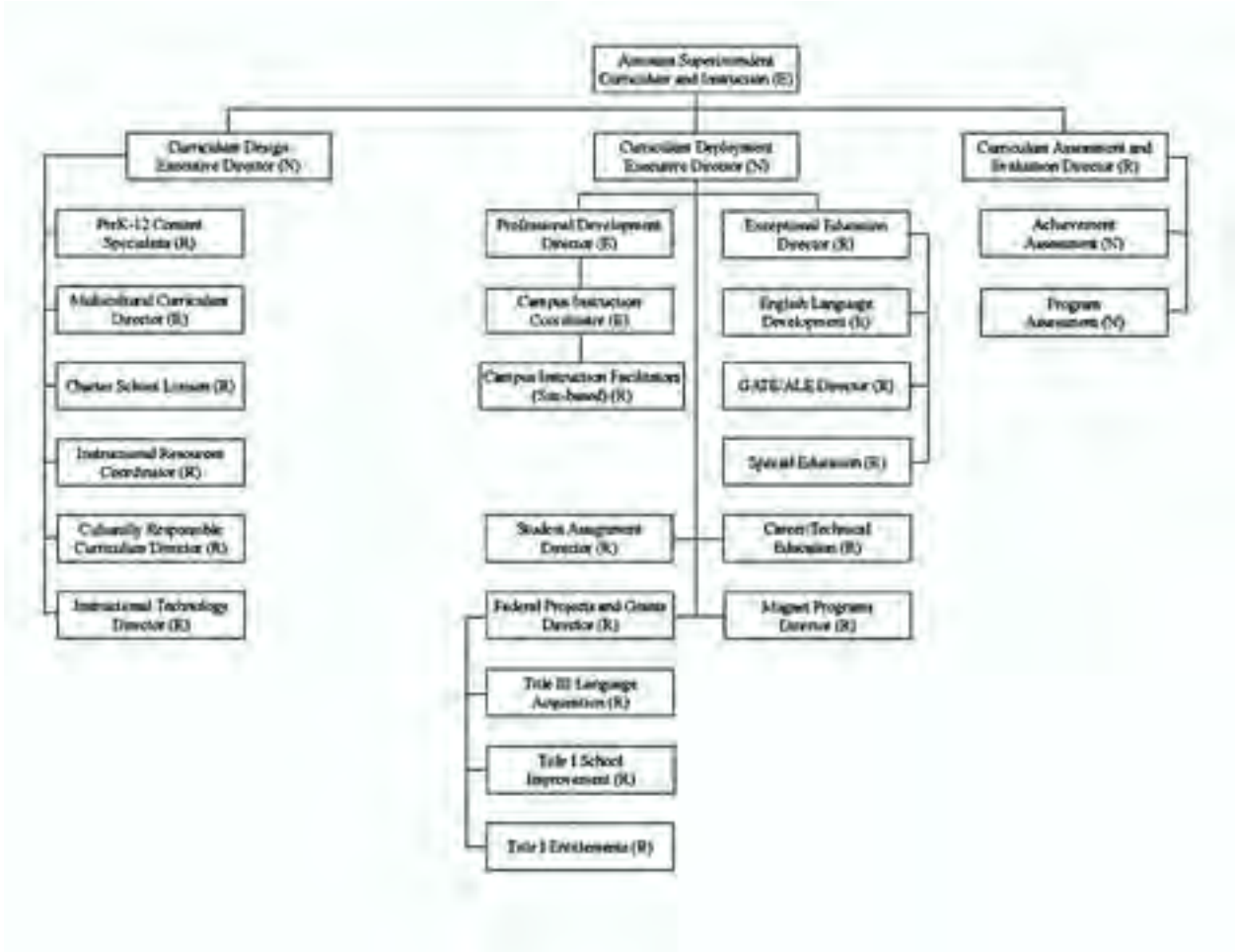


Exhibit R.3.1d

Proposed Revised Organizational Chart
Tucson Unified School District
January 2014

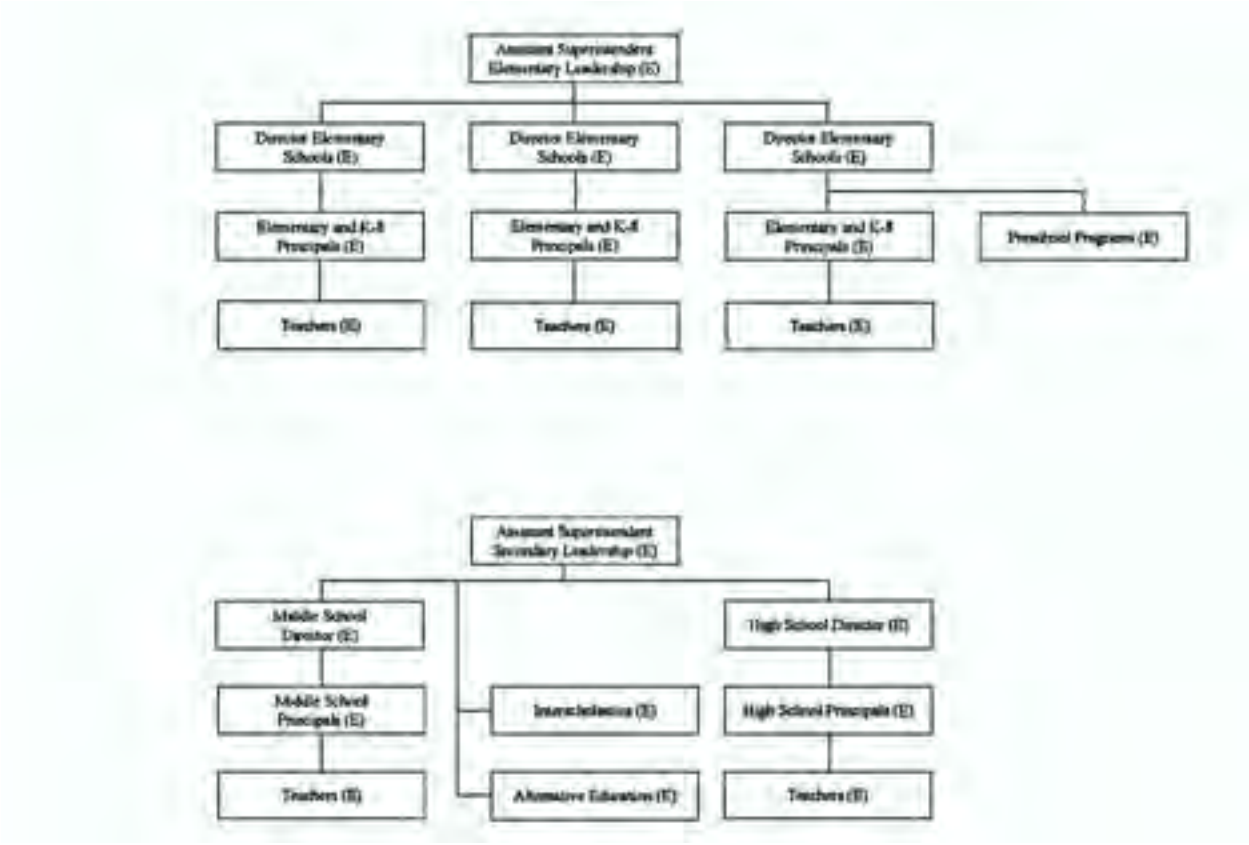


Exhibit R.3.1e

Proposed Revised Organizational Chart
Tucson Unified School District
January 2014

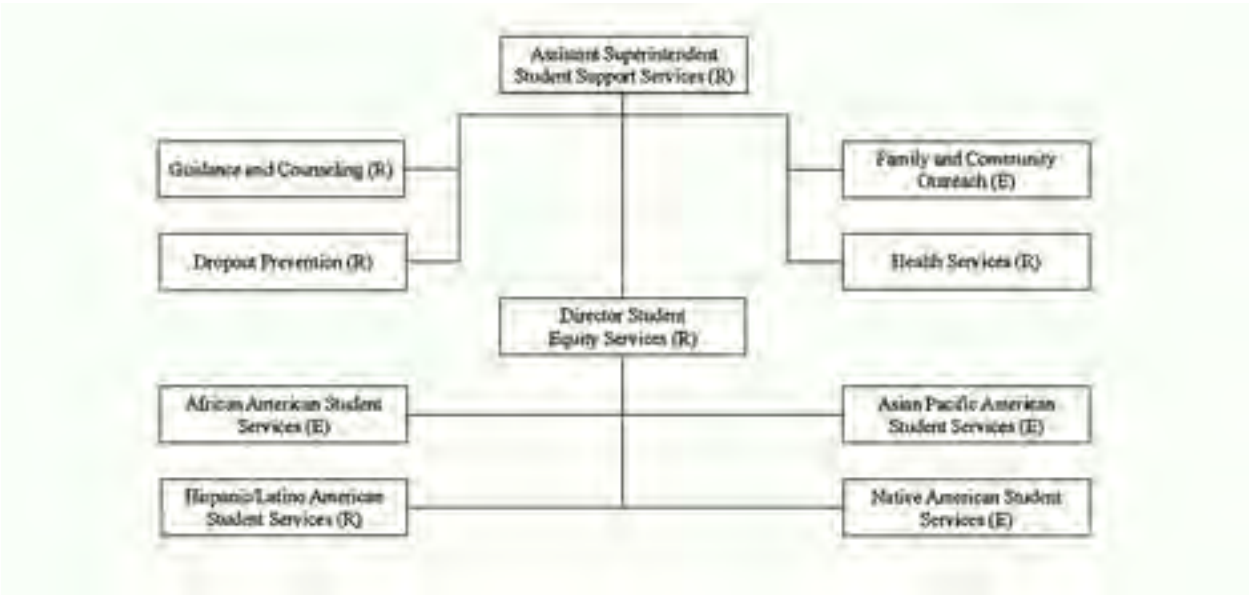


Exhibit R.3.1f

Recommendation to the Superintendent
for Organizational Chart Modifications
Tucson Unified School District
January 2014

1. Relocate and reassign the Director of Employee Relations position to the Human Resources Department with responsibility to the chief of that department in order to achieve logical grouping of employee and human resources services and programs.

2. Reassign the attorney position currently directing magnet programs to a position within the TUSD Legal Services department for the purpose of monitoring and tracking court-ordered equity and intervention activities for compliance with the federal court requirements, and of advising the superintendent and Governing Board as to developments and progress, among other assigned duties.

3. Create the position of Executive Director of Curriculum Design and Development and a department similarly named accordingly and supervised by the Assistant Superintendent for Curriculum and Instruction, for the purposes of closing significant gaps in quality control. Charge the position with unifying and delineating authorized curriculum expectations and objectives for student learning and consolidating and aligning instructional resources and programmatic interventions with curriculum parameters.

    a. Reassign instructional coaches, along with selected teacher mentors and learning support coordination staff, in sufficient numbers to provide adequate expertise and curriculum experience for developing and coordinating curriculum for all core content areas (reading, language arts, mathematics, science, social studies, and English language development).

    b. Reassign the Multicultural Curriculum Director and the Culturally Responsible Curriculum Director to the Curriculum Design Department under supervision of the department director for the purpose of integrating all related programs and services.

    c. Reassign the Charter School Liaison position to the Curriculum Design Department for greater continuity in planning and coordinating curriculum expectations.

    d. Reassign the Coordinator of Instructional Resources position to the Curriculum Design Department for the purposes of more effective alignment of selected textbooks and other instructional resources with the authorized curriculum.

    e. Reassign a qualified individual to the Curriculum Design Department in the position of Instructional Technology Director to facilitate the design of technology-based curriculum and instruction in order to keep the system's clientele on the cutting edge of emerging trends in technology in education and future vocations.

4. Create the position of Executive Director of Curriculum Deployment and a department similarly named to provide quality control in teaching and learning, to implement valid and sound curriculum objectives, and to establish and conduct professional development for implementing effective classroom practices, including mastery learning for all students equitably. It needs to be clear that this position is a staff position, and the main thrust of the position is to provide the support activities, services, and logistics for implementation of the curriculum by the Leadership division (school principals).

    a. Reassign the Professional Development Department to the Curriculum Deployment division for greater congruity of purpose, work, and results. Reassign several positions, currently operating independently, to this department.

        i. Reassign the Mentor Teacher Coordinator under the Professional Development Director, and change the title and job description to Campus Instruction Coordinator, responsible for coordinating the following positions for site-based services to individual schools:

1. Create the position of Campus Instruction Facilitators, responsible for assistance to school principals in professional development and for assistance in curriculum design and development.
2. Eliminate and reassign and restructure the positions of Teacher Mentors , Learning Support Coordinators, Instructional Coaches, and Professional Development Academic Trainers to new school site-based positions, entitled Campus Instruction Facilitators. These positions need to be assigned to individual school principals to provide extensive professional development in curriculum implementation and support to the instructional program in their assigned school.
3. Also direct the staff in these restructured positions to duties associated with new teacher induction and teacher retention. Assign a small portion of their time to the Curriculum Design Department for assistance in curriculum design and deployment as needed.
4. Some of these positions may be redirected to PK-12 Content Specialist (curriculum design) positions as needed to adequately staff essential quality control functions and operations.

ii. The approximately 93 site-based services created under this configuration with no added cost to the system need to provide consistency and effective mentoring to new teachers within their building on an on-site basis, focus and connectivity in implementation of curriculum, and training in effective instructional strategies and curriculum delivery.

It is expected that this option would substantially reduce cost and improve effectiveness, while freeing up resources that could be better utilized to support other system priorities.

b. Reassign the following departments and administrators under the Curriculum Deployment Executive Director to unify and consolidate major programs and services within a logical grouping of functions that address and focus on school implementation of educational programming.

i. Student Assignment Director and staff

ii. Federal Projects and Grants Director and staff and subordinate departments, including:

1. Title III Language Acquisition Department
2. Title I School Improvement Department
3. Title I Entitlements Department

iii. Exceptional Education Director and staff and subordinate departments with staff, including:

1. Special Education Department
2. English Language Development Department

iv. Career and Technical Education Department

v. Magnet Programs Department

c. Merge the Gifted and Talented Education Department and the Advanced Learning Experience Department, and combine supervisory responsibilities into one director position.

5. To ensure quality control includes feedback on results and progress for use in improvement, create the position of Director of Curriculum Assessment and Evaluation, and a department similarly named, to provide feedback necessary for quality control in teaching and learning, including achievement assessment for individual students, classrooms, programs, schools, and the total system. The system needs valid and useful data to guide decision making at all levels of the system for the improvement of teaching and learning effectiveness, accountability for results, and system excellence. While broad, comprehensive data are available in the system (see Finding 4.2), results indicate that the use of data is not found to be robust in guiding decisions or system actions (see Finding 4.4), and achievement trends are not encouraging (see Finding 4.3).

Without vigorous assessment functions and specific measurements driving organizational actions and goals, institutional effectiveness, instructional programs, and student achievement cannot be empirically improved or cost-effective (see Finding 5.1).

6. To correct the unclear chain of command in the Educational Leadership Department, consolidate site leadership positions for coordination and direction under the Assistant Superintendent position including the following:

   a. Divide the Elementary Leadership division into three area sections, each headed by an elementary leadership director, consisting of equal numbers of school sites in each section, with principals reporting to and evaluated by their respective director. All teacher positions on a given school campus need to be identified on the TUSD organizational chart as reporting to respective principals.

   b. Retain the current configuration of the Secondary Leadership division, with the middle school and high school sections and the Interscholastic Department as is, but with the following addition:

      i. Reassign the Alternative Education Department and personnel to the Secondary Leadership Department, to foster greater coordination and articulation of instructional programming across disparate locations and arrangements.

7. Notably, many of the above position reassignment recommendations were predicated on the need for improved institutionalization and integration of the subunits found in the Department of Equity and Interventions. The configuration emerges from the external funding of the subunits, which was found to sub-optimize organizational congruity, non-duplication, and unity of purpose (see Finding 1.3). By sub-optimization is meant that a sub-function if successful at the expense of other sub-functions or larger functions. The configuration functions in a manner often characterized by actions autonomous from the total system with respect to the nature of the department's programs and services.

   The remaining functions and operations from the Department of Equity and Interventions need to be organized and situated within the Deputy Superintendent's Division of Teaching and Learning to facilitate organizational unity of purpose and harmonization of institutional relationships in a new department with reassigned existing staff.

   It is recommended that the Executive Director of Equity and Interventions be reassigned to the position of Assistant Superintendent of Student Support Services, supervised by the Deputy Superintendent of Teaching and Learning, in a reassigned and reconfigured department, which needs to contain the following interrelated functions and operational units:

   a. Guidance and counseling

   b. Dropout prevention

   c. Family and community outreach

   d. Health services

   e. Student Equity Services, which includes the following subunits:

      i. African American Student Services

      ii. Hispanic-Latino American Student Services

      iii. Asian Pacific American Student Services

      iv. Native American Student Services

8. The auditors found that Learning Support Coordinator Services manifested widely dissimilar duties and responsibilities, inconsistent qualifications, and unclear supervision (see Findings 1.3 and 1.4). The coordinator positions need to be redefined in terms of specific position objectives with measurable outcomes or results and clear duties and responsibilities.

The coordinator personnel need to be transferred to the Professional Development Department, under the director, and assigned to specific principals for supervision, with duties and responsibilities including:

- Coordination with student support services sections for client identification and selection,
- Evaluation on the impact of their work with valid measures of student progress using prior and after assessments of achievement,
- Demonstration of proficiency and competence in tutoring students for progress, and
- Monitoring for effective use of time and compliance with job specifications by their assigned principal, as the direct supervisory position.

This recommendation is grounded in findings of ineffective quality control in vital system functions of curriculum, instruction, and feedback for improvement. The system was found to be highly decentralized and fragmented with wide differences in program design and implementation, inadequate position descriptions, tenuous cost-benefit connections, and insufficient accountability.

Organizational issues, including duplicative services and conflicting purposes and activities, were found to foster the system's substandard performance within the State of Arizona's educational standards and assessments. The system's focus and connectivity within a framework to cultivate learning was found to be deficient, and the auditors found that vital functions for quality control were missing from the organizational chart and the system.

The recommended changes in the administrative and operational structure found in this recommendation are constructed to fill in crucial gaps found in the staffing of vital functions for quality control in teaching and learning, to improve system congruity and coordination with consolidation and reassignment of positions and responsibilities, and to simplify and reorganize departments and services for efficiency and cost-benefit advantages. Recommended staffing and position changes were grounded in a zero-increase cost framework and proposed to improve productivity of the TUSD system.

Recommendation 4: Develop and implement a comprehensive curriculum management system that coordinates and focuses all curriculum management functions; prioritizes curriculum development in all content areas; incorporates clear expectations for rigor in instruction as well as in student materials and resources; supports instruction that is culturally responsive; requires the development of deeply aligned, authentic formative and diagnostic assessment tools; and defines and prioritizes the effective delivery of curriculum in every grade level and course.

Delivering quality instruction to every student and ensuring each child's academic success is the single most critical goal of any school district. It is also unquestionably a goal that cannot be left to chance. Ensuring that every student has access to and is provided the very best quality instruction and learning must be purposeful and carefully planned at every level of the school system. Therefore, written planning documents must be in place that direct the many levels of personnel ultimately responsible for the primary purpose of all school districts: student learning. In addition to documents, active planning and training must continue in order to actualize the written plans and maintain a constancy of purpose. Such planning will then focus and direct all efforts across the system to achieve a quality, deeply-aligned curriculum and strong system for instructional delivery and educational equity.

A quality curriculum is based on the principle that the written, taught, and tested curricula are aligned. To be truly effective, not only must they be aligned in content, but in context and cognitive type, as well. Context refers to the way in which something is learned or practiced. The cognitive type refers to the type of cognitive functioning children engage in when accomplishing a task or practicing a skill. The first big step in assuring alignment begins with a quality written curriculum guide that specifies what content is to be taught and suggests the best ways to approach that content, as well as suggesting the contexts necessary for students to attain mastery and the desired cognitive type of student engagement. A quality guide also suggests a variety of rigorous, aligned resources and materials that support instructional goals, and provides a battery of formative, diagnostic assessments and sample test items so teachers are able to evaluate when students have mastered the intended objectives. The third step lies in ensuring that the written curriculum is delivered effectively, using

the district-expected and suggested strategies and approaches described in the Curriculum Framework and in accompanying district documents, and in a way that communicates high expectations for all students and allows for individualization of learning and successful differentiation of instruction. Instructional expectations should also focus on student engagement in the classroom, both in terms of their physical activity as well as their cognitive activity.

Once a district has the key components of the aligned curriculum in the design (all written aspects of the curriculum, including the expectations for what its implementation should look like), managing the delivery of that curriculum involves staff development, ongoing support and coaching, and strong monitoring to ensure its implementation as well as feedback to determine whether the delivery is effective. All measures of effectiveness (of the written curriculum as well as instruction) relate back to the impact on student achievement; programs, teaching practices, student activities, and curriculum are only effective if students experience increased academic success. In addition, such success must be sought on behalf of, and provided to, all students, according to their individual needs, and continuous evaluation must take place to determine if all subgroups of the student population are experiencing success (see also Recommendation 5), accessing appropriate and challenging content, and making gains in their learning.

In the Tucson Unified School District, the auditors found new top-level administrators who demonstrate a clear commitment to quality curriculum development and to supporting teachers and principals in its delivery. They are newly engaged in the beginning stages of planning and in restructuring existing departments to facilitate increased productivity and cohesiveness across department tasks. The auditors found that the district lacked comprehensive curriculum management planning for the development, delivery, monitoring, evaluation, and revision of the district curriculum (see Findings 2.1 and 3.2). Curriculum planning was not supported by board policy (see Findings 1.1 and 2.1), and job descriptions were inadequate to assign specific roles and responsibilities for the management of curriculum and assessment (see Finding 1.4). The scope of the existing curriculum was inadequate to direct classroom instruction and the attainment of the district goals (see Finding 2.2), and the quality of written curriculum that is available was inadequate to support effective delivery that addresses cultural responsiveness and ELL needs (see Finding 2.3). Curriculum documents varied from site to site, and teacher to teacher, and were not available in most curricular areas. Exceptions were in the areas of mathematics, English language arts, and science, where district documents were available on the website.

Curriculum documents lacked consistent alignment in all three dimensions (content, context, and cognitive type) among instructional resources, instructional strategies, *PARCC* assessments, the *ATI*, and written district objectives (see Findings 2.4 and 3.1). The district's written curriculum also lacked adequate formative and diagnostic assessments to determine students' prerequisite knowledge and skills and to measure progress toward mastery of the objectives (see Findings 4.2 and 4.4). Data related to professional development showed a lack of attention to preparing staff to implement the district's written curriculum or to address student needs based on performance results (see Findings 3.3 and 4.3).

The district also has only minimum direction for what classroom instruction should look like or what the district has determined to be the most effective. There has been training in an instructional model, but it hasn't been formally adopted, nor have buildings consistently implemented it yet. The model does not include structuring classroom modalities to address individual needs (see Finding 3.1).

Perhaps most importantly, the auditors found that the district lacks a structure, system, or department solely focused on the design and development of a strong written curriculum that supports desired modes of delivery, cognitive engagement, cultural relevance, and sheltered strategies for English language learners. Current staffing in curriculum is inadequate to support curriculum design, and current curriculum department efforts are focused almost solely on delivery—training teachers and providing site-based interventions—without the foundation in place that specifically defines what students are supposed to be learning. In other words, TUSD personnel are very focused on *how* teachers teach and students learn, but not on *what*.

Based on their findings, the auditors recommend the development and implementation of a comprehensive curriculum management system that is focused on a planned approach to every aspect of curriculum design and delivery—its development, implementation, monitoring, evaluation, and revision—so that student learning for

all children is maximized. To put such a system in place and support these functions, the auditors recommend the following actions to the TUSD Board of Education and Superintendent of Schools.

These steps will help district leaders prioritize the work that needs to be done and focus all involved personnel on common goals, thereby rendering the attainment of those goals more likely. The recommended steps are organized into the following sections:

I. Curriculum Management Planning,

II. Curriculum Design and Development,

III. Curriculum Implementation, and

IV. Curriculum Staffing.

These sections begin below:

I. Curriculum Management Planning

The district needs a cohesive and comprehensive plan that directs a management system to establish and maintain a quality curriculum that is: 1) aligned to both AZ Standards for College and Career Readiness as well as *PARCC* assessments, 2) implemented effectively in every classroom, and 3) continuously evaluated using aligned, formative, and diagnostic assessments. This plan should be developed in concert with plans governing student and program assessment and equity to assure that the complex interworking of all departments within the district is both efficient and effective in achieving district goals.

The curriculum management system needs coordination by a single written plan that directs curriculum design, implementation, evaluation, monitoring, and revision, and that also guides the integration of other components of curriculum that transcend its development, such as content, strategies and approaches that support culturally relevant and responsive instruction, and English language development. The plan also integrates staff development across the schools, includes various methods for monitoring curriculum delivery, and provides a model for instructional delivery. These processes and procedures must be formalized and institutionalized in policy to ensure smooth transitions in the event of staff turnover and to facilitate orientation of new staff during the future years of growth and expansion in the communities served.

Governance Functions: The following actions are recommended to the Tucson Unified School District Board of Education:

G.4.1: Develop policies that define the roles and responsibilities of the board of education, district administrators, curriculum/program directors, school-level administrators, and teachers regarding curriculum. Incorporate into these policies the responsibilities outlined under the administrative functions section of this recommendation.

G.4.2: Direct the superintendent (or designee) to define a plan for the development, revision, delivery, monitoring, and assessment of curriculum. The plan is intended to serve many purposes: 1) to define the processes surrounding the continuous evaluation and development of curriculum; 2) to provide guidelines for what a finished product should look like; and 3) to clarify which tasks and responsibilities are classroom-level, school-level, or district-level. This plan should also incorporate the district's Values and Mission Statements, and integrate the main goals of the coming strategic plan. It should explicitly coordinate functions across departments (such as curriculum design and professional development, curriculum delivery and assessment) and system levels so any confusion among departments is minimized and gaps and overlaps diminished. The plan should include all the components outlined in **A.4.2** and described in Exhibit 2.1.2, along with the following:

- The definition of those curriculum functions and components that are tightly held vs. those that are loosely held (see Exhibit 2.1.1);
- The expectation of an aligned written, taught, and tested curriculum in all three dimensions (content, context, and cognitive type);

- The expectation of a K-12 scope-and-sequence of specific learning goals, benchmarks, and objectives that form the backbone of the curriculum guides; meet and exceed the Arizona Standards for College and Career Readiness; and incorporate USP requirements for culturally relevant instruction;
- A requirement that all courses offered be supported by quality written curriculum that aligns with the Common Core and Arizona Standards; and
- Formal board of education adoption of all curricula prior to implementation.

Require that planning, particularly timelines for curriculum revisions, within and among departments and schools be aligned to the curriculum management plan, especially in the area of providing professional development necessary to support effective curriculum delivery.

Administrative Functions: The following actions are recommended to the Tucson Unified School District Superintendent:

A.4.1: Assist the board of education in developing policies that define the roles of the board, district administrators, and teachers regarding curriculum. For example, the board of education is primarily responsible for adopting curriculum; administrators are responsible for overseeing its development, evaluation, and revision, as well as for monitoring its implementation; teachers are responsible for delivering the adopted curriculum and sometimes assisting in the writing or reviewing of the curriculum, with assistance from outside consultants or district administrators.

A.4.2: Develop a curriculum management plan for directing the design, delivery, monitoring, evaluation, and revision of curriculum. The plan should address the following areas (see also Exhibit 2.1.2):

A philosophical framework for the design of the curriculum: What are the underlying beliefs of district leadership regarding how children learn, what constitutes effective teaching, what is the teacher's role, what is the student's role, and what is a district's role in making available or ensuring a student's education? Is education a process, a goal, or both? Defining the beliefs and philosophy establishes the foundation for what curriculum should look like, what the district's and schools' respective roles are in providing each child with an education, and what an effective, engaging classroom might look like. Defining the philosophical framework must take place before defining an instructional model, and all curriculum work, both design and delivery, should reflect that same philosophy.

Timing, scope, and procedures for a periodic cycle of curriculum and resource review/development: This ensures that every content area is addressed and has a written curriculum that facilitates effective, rigorous instruction, and that curriculum is kept up-to-date, particularly with changes in state or national standards or requirements as well as with testing modifications or changes. The cycle should also include procedures for when/how often to finalize updates and revisions to the written curriculum so teachers can rely on the accuracy of their content and prepare for anticipated changes and revisions. Such a cycle should also establish the timeline for reviewing the alignment, quality, and rigor of adopted resources and materials, and direct their revision or replacement where and when they are inadequate. ALL resources that are referenced or suggested by the written curriculum should be screened for rigor, appropriateness, cultural relevance, alignment to district expectations for instruction and student engagement, and content alignment (in all dimensions: content, context, and cognitive type).

Stages of curriculum development: This specifies the different stages that are involved in developing and revising the written curriculum and might include: backloading and released item analysis; review for alignment with external/target assessments in all three dimensions (content, context, cognition); assessing the complexity, rigor, and measurability of objectives; placing objectives in an articulated, PreK-12 sequence that expects mastery of content six to nine months before it is encountered on the *PARCC* or other high stakes tests; developing mastery-level projects and activities with accompanying rubrics; validating the existing objectives, materials, and resources against multiple external sources, such as IB standards or AP standards, or for rigor, cultural relevance and responsiveness, and student-centered, active learning; and creating a bank of high quality assessment items and formative/diagnostic assessment instruments to support differentiated, individualized

instruction. See *50 Ways to Close the Achievement Gap*[5] for more specific suggestions and information. The stages defined in TUSD's plan must address particularly the way student achievement data, teacher feedback, and classroom monitoring data are used in evaluating the quality of the written curriculum and revising the written curriculum accordingly.

Staff roles and responsibilities for curriculum management: Who is responsible for what task? How do departments with overlapping responsibilities (such as dual language education and elementary reading) work in concert to effect improvements in the written curriculum and in classroom instruction? This aspect of the plan delineates which tasks are primarily classroom-based, which are school-based, which are department-based, and which are board-based. For example, it is the board of education's responsibility to determine the content of the educational program, in congruence with state law, and to approve and adopt the written curriculum. It is the teacher's role to deliver the curriculum effectively (so students master it), the principal's to monitor its delivery, and the instructional coach's and principal's role to support teachers in delivering the curriculum.

Monitoring of classroom activities should be accomplished by principals and other designated supervisors (such as instructional coaches) to identify and promote productive practices that support *learning*, correct or eliminate practices that do not, and identify professional development needs. Clarify how monitoring responsibilities of any school-based personnel complement one another to prevent duplication of effort or possible conflicts in carrying out monitoring responsibilities.

A format and included components for curriculum guides: Specify the aspects or components of the written curriculum that are nonnegotiable, for consistency in every content area, and the other aspects that are "fluid." The curriculum guides should include, minimally, the criteria presented in Exhibit 2.3.2 and in **A.4.4**, and preferably include suggested student projects or activities that integrate all the expectations for rigorous student engagement and learning described in part in Finding 3.1, and in the district's instructional model and expectations (see **A.4.13**).

Direction for how state standards will be included in the curriculum: This includes whether or not to use a backloaded approach, in which the curriculum is derived from high-stakes tested learnings (topological and/or deep alignment), and/or a frontloaded approach, which derives the curriculum from the Common Core or Arizona state standards (Blueprint), but in a refined, more specific format.

Require for every content area a focused set of precise student objectives and standards: These should be derived from the Arizona Standards, be reasonable in number so the student has adequate time to master the content, be very specific so teachers clearly understand what mastery of these objectives look like and what the standard of performance is, and be written in measurable terms.

The written curriculum should not only specify the content of the student objectives, but also include multiple contexts and suggestions for activities and approaches that engage students in critical thinking, culturally responsive (and personally relevant) activities, and analytical cognitive types.

Assessment beliefs and procedures to determine curriculum effectiveness and use of data: What are all the instruments that will be used to measure progress toward meeting goals, including the goal of students' mastering curriculum objectives? How the data will be used, who will use them, and how they will be collected, analyzed, and disseminated to teachers, administrators, and concerned stakeholders should all be defined. There must be an expectation for formative assessments, included in the curriculum guides, that teachers can use *whenever* needed to evaluate student progress in mastering objectives (or to determine whether they already know content about to be taught). The availability and quality of formative, diagnostic assessment tools are critical to being able to determine, and meet, students' individual academic needs.

Design of curriculum to support differentiation and other expectations for delivery: Directs the curriculum guides to be designed so that they support teachers' differentiation of instructional approaches (to match student preferences and learning styles), and to support teachers' selection of student objectives at the right level of difficulty. This ensures that those students who need prerequisite concepts, knowledge, and skills are moved

[5] Downey, English, Poston, Steffy (2009). Corwin Press.

ahead at an accelerated pace, so they don't fall further and further behind, and that students who have already mastered the objectives are also moved ahead at a challenging pace.

Whole group, one-size-fits-all approaches cannot meet the majority of students' academic needs. District curriculum leaders must define what true academic differentiation looks like and how teachers can manage so many different skill levels and varying content knowledge in the classroom without holding certain students back or leaving other students behind. This is critical to meeting the needs of academically at-risk populations and must be supported by the design of the curriculum in addition to all district documents that describe expectations for delivery.

Approaches for using diagnostic, formative, and summative test results to plan instruction, evaluate programs, and design interventions at all levels: See Curriculum Implementation.

A staff development program linked to curriculum design and delivery: Professional development should prepare teachers to deliver the curriculum in accordance with the board's performance expectations. This includes support in the classroom to ensure that training and curriculum materials are properly used. See also the staff development section of Curriculum Implementation for more detailed information.

Monitoring the delivery of curriculum: This presents the procedures, philosophy, and intent for monitoring the delivery of curriculum. Multiple means of monitoring (as well as multiple purposes) are suggested, including the *Three-Minute Walk-through* (Downey, et al.). See the monitoring section under Curriculum Delivery. Monitoring curriculum delivery is an essential function for school principals and assistant superintendents for elementary and secondary leadership. The key person to monitor curriculum content, context, and cognitive type; instructional strategies, student engagement and mastery, environments, and appropriate selection of learner objectives for teaching is the principal. Monitoring is a line officer responsibility that needs to be assigned, and with accountability for results, to principals.

Communication plan: This establishes a plan for communicating among and across departments and levels of the district regarding the process of curriculum design and delivery (which also includes professional development and assessment) to maintain constancy of effort, focus, and continuity.

A.4.3: Make periodic reports to the board of education regarding the progress in managing curriculum district-wide, using data from formative and summative assessments, as well as from monitoring practices. The importance of quality, deeply-aligned written curriculum that raises expectations for student performance and supports those expectations with critical resources for teachers cannot be overstated–curriculum is a key component in ensuring better teaching and higher achievement. Planning for its development, implementation, and revision is essential to impacting student learning in every classroom.

II. Curriculum Design and Development

Governance Functions: The following actions are recommended to the Tucson Unified School District Board of Education:

G.4.3: Require that efforts to develop the written curriculum begin immediately; require that decisions regarding which content areas receive priority be data-based (for example, if math is an area of concern for so many individuals and there is little consistency in its delivery, focusing on that content area first might be prudent).

G.4.4: Review and adopt the written curriculum that is currently in use, and future curriculum prior to its implementation, based on a thorough consideration of documentation and staff advice.

G.4.5: Direct the superintendent (or designee) to review the concepts of deep curriculum alignment and require that those concepts form the basis for curriculum design efforts across the district (see **A.5.7**).

Administrative Functions: The following actions are recommended to the Tucson Unified School District Superintendent:

A.4.4: Define what components and characteristics need to be included for a document to be considered a "model" curriculum guide. Review the components and characteristics identified and discussed in Findings 2.3 and 2.4. The following components are minimum requirements:

1. **Objectives:** The objectives used in the curriculum were either from the *AIMS* blueprint or from the Common Core. They were insufficiently specific to give teachers adequate information regarding what mastery looks like. Objectives should be "refinements" of the state standards or Common Core Standards: a specific restatement of the intended skill or knowledge to be learned, the contexts in which it is to be learned and practiced, and the standard of performance by which a teacher knows mastery of that skill or knowledge has been achieved. These should all align closely with the state/national standards, but these specific learner objectives give the teacher more precise information of what mastery looks like and clearly define which objectives are assigned to which grade or instructional level (because the first grade objective is clearly different from the second, and so on).

   The number of objectives included in the guide must also be manageable. It is better to focus on fewer objectives and address them more deeply than to include an entire of battery of objectives that teachers "might" touch on. Review all objectives for evidence of rigor (see Bloom's Taxonomy in Appendix I), and integrate into the objectives across all content areas expectations for culturally responsive content.

   Giving teachers a clear continuum of student learning from preschool through twelfth grade allows them to move students ahead at a more appropriate pace, if the students are ready, or to accelerate them if they are behind. This is easier when the teacher knows exactly where a student is on the continuum of learning, knows what content is next in the sequence, and can easily determine what students have mastered when they come into their classroom (this is particularly important in districts with high mobility).

2. **Assessment:** Specific examples of how each objective will be assessed, with what tools, and when must be included in the written curriculum documents. District formative assessments must be cross-referenced throughout, specifying when, how, and with which instrument each objective will be evaluated. Relying on released test items or commercially produced assessments or unit/chapter tests is insufficient; the sample items to be included should be items based on deconstructed, released test items that have been altered and "deepened" to provide students with a challenge level ensuring their success on a multitude of test items related to the same content (English and Steffy, 2001). Additional diagnostic assessments are needed to supplement the *ATI*, which serves as a minimal benchmark but lacks cognitive rigor. Teachers must have tools with which to continuously evaluate student progress and move them at the appropriate, individualized pace in all content areas. Consider more authentic approaches that integrate into daily instruction and are more project-based in nature, particularly those assessment tools that require writing. These formats parallel more closely what is required on the *PARCC* assessment.

3. **Prerequisites/Scope-and-Sequence:** Place the learner objectives (PreK-12) within a scope-and-sequence document to allow teachers to easily discern what content and skills students come in with, and what content and skills they are responsible for seeing students leave with. Such a document helps distribute accountability and eliminates gaps and overlaps in student learning—an important factor in an educational environment that must make the most of the time allowed with students. This will also facilitate greater articulation of the curriculum from one level to the next and assure greater coordination across a single level or course, as the mapping out of objectives is already completed and any "misinterpretation" of the unspecific state or Common Core standards is avoided.

4. **Suggested Strategies and Approaches:** This item is a critical part of ensuring high expectations for students and achieving deep alignment to provide teachers, particularly inexperienced teachers, with support in deciding ways to teach the assigned objectives. Flexibility is always allowed in how teachers approach a given objective, but this component provides teachers with invaluable, research-proven suggestions if they want or need them and is another way to integrate the culturally responsive approaches required by the USP. The suggested strategies should be developed to ensure they incorporate those contexts and cognitive types known to be part of the tests in use, and these strategies and suggested student activities and projects allow students to become familiar with the context and

cognitive type before encountering them on the high stakes tests. This is the main tenet of the "doctrine of no surprises."

However, such strategies should not ONLY align with test contexts**.** A wide variety of authentic, student-centered contexts is recommended to ensure a more broad-based, real-life application of the concepts, skills, and knowledge so that students can connect personally with the learning, be more actively and cognitively engaged, and see the overall value of their learning.

Currently, the strategies observed in classrooms are of varying quality and rigor, and the rigor of the sample student work was below that required on the *PARCC* assessments. Classroom-based activities and strategies should always meet and exceed the rigor found on assessments—students should be challenged in the classroom, not by a high stakes assessment.

5. **Resources and Materials**: Every book, recommended professional resource, audiovisual aid, technological enhancement or program, and other resource should be listed (after ensuring teachers have all that are necessary) in the written curriculum and referenced by objective/strategy, AFTER it has been screened for rigor, quality, developmental appropriateness, and alignment with the content, contexts, and cognitive types of the objectives. All suggested materials and resources should have been analyzed for deep alignment to the curriculum and the tests in use; modifications are also included in the guide to improve alignment. Materials and resources are suggested—as with strategies and approaches, not required—to allow teachers and buildings flexibility in selecting those materials most effective and appropriate for their students. However, in cases with extremely high mobility, adherence to the sequence of units or objectives in the curriculum guide by teachers across schools becomes more important. This consistency in WHAT is taught is critical to ensure better transitions for students moving from school to school (while allowing for flexibility in how the content is taught).

Beyond these components, the format for the guides should be determined. These do not necessarily need to be identical for all content areas, but within content areas it is recommended that a common format is selected and adhered to for consistency across the district. The degree of variation in curriculum guides is up to district leaders.

Use the data from Findings 2.3 and 2.4 in making decisions concerning curriculum design and development.

A.4.5: Reflect in the design of the curriculum the expectation that instruction will be differentiated to accommodate individual student needs (academic) and learning styles (see Findings 2.3 and 3.1). This requires supporting fluid groupings of students (pairs, small groups, etc.), RTI, and SEI/ELL approaches, in addition to the basic suggestions for remediation as well as enrichment within the guides themselves.

Also include in the curriculum design components and characteristics that reflect the district's philosophy and beliefs concerning effective delivery. Design must support delivery. In other words, if culturally responsive, cognitively engaging instruction is an expectation, then the written curriculum should reflect that expectation and include suggestions to support that kind of instruction. Make these expectations an integral part of the guides, not a stand-alone document. See also **A.4.13** in Curriculum Implementation.

A.4.6: Take steps to assure that all courses have a corresponding curriculum.

Ascertain that every board-approved course in the district is included in the official course list. In the official course list, indicate which courses are offered at each building during the current school year (see Finding 2.2).

A.4.7: Engage in a deep alignment analysis to ensure that the objectives, resources, and strategies included in curriculum guides are deeply aligned to the tests in use in all three dimensions—content, context, and cognitive type. Research the methods and ideas presented in the book *Deep Curriculum Alignment* by English and Steffy (2001), or consider contracting for a deep curriculum alignment training (contact CMSi for more information) to gain the skills necessary to analyze and deconstruct released test items, for information on how to successfully prepare for current and future tests in use, and to more successfully anticipate the direction in which the test is moving. This will assist the district in predicting where the *PARCC* assessments and other external assessments are going and increase student success on current and future forms of the tests in use, by ensuring that the

content, context, and cognitive types encountered on any tests are an integral part of daily instruction without compromising rigor, active student engagement, and hands-on problem solving.

A.4.8: Develop formative assessments to more deeply align with the *PARCC*/Common Core and existing state standards, and to more closely reflect the levels of cognition and type of student performance desired by district leaders. Link them to the written curriculum, and identify those for which the data will be entered electronically and monitored at the system and building level. Some formative assessments should be open for teacher selection, but ALL should be rigorous and incorporate a wide variety of contexts—not just multiple choice.

These assessments will provide teachers with diagnostic data on what skills, concepts, and knowledge students have mastered or are still lacking, so that instructional decisions may be made that target those deficiencies and so that teaching is never redundant. Include diagnostic assessments that target specific skills, to round out the battery of assessments teachers can use to constantly monitor student progress toward mastery of a discrete concept, skill, or objective. All assessments used in the district, whether classroom-based or district-level, should integrate a variety of student modes of response and performance-based items, as well as incorporate multiple types of cognition.

The assessments should be concise and yield the needed information in a very brief span of time–a few days, at the most. Ideally, the assessments could be quickly scored at each campus, so teachers receive the data immediately and can adjust instruction accordingly. In addition, continue to return benchmark assessment data to teachers in a timely manner. These formative assessments also allow teachers to monitor every individual student's progress toward mastering the intended curriculum, and each student's performance on the state tests will no longer be a surprise or guessing game.

A.4.9: Wherever possible, integrate expectations from the culturally-responsive curriculum required by the USP into all curriculum guides, and also integrate strategies and approaches that are most effective with English language learners. When these are integrated within all core and non-core courses, it is more likely to become an institutionalized expectation and practice.

Require principals to monitor whether these approaches are implemented in the classroom. Continue to train teachers in these approaches and monitor for their impact on curriculum delivery.

A.4.10: Work in concert with staff development personnel to prepare trainings for teachers in using and effectively implementing the written curriculum, using the instructional model (**A.4.13**) as the context for delivering the guides.

III. Curriculum Implementation

Instruction

Governance Functions: The following actions are recommended to the Tucson Unified School District Board of Education:

G.4.6: Direct the superintendent (or designee) to widely disseminate to all teachers and building-level administrators a synopsis of research-supported instructional strategies that are effective with linguistically, culturally, and economically diverse student populations. Much of this information is already present in the USP-required culturally responsive curriculum, but its existence in a stand-alone curriculum guide decreases its prevalence and relevance in all classrooms.

Require this review of research to focus especially on those characteristics that have been shown to decrease dropout rates and improve student attendance and performance. Many districts have found that the more challenging (rigorous) and engaging instruction is, the more students stay in school, come to class, and complete assignments. See Appendix J for additional suggestions in this area. These expectations not only meet USP requirements but should also comprise a common thread through all written curriculum and instruction in TUSD and celebrate the incredible linguistic, ethnic, and economic diversity present in the district.

G.4.7: Direct the superintendent (or designee) to develop administrative regulations that define the instructional model to be adopted in classrooms throughout the district. Use the documents presented and discussed in Finding 3.1 for a summary of the expectations culled from multiple documents.

G.4.8: Direct the superintendent (or designee) to regularly evaluate the effectiveness of the delivery of curriculum across the district. Such an evaluation should use data from multiple sources: formative assessments, summative assessments, monitoring data from both principals and coaches (see **G.4.10**), and formal teacher observations.

G.4.9: Adopt the policies and regulations described above when drafted; direct the superintendent to ensure their implementation.

Administrative Functions: The following actions are recommended to the Tucson Unified School District Superintendent:

A.4.11: Assist the board of education in developing the policies described above.

A.4.12: Prepare for curriculum implementation. At least six months to one year prior to rolling out any new curriculum, consider doing the following:

- Field-test the curriculum. Pilot the resource materials, assessments, and any other supporting materials.
- Collect preliminary data concerning the pilot curriculum's effectiveness in terms of student achievement and from teacher feedback.
- Revise field-tested curriculum guides based on feedback.
- Submit the curriculum for adoption by the board.

Provide written curriculum guides for all teachers and extensively train them in the guides' content and in the suggested strategies and approaches, within the context of the recommended instructional model.

A.4.13: Define the instructional model expected to be used in classrooms across the district. This is *not* intended to be a prescriptive, tightly-held requirement. Rather, the instructional model is intended to provide a clear picture of what district leaders want and expect effective and rigorous instruction to look like. Use the summary of TUSD expectations in Finding 3.1 and in the culturally responsive curriculum as a starting point, and also consider the characteristics presented in Appendix K. Instructional expectations should all be integrated into one consolidated document that is adopted by the board. The model should do the following:

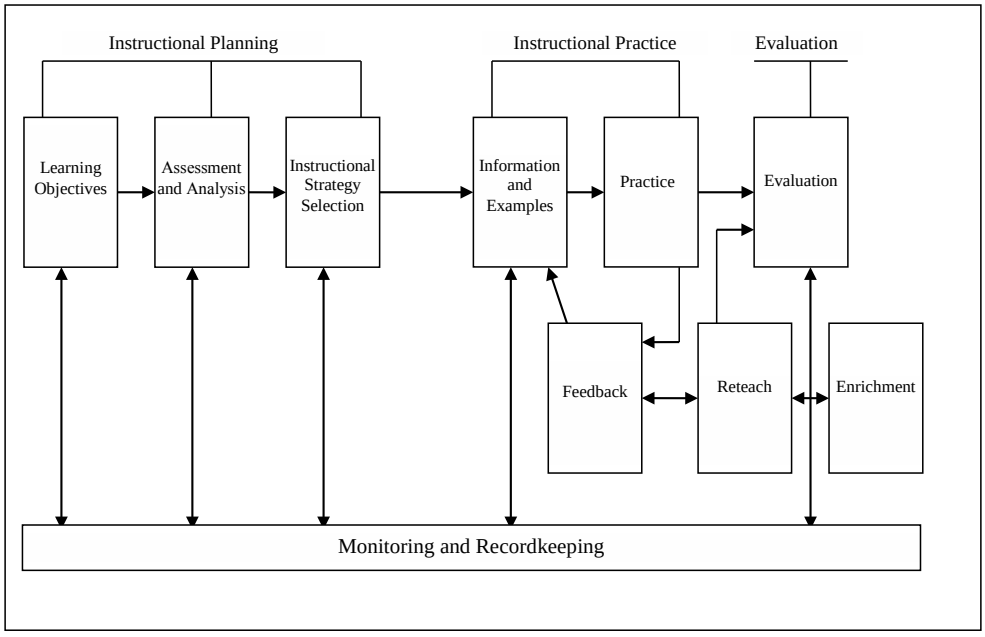
1. **Strategies/Approaches**: Describe the ways in which district-adopted curriculum is expected to be delivered. In other words, the types of teaching practices district leadership expects to see and that are proven effective should be specifically described in writing and adopted in policy to ensure implementation. Suggested practices should be research-based, developmentally appropriate, as well as culturally and personally relevant to students, and might include:
    - Implementing higher-order questioning that helps students see the "big picture" of the concepts, knowledge, and skills being taught, as well as facilitates a deeper understanding on the part of students;
    - Differentiating instruction to meet the individual needs of all students;
    - Using small group activities, paired tasks, and cooperative learning strategies;
    - Comparing/contrasting new concepts, knowledge, and skills with concepts, skills, and experiences already familiar to students;
    - Engaging students in experimental inquiry, problem-solving, and investigation—all hands-on methods of applying or discovering new knowledge and concepts;
    - Having students set their own learning goals, develop strategies for attaining them, and monitor their own progress toward meeting those goals;

- Engaging students in metacognitive activities, whereby they analyze their own thought processes in approaching test questions, assignments, and new information;
- Using non-linguistic ways to support comprehension of, identification with, and the retention of new concepts or knowledge, such as pictures, graphic organizers, and outlines;[6] and
- Tailoring instruction to the cultural, economic, and linguistic diversity present in every classroom, recognizing and valuing differences and similarities, and emphasizing the benefits of cultural and linguistic pluralism.

2. **Instructional Planning and Monitoring of Learning**: Describe expectations for how teachers are to use student performance/achievement data to plan individualized instruction based on students' specific academic needs. Integrate elements of the Mastery Learning Model into the Essential Elements of Instruction (EEI) (or vice-versa) as a proposed model for planning and executing instruction using a variety of strategies and approaches that the teacher is comfortable with. The Mastery Learning Model presents a model of close monitoring of student learning that is data-based, in common with EEI, and relies on flexible, small student grouping to deliver the exact teaching that those students need, rather than relying on whole group, one-size-fits all approaches. The model also allows for integration of those strategies that are considered culturally relevant and effective with culturally, linguistically, and economically diverse students (such as ELL students). The Mastery Learning model is presented in Exhibit R.4.1:

Exhibit R.4.1

Mastery Learning Model



Require the monitoring of curriculum delivery (see also **G.4.10**) to include monitoring for these teaching strategies and practices expected to be used in the classroom. The aim is to provide teachers with specific feedback regarding what type of strategies they were using, their effectiveness, and how those strategies could have been more effective or how perhaps another could have been used to improve student achievement.

A.4.14: As part of the instructional model, incorporate the expectation for differentiating instruction in the classroom to meet individual student needs. Differentiation occurs in two important ways: differentiating the

[6] For more information, see Downey, C., English, F., Steffy, B., Frase, L., & Poston, W. (2003). *Fifty Ways to Close the Achievement Gap.*
See also Marzano, R., Gaddy, B. & Dean, C. (2001). *What Works in Classroom Instruction.* May be downloaded from http://www.mcrel.org/topics/products/110/

content or objective an individual student needs to learn based on where he or she is in the overall sequence of learning, and differentiating the type of activity or performance product the student is expected to accomplish or create. Both types of differentiation are important, but teachers must learn the difference and apply one or the other or both as needed with each individual child, based on the individual child's need. A critical part of differentiating effectively is having a battery of skill-specific diagnostic assessments that give teachers key information on whether a student has mastered a targeted concept or skill.

A.4.15: Communicate the expectations for adherence to the instructional model widely. Integrate throughout all discussions and meetings concerning curriculum delivery the need to not only verbally espouse high expectations for all students and respect and appreciation for cultural, ethnic, linguistic, and economic diversity, but to model it faithfully in every classroom every day.

The definition and adoption of a research-based, student-centered, rigorous instructional model will assist the district in moving forward with improving instruction and student achievement.

Monitoring

Monitoring is the primary means by which district leaders evaluate the degree to which curriculum is delivered with fidelity, and to which the instructional model is likewise reflected in classroom activities and instruction. Monitoring is an absolutely critical facet of effective implementation. It is about supporting and facilitating quality and effective curriculum delivery, not just looking for it. No matter who is involved in monitoring (it can be carried out by multiple positions within a building and even by teachers amongst themselves), the principal should still remain the instructional leader on the campus.

Governance Functions: The following actions are recommended to the Tucson Unified School District Board of Education:

G.4.10: Revise the principals' and the building-level coaches' job descriptions and board policy to include more specific expectations for monitoring. These expectations must:

- Define all purposes of monitoring.
- Specify who is monitoring for what and how those responsibilities are interconnected. For example, if math coaches share in monitoring responsibilities, how/when are their findings or observation data shared with the principal? What kind of feedback should they share with district-level curriculum staff? How is this to occur and how frequently? Ensure that the building principal remains the key instructional leader in the building and require him/her to oversee all monitoring that occurs by other staff members.
- Specify what type of data are to be collected for each purpose and with what methods.
- Indicate which data are intended to be collected district-wide for district-level feedback (such as for determining the effectiveness of a staff development initiative), and which data are to be used for teacher evaluation, coaching, and instructional improvement within the building. All monitoring data should be reported to a single department, rather than split among leadership/curriculum. Monitoring is about overseeing and collecting information about the effectiveness and alignment of the delivered curriculum, not evaluating teachers, so this should be seen primarily as a curriculum-related function.

Consider two other purposes and types of monitoring that supplement the non-supervisory classroom walk-throughs: SchoolView trend data collection and Examining Student Work data collection for calibrating student work. SchoolView is simply classroom observational data collected frequently over time to see if dominant teacher and student activities, the objectives taught, and the student work displayed all reflect the district's instructional model and expectations for rigor. Examining Student Work is a method for collecting student work to calibrate it against district and state standards and expectations to check alignment and determine whether the work is on, above, or below level. All three methods for collecting data are for different purposes, and all three comprise one facet of monitoring that contributes to valuable district-level and campus-level feedback for decision making.

Administrative Functions: The following actions are recommended to the Tucson Unified School District Superintendent:

A.4.16: Require monitoring to be the primary responsibility of building administrators, including the building-based coaches, in keeping with their role as instructional leaders. In monitoring, district leaders should not only keep the learner objectives and effective strategies in mind, but the instructional model as well, focusing reflective questions on those aspects of the model the administrators deem appropriate or desirable. Monitoring should not be confined to the Danielson evaluation framework.

A.4.17: Use a classroom observation process (in addition to walk-throughs), as described above, to specifically evaluate the student artifacts and objectives being used in each classroom in a collaborative, non-threatening context that can even be performed by teacher teams, department heads, or instructional coaches. Consider something like the Examining Student Work program (CMSi) to enable teachers and building leaders to gauge the level of student work in the school and determine if it is appropriately on-level and cognitively challenging. This process will also assist teachers in evaluating the work they assign in their classrooms, particularly those activities and resources that are commercially-produced.

Professional Development

The goal of quality professional development is to increase staff effectiveness and student achievement. This is accomplished by developing the skills of teachers, administrators, and support personnel in effective design and delivery of curriculum and support functions. Special emphasis must be placed on training teachers and principals to employ instructional strategies that meet the needs of all students and to implement the adopted instructional model to support differentiation and student-responsive teaching. A comprehensive professional development program has a long-term focus and is based on district and curricular goals, student achievement data, and staff needs.

To eliminate the deficiencies found in the Tucson Unified School District professional development system (see Finding 3.3), the audit team developed the following recommendations, which provide for a comprehensive system of professional development with centralized direction, decentralized execution, and accountability for results.

Governance Functions: The following actions are recommended to the Tucson Unified School District Board of Education**:**

G.4.11: Direct the superintendent to draft, for board review, revision, and approval, a policy that provides for centralized control and direction of professional development in the district. The policy should incorporate the characteristics in Exhibit 3.3.2 and address the deficiencies identified in Finding 3.3. In particular, the policy should:

- Be aligned with and serve the district's goals and expectations for staff performance, curriculum delivery, and student achievement;
- Establish a professional development mission, vision, goals, and priorities aligned with district goals and needs;
- Identify the district's concept for providing professional development (e.g., provided at three levels: individual, school, and district) and state responsibilities at each level for needs assessment, planning, coordinating, deployment of resources, delivery, monitoring, evaluation, and use of feedback;
- Define the mechanism for rational coordination of professional development efforts to ensure appropriate training and prevent duplication and gaps in required training;
- Require systematic monitoring of instruction specifically to determine if skills acquired through the professional development program are being applied (and correctly) in the classroom; and
- Require that professional development training be evaluated in terms of demonstrated teacher competence in the classrooms and improved student achievement.

In short, the policy should require planning that will turn the current hodgepodge of activities into a controlled and coordinated professional development system, focused on more effective curriculum delivery, with accountability for design and results.

G.4.12: When the new professional development policy is adopted, direct the superintendent to provide annual reports that contain the necessary information to help the board judge the effectiveness of the policy and justify any required policy changes. Effectiveness of professional development is best measured in terms of observed changes in classroom instruction and more effective classroom instruction, based on student achievement data and classroom observation data.

Administrative Functions: The following actions are recommended for consideration to the Tucson Unified School District Superintendent:

A.4.18: When directed by the board, prepare for board review, revision, and approval a policy that provides for centralized control and direction of professional development in the district. The policy should be consistent with the provisions of **G.4.11**, incorporating the characteristics in Exhibit 3.3.2.

A.4.19: When the board approves the professional development policy described in **G.4.11**, prepare the administrative instructions necessary to implement a professional development program that is centrally controlled, with decentralized implementation by principals and the central office staff.

A.4.20: When the new professional development policy is adopted, provide to the board annual reports that contain the necessary information to help the board judge the effectiveness of the policy and support any required policy changes.

A.4.21: Revise all supervisors' job descriptions (principals and all building-based coaches) to include the expectation that they provide developmental experiences necessary to improve the job performance of their supervisees. The idea is on-the-job application of the principles and concepts acquired during staff development offerings, with coaching for improved implementation and performance.

A.4.22: Prepare a multi-year professional development plan that supports district goals and priorities, works in concert with (or is a sub-plan of) the curriculum management plan, and serves to support school improvement plans. The district professional development plan should be updated annually to maintain alignment with any changing priorities or conditions. The plan should also include the following components:

- A framework for integrating professional development activities with the mission, goals, and plans of the district;
- An expectation for professional growth for all employees, certified and classified;
- A process to provide for organizational, unit/school, and individual professional development in a systemic manner;
- A requirement that professional development be based on data-driven needs assessments (this means not all buildings may require the same trainings);
- Approaches and activities that have historically increased productivity and improved cultural sensitivity and responsiveness;
- Inclusion of district employees in the development, implementation, and review process for professional development planning;
- A process to provide for the three phases of the change process: initiation, implementation, and institutionalization;
- Follow-up or on-the-job assistance to ensure that professional development training is being applied correctly in the classroom and elsewhere;
- An evaluation process that is ongoing, focuses on all levels of the school district, includes multiple sources of information, and is based on actual behavior noted in the classroom; and

- Professional development, from whatever source, entered into a district database and retrievable by managers for planning purposes.

A.4.23: Determine priority areas for professional development across the district, after the development of the district instructional model and analysis of the data contained in this report. Based on the prioritized list, create a schedule for professional development offerings (specifying which are mandatory and which elective) over the course of the next three years. Collect data concerning the effectiveness of offerings and subsequent impact on student achievement to make adjustments to professional development offerings.

Focus areas should include, but not necessarily be limited to, the following:

- Training in the instructional model adopted by the district—what this looks like at the classroom level across content areas and grade levels. The model (see **A.4.13**) should minimally address how teachers group for individualized instruction, how they plan for different and varying academic needs, how they assess for those needs, etc. The model is not about what strategies to use, it's about how to accommodate for the varying student needs found in every single classroom so that no one is left behind and those who can, are moved ahead at an accelerated pace. It also addresses the different objectives that may be needed by different students (rather than just teaching all students the same objective all the time).
- Training in instructional differentiation that not only incorporates different types of activities to engage students with different learning styles and preferences, but focuses intensely on how to group students fluidly for needs-based instruction or reteaching. Such grouping strategies are critical at all grade levels to support student learning in the most effective way, especially with student populations that have historically been underperforming. Reteaching needs to *accelerate* teaching those concepts and skills that students are missing, so they can catch up to on-level peers, but it must take place in small groups so that those who don't need it aren't hindered in their own learning progress. This is in part a component of the RTI model, but with greater sophistication than that model proposes. There may be multiple levels of student ability in a classroom that demand grouping kids differently several times in just a few weeks' time.
- Training in data collection and analysis concerning the grade level and cognitive rigor of materials used in the classroom. Teachers must be informed consumers concerning the types of activities and materials they use with students—too many passive, low-level activities result in low-level learning and students who are not prepared for test success.
- Training in the how to use the curriculum guides most effectively—what are the components that are tightly held? (objectives for students, assessments). What are loosely held? (recommended strategies/ approaches, resources and materials). How should teachers use the curriculum within the context of the instructional model?

Ensure that all building-level and district curriculum administrators attend prioritized trainings, as well, to support the instructional leadership and monitoring functions across the district.

A.4.24: Assign all professional development duties to the appropriate administrator under the umbrella of curriculum and instruction to ensure that professional development at all levels aligns to curriculum priorities district-wide and supports the directing plan for curriculum management. The responsible administrator should incorporate all professional development planning within ongoing curriculum management planning.

A.4.25: Expand the tracking of all professional development activity to coordinate with the curriculum department, so professional development planning effectively responds to needs in curriculum delivery. Tracking is partially in place but does not yet coordinate district-wide with curriculum design and development, nor does tracking include the site-based trainings conducted on Wednesdays. Data analyses regarding professional development participation will enable leaders to differentiate offerings and ensure that every employee has the appropriate professional skills to carry out assigned responsibilities.

A.4.26: Update principals' and teachers' job descriptions accordingly (see requirements and expectations, above).

IV. Curriculum Staffing

In the Tucson Unified School District, curriculum development functions have been superseded by curriculum delivery and intervention work, and by meeting the demands of the USP. Curriculum development is a critical function and must precede delivery work to ensure that what is taught to students in classrooms aligns with district goals, priorities, curriculum, and assessments. This also will ensure that students receive the culturally responsive pedagogy required by the USP. Consider the following suggestions to make the development and implementation aspects of curriculum management work together more seamlessly.

Governance Functions: The following actions are recommended to the Tucson Unified School District Board of Education**:**

G.4.13: Direct the superintendent to draft guidelines concerning the staffing of the Curriculum and Instruction Department and the staffing for coach/teacher specialist positions at the building level. Consider the suggestions outlined in **A.4.27**.

Administrative Functions: The following actions are recommended for consideration to the Superintendent of the Tucson Unified School District:

A.4.27: Draft guidelines for the staffing of the Curriculum and Instruction Department at the district office. Assign curriculum personnel according to the primary functions of curriculum management district-wide: Curriculum design and development, and curriculum delivery/implementation. Review all the steps outlined in this recommendation to more fully understand the tasks, roles, and responsibilities that fall under each category. To staff these positions without requiring additional resources, consider reassigning personnel from positions in the Student Equity departments and/or personnel serving as teacher mentors.

a. Curriculum Design and Development: Those staff assigned to curriculum design and development need not always be content-area specialists (although they certainly can be). Rather, this is a small core group of individuals who are good writers and have the pedagogical knowledge regarding the most effective instructional strategies and student engagement activities, irrespective of content areas. The best curriculum writers know good instruction and can write objectives and curriculum guides in clear, accessible language.

These individuals are primarily the writers/revisers; they write curriculum according to the input of content experts, but they must be familiar with pedagogical excellence, the instructional model, as well as other district requirements, such as culturally-responsive pedagogy, technology integration, or Sheltered English Instruction. Familiarity with these other components is critical to supporting their integration into the written curriculum.

To perform curriculum design-related functions, (see section II in this recommendation) the core group of curriculum designers/developers pull together committees of building-level staff, curriculum delivery and content area specialists (coaches and selected teachers), and other stakeholders as needed.

Keeping a core group of designers/writers separate from the personnel who work directly with schools and teachers allows the delivery experts more time to work in the classroom so they can serve more schools, teachers, and students.

b. Curriculum Delivery: Consider adding instructional coaches or teachers on special assignment at each school building to support effective and aligned delivery of the curriculum. Define the role of these instructional coaches at the building level and specify how they work in concert with and support the principal and teachers in the building. Consider assigning the coach role to a pair of teachers, which would allow coaches to cycle in and out of the classroom every other year. Continued, frequent contact with students ensures that coaches' skills stay sharp and relevant. Smaller schools may share a coach, if their size warrants it.

In defining the coaches' role:

1. Consider expanding the coaches' role to include mentoring functions on-site, particularly with teachers who are new to the district but experienced in teaching. These teachers typically require less support than brand-new teachers, who may require more formal mentors in addition to what the coaches provide.
2. Require that all building-level coaches be adequately trained in:

a. Interpersonal competence,

b. Pedagogical excellence,

c. Curriculum differentiation (as required by the instructional model),

d. Technology integration, and

e. Culturally-responsive instruction.

Those staff assigned to curriculum delivery may be specialists in their content area, but it is preferable that they be mainly experts in quality and effective pedagogy and differentiation for culturally, linguistically, and economically diverse populations. These individuals should be generalists who are experts in quality and effective teaching and learning, regardless of the content being taught. When professional development is needed that requires very content-specific data, a curriculum staff member with expertise in that content area can co-collaborate on the training.

Flexibility in using coaches is paramount; teachers at the secondary level could teach every other year, or every other semester, or even do half-day teaching, half-day coaching. It should be determined by the building principal and the coaches what works best in their respective buildings, but all coaches should have similar duties and scope of responsibility.

Recommendation 5: Establish and implement policies and procedures to provide equal access to comparable programs, services, and opportunities. Eliminate the achievement gap between ethnic groups.

A well-managed school system affords all students with equal access to the programs, services, and opportunities provided by the district. Fairness to all students is apparent in areas such as access to challenging course offerings and placement in special programs, and in consistent expectations that all children can learn. School districts that serve heterogeneous communities have students who require differentiated resources and instructional staff who are trained to meet their needs if all learners are to be given an equal opportunity to experience success in the educational program. Clear direction for special program development and instructional delivery and set goals for improving subpopulation student achievement are necessary for programs to address diverse needs. A comprehensive program will provide the implementation of a program assessment process including assessment for all subject/learning areas of subgroups and collection of data to demonstrate the effectiveness of the program (see Findings 4.2 and 4.3).

Tucson Unified School District's policies, documents, staff interviews, and despite years of concerted efforts, inequities and inadequate access indicate that the system employees were unable to resolve the issues, and the issues remain unresolved. Auditors found that inequalities exist on the basis of ethnicity, gender, economic disadvantage (FARM), and other factors regarding participation in Advanced Learning Environments and special program identification (see Findings 3.3 and 3.5). Board policies contain language addressing inclusion of students with regard to high standards of learning; however, few strategies for addressing inequalities and inequities were being implemented (see Findings 3.3 and 3.5).

Create an approach that is inclusive and require that all educational practices and programs be evaluated using formative and summative student achievement data disaggregated to determine their effectiveness. The curriculum was lacking and/or was not comprehensive and did not address all content areas at all levels (see Findings 2.2 and 2.3), so the delivery of the curriculum is inconsistent from classroom to classroom and school to school (see Findings 3.1 and 3.2). Although differentiated instruction was referenced in documents and school plans, few instances of differentiated instruction were observed by the auditors (see Findings 3.1 and 3.2). Test data show achievement gaps between/among ethnic and other subpopulations (see Findings 3.3, 3.5, and 4.3). Exceptional education students and English language learners are not experiencing success in all educational programs offered by the district. Exceptional education students and English language learners experienced lower graduation rates, higher dropout rates, higher retention rates, and lower achievement rates (see Findings 3.3 and 3.5). The district's Unitary Status Plan, in the form of a desegregation court order, requires equity and

equal access for certain populations, including African Americans, Mexicans, and Hispanics, and, by extension, all students. However, the auditors did not find those conditions (see Finding 3.5).

In order to overcome, rather than perpetuate, the relative disadvantage that students bring to the educational system, the following recommendations are presented.

Governance Function: The following actions are recommended for consideration to the Tucson Unified School District Board of Directors:

G.5.1: Prepare a directive signed by all board members stating the expectation that the superintendent and all district employees will comply with the both the letter and spirit of the Unitary Status Plan. Publish this letter to all district stakeholders. Develop a policy stating this expectation and use the personnel evaluation system to monitor and enforce this expectation.

G.5.2: Adopt a policy that will provide direction for establishing comprehensive equity and equal access conditions for all students. The policy should include a plan for identifying and implementing specific and focused instructional strategies to raise the achievement of all subpopulations to state standards of performance. Strategies and their implementation should be specific, district-wide, aimed at accelerating the rate of improvement for underachievers, and limited in number at any one time to ensure optimal implementation.

G.5.3: Adopt a policy that will provide for the collection and analysis of data regarding achievement, staffing patterns, and student enrollment in programs and services in disaggregated forms on a regular basis. This data should then be used to eliminate/modify/augment current practices and programs. Require that the results of this analysis be reported to the board.

G.5.4: Direct the superintendent to take whatever steps necessary to change any practices that impede the district's response to the elimination of achievement gaps. Direct the superintendent to develop with principals systemic strategies to help students experience success in the district's exceptional education, English language learner, and Advanced Learning Experiences programs.

G.5.5: Direct the superintendent to provide staff development that addresses diversity, needs for high expectation of all students, and instructional strategies that will assist in reducing the achievement gap.

G.5.6: Adopt a policy that makes a commitment to reduce the high school dropout rate for all students, including exceptional education learners and English language learners.

G.5.7: Direct the superintendent to develop a district curriculum, program, and assessment plan to provide the framework for a consistent educational program available for all students (see Recommendations 2 and 4).

G.5.8: Create and adopt policies that require comprehensive program planning in the district. Include directions for the inclusion of exceptional education programs, English language learner, Advanced Learning Experiences, and other programs in support of the general education program.

G.5.9: Direct the superintendent to review all curriculum areas, programs, and interventions to determine equality of access and equitable distribution of resources using achievement data and cost-benefit analysis (see Recommendations 5 and 9).

G.5.10: Require that a comprehensive Exceptional Education Program Plan be developed, including mission, vision, goals, and objectives related to improving exceptional education student achievement, along with budgetary implications and an evaluation process.

G.5.11: Require that a comprehensive English Language Learner Plan be developed, including mission, vision, goals and objectives related to improving English language learner achievement, along with budgetary implications and an evaluation process.

G.5.12: Require the superintendent to make periodic reports to the board on the exceptional education program, including achievement of exceptional education students; on the English language learner program, including achievement of English language learners; and the GATE program including the Advanced Learning Experiences.

G.5.13: Require that curriculum effectiveness be evaluated in terms of its impact on the achievement of all students, but most importantly for the exceptional learners, the English language learners, and the other low achieving subpopulations.

Administrative Functions: The following actions are recommended to the Tucson Unified School District Superintendent:

A.5.1: When received, comply with the board's directive to execute your duties in accordance with the both the letter and spirit of the Unitary Status Plan. Publish a directive to all district stakeholders, develop a policy and accompanying regulation stating this expectation, and use the personnel evaluation system to monitor and enforce this expectation.

A.5.2: Prepare drafts for the suggested policies noted above for board review, critique, and adoption.

A.5.3: Develop strategies to improve the achievement of students not experiencing success, specifically exceptional education students and English language learners. Include the following:

- Provide staff training in diversity and differentiated instruction that will strengthen the belief that all students can and will learn.
- Require closer participation with the schools regarding the special education population. This participation should include the modeling of instructional strategies in a regular classroom that includes this subgroup of students. Allow staff to analyze the differentiation employed and develop strategies for implementing these techniques in their own classrooms. Repeat this type of staff development as frequently as needed.
- Provide ongoing administrator support and monitoring to ensure that skills presented during the training are applied in the classroom.
- Hold administrators and teachers accountable for student success through the personnel evaluation system.

A.5.4: Take steps to ensure that all students can meet their achievement targets regardless of ethnicity, primary language, socioeconomic status, or disability status.

- Disaggregate student achievement data by school, level, gender, and ethnicity. Include an analysis of these data and link the analysis to the achievement of school goals and district goals.
- Develop an assessment process and analyze assessment data that measure the effectiveness of the above professional development and the achievement of all students (see Recommendation 7).
- Establish ongoing staff development for administrators and teachers on data collection, disaggregation, organization, interpretation, and use in determining equal access.

A.5.5: Develop a mind-set that in all educational staff that practices and programs need formative and summative disaggregated evaluations to determine their effectiveness pertaining to measurable student achievement. Require the use of these evaluations to terminate, modify, or expand current special program initiatives and practices.

A.5.6: Monitor placements in special education, Advanced Learning Experiences, and English language learner programs for disparities in participation among subgroups by gender, ethnicity, and socioeconomic status.

A.5.7: Prohibit site-based decisions that may cause inequities in course offerings, materials, program models, and practices.

A.5.8: Establish systems, processes, and staffs to oversee all reports, budgets, planning documents, assessments, programs, and interventions to ascertain equal access of all students in all district programs and at all school sites and alignment with district direction.

A.5.9: Develop an exceptional learner program plan to guide the district in achieving the focus and mission of the support program to accomplish increased exceptional learner student achievement.

- Review, revise, and focus on a mission and vision for the exceptional education program;
- Describe district and building organization and define job responsibilities related to the exceptional education program;
- Describe the linkages of exceptional education program to the general curriculum;
- Define a movement toward Least Restrictive Environment and Co-teaching;
- Provide for ongoing exceptional education services and training; and
- Incorporate an exceptional education district and school committee with parents, teachers, community members, and students.

A.5.10: Develop a system for monitoring exceptional education program delivery that includes structured classroom observations to collect data on how the exceptional learner program is being delivered.

- Specify time on task (how many exceptional learners in the room are on-task and off-task when observed);
- Determine the curriculum objective and the cognitive level of the objective that is taught.
- Compare the taught objective to the district general education curriculum for alignment.
- Identify effective teaching practices taking place.

A.5.11: Develop a comprehensive, long-term, districtwide exceptional education staff development plan that includes training for all personnel involved with the design, delivery, and monitoring of the exceptional learner program.

- Identify target areas based on exceptional learner student achievement data and compliance monitoring visits;
- Develop a long-term prioritized training that is required of all professional and support staff;
- Establish a clearinghouse responsible for appropriate personnel so that all staff development needs will be documented;
- Require application of skills and learning with appropriate follow-up coaching and evaluation for all new concepts and skills learned through professional development;
- Require training in walk-through techniques for all central and campus administrators to enhance their skills in monitoring the delivery of the exceptional learner program; and
- Require an evaluation process of all staff development that is ongoing, focused on the actual changed behavior, and reflects exceptional education student achievement.

A.5.12: Take steps to ensure that all students can succeed regardless of ethnicity, primary language, mobility, disability, or economic status.

- Require the use and analysis of disaggregated data pertaining to the needs of the students served or to be served as background information in all reports, planning documents, and programming plans;
- Require regular analysis of disaggregated data pertaining to all district practices (e.g., retention, program enrollment, course offerings, and program eligibility and services to determine disparities and inequalities);
- Develop a process for terminating ineffective programs and interventions and continuing effective ones; and
- Revise enrollment and placement procedures to allow students equal access and to ensure appropriate services to address achievement gaps.

A.5.13: Develop an English language learner program plan to guide the district in following through on the focus and mission of the support program to accomplish increase ELL student achievement.

- Review, revise, and focus on a mission and vision for the English language learner program;
- Describe district and building organization and define job responsibilities related to the ELL program;
- Describe the linkages of the ELL program to the general curriculum;
- Define a movement toward Inclusion and Co-teaching;
- Provide for ongoing ELL services and training; and
- Incorporate an ELL education district and school committee with parents, teachers, community members, and students.

A.5.14: In addition to the positions required by the Unitary Status Plan, conduct a study to determine the staffing needs to implement the USP, especially needs of the directors required by the court, and present the required positions to the governing board for review, revision, and approval. Hire the required personnel when approved by the board.

This recommendation, if implemented, should give the district a means for ensuring equality and equity in the educational design and delivery and success for all students within the Tucson Unified School District. It should provide clear direction for special program development and instructional delivery and set goals for attaining improvement of subpopulation student achievement as necessary for programs to address diverse needs and for all students in the district to have equal opportunity to be successful. The recommendation should drive all program and intervention decisions using student achievement and equity data.

Recommendation 6: Develop a comprehensive district plan for student assessment and program evaluation aligned with the district's strategic and curriculum plans that provides for the systematic collection, analysis, dissemination, and application of student achievement and program evaluation results to promote improved student achievement. Expand board policies to provide direction for formative assessment development and program evaluation and develop administrative procedures that formalize the process for developing high quality formative assessments, conducting program evaluation, and using disaggregated data to improve curriculum design and instructional delivery.

The auditors found that board policies and system plans were inadequate to provide direction to the school district, guide the use of data to address students' instructional needs, and provide direction to teachers and administrators regarding the delivery of instruction (see Findings 1.1, 1.2, and 4.1). The design of the formative assessment program in the district is in the early stages of development. *ATI* is being used as the benchmark formative assessment, though questions have been raised in TUSD regarding the appropriateness of its use as a formative assessment (see Finding 4.3). TUSD does not have a comprehensive assessment system in place to guide the development of high quality, formative assessments of appropriate rigor and reliability at the district level (Findings 4.1 and 4.3). While district staff have prioritized the use of *AIMS* and *ATI* assessment data to make instructional decisions, the design and use of formative, diagnostic data are inadequate to inform instruction and improve student achievement (see Finding 4.3). No comprehensive assessment or evaluation plan exists in the district to guide the development of the formative assessments (Finding 4.1). The scope of student assessment was inadequate to evaluate the taught curriculum in core and non-core courses so as to provide sufficient data for making sound curricular decisions (Finding 4.2). Student achievement results from state and national assessments reflect some improvement in academic performance over recent years, but student achievement in Tucson still remains below state and national averages (see Finding 4.4). Programs are not formally planned, monitored, or evaluated for effectiveness. Use of data to improve student achievement outcomes is inadequate beyond the analysis step and is ineffective in solving curricular and instructional concerns (see Finding 4.3). No evidence was presented to the auditors that the district has used data to evaluate the effectiveness of instructional programs, and there were no confirmed reports regarding any decisions to keep or remove an instructional program based on evaluation results (see Finding 4.3).

Auditors recommend the development of district policies directing the design of a comprehensive student assessment plan to cover all core and non-core courses K-12 and to evaluate of programs to improve student achievement and promote effective use of district resources. Board policy needs to direct the design, development, delivery, and evaluation of the formative assessment program implemented in TUSD. Delivery also needs to focus on professional development of principals and teachers administering formative assessments and how the from those assessments are used to improve curriculum and student achievement (Finding 3.4). The design and delivery of campus-based formative assessments also need to be covered under board policy and the design and delivery mechanisms for teacher development of those exams need to be written into administrative procedures (Finding 1.1 and 4.1). Auditors recommend the development of such policies, prior to the beginning of the next academic year.

The absence of a comprehensive plan for student assessment and program evaluation means the district lacks critical linkages with the curriculum (see Findings 2.1 and 2.3) and, therefore, direction for producing desired learning outcomes. Having an assessment plan and process in place can serve as a means to acquire, organize, and analyze information needed to guide instructional planning; inform teachers about student learning; assess program effectiveness; and make critical decisions regarding the educational program, district practices, and resource allocations. This plan should be in place prior to the beginning of the next academic year.

Governance Functions: The following actions are recommended to the members of the Tucson Unified School District School Board:

G.6.1: Direct the superintendent to present to the board for review and adoption policies that provide the framework for a comprehensive student assessment and program evaluation plan and include the following:

- Develop a philosophical framework for the design of the comprehensive student assessment and program evaluation plan that is congruent with the strategic plan that is being developed by TUSD and that aligns with the curriculum management plan.
- Develop board policies that specifically provide direction to the superintendent and his staff to develop or select high quality assessments aligned with the district curriculum and accessible by all students. The board policies should provide direction for both formative and summative assessment of the curriculum by course and grade.
- Direct the use of data to analyze group, school, program, and system student trends.
- Include an expectation for ongoing formative and summative program evaluation, an explicit set of formative and summative procedures to carry out these expectations, and provisions for regular formative and summative assessment at all levels of the system (organization, program, and student).
- Require that formative, diagnostic assessment instruments be aligned to district curriculum and administered to students frequently to give teachers information for instructional decision making.
- Require that teachers developing formative assessments receive professional development that will enable them to develop valid and reliable formative assessments.

G.6.2: Direct the Superintendent to prepare for board review and adoption a comprehensive student assessment and program evaluation plan as described in new board policies developed under action **G.6.1**.

G.6.3: Commit adequate resources to support implementation of comprehensive student assessment and program evaluation planning so that 75% of the plan's goals and strategies can be achieved.

Administrative Functions: The following actions are recommended to the Superintendent of the Tucson Unified School District:

A.6.1: Assist the school board in developing policies that provide direction for the development and implementation of a comprehensive student assessment and program evaluation plan as described in governance action **G.6.1**.

A.6.2: Develop a comprehensive student assessment and program evaluation plan containing the following elements:

- The philosophical framework for the design of the student assessment plan and direction for both formative and summative assessment of the curriculum by course and grade, in congruence with board policy.
- Direction for use of data to analyze group, school, program, and system student trends.
- An expectation for ongoing formative and summative program evaluation, an explicit set of formative and summative procedures to carry out these expectations, and provisions for regular formative and summative assessment at all levels of the system (organization, program, and student).
- Requirement that formative, diagnostic assessment instruments are aligned to district curriculum and are administered to students frequently to give teachers information for instructional decision making.
- Inclusion of a list of student assessment and program evaluation tools, purposes, subjects, type of student tested, timelines, and so forth. Tools should make use of diverse formative and summative assessment strategies for multiple purposes at all levels.
- Specification of responsibilities of the central office staff and school-based staff for assessing all students using designated assessment measures, and for analyzing test data.
- Specification of connection(s) among district, state, and national assessments.
- Description of overall assessment and analysis procedures for use in determining curriculum effectiveness.
- Requirement that aligned student assessment examples and tools be placed in curriculum and assessment documents.
- Specifics regarding how equity issues will be identified and addressed using data sources, including controls for possible bias.
- Identification of components of the student assessment system to be included in program evaluation and specifics as to how these data will be used to determine continuation, modification, or termination of a given program.
- Requirement that principals and teachers as well as other appropriate staff are trained in the development of valid and reliable formative assessments that are aligned to the curriculum.
- Establishment of processes for communicating and training staff in the interpretation of results, changes in state and local student achievement tests, and new trends in the student assessment field.
- Provision for appropriate trainings for various audiences on assessment and the instructional use of assessment results.
- Delineation of responsibilities, procedures, and time frames for monitoring administration of the comprehensive student assessment and program evaluation plan and/or procedures.
- Description of creation of an assessment data system that allows for the attribution of costs by program, permitting program evaluations to support program-based cost-benefit analyses.

A.6.3: Assign responsibility for the development and implementation of formalized procedures for systematic student assessment and program evaluation aligned with the curriculum management plan.

A.6.4: Expand training in formative and summative data access, analysis, and use in facilitating teaching and learning. Extend this training to all instructional staff and administrators and provide systems to connect this training to district-wide efforts to increase student achievement.

A.6.5: Establish clear expectations for administrators and teachers in board policies, job descriptions, and personnel appraisal systems on use of assessment data for diagnosing student needs, evaluating student progress, determining curriculum and program effectiveness, and making decisions in all district operations.

A.6.6: Expect all program evaluations to provide a cost-benefit analysis and recommendations for continuation, expansion, modification, or termination.

A.6.7: Further efforts to use technology to facilitate ease of data collection and use; provide training in its use to ensure its effective implementation system-wide.

These recommendations, if implemented, should give the district a means for ensuring that the formative assessments developed by the district are valid, reliable and of high quality. These recommendations should secure the appropriate use of data to assess student progress and evaluate programs, analyze the results, and ensure that such results are used to make sound decisions about curriculum, instruction, and programs. Additionally, assessment and evaluation data will be available for use in informing students, parents, and other stakeholders of the effectiveness of district staff in educating its students. If this recommendation is not implemented, then the district will miss the opportunity to develop a comprehensive approach to assessing student instructional and teacher instructional delivery needs and will continue to support instructional programs without a strategy for determining if they are effective or not, thus potentially misusing district resources.

Recommendation 7: Develop a district staff development plan that incorporates an emphasis on growth in curriculum design and delivery, effective classroom strategies to engage the variety of learners, fulfillment of the Unitary Status plan, and ongoing professional growth among all employees focused on annual district student achievement goals.

The goal of a quality professional development plan is to increase student achievement. This is accomplished by developing the skills of teachers, administrators, and support personnel in the effective delivery of the curriculum, utilizing instructional strategies that meet the needs of all students. A comprehensive professional development plan is long-term, is focused on student achievement data, and is based on the curriculum and district goals.

The auditors found that there is locally developed policy that lacks specificity for the fulfillment of professional development in the Tucson Unified School District. Without policy and a formal plan, the district is unable to systematically meet the multiple requirements set forth by the district's desegregation plan. Neither are they able to provide a district-focused program that stipulates needed staff growth to meet the academic needs of all students in the classrooms. Auditors also found that the current professional development activities are primarily site-driven and thus vary from campus to campus. The Tucson Unified School District does not have a comprehensive professional development plan to provide the direction for systemic development of all district staff (see Finding 3.4).

This recommendation provides for a comprehensive professional development plan with central administrative guidance to focus professional development activities based on district goals and coordination at all levels of the district.

Governance Functions: The following actions are recommended to the Governing Board of the Tucson Unified School District.

G.7.1: Develop and adopt a local policy that describes the district's expectation and goals and directs professional development efforts regarding the following:

- Assessing professional development needs in relation to student learning and requirements of the Unitary Status Plan;
- Planning, coordinating, implementing, and evaluating professional development activities in relation to student learning and the Unitary Status Plan; and

- Tracking participation in professional development activities in relation to student learning and Unitary Status Plan requirements through a district-wide data base used for both district-and campus-level training.

G.7.2: Direct the superintendent to develop regulations to implement the professional development policy across the district.

G.7.3: Direct the superintendent to develop a long-range professional development plan. The plan should include a minimum of three years with annual updates that ensure tight linkage to system priorities. The plan should also include the following components:

- The policy recommended in **G.7.1** to direct professional development efforts;
- A framework to integrate professional development activities to the mission of the district;
- A board-adopted expectation for professional growth for all employees;
- A process to provide for organizational, site, and individual professional development in a systemic manner;
- The inclusion of all employees;
- An expectation that professional development is needs driven, supported by data;
- A process to ensure fulfillment of the requirements of the Unitary Status Plan, as well as providing professional development based on needs supported by data, as noted above;
- A focus on proven approaches and activities that have historically shown an increase in productivity;
- A means to include district employees in the development, implementation, and review process for the professional development plan;
- A process to provide for the three phases of the change process: initiation, implementation, and institutionalization;
- A component to require follow-up and on-the-job application to ensure improvement;
- An evaluation process that is ongoing, focuses on all levels of the school district, includes multiple sources of information, and is based on actual behavior noted in the classroom;
- A process for district-wide coordination and a clearinghouse process for all professional development activities; and
- The necessary funding to carry out the professional development goals.

G.7.4: Direct the superintendent to annually report on the comprehensive professional development plan to ensure that the program is meeting board policy and is aligned with district-wide goals. The annual report should include:

- An overview of the process used to assess the professional development needs (data, needs assessment, survey results, etc.);
- A review of the identified professional development needs and the student learning needs these will address;
- A review of what the district as a whole and each campus site are working to accomplish from the professional development activities;
- A compilation of the primary professional development activities offered at both the district and site levels;
- A compilation of the professional development activities that meet requirements set forth in the Unitary Status Plan at both the district and site levels;

- A review of data regarding teacher, principal, and other staff member participation in quality professional development by content area and/or department; and
- A review of evaluation procedures to measure the effectiveness of professional development activities in relation to planned outcomes for both students and teachers.

Administrative Functions: The following actions are recommended to the Tucson Unified School District Superintendent:

A.7.1: Assist the governing board members with the development of the recommended policy.

A.7.2: Develop administrative rules and regulations to implement the professional development policy district-wide.

A.7.3: Assign to the Director of Professional Development, with oversight by the Deputy Superintendent, the responsibility to oversee the development of a comprehensive, long-range professional development plan, as described above and including all requirements from the Unitary Status Plan, for your review and approval (working with the directors of all subjects, both core and non-core). Attention should be given to establishing a reasonable plan with regard to number of priorities and timelines.

A.7.4: Support the role of the principal as a leader in providing professional development for campus personnel; the principal should also work cooperatively with district and site staff who share the responsibility for professional development.

A.7.5: Assign the Director of Professional Development, with oversight by the Deputy Superintendent, the responsibility to report annually on the professional development process, as described above.

A.7.6: Assign the Director of Professional Development, with oversight by the Deputy Superintendent, the responsibility to fulfill all professional development requirements of the Unitary Status Plan.

A.7.7: Provide the resources and funding necessary to create a quality professional development program for all employees of the district.

A.7.8: Assign the Director of Professional Development, with oversight by the Deputy Superintendent, the responsibility for annual evaluation of the professional development plan and program for the assurance that all components are appropriate and fully functional.

Instruction to students improves when teachers and support personnel receive quality training that is translated into action in the classroom. An effective professional development program has a well-designed plan for the effective delivery of curriculum. The staff is aware of the plan and understands the importance of ongoing, quality professional development activities. Additionally, an effective professional development program is monitored and assessed regularly to ensure that student achievement is positively impacted.

Recommendation 8: Refine and expand facilities planning to include all components of comprehensive long-range facilities planning with clear linkage to educational priorities, goals, and objectives in the district strategic plan as well as in funding plans. Incorporate planning for all operations, including and emphasizing information and instructional technology, into the 2014 strategic plan. Identify and aggressively seek external grants and other funding that cohere to the overall focus of the district and aligned with the district's strategic plan as needed to expedite identified improvement needs for technology support services and instructional technology. Ensure that written curriculum to support course offerings in technology are developed in accordance with audit criteria.

Effective school districts provide safe, healthy, and appropriate educational environments and administrative settings that support teaching, learning, and organizational management functions. Ensuring that the facilities are effective environments for 21st century educational practices is a critical component of quality plans. When well written and skillfully deployed, a facilities plan generates community pride and ongoing support for schools and their related district operations. With the 21st century requirements for technological skills in the learning world and the workplace, school districts offering K-12 opportunities for acquisition of these skills and developing ongoing, quality instructional technology planning better prepare their students to succeed.

The auditors found that many of the facilities were constructed in the early 1900,s and some have had little remodeling or renovation in recent years. Most schools were observed to be clean and safe, but some were behind in addressing maintenance needs. Recent spending cuts have affected staffing for such positions as custodians, librarians, and classroom aides and are impacting the quality of schools' instructional services. Some schools are more capable of providing support to technology, while others struggle to develop tech capacity. The district level operations are seriously impacted by what is called by many "an antiquated technology system" that creates delays in numerous processing and reporting functions and provides instructional support that varies in adequacy (see Finding 5.2). Further, planning for the design and implementation of instructional technology failed to meet audit quality expectations.

To address the needs identified by the audit team, the following recommendations are offered for consideration by the Tucson Unified School District leaders:

Governance Functions: The following actions are recommended for consideration by the Tucson USD Board of Trustees:

G.8.1: Adopt a policy that calls for the creation and periodic review and revision of a comprehensive, five- to 10-year master plan for facilities development and maintenance. Adopt a similar policy directing long-range planning for information technology.

G.8.2: Require the superintendent to submit for board approval a five- to 10-year facilities plan that (a) includes information derived from curriculum and instruction planning, as well as facility, enrollment, and community population data; and (b) reflects goals, strategies, and related components of the strategic plan to be developed in 2014. Further, require an updated five- to 10-year information technology plan. As appropriate to meet state direction, require integration of the plans.

G.8.3: Direct the administration to develop both an instructional technology plan focused on teachers and students and a technology curriculum offering courses at appropriate levels to support and enhance student learning. Design student skills assessments for each offering and for overall needs assessment in light of 21st century demands for technological knowledge and skills in academia and in the workplace.

G.8.4: Require that the plans be a result of various school- and community-based opportunities for stakeholder input, the expertise of district leaders, the architectural involvement required by *Board Policy FD: Facilities Planning and Development,* and other external expertise deemed advisable.

G.8.5: Require the Superintendent to schedule periodic reports to the board of trustees on facilities and information technology plan implementation progress. Particularly include the impact of the technology improvements on both operational and instructional technology uses. Incorporate these components of progress reporting with those related to the comprehensive strategic plan being developed.

Administrative Functions: The following actions are recommended for consideration by the Tucson USD Superintendent:

A.8.1: Develop updated five- to 10-year facilities and information technology plans responding to the direction in actions **G.8.1-G.8.3** to present to the board for approval.

- Ensure that the technology plan addresses state as well as local requirements.
- Involve the leadership team in establishing a process, format, and contents for the updated facilities plan.
- Continue to update and use the Facilities Condition Index and the Educational Suitability Scores to inform prioritization of facilities planning.
- Ensure that the facilities and technology planning processes include information from curriculum and instruction to facility design and finance and respond to needs identified in the information collection.
- Establish inclusive participation guidelines and ensure solicitation of input from internal and external stakeholders.

A.8.2: Create processes for the integration of all plans into the strategic planning process and final product.

A.8.3: Widely disseminate the strategic plan with the various components integrated into it. Provide the more detailed information as needed, but also develop a succinct and readable public information summary that can be used with parents and other citizens across the district.

A.8.4: Develop a calendar for periodic reports on plan implementation progress for the various components of the strategic plan, with emphasis on facilities and technology updates.

A.8.5: In response to **G.8.3**, ensure development of a technology skills curriculum with accompanying skills assessments. Similarly, design student skills assessments for each offering and for overall needs assessment in light of 21st century demands for technological knowledge and skills in academia and in the workplace.

A.8.6: As enrollment projections dictate change, continue to evaluate educational facilities for closures and mergers and plan those in accordance with the participatory and data-supported process used in earlier such decisions.

A.8.7: In accordance with audit criteria noted in Finding 2.2, direct the development of curriculum documents to guide all technology instruction at all grade levels where the courses are offered. Ensure accompanying assessments to evaluate the development of identified skills and knowledge.

With implementation of actions recommended to the board of trustees and the administration, the district's framework for urgently needed long-range integrated thinking and planning can be formalized. Clarity of educational goals and their linkage to facilities and technological infrastructure is a primary need in implementing the recommendations. Launching a cohesive technology curriculum and pursuit of grant funding that aligns to the overall focus of the school district and as incorporated in the district's strategic plan can also expedite attainment of the desired results. The district needs a strong framework for united community action to plan for both future school facilities and the technological requirements of 21st century learning environments. Additionally, the district operations and school management functions need a strong infrastructure that supports technology being used as a tool for both student success and operational efficiency for support services. Implementation of the recommended actions and inclusive involvement of the broad community of stakeholders, as already planned in the forthcoming strategic planning process, can create that infrastructure.

Recommendation 9: Develop and implement a policy and procedure that standardizes program and intervention selection based on diagnosed needs, and design and implement the evaluation of program objectives with feedback linked to student achievement. Decision making on the initiation, modification, continuation, or termination of programs and interventions must be based on valid and impartial knowledge of potential value and measured results.

Leaders of effective school systems intentionally plan to systematically evaluate the efficacy of their curriculum and instructional programs against predetermined criteria that are based upon student achievement outcomes. These data are also used to determine selection, value, and funding priorities. Such a system creates and maintains a culture of accountability and related transparency that enables the district to direct its resources towards achieving its established goals and objectives.

As with all curriculum program development, program interventions should follow a rational selection and evaluation process to ensure that they meet desired outcomes, sustain district productivity, and lead to the improvement of student academic achievement with documented assurance. In designing procedures and processes for implementation, it is necessary to control the number of interventions implemented at any point in time to minimize fragmentation and loss of quality. With the proliferation of programs and fragmentation, the system has experienced a loss of critical mass, system energy, and assimilated greater risk of sub-optimization. When the system is overburdened with an excessive number of programs, principals and teachers are unable to distinguish which, if any, program actually helped to improve student achievement. Likewise, in the absence of clearly written procedures, it is difficult to sustain the fidelity of effective programs through changes in leadership and staff.

The auditors found that TUSD has a great number of intervention programs. The majority are grant funded and based in preliminary planning. Although the District Continuous Improvement Plan and the Unitary Status Plan provide guidance, district direction and control are lacking due to the absence of board policy relevant to program interventions. Indicators of lack of district direction are evident in the absence of measurable objectives and evaluations necessary to determine their effectiveness (see Finding 5.3).

Governance Functions: The following actions are recommended to the Tucson Unified School District Governing Board:

G.9.1: Direct the superintendent to prepare for review and adoption a policy (see Recommendation 1) to serve as a framework for the selection, implementation, and evaluation of programs and interventions that includes the following:

- Description of the documented need supported by diagnostic and analysis data collected and considered in the selection of the intervention (see Recommendation 6);
- Evidence that a problem was identified from data analysis, that several alternatives were proposed and examined, and a rationale for the specific program that was selected (see Recommendations 2 and 6).
- A formal plan with goals and objectives to address the identified problem that includes documentation that defines the purpose of the intervention, why it addresses the system need/problem, and how it will affect student achievement. The plan includes design, deployment, and implementation details for the intervention (see Recommendation 2);
- Identification of staff proficiencies needed to implement the program/intervention, appropriate staff development directed at these proficiencies, and a clear communication plan for appropriate audiences (see Recommendation 5);
- The human, material, and fiscal resources (detailed budget) needed and funding sources to initiate the intervention and to sustain it long-term (see Recommendation 7);
- Evaluation criteria for both formative feedback and summative evaluation that are aligned to intervention goals, objectives, and expectations (see Recommendation 6);
- Criteria for continuation, modification, or elimination of programs and interventions as well as assurance of non-duplication of programs or interventions that serve the same or similar purposes and/or targeted populations (see Recommendations 4, 5, and 6); and

G.9.2: Direct the superintendent to prepare for board review and adoption a comprehensive program and intervention plan for new programs/interventions in the district that meets board policy as described in **G.9.1**.

G.9.3: Establish an annual reporting cycle for programs and interventions for administrators to present program/intervention results that include student performance data linked to the goals and objectives of the program/intervention as well as recommendations to continue, modify, or terminate the program/intervention.

G.9.4: Approve funding for programs/interventions based on completed needs assessment, information regarding alignment with the curriculum, student performance data, and the criteria in **G.9.1**.

Administrative Functions: The following actions are recommended to the Tucson Unified School District Superintendent:

A.9.1: Draft the policy to meet **G.9.1** above and present it to the board for adoption.

A.9.2: Create administrative procedures for the implementation of board policy with detailed selection criteria for new programs/interventions to be recommended to the board for adoption. Include the criteria listed in **G.9.1**.

A.9.3: Design an evaluation and reporting format and schedule for programs/interventions that include student performance data sources, alignment to curricular goals, criteria used to measure effective implementation, and the statistical analysis used to measure program effectiveness.

A.9.4: Using the policy criteria in **G.9.1** and the evaluation design in **A.9.3,** develop and implement procedures for eliminating programs that do not demonstrate effectiveness in improving student performance.

A.9.5: Implement the procedures developed for **A.9.2** and **A.9.3** by inventorying current intervention programs, selecting a sample of them for piloting the use of the procedures, and completing the procedures for evaluating the sample. Determine recommendations for continuation, modification, or termination of programs in the sample based on student performance data.

A.9.6: Create a comprehensive data management system to facilitate access to and use of student performance data in the evaluation of programs and interventions.

A.9.7: Provide professional development for administrators on selecting or designing, monitoring, and evaluating programs and interventions using the criteria and procedures developed in **G.9.1, A.9.2, A.9.3,** and **A.9.4**.

A.9.8: Allocate funding to effectively design, implement, and assess programmatic interventions using student performance data to evaluate effectiveness. Provide future funding in the budget for effective programs/ interventions from existing internal funding sources or from long-term external funding sources.

Recommendation 10: Adopt a three-year plan for implementation of a performance-based budgeting and allocation system for all Tucson Unified School District schools, departments, programs, and services.

The auditors found that the Tucson Unified School District funds schools largely upon the basis of enrollment (student head count), and the auditors also found that there are many programs or "interventions" funded by the district, that are designed to address needs of schools but are ineffectively planned or evaluated (see Finding 5.3). The auditors also found that the funds for the system are controlled by the TUSD governing board, but allocations are generally made without solid information about expectations, costs, and planned results(see Finding 5.1).

The auditors found that many of the programs and services funded were not implemented in a way to evaluate benefits received from the cost of the program (see Findings 4.1 and 4.2). The Tucson Unified School District leadership team needs to not only develop a budget that is within legally established limits and guidelines, but also respond to the needs of its clientele, with a budget that reflects the educational priorities of the district and organizes funding along programmatic needs instead of enrollment. The challenge is to be able to determine not so much what the funding is, but rather what the funding does. Only then will the governing board and the Tucson community be able to ascertain whether or not they are getting maximum "bang from the buck."

The monitored results discussed in other recommendations of this audit report must be used in determining budget priorities. Using its resources within the district to link curricular expectations, adopted goals and objectives, and testing and performance feedback data, it would be possible to move ahead with programmatic performance-based budgeting. Tangible connections are needed between the costs and the resultant benefits that accrue from the funded activities of the system.

Programmatic budgeting processes, tailored specifically for the Tucson Unified School District, can offer an efficient way for the governing board, the superintendent, and the TUSD leadership team to determine how well funds are being used in addressing system needs. To do this, all programs and activities of the organization must first be evaluated and reviewed on the basis of performance and cost.

An annual budget, built anew each year, is recommended for use for the basic instructional and support areas of the budget, and linkages are needed with performance (or results) information. The major steps of installing programmatic budgeting include the following recommended actions:

Governance Functions: The following actions are recommended to the Tucson Unified School District Governing Board:

G.10.1: Review programmatic intervention recommendations, evaluate priorities, establish goals for programs and services, and monitor feedback of results.

G.10.2: Confer with the superintendent to identify key components for a board policy requiring improved quality control with a performance-based budgeting process, to facilitate cost-benefit information about programs and services for data-driven decision making in budget planning and implementation.

G.10.3: Once information is available on the impact of allocations based on needs and results, share such information with the community as to system performance in periodic reports, such as a newsletter.

Within such a budgeting system, both finances and curriculum are monitored simultaneously. It is important to note that such a system should not be implemented hastily, nor can it be put into place overnight.

Administrative Functions: The following actions are recommended to the Tucson Unified School District Administration:

A.10.1: Identify various educational activities or programs and group them into broad areas of need or purpose served. Examples might be elementary instruction - personnel, gifted education, district governance (board and superintendent functions), high school instruction, counseling and guidance, K-3 Reading, etc. Try to divide the organization into the most logical (but least number necessary) subgroups based on the existing operating structure.

A.10.2: Build budget "packages" within each of the subgroups that incrementally (or increasingly) deliver the objectives of the area of need or purpose. Any given program could be defined and packaged into units that provide programs and services at different levels of quality and cost; for example, (1) 90 percent of last year's budget, which allows recovery or savings of previous allocations if better used elsewhere; (2) 100 percent of last year's budget, which continues the allocation at the current or existing level; and (3) 105 percent of last year's budget level, which helps increase allocations for program improvement if needed and if it can be evaluated thoroughly both formatively and summatively.

A.10.3: Have program managers prepare packages for their areas with each package representing a level of activity that stands alone but builds sequentially on the previous package. Budget packages should be concise and meaningful. Examples might be minimal services, optimal services, and improved services.

A.10.4: Define a tentative program structure after grouping and compilating budget packages.

A.10.5: Include in each program area (package group) a goal statement that clearly expresses the purpose of the program or activity serves. Compile goal statements and budget packages, and give to appropriate staff to gather data to best describe service levels, program outputs, and cost benefits.

A.10.6: Define organizational performance data, appropriate involvement of staff (including principals and teachers), current and desired service, and program objectives. Prepare guidelines and recommendations and give them to those who will develop the program budgets.

A.10.7: Compile budget packages, including costs, into a work sheet with instructions for evaluating and ranking. Priorities must be set among competing intentions to facilitate allocations up to the predetermined funding levels. Couple past cost information, especially expenditure percentages, with performance data and develop recommendations to guide preliminary budget-building estimates.

A.10.8: Give budget program packages to the appropriate program directors and staff for evaluation and ranking, and publish compiled results in a tentative budgeted program package list in order of ranked priority.

A.10.9: Make final decisions in allocation priorities based upon measured effectiveness of programs elements, revenues available, the appropriation levels to be authorized, and the program funding priorities and rankings by the administration. Recommended to the governing board for funding and budget approval as required by law.

Given this approach to budgeting, the process of changing funding or allocation levels is based on "how well is this program or activity doing?" instead of "how much did we spend last year?" Top management, the governing board, and the Tucson community will have a more complete idea of what is funded (and what is not) in operations, programs, and services of the Tucson Unified School District. Tangible connections between results and costs will be abundantly evident, and productivity stands a greater likelihood of improving.

The Tucson Unified School District needs a credible rationale and an effective system for appropriating and/or reallocating finances, especially from aged, obsolescent, or unproductive programs and activities to new, emerging programs or activities of high priority based on organizational effectiveness, changing needs of clientele, or produced results. Moreover, valid linkages need to be identified among organizational objectives, results, and costs in the process of improving quality control and system prudence with its financial resources. It will be far easier to explain why certain portions of the budget are increasing (and perhaps why certain portions are decreasing) each year.

Again, it is important to stress that it may take three or more years to develop such a budgetary system, and the budget's cornerstones must be curriculum unity[7] and monitored performance in the Tucson Unified School District.

[7] Quality control results from unity of purpose, activity, and assessment, or in educational systems there is a cycle unifying what is taught, when and how it is taught, and what and how it is assessed. (See the quality control triangle in the Introduction section of this audit report.)

V. EXECUTIVE SUMMARY

A Curriculum Audit is an "exception report" similar to a financial audit. Data are gathered by the curriculum auditors from three sources—documents, interviews, and on-site visits—and compared to audit standards and indicators. A school system is not compared to other systems but is evaluated on its own merits based on Curriculum Audit standards.

The auditors conducted a Curriculum Audit of the Tucson Unified School District (TUSD) during January 2014. TUSD policies, plans, curriculum, access to the educational programs and activities, student achievement, and productivity of the support offices and programs were analyzed and evaluated against a set of predefined standards and indicators of quality, noting any discrepancies from the standards. These constitute the *findings* of the audit. The auditors then provide recommendations to help the district address the discrepancies noted in the report. The recommendations represent the auditors' "best judgment" regarding how to address the discrepancies contained in the report. It is expected that the superintendent and his staff will review the findings and recommendations and make decisions regarding how and when to address the suggested steps for resolving the discrepancies in relationship to the audit standards. The recommendations serve as the *starting point* for a discussion of how to deal with the documented findings.

Standard audit practice is that the superintendent and the district's governing board *receive* an audit, but they do not *accept* or *approve* it. After review of the audit report, the board may request the response of its superintendent of schools to the audit recommendations. When the superintendent's response is received, then the board makes a determination regarding how it will act upon the recommendations. In this manner, the superintendent and the board become accountable for what occurs in the school system after an audit report.

Overview. The Tucson Unified School District is a large urban school district and is comprised of a culturally and linguistically diverse student population. TUSD has many issues related to student achievement, which is challenged by rigorous state standards and state assessments. Historically, the school district has substantially decentralized the system, investing each school with considerable freedom in the areas of finance, curriculum, programs, and personnel. However, the system has noted serious achievement gaps among various student subgroups, and the goal of equal success in learning for all students has not been realized throughout the Tucson Unified School District.

The superintendent has established measurable goals for the Tucson Unified School District for 2012-13, which are being used as well in 2013-14 to focus the direction of the school district as it begins the process of developing a strategic plan. The goals include:

ACHIEVEMENT:

- Continue the achievement goals in reading and writing and increase student achievement in Mathematics by improving the district passing rate at all levels on *AIMS* by 10 percent.

STUDENT ENROLLMENT:

- Increase the percentage of students who reach the number of credits to become freshmen and sophomores by 5 percent.
- Meet the goals identified in the Unitary Plan.

TRANSPORTATION:

- Develop transportation models, with detailed cost and efficiency data to analyze and implement student assignment requirements in the Unitary Status Plan.
- Develop and distribute a school site and department satisfactory survey.
- Sustain high level of school site and department satisfaction with Transportation communication and service revealed in October and April survey results.

CLIENT SERVICE:

- Conduct intensive training sessions for office managers, front office staff, and district-level customer contact personnel no later than March 2013. This will include a system to assess the transfer of concepts taught.
- Using the pilot created during the 2011-12 school year, create and implement a district- wide secret shopper program to assess the public's perception of our customer service orientation. This will include the development of standards and periodic assessments of progress at a minimum of three times during the year. The first assessment will serve as the baseline and will be done before the training is administered. The outcomes of three visits will be reviewed by Cabinet Members and presented to the Board, and plans will be developed to encourage continued efforts or remediate individuals who are deemed to not meet the standards. Metrics will be determined following the 1st assessment.
- Streamline and enhance the district enrollment and registration processes to ensure that students are enrolled and registered in an efficient manner that yields a high level of customer satisfaction. This will be measured through a process designed to solicit feedback from as many parents as possible.
- Create and administer an employee climate survey. Each school will administer the climate survey focusing on the administration and overall environment. Results will be reviewed by district leadership and a summary will be provided to the Governing Board. As part of the process, the survey administered will be done by a neutral third party.

GRANTS:

- Increase competitive grant funds and outside donations, including partnership contributions, by 5 percent for the 2012-13 school year.

DESEGREGATION:

- Develop the system to successfully implement the requirements of the Unitary Plan.

SCHOOL MASTER PLAN:

- Develop and implement the school master plan.

OTHER DISTRICT GOALS:

Achievement –

- Continue to reduce the number of schools labeled "D" at all levels and increase B and A schools. Reduce 75 percent of the D schools with emphasis on Double "D" schools.
- Continue to improve the overall culture & performance of turnaround schools.
- Reduce overall enrollment decline for the 2012-2013 school year.

The school district is facing strong challenges, among them closing the achievement gap among its linguistically and culturally diverse student populations and complying with the components of a court mandated and monitored Unitary Status Plan.

The superintendent was prudent in requesting an external, objective, and incisive scrutiny of the system. If the Tucson Unified School District is to enhance the quality and performance of its curriculum and impact student achievement outcomes, then an external, standards-based review process can assist a district in prioritizing its direction and improvement strategies. This audit report will help clarify issues confronting the system that are worthy of focus and that need improvement in the future in order to take the entire system to the next level of quality.

Included in the audit findings are issues pertaining to inadequacy in educational organization structures and job descriptions, absence of policy in several critical areas related to teaching and learning, shortcomings in uniform policy and procedures across the system, inequity in educational opportunity and success, incongruent educational programming across the system, insufficient quantity and quality of curriculum documents,

ineffective use of feedback information in decision making, and inconsistent attention to individual client needs and services in instruction and the allocation of resources.

The audit team visited a random sample of 89 schools including all configurations (K-5, K-8, 6-8, etc.) in the system, and the audit team also interviewed approximately 310 individuals during the site visit, which took place the week of January 27-February 1, 2014. Over 1,000 documents were obtained from the system, which the auditors reviewed. A list of those documents is found in the Appendix of this report.

The audit examined quality control and teaching and learning operations across the entire system in five standards or areas:

1. Control (governance, leadership, and organizational structures)
2. Direction (curriculum design and delivery)
3. Equity and Connectivity (equal access, equality of student success, and coherence of the system)
4. Feedback and Assessment (evaluation of programs, services, instruction, and operations)
5. Productivity (use of financial resources, nature of facilities and environments, and interventions)

An abbreviated summary of the findings in the above five standards follows:

Control and Governance. The auditors found the Tucson Unified School District's board policies, rules ,and regulations to be inadequate in both content and specificity to guide all necessary aspects of curriculum management and the educational program. Several policies in the curriculum management areas of control, direction, connectivity and equity, feedback, and productivity were either weak or absent. More specifically, no board policies or administrative regulations clearly require specific or similar curriculum requirements that would help teachers demonstrate student mastery of critical learner objectives aligned with accountability measures. Policies related to assessment and curriculum contain no direction for formative assessment instruments, denying teachers access to information about student progress in their mastery of learner objectives on a frequent basis.

The auditors also reviewed documents and conducted interviews relative to planning processes in the school district. They observed no clearly identified direction in policy from the school board regarding expectations for planning processes and documents, which would ideally incorporate state expectations and extend beyond those to localized intentions. The current planning process for the school district leans heavily on the state requirements for an LEA Continuous Improvement Plan (CIP). The CIP focuses on one year at a time, thus minimizing the long-range views and goals that also need attention. The district currently lacks several anticipated planning documents: for example, curriculum management, staff development, and student assessment and program evaluation plans.

Regarding the organizational structure of the school district, the auditors found that the organizational charts were inadequate and were missing crucially important functions and operations for effective quality control. The TUSD organizational chart was found by the auditors to be missing two of the three important quality control components, seriously eroding capabilities to design and deliver effective teaching and learning.

The auditors also found that job descriptions were inadequate in delineating qualifications and clear links to the chain of command. Only one job description included a clear statement of direct report. The remainder of the job descriptions contained either no statements or general statements. Most job descriptions did not list subordinates under the position's direct supervision. Nearly one-third of the job descriptions reviewed included qualifications that lacked adequate statements of education, certificate or licensure, and/or knowledge, skills, and abilities. In addition, auditors noted multiple instances of inconsistency between job descriptions and the organizational chart, overlap and redundancy of responsibilities, and outdated "inactive" job descriptions available within the same data base as "active" job descriptions. None of the job descriptions were rated "exemplary" in any of the four critical elements.

Curriculum and Direction. The auditors found that curriculum management planning is inadequate and unfocused in the Tucson Unified School District. Planning for the development, implementation, monitoring,

and evaluation of the district curriculum was inadequate. Board policy was inadequate to provide direction to district administration for the written curriculum. No district documentation was presented that provided evidence of an aligned, tightly held curriculum that allows teachers and school leaders to make appropriate site-level decisions in the best interest of their students. The district lacked an adequate philosophical framework for the design of district curriculum, requirements for a specific review cycle in all subject areas and grade levels, and definitions of the stages of curriculum development. Curriculum planning in terms of roles and responsibilities for the design and delivery of the curriculum, for the formats and components of the written curriculum, and the use of state standards in a frontloaded approach was evident in some areas of curriculum planning and development, but was inconsistent and inadequate overall.

Current requirements for curriculum design are inadequate to support teachers' differentiation of instructional approaches, to direct the use of assessment data in instructional decision making, and to evaluate programs and curriculum content both formatively and summatively. Although the presence of professional development was noted, there was no comprehensive staff development plan. Additionally, no communication plan for sharing the processes of curriculum design and delivery existed. Expectations were evident and verbalized, but no procedures were in place for monitoring the delivery of the curriculum. The lack of written direction for curriculum management functions is also evident in the structures and staffing in place at the district level.

The auditors discovered that the quality of the approved curriculum was inadequate to guide teaching. Existing documents (n=28) had an overall mean rating of 5.7 out of a possible 15 points when analyzed for specific design elements. No approved curriculum documents attained the minimum acceptable score of 12 points. About one-fourth of all teachers who responded to the teacher survey reported finding the curriculum useful for planning, while one-fifth reported finding it not useful.

Finally for this section, the auditors found that the board policy did not specify any expectations for the design and alignment of components of the district curriculum. Auditors searched for content and cognitive congruency among three areas: between classroom artifacts and district *ATI* benchmark assessments, Arizona standards and district *ATI* benchmark assessments, and district *ATI* benchmark assessments and *PARCC* sample assessments. A congruent curriculum in both content and cognitive domains would prepare students from their daily work, their *ATI* benchmark assessments, and finally state *PARCC* assessments. Students most likely struggle with *ATI* benchmark assessments because the classroom artifacts evaluated by auditors did not meet the criteria to be considered congruent for either content or cognitive type. While the *ATI* benchmark assessments do align in content with standards used to guide instruction, they do not align with the cognitive type necessary for students to master the standard. Finally, there is a lack of congruency between the district benchmark assessments and the state *PARCC* assessments, with the exception of the content for English language arts.

Connectivity and Equity. The district's design for equal access to the curriculum and equitable treatment of students is inadequate, and delivery is ineffective. There is an expectation in the Tucson Unified School District that principals should supervise the educational program in their schools and that they should serve as coaches for the teachers in their buildings. Even so, monitoring of the curriculum is inconsistent from one building to the next; principals cited difficulties in having time to be in classrooms because of meetings, disciplinary issues, or no building support (such as an Assistant Principal). A number of teachers reported never seeing their building administrator, while others reported seeing him or her often. Written direction regarding the philosophy, purposes, instruments, and results of monitoring is inadequate to ensure proper support and oversight of the delivery of curriculum.

The auditors also learned that the Tucson Unified School District provides educational services for gifted education, special education, and English language learners through a variety of models in the district. Not all of the models are offered at every school; however, the district provides transportation for students to attend a school that provides the needed services. The district has several board policies addressing equity and equal opportunity for learning and nondiscrimination. The policies fail to provide specific guidance in the design and delivery of the instructional programs to ensure student success. In addition, the ELL program uses a curriculum separate from the general curriculum, while exceptional education material is considered to be supplemental, and gifted and talented is considered "differentiated." Auditors identified multiple inconsistencies and inadequacies

in a number of these programs' practices. Specifically, inequities were noticed in identification of ethnicities in special education and GATE. Discipline, retention, and graduation rates, as well as gaps in student achievement, raised concern as to the equal opportunity for all students to be successful. An expectancy that every student was capable of achieving and will learn was lacking.

Professional development is occurring in the Tucson Unified School District at the district and campus levels to varying degrees, and some components of a professional development plan are in place. However, the current components do not provide for focused, ongoing training for all employees of the district. Additionally, the auditors learned there is no vehicle to ensure that initiation, implementation, institutionalization, and evaluation occur and that student performance increases as a result of improved staff performance.

The Tucson Unified School District has been under court order to provide equity and equal access for more than 30 years. However, an adequate design for those efforts—the Unitary Status Plan—is in the first year of implementation, and many necessary and required supporting plans and infrastructure have not been completed or put into place. Therefore, auditors concluded that the overall design for equity and equal access is inadequate. Delivery of equal access and equity is also ineffective. The composition of the staff was inconsistent with the district's policy commitment to diversity and the court's requirement for it. Enrollments in the Advanced Learning Experiences (ALE) (e.g., University High School and Advanced Placement, honors, and gifted and talented courses) did not reflect the ethnic and gender characteristics of district students. The same is true for disciplinary actions, retentions in grade, and exceptional education placements. Achievement gaps existed among students groups, and many gaps cannot be closed at current growth rates in the percentages of students performing satisfactorily on *AIMS* tests. Given these facts, the audit team concluded that delivery of equal access and equity in the Tucson Unified School District is ineffective.

Feedback and Assessment. The auditors found that planning for student assessment and program evaluation is inadequate. There is no written comprehensive assessment and program evaluation plan for the TUSD. Further, TUSD lacks language within its board policies to appropriately govern student assessment and provide program evaluation direction.

The scope of the formal student assessment in the Tucson Unified School District is inadequate when viewed across all grade levels and curriculum offerings. The auditors learned that only 42 percent of the curriculum offerings in the district are formally assessed. At the elementary level, the scope of assessment for the core areas of English language arts/reading and mathematics is 100 percent and the scope for science is 17 percent. No assessments were identified for the core area of social studies. In grades 6-8, courses in English language arts/reading and mathematics are fully assessed, with the remaining core areas of science and social studies falling short of the audit criterion of 100 percent (33 percent for science and zero percent for social studies). The scope of assessment in grades 9-12 is adequate for English/language arts and mathematics but is otherwise inadequate in all other core areas.

The auditors also found that the district has focused its formative assessment system on the *ATI* Galileo assessment systems. The formative assessment system in place meets 47 percent of the audit's formative assessment criteria (80 percent is a passing score). Auditors noted inadequate board policy guidance to provide direction to a comprehensive student assessment and program evaluation system that includes program evaluation and a formative assessment system. Although the auditors found the district moving toward using data more consistently, there is significant variation among schools and staff members regarding data usage. The transition of *ATI* to a comprehensive benchmark assessment for predicting *AIMS* performance has modified the original formative intent. The auditors found that Tucson Unified School District lacks a plan to guide decision making for improved student achievement.

Regarding student achievement in the Tucson Unified School District, the auditors learned that student performance has improved from 2008 to 2013 in most grades and subjects. However, on the *AIMS* exams, Tucson Unified School District students have consistently performed lower than statewide averages. The performance gap between Tucson Unified School District and statewide grade level cohorts has widened in math; however, district cohorts have increased proficiency in reading more rapidly than their peers statewide. Conversely, *SAT 10* data indicate that Tucson Unified School District students are improving more in math than

in reading, and that when compared to peers nationally, Tucson Unified School District students are achieving higher levels in math than in reading. Math is also the highest scoring content area for Tucson Unified School District students on the *ACT* and displays the smallest gaps between student and state performance. Tucson Unified School District students have consistently performed lower than national and statewide averages on the *ACT*, and composite performance has declined over the past three years.

Resources and Productivity. The auditors determined that current budget development and decision-making processes of the Tucson Unified Schools are not yet fully adequate in assuring system-wide cohesion and productivity. The absence of formal program assessment to verify program efficacy results in there being no systematic linkage between funding and board adopted priorities. Without cost-effectiveness data on allocations for programs and service, the system could end up serving the students and community ineffectively, inequitably, or inconsistently.

Overall, school facilities were found to be adequately maintained, clean, and functional. The auditors found that, for the most part, facility availability was adequate for district administrative functions, although access to more consolidated venues of services could contribute to efficiency of operations and enhance ease of access to offices for providing services and enhancing collaboration. The need of highest urgency that emerged from the auditors' review of systems and operations was updating and expanding the technology systems, hardware, and software to provide quality educational support to teachers and students in all schools and to reduce the inefficiencies in daily management of personnel and finance functions at both district and school levels. Slow processing of such actions as purchasing equipment or materials, hiring of staff, and receiving custodial and maintenance services is affected directly and indirectly by both the recent staff reductions caused by changes in state funding and the weaknesses in the technological support systems. Hiring processes are in need of immediate modifications to expedite filling teaching vacancies with qualified personnel. The planning activities to support instructional technology failed to meet audit criteria for quality instructional technology services.

The auditors also learned that TUSD has a great number of intervention programs. The majority are grant funded. Although the District Continuous Improvement and the Unitary Status Plans provide guidance, district direction and control are lacking due to the absence of board policy relevant to program interventions. Indicators of the lack of district direction are evident in the absence of measurable objectives and evaluations necessary to determine program effectiveness. The TUSD Induction/Mentoring Program also lacked many of the basic components needed in determining adequacy as a district intervention.

Recommendations. The auditors provided recommendations for the governing board and the superintendent intended to ameliorate and improve the curriculum management system in the Tucson Unified School District and to foster quality control in teaching and learning. The key recommendations include the following:

Recommendation 1: Review, revise, adopt, and implement current policies (governing board) and corresponding administrative regulations (superintendent) to obtain quality control with adequate elements of policy, planning, and organizational structures needed for sound curriculum management and to effectively accomplish the district's mission and goals.

Recommendation 2: Modify planning processes and integrate plan documents to incorporate characteristics of effective planning practices and enhance the cohesiveness of district and school documents to lead ongoing improvements of student achievement and organizational support functions. Ensure that plans are used regularly in decision making at all levels of the organization.

Recommendation 3: Adopt a policy governing administrative functions and the management of job descriptions and the table of organization. Revise the Superintendent's Organizational Chart consistent with sound curriculum management principles for quality control. Configure personnel to reestablish quality control positions in curriculum design (development) and curriculum deployment (implementation) to ensure that the essential functions relating to curriculum design and delivery, assessments, data management and interpretation, professional development, and program evaluation are properly managed. Prepare and adopt a set of quality job descriptions to better define role responsibilities and supervisory functions.

Recommendation 4: Develop and implement a comprehensive curriculum management plan that includes a system for revision of the existing curriculum to promote deep alignment of the written, taught, and assessed curriculum.. Develop and implement a comprehensive curriculum management system that coordinates and focuses all curriculum management functions; prioritizes curriculum development in all content areas; incorporates clear expectations for rigor in instruction as well as in student materials and resources; supports instruction that is culturally responsive; requires the development of deeply aligned, authentic formative and diagnostic assessment tools; and defines and prioritizes the effective delivery of curriculum in every grade level and course.

Recommendation 5: Establish and implement policies and procedures to provide equal access to comparable programs, services, and opportunities. Eliminate the achievement gaps among ethnic groups.

Recommendation 6: Develop a comprehensive district plan for student assessment and program evaluation—aligned with the district's strategic and curriculum plans—that provides for the systematic collection, analysis, dissemination, and application of student achievement and program evaluation results to promote improved student achievement. Expand board policies to provide direction for formative assessment development and program evaluation, and develop administrative procedures that formalize the process for developing high quality formative assessments, conducting program evaluation, and using disaggregated data to improve curriculum design and instructional delivery.

Recommendation 7: Develop a district staff development plan that incorporates emphasis on growth in curriculum design and delivery, effective classroom strategies to engage a variety of learners, fulfillment of the Unitary Status Plan, and ongoing professional growth among all employees for the goal of increased student achievement.

Recommendation 8: Refine and expand facilities planning to include all components of comprehensive long-range facilities planning with clear linkage to educational priorities, goals, and objectives in the district strategic plan as well as in funding plans. Incorporate planning for all operations, including and emphasizing information and instructional technology, into the 2014 strategic plan. Identify and aggressively seek external grants and other funding as needed to expedite identified improvement needs for technology support services and instructional technology. Ensure that written curricula to support course offerings in technology are developed in accordance with audit criteria.

Recommendation 9: Develop and implement a policy and procedure that standardizes program and intervention selection based on diagnosed needs, and design and implement the evaluation of program objectives with feedback linked to student achievement. Decision making on the initiation, modification, continuation, or termination of programs and interventions must be based on valid and impartial knowledge of potential value and measured results.

Recommendation 10: Adopt a three-year plan for implementation of a performance-based budgeting and allocation system for all Tucson Unified School District schools, departments, programs, and services.

In summary, the superintendent and the governing board are working on a strategic plan to lead the Tucson Unified School District on a path to educational excellence. To make sure they are focused in their efforts to achieve educational excellence, they held their own educational system up for public scrutiny, and they voluntarily requested this rigorous analysis of the quality and needs of the district. The Curriculum Audit provides information that the board and superintendent can use in the coming months and years to fully achieve their goals, including improving the academic achievement of all students. Given attention to the findings of this audit, commitment to use the recommendations in formulating an agenda for improvement, and continued support from the city and county leadership as well as the residents of Tucson, the children attending the Tucson Unified School District will reap many benefits from a focused and reinvigorated school district.

VI. APPENDICES

Appendix A

Auditors' Biographical Data

William K Poston Jr, EdD

William K. Poston Jr. is Emeritus Professor of Educational Leadership and Policy Studies at Iowa State University in Ames, Iowa, where he served from 1990 to 2005. Bill began his educational career as a math and physics teacher, and he accumulated 25 years of experience in educational administration including five years as secondary school principal, and 15 years as a superintendent in Tucson, Arizona; Phoenix, Arizona; and in Billings, Montana. He has many distinctive professional achievements, including service as the youngest-elected international president of Phi Delta Kappa, selection as an Outstanding Young Leader in American Education in 1980, and recipient of the Distinguished Alumni Award from the University of Northern Iowa.

He has authored numerous professional articles and has published over a dozen professional books including *School Budgeting for Hard Times: Confronting Cutbacks and Critics* (2010), and *School Finance* (Chapter in Handbook of Educational Leadership). Dr. Poston taught school finance and school business management at Iowa State University, and he was the founding Director of the Iowa School Business Management Academy, sponsored by the Iowa Association of School Business Officials.

Dr. Poston completed his curriculum auditing licensure in 1988, and he has led over 75 audits in many states, and a few foreign countries.

Kay Coleman, MEd

Kay Coleman is an independent consultant and retired school administrator having served in the roles of Assistant Superintendent for Educational Services in two urban districts in Phoenix, Arizona, as well as Executive Director of a BOCES in rural Colorado. Over her 35-year career in public education she was a classroom teacher, reading specialist, elementary principal, and director of curriculum and instruction in urban and suburban areas and currently works as a director of an aspiring principal program at Arizona State University. Mrs. Coleman's areas of expertise are in curriculum development, professional development, instructional leadership, program evaluation, and early literacy. She conducts workshops and seminars in her areas of expertise nationally and within the state of Arizona. She has served as principal investigator and co-principal investigator of several systemic change projects in mathematics through the National Science Foundation and the U. S. Department of Education as well as a contributing author on a number of books on teaching mathematics and literacy. She earned her M.Ed. from Arizona State University and was trained as an auditor in 1992 in San Antonio, Texas.

Maureen Cotter, EdD

Maureen Cotter is an organizational development consultant specializing in governance and leadership training for school boards and executive staff. Dr. Cotter has over 25 years of experience in education, political and policy advocacy, and governance. She is a former high school teacher and central office professional. Her research interest is in examining governing and leadership practices that support student achievement. Dr. Cotter is serving her fourth term on an elected school board and is the current chair. She has a Doctorate in Education Leadership from Johnson & Wales University , M.Ed. in education administration from Providence College, and MS in physical education from the University of Rhode Island. Maureen completed her audit training in Tucson, AZ in 2009 and has participated on audits in Massachusetts and North Carolina.

Appendix A (continued)
Auditors' Biographical Data

Jim Ferrell, EdD

Dr. Jim Ferrell grew up in southwestern Oklahoma and now lives in Tulsa. He currently works at Northeastern State University in the College of Education where he serves as chair of the School Administration Program. He also serves as director of the Leading Educators Academically Rural Network (LEARN) Program. This program works with future teachers who know they want to teach in a rural environment. The program concentrates on research and the application of theory to practice in the diverse rural environments. Prior to this assignment, Dr. Ferrell served six years as a middle school principal and 12.5 years teaching secondary social studies and Spanish. He received his B.A. in history from Oklahoma City University; his MA in history from the University of Central Oklahoma; and, his EdD in school administration from Oklahoma State University. Dr. Ferrell received his curriculum auditor training in Tucson, Arizona, in 2008.

Diana Gilsinger, EdD

Dr. Diana Gilsinger retired from public education as Deputy Superintendent in Battle Ground School District in SW Washington. In her 28-year career, she has provided leadership for Curriculum, Finance, Technology, and Equity Services and partnered with the Superintendent to provide leadership for comprehensive planning and implementation of school improvement. She has also held positions as Assistant Superintendent for Educational Services in both Washington and Arizona; K-8 school administrator, special programs director and a variety of teaching positions. She currently provides professional development and program consultation through Kiva Educational Consulting, LLC. She has directed numerous curriculum alignment projects and provided a variety of workshops and in-services for school districts as well as state and national conferences. In addition to her work as auditor and consultant, Dr. Gilsinger serves as Grand Canyon University faculty supervisor. Dr. Gilsinger earned her MEd. in Educational Technology and her EdD in Educational Administration from Arizona State University. She completed her audit training in Tucson, Arizona in 2003.

Susan Penny Gray, PhD

Dr. Gray has been an educator for more than 40 years in Indiana and California, including 15 years as Director of Curriculum Services for the San Marcos Unified School District in San Marcos, California and 10 years as a member of the Educational Leadership faculty at San Diego State University teaching in the administrator credentialing program. She has served on academic achievement teams conducting comprehensive on-site assessments of the educational operations of school and community college districts in California. Dr. Gray earned her undergraduate degree from the University of California, Santa Barbara, and her master's degree from San Diego State University. She received a doctoral degree in educational leadership through the Claremont Graduate University/San Diego State University Joint Doctoral Program. Dr. Gray has served as a curriculum management auditor for school districts in California, Washington, Texas, Ohio, Arizona, Maryland, New York, Pennsylvania, Bermuda, North Carolina, and Missouri.

Appendix A (continued)
Auditors' Biographical Data

Meredith G. Hairell, MEd

Meredith G. Hairell currently serves as the Advanced Academics Coordinator and AVID District Director for the Victoria Independent School District in Victoria, Texas. She has also worked for the Education Service Center, Region 20, as an Educational Specialist in English Language Arts and Reading. She has taught in both the public and private sectors at all levels in Texas and Ohio. Ms. Hairell holds Master of Education degrees in Curriculum and Instruction from the University of Houston in Houston, Texas, and Educational Leadership from the University of Houston—Victoria in Victoria, Texas. She completed her audit training in Tucson, Arizona, in 2009.

Holly Kaptain, PhD

Holly J. Kaptain is currently the Executive Director of Curriculum Management Systems, inc. She has worked in public education for over 20 years and most recently in higher education at Iowa State University, where she was a research assistant in bilingual and two-way immersion programming for culturally and linguistically diverse students. She is a CMSi (Curriculum Management Systems, Inc.) licensed trainer in deep curriculum alignment and has participated in over two dozen audits in 11 different states since 1996. Dr. Kaptain graduated with a B.A. from St. Olaf College in Minnesota and completed curriculum management audit training in St. Paul, Minnesota in July of 1996. She completed her M.S. in Curriculum and Instruction and her Ph.D. in Educational Administration at Iowa State University. She has presented at regional and national conferences on bilingual education research, instructional efficacy, and curriculum design. Dr. Kaptain is a member of Phi Delta Kappa, the National Association for Bilingual Education, the American Council of Teachers of Foreign Languages, as well as other honor and professional organizations.

Sarah McKenzie, PhD

Dr. McKenzie is the Director of Assessment, Research, and Accountability for Fayetteville Public Schools in Arkansas. Sarah McKenzie has taught Pre-K to university level, has provided training and consulting to public school districts, and has presented nationally and internationally on educational statistics. She received her B.S. in literature from Claremont McKenna College, M.A. in Early Childhood Education from Mills College, and Ph.D. in Education Statistics and Research Methods from the University of Arkansas. Dr. McKenzie completed her curriculum audit training in Tucson, Arizona in 2010, and has participated in audits in Massachusetts and Texas.

Appendix A (continued)
Auditors' Biographical Data

Eve Proffitt, EdD

Dr. Proffitt is the Co-Director of the Innovation Lab at the University of Kentucky and the Kentucky STEMx Network. She previously was the Dean of Education, the Associate Dean for Graduate Education and Professor of Education at Georgetown College, Kentucky. She is retired as Director of Student Achievement and Disability Law for the Kentucky School Boards Association, and formerly she was an Assistant Superintendent of Instructional Support, the Director of Special Education, a building principal, a federal grants writer, and a teacher for the Fayette County Schools in Lexington, Kentucky. Dr. Proffitt has extensive experience in educational administration, curriculum development, collaboration and inclusion, differentiated instruction, innovation and next generation learning, and disability law. She serves as a consultant statewide and nationally on special education curriculum, co-teaching, and differentiated instruction. Dr. Proffitt received her MA degree from Eastern Kentucky University and her EdD from the University of Kentucky. Dr. Proffitt received her audit training in Tucson, Arizona, in January, 1989. She is a lead auditor and a former board member for CMSi. Eve is an international Past President of Phi Delta Kappa, International.

James A. Scott, PhD

Dr. Scott serves as an educational consultant for curriculum management and system evaluation projects. He is a former Executive Director for Human Resources for the Gary, Indiana, public schools, and taught at Frankfurt American High School in Germany and the University of Maryland, European Division. Dr. Scott has held positions as an instructor, auditor, chief of staff, and director of U.S. Army education and training programs. His areas of expertise include program-driven budgeting, leadership training, professional development, personnel management, and strategic planning. He authored the first nation-wide study of educational equity attitudes among public school stakeholders. He earned master's degrees in Business (Central Michigan University) and Public Administration (University of Missouri at Kansas City). His Ph.D. in Educational Administration was awarded at Iowa State University. Dr. Scott completed Curriculum Management Auditor training in January 1991 in San Diego, California; and he has participated in audits in the United States and overseas.

Sue Shidaker, MEd

Ms. Shidaker is an educational consultant based in Washington. She previously served as an assistant superintendent in Washington and Arizona and as a curriculum coordinator, school administrator, and teacher of English Language Arts in secondary schools in five states. Sue's career path also included seven years as a Governor's special assistant for public schools and higher education, law, local government, and health/social services, and for two years she was Deputy Commissioner of the Alaska Department of Administration. Sue was a school board president and president of the Alaska School Boards Association, and has served on several other boards and commissions in education and in state and local government. She completed her B.A. degree in English at Ohio Wesleyan University and her M.Ed. in education administration at the University of Alaska, Anchorage. She also completed additional graduate work at Duke University, The Ohio State University, Arizona State University, and Seattle University. Sue has led curriculum management audits since 1989 and has participated on audit teams in 29 states. Sue is a co-author of *A Practitioner's Guide for Managing Curriculum and Assessment.*

Appendix A (continued)
Auditors' Biographical Data

Zollie Stevenson, Jr. PhD

Dr. Stevenson currently is an Associate Professor of Educational Leadership and Policy Studies in the doctoral Educational Leadership program at Howard University in Washington, DC. Until his September 2010 retirement, he was the Director of Student Achievement and School Accountability Programs (SASA) at the United States Department of Education, where he administered the Title I, Title III and School Improvement Grant programs. Prior to being named Director of SASA, he served as the program Deputy Director and the group leader for standards, assessment and accountability, responsible for implementing and providing technical assistance to states implementing the Improving America's Schools Act and the NCLB assessment and accountability provisions. Stevenson has served as a regional coordinator for research, testing and accreditation for the North Carolina Department of Public Instruction. He has been the assessment and/or research director for several large school districts including the District of Columbia Public Schools, the Baltimore City (MD) Public Schools, and the Charlotte/Mecklenburg Schools (NC). He earned the Ph.D. from the University of North Carolina at Chapel Hill, and his audit training in Monterey, California in 1992 and has been a member of 34 audit teams.

Jeani Stoddard, MA

Ms. Stoddard is a practicing educator in Texas with 30 years of experience in grades K-12 and adult education in a variety of settings including public and private schools, corrections, and mental health facilities. Her assignments have included general and special education classrooms, curriculum director, staff development director, assistant principal and reading coach. She currently is employed in Big Bend, Texas. Jeani holds Master's degrees in secondary education from Austin College and exercise physiology from Texas Woman's University. She completed her curriculum audit training in Phoenix, Arizona, in 2009. She has participated in audits in Mississippi, Kentucky, and Texas.

Stephanie Streeter, MEd

Stephanie Streeter has over 15 years in education, serving as an administrator and teacher in both suburban and urban school districts in Arizona and Texas. She has both district and building administration experience, including Director of Curriculum K-12 in a suburban school district (Tanque Verde Unified School District, Arizona), Assistant Principal of both Instruction and Registration in a large, urban school district (Phoenix Union High School District), Instructional Coach and Curriculum Specialist in a large, urban school system (Tucson Unified School District). Teaching experiences include high schools in a suburban district (Midway Independent School District, Texas) and in an urban district (Tucson Unified School District, Arizona). Ms. Streeter received her B.A. in Communication from Purdue University, Indiana, her teaching certification from Baylor University, Texas, and her Master's in Educational Leadership from Northern Arizona University, Arizona. She has provided professional development training to improve effective teaching and learning for school districts in both Texas and Arizona. She received her Curriculum Management Audit training in Tucson, Arizona in 2006, and has conducted curriculum audits in Minnesota, Texas, and Arizona.

Appendix A (continued)
Auditors' Biographical Data

Susan L. Townsend, MA

Susan Townsend recently retired as Superintendent of Schools for the Weld County School District, just northeast of Denver, Colorado. She is currently working as a consultant for Centennial Bureau of Cooperative Educational Services in Northern Colorado. Her professional background includes 34 years of working in public schools as a teacher and administrator. Mrs. Townsend's administrative experience includes serving as assistant principal, principal, Coordinator for Instruction, Curriculum, and Assessment in a large district, Personnel Coordinator, and opening a new elementary school building. She has experience in long-range planning, personnel management, curriculum design and development, and school facilities planning. She has also been a presenter and trainer at the state and national levels on topics dealing with classroom management, affective education, effective instruction, curriculum design and implementation, and Developing Capable People. Susan received her B.A. in Elementary Education from the University of Northern Colorado, and her M.A. in Educational Leadership and Policy Studies from UNC in Greeley, Colorado. She received her CMSi audit training in Philadelphia, Pennsylvania in 1994. Susan has served on audits in Illinois, Kansas, New York, Texas, Washington, Vermont, Colorado, North Carolina, and Alaska.

Jeffrey Tuneberg, PhD

Jeffrey Tuneberg currently serves as the Director of Curriculum with the Mercer County Educational Service Center, Celina, Ohio. He has over 30 years experience in education, including over 20 years in administration. His teaching background includes experience in urban (Cleveland Public Schools) and suburban settings, as well as overseas (Guam). He was selected as a Fulbright Memorial Fund Teacher Program representative to Japan in 1997. He is also an adjunct professor at Wright State University Lake Campus, Celina, Ohio, and Ashland University, Ashland, Ohio.

Dr. Tuneberg received his B.S. in Education, M.Ed., and Ph.D. from Bowling Green State University, Ohio. He has served as a consultant to school districts in Ohio, Tennessee, and Oklahoma on issues of teacher licensure, school improvement, and value-added student growth measures. He received his Curriculum Management Audit training in Lima, Ohio in 1999, and has conducted curriculum audits in Ohio, Oregon, Washington, Michigan, Pennsylvania, Iowa, Wisconsin, Kentucky, Arizona, Texas, and New Jersey.

Susan N. Van Hoozer, MEd

Sue Van Hoozer has been an educator for 39 years. She was a teacher at the elementary level and taught developmental and remedial reading in middle school and high school. Mrs. Van Hoozer was an elementary principal, high school assistant principal, and high school principal. She worked in human resources and served as Executive Director of Schools, supervising principals, for the San Angelo Independent School District in San Angelo, Texas. Mrs. Van Hoozer currently works as an education specialist for the Education Service Center, Region XV in Texas, where she provides technical assistance and professional development for principals, superintendents, and school trustees. She received her B.S. and M.Ed. degrees from Angelo State University. Mrs. Van Hoozer completed her audit training in Tucson, Arizona, in 2004, and has served as an auditor in Texas, California, Virginia, Mississippi, Wisconsin, Minnesota, New York, and Kentucky.

Appendix B

Professional Development activities by Campus
Tucson Unified School District
2013-14

Professional Development activity	Banks Elem	Blenman Elem	Bloom Elem	Bonillas Elem	Booth Fickett K-8	Borman Elem	Borton Primary	Carrillo Elem	Catalina HS	Cavett Elem	Cholla HS	Cragin Elem	Davis K-8	Davidson Elem	Dietz K-8	Dodge MS	Doolen MS
212°					*												
301 PLC	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
Acad Foci - Math, Rdg, Wrtg																	
Acad Tchr/Parent Team																	
Academic Vocabulary																	
Academic Writing																	
active Participation Strat										*							
active Shooter Training						*											
AIMS				*	*	*		*		*	*	*	*		*	*	*
Anchor Charts w/ AES																	
Anti-Bullying																	
Art																	
Assessing Reading																	
ATI		*	*	*				*	*	*	*						*
AVID											*						
AZ K-12 Camp Plug & Play																	
AZ Learns Letter Grade																	
Balanced Literacy																	
Balanced Math																	
Behavior																	
Beyond Bridging																	
Beyond Textbooks																	
Budgeting/Staffing																	
C Danielson Training	*	*	*		*	*	*	*	*	*	*	*	*		*	*	*
Century 21 Tutoring																	
Child Assistance Team																	
CIP																	
Circle of Control																	
Classroom Assessment																	
Collaborative Planning																	
Collective Inquiry																	
Common Core																	*
Common Core - ELA						*											
Common Core - Intel Math					*												
Common Core - Pthwys Rdg														*			
Common Core - Spkg & Lstg						*											
Common Core - Writing																	

Professional Development activity	**Banks Elem**	**Blenman Elem**	**Bloom Elem**	**Bonillas Elem**	**Booth Fickett K-8**	**Borman Elem**	**Borton Primary**	**Carrillo Elem**	**Catalina HS**	**Cavett Elem**	**Cholla HS**	**Cragin Elem**	**Davis K-8**	**Davidson Elem**	**Dietz K-8**	**Dodge MS**	**Doolen MS**
Communication																	
Community Building																	
Cornell Notes																	
Corr of Highly Eff Schs																	
CPS Training																	
Critical Friends																	
Culturally Resp Practices																	
Culture of Learning																	
Curr Dev/ Planning								*					*				*
Cynthia Lee Math																	
Daily 5										*							
Data Analysis							*	*				*	*	*	*		*
Davis Span Immersion Model													*				
Debbie Miller Literacy															*		
Department/Team Mtgs									*							*	
Depth of Knowledge																	
Differentiated Instruction													*				
DRA																	
EEI																	
Elementary Leadership																	
Elements of Literature	*																
ELL		*															
Emergency Plan																	
Engineering is Elementary																	
EOY Data & Evaluation	*						*										
EPI Pens								*									
eSource																	
Evolution of Kindness																	
Expeditionary Learning																	
Expert Groups																	
Formative Assessment																	
Galileo																	
GATE																	
GLSEN																	
Grade Level Data		*															
Grade Level/Team Mtgs		*														*	*
GSRR & Discipline																	
Guided Reading Strategies						*											
Handle w/ Care Strategies																	
Harcourt Training																	
Harry Wong - The Eff Tchr																	
IB and CAP											*						

Professional Development activity	**Banks Elem**	**Blenman Elem**	**Bloom Elem**	**Bonillas Elem**	**Booth Fickett K-8**	**Borman Elem**	**Borton Primary**	**Carrillo Elem**	**Catalina HS**	**Cavett Elem**	**Cholla HS**	**Cragin Elem**	**Davis K-8**	**Davidson Elem**	**Dietz K-8**	**Dodge MS**	**Doolen MS**
IEP Training										*							
Inclusion Model																	
Increasing Rigor																	
Instructional Calendar																	
Interactive Notebooks																	
Interdisciplinary Planning					*												
Interventions - Tier 1,2,3										*							
Interventions																	
Investigations Support																	
Job-Embedded Observ																	
Kind Kids School																	
Korean Cultural Awareness																	
Language Acquisition																	
Leadership Points Mtg																	
Lesson Design		*															
Literacy						*									*		
Love & Logic Training																	
Love of Reading																	
Lucy Caulkins Writing																	
MAC-Ro Math		*															
Magnet Curr Mapping					*												
Magnet Overview & Focus								*			*	*	*				
Marzano Strategies																	
Masonic Model Asst Prog																	
Math															*		
Math Across Curriculum					*												
Math Habits														*			
Math Interventions						*									*		
McKinney Vento Trng															*		
Meaningful Work																	
Mindfulness/Social Emotional																	
Mission/Vision/Goals						*											
MobyMath																	
Models of Teaching																	
Motor Act. For Testing																	
MSSI												*					
Multicultural																	
New Tech Network																	
Next Chapter																	
No Excuses University																*	
Number Sense & Oper	*																
OMA																	

Professional Development activity	**Banks Elem**	**Blenman Elem**	**Bloom Elem**	**Bonillas Elem**	**Booth Fickett K-8**	**Borman Elem**	**Borton Primary**	**Carrillo Elem**	**Catalina HS**	**Cavett Elem**	**Cholla HS**	**Cragin Elem**	**Davis K-8**	**Davidson Elem**	**Dietz K-8**	**Dodge MS**	**Doolen MS**
PARCC																	
Parental Access Bulletin Bd																	
PBIS								*			*				*		*
Peer Observ Protocol																	
Plato																	
PLC	*						*			*	*		*				*
Poll Everywhere																	
Professional Boundaries																	
Promethean Bd Trng																	
Quadrant Teaching																	*
Questioning & DOK											*						
Questioning Strategies											*						
Rdg & Math Assess & Intrv																	
Reading Strategies									*								
Recess & Playgrd Trng															*		
Reggio Leadership Team																	
Restorative Practices																	
Retention Policy																	
Rltshps & Comm in Clssrm																	*
Running Records															*		
Save a Heart Training																	
School Climate																	
School Improvement Plan																	
School Letter Grade Trng																	
Science Inquiry																	
Science Olympiad					*												
Second Semester Planning																	
SFA Component Mtgs																	
SHAC Meeting																	
SLP																	
SMART Goal Develop																	
Social/Emotional Climate																	
Socratic Seminar											*						
Spanish EXITO Protocols													*				
Special Education - Topics																	
SQ3R Reading Strategies																	
Standards & Lesson Design																	
Standards Based Obj																	
Standford 10 Prep													*				
STEM																	
Strategic Instrl Planning																	
Strategies & Common Lang.																	

Professional Development activity	**Banks Elem**	**Blenman Elem**	**Bloom Elem**	**Bonillas Elem**	**Booth Fickett K-8**	**Borman Elem**	**Borton Primary**	**Carrillo Elem**	**Catalina HS**	**Cavett Elem**	**Cholla HS**	**Cragin Elem**	**Davis K-8**	**Davidson Elem**	**Dietz K-8**	**Dodge MS**	**Doolen MS**
Stud Achiev Strategies																	
Student Engagement		*															
Study Buddies									*								
SuccessMaker	*									*							
Survey Monkey																	
Systs Thkg - Multi-Tiered							*										
Systs Thkg -Proj Based Lrng							*										
TAT Procedures										*							
Teaching Reading Effectively																	
Teachscape			*		*	*	*	*			*	*	*	*	*		
Technology Integration																	
Technology Update						*											
TEP Home Energy Prog																	
Test Taking Strategies											*						
Thematic Instruction																	
Thinking Maps	*																
Title I Plan/Update		*	*		*								*				
Unitary Status Plan							*			*							
UNRAAVEL Rdg in Cont																	
Vocabulary																	
Volunteer DIT Meeting																	
Walkthroughs - various topics										*	*				*		
Waterford																	
WIP Lesson Plans											*						
Writer's Workshop	*																
Writing Process							*										
Writing Prompts&Scoring			*		*							*		*			
Zoo Phonics																	

Professional Development activity	**Drachman Elem**	**Dunham Elem**	**Erickson Elem**	**Ford Elem**	**Fruchthendler Elem**	**Gale Elem**	**Gridley MS**	**Grijalva Elem**	**Henry Elem**	**Holladay Elem**	**Hollinger K-8**	**Howell Elem**	**Hudlow Elem**	**Hughes Elem**	**Johnson Primary**	**Kellond Elem**	**Lawrence 3-8**
212°																	
301 PLC	*	*	*	*	*	*	*		*		*	*	*	*		*	*
Acad Foci - Math, Rdg, Wrtg			*														
Acad Tchr/Parent Team	*									*							*
Academic Vocabulary																	
Academic Writing																	

Professional Development activity	**Drachman Elem**	**Dunham Elem**	**Erickson Elem**	**Ford Elem**	**Fruchthendler Elem**	**Gale Elem**	**Gridley MS**	**Grijalva Elem**	**Henry Elem**	**Holladay Elem**	**Hollinger K-8**	**Howell Elem**	**Hudlow Elem**	**Hughes Elem**	**Johnson Primary**	**Kellond Elem**	**Lawrence 3-8**
active Participation Strat																	
active Shooter Training																	
AIMS		*	*	*		*		*	*		*			*			*
Anchor Charts w/ AES																	
Anti-Bullying																	
Art																	
Assessing Reading		*															
ATI				*			*		*	*	*			*	*		
AVID																	
AZ K-12 Camp Plug & Play													*				
AZ Learns Letter Grade																	
Balanced Literacy																	
Balanced Math																	
Behavior	*		*														
Beyond Bridging																	
Beyond Textbooks																	*
Budgeting/Staffing																	
C Danielson Training	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Century 21 Tutoring																	
Child Assistance Team															*		
CIP																	
Circle of Control			*														
Classroom Assessment																	
Collaborative Planning			*														
Collective Inquiry																	
Common Core								*									
Common Core - ELA																	
Common Core - Intel Math																	
Common Core - Pthwys Rdg																	
Common Core - Spkg & Lstg																	
Common Core - Writing																	
Communication																	
Community Building						*											
Cornell Notes																	
Corr of Highly Eff Schs																	
CPS Training				*	*									*			
Critical Friends	*																
Culturally Resp Practices																	
Culture of Learning																	
Curr Dev/ Planning																	
Cynthia Lee Math															*		

Professional Development activity	**Drachman Elem**	**Dunham Elem**	**Erickson Elem**	**Ford Elem**	**Fruchthendler Elem**	**Gale Elem**	**Gridley MS**	**Grijalva Elem**	**Henry Elem**	**Holladay Elem**	**Hollinger K-8**	**Howell Elem**	**Hudlow Elem**	**Hughes Elem**	**Johnson Primary**	**Kellond Elem**	**Lawrence 3-8**
Daily 5																	
Data Analysis	*	*					*	*	*		*	*		*		*	
Davis Span Immersion Model																	
Debbie Miller Literacy																	
Department/Team Mtgs							*										
Depth of Knowledge																	
Differentiated Instruction																	
DRA										*		*					
EEI										*							
Elementary Leadership			*														
Elements of Literature																	
ELL																	
Emergency Plan												*					
Engineering is Elementary																	
EOY Data & Evaluation																	
EPI Pens																	
eSource												*	*		*		
Evolution of Kindness																	
Expeditionary Learning														*			
Expert Groups																	
Formative Assessment							*										
Galileo									*								
GATE																	
GLSEN																	
Grade Level Data																	
Grade Level/Team Mtgs		*			*	*			*			*					
GSRR & Discipline			*														
Guided Reading Strategies													*				
Handle w/ Care Strategies																	
Harcourt Training															*		
Harry Wong - The Eff Tchr																	
IB and CAP																	
IEP Training																	
Inclusion Model													*				
Increasing Rigor																	
Instructional Calendar							*										
Interactive Notebooks																	
Interdisciplinary Planning																	
Interventions - Tier 1,2,3							*		*								
Interventions															*	*	
Investigations Support															*		

Professional Development activity	**Drachman Elem**	**Dunham Elem**	**Erickson Elem**	**Ford Elem**	**Fruchthendler Elem**	**Gale Elem**	**Gridley MS**	**Grijalva Elem**	**Henry Elem**	**Holladay Elem**	**Hollinger K-8**	**Howell Elem**	**Hudlow Elem**	**Hughes Elem**	**Johnson Primary**	**Kellond Elem**	**Lawrence 3-8**
Job-Embedded Observ																	
Kind Kids School																	
Korean Cultural Awareness																	
Language Acquisition																	
Leadership Points Mtg					*												
Lesson Design																	
Literacy	*																
Love & Logic Training													*				
Love of Reading																	
Lucy Caulkins Writing																	
MAC-Ro Math			*														
Magnet Curr Mapping																	
Magnet Overview & Focus										*							
Marzano Strategies													*				
Masonic Model Asst Prog		*															
Math	*										*	*				*	
Math Across Curriculum																	
Math Habits																	
Math Interventions																	
McKinney Vento Trng																	
Meaningful Work																	
Mindfulness/Social Emotional													*				
Mission/Vision/Goals						*					*		*			*	
MobyMath																	
Models of Teaching																	
Motor Act. For Testing												*					
MSSI																	
Multicultural																	
New Tech Network																	
Next Chapter																	
No Excuses University																	
Number Sense & Oper																	
OMA																	
PARCC																	
Parental Access Bulletin Bd																	
PBIS									*		*	*					
Peer Observ Protocol																	
Plato																	
PLC	*	*			*						*		*		*		
Poll Everywhere																	
Professional Boundaries																	

Professional Development activity	**Drachman Elem**	**Dunham Elem**	**Erickson Elem**	**Ford Elem**	**Fruchthendler Elem**	**Gale Elem**	**Gridley MS**	**Grijalva Elem**	**Henry Elem**	**Holladay Elem**	**Hollinger K-8**	**Howell Elem**	**Hudlow Elem**	**Hughes Elem**	**Johnson Primary**	**Kellond Elem**	**Lawrence 3-8**
Promethean Bd Trng																	
Quadrant Teaching																	
Questioning & DOK																	
Questioning Strategies															*		
Rdg & Math Assess & Intrv															*		
Reading Strategies																	
Recess & Playgrd Trng																	
Reggio Leadership Team																	
Restorative Practices																	
Retention Policy			*														
Rltshps & Comm in Clssrm																	
Running Records																	
Save a Heart Training																	
School Climate																	
School Improvement Plan											*						
School Letter Grade Trng																	
Science Inquiry																	
Science Olympiad																	
Second Semester Planning				*													
SFA Component Mtgs																	
SHAC Meeting		*															
SLP																	
SMART Goal Develop																	
Social/Emotional Climate																	
Socratic Seminar																	
Spanish EXITO Protocols																	
Special Education - Topics									*								
SQ3R Reading Strategies																	
Standards & Lesson Design																	
Standards Based Obj																	
Standford 10 Prep														*			
STEM																	
Strategic Instrl Planning																	
Strategies & Common Lang.																	
Stud Achiev Strategies		*															
Student Engagement											*						*
Study Buddies																	
SuccessMaker			*	*						*	*			*	*	*	
Survey Monkey																	
Systs Thkg - Multi-Tiered																	
Systs Thkg -Proj Based Lrng																	

Professional Development activity	**Drachman Elem**	**Dunham Elem**	**Erickson Elem**	**Ford Elem**	**Fruchthendler Elem**	**Gale Elem**	**Gridley MS**	**Grijalva Elem**	**Henry Elem**	**Holladay Elem**	**Hollinger K-8**	**Howell Elem**	**Hudlow Elem**	**Hughes Elem**	**Johnson Primary**	**Kellond Elem**	**Lawrence 3-8**
TAT Procedures				*													
Teaching Reading Effectively															*		
Teachscape	*	*		*	*	*		*					*	*	*	*	
Technology Integration			*														
Technology Update																	
TEP Home Energy Prog																	
Test Taking Strategies						*											
Thematic Instruction																	
Thinking Maps																	
Title I Plan/Update								*		*		*	*				
Unitary Status Plan	*	*										*					
UNRAAVEL Rdg in Cont																	
Vocabulary															*		
Volunteer DIT Meeting					*												
Walkthroughs - various topics																	*
Waterford																	
WIP Lesson Plans																	
Writer's Workshop																	
Writing Process												*			*		
Writing Prompts&Scoring																	
Zoo Phonics															*		

Professional Development activity	**Lineweaver Elem**	**Lynn Urquides Elem**	**Magee MS**	**Maldonado Elem**	**Mansfeld MS**	**Manzo Elem**	**Marshall Elem**	**Mary Meredith K-12**	**Maxwell MS**	**McCorkle K-8**	**Miles K-8**	**Miller Elem**	**Mission View Elem**	**Myers Ganoung Elem**	**Ochoa Elem**	**Palo Verde HS**	**Pistor MS**	**Project MORE HS**
212°																		
301 PLC	*	*	*	*	*	*		*		*	*	*	*	*		*		*
Acad Foci - Math, Rdg, Wrtg																		
Acad Tchr/Parent Team				*									*					
Academic Vocabulary																		
Academic Writing																		*
active Participation Strat										*								
active Shooter Training																		
AIMS	*	*	*	*	*	*			*		*	*						
Anchor Charts w/ AES										*								
Anti-Bullying												*						
Art																		

Professional Development activity	**Lineweaver Elem**	**Lynn Urquides Elem**	**Magee MS**	**Maldonado Elem**	**Mansfeld MS**	**Manzo Elem**	**Marshall Elem**	**Mary Meredith K-12**	**Maxwell MS**	**McCorkle K-8**	**Miles K-8**	**Miller Elem**	**Mission View Elem**	**Myers Ganoung Elem**	**Ochoa Elem**	**Palo Verde HS**	**Pistor MS**	**Project MORE HS**
Assessing Reading									*									
ATI	*	*	*	*		*	*			*	*	*	*		*	*		*
AVID																*		
AZ K-12 Camp Plug & Play																		
AZ Learns Letter Grade																		
Balanced Literacy																		
Balanced Math																		
Behavior																		
Beyond Bridging																		
Beyond Textbooks																		
Budgeting/Staffing	*											*						
C Danielson Training	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*
Century 21 Tutoring																		
Child Assistance Team												*						
CIP																		
Circle of Control																		
Classroom Assessment																*		
Collaborative Planning																		
Collective Inquiry																		
Common Core														*				
Common Core - ELA	*					*						*		*				
Common Core - Intel Math														*				
Common Core - Pthwys Rdg												*						
Common Core - Spkg & Lstg																		
Common Core - Writing																		
Communication																		
Community Building																		
Cornell Notes																*		
Corr of Highly Eff Schs									*									
CPS Training	*																	
Critical Friends																		
Culturally Resp Practices			*							*		*						
Culture of Learning																*		
Curr Dev/ Planning																		
Cynthia Lee Math																		
Daily 5																		
Data Analysis	*	*	*			*	*	*	*	*	*	*	*			*		*
Davis Span Immersion Model																		
Debbie Miller Literacy																		
Department/Team Mtgs					*			*								*		
Depth of Knowledge																		

Professional Development activity	**Lineweaver Elem**	**Lynn Urquides Elem**	**Magee MS**	**Maldonado Elem**	**Mansfeld MS**	**Manzo Elem**	**Marshall Elem**	**Mary Meredith K-12**	**Maxwell MS**	**McCorkle K-8**	**Miles K-8**	**Miller Elem**	**Mission View Elem**	**Myers Ganoung Elem**	**Ochoa Elem**	**Palo Verde HS**	**Pistor MS**	**Project MORE HS**
Differentiated Instruction					*													
DRA																		
EEI						*			*				*					
Elementary Leadership																		
Elements of Literature																		
ELL																		
Emergency Plan																		
Engineering is Elementary																		
EOY Data & Evaluation																		
EPI Pens																		
eSource																		
Evolution of Kindness		*																
Expeditionary Learning																		
Expert Groups																		
Formative Assessment									*							*		*
Galileo						*												
GATE					*													
GLSEN					*													
Grade Level Data																		
Grade Level/Team Mtgs											*	*		*				
GSRR & Discipline																		
Guided Reading Strategies										*								
Handle w/ Care Strategies								*										
Harcourt Training																		
Harry Wong - The Eff Tchr																		
IB and CAP																		
IEP Training								*										
Inclusion Model																		
Increasing Rigor																		
Instructional Calendar																		
Interactive Notebooks																		
Interdisciplinary Planning																		
Interventions - Tier 1,2,3																		
Interventions	*	*				*		*								*		
Investigations Support																		
Job-Embedded Observ																		
Kind Kids School														*				
Korean Cultural Awareness																		
Language Acquisition															*			
Leadership Points Mtg										*								
Lesson Design																		

Professional Development activity	**Lineweaver Elem**	**Lynn Urquides Elem**	**Magee MS**	**Maldonado Elem**	**Mansfeld MS**	**Manzo Elem**	**Marshall Elem**	**Mary Meredith K-12**	**Maxwell MS**	**McCorkle K-8**	**Miles K-8**	**Miller Elem**	**Mission View Elem**	**Myers Ganoung Elem**	**Ochoa Elem**	**Palo Verde HS**	**Pistor MS**	**Project MORE HS**
Literacy															*			*
Love & Logic Training																		
Love of Reading																		
Lucy Caulkins Writing						*												
MAC-Ro Math																		
Magnet Curr Mapping																		
Magnet Overview & Focus																*		
Marzano Strategies																		
Masonic Model Asst Prog																		
Math		*		*		*	*			*								*
Math Across Curriculum																		
Math Habits																		
Math Interventions																		
McKinney Vento Trng	*							*				*	*					
Meaningful Work																*		
Mindfulness/Social Emotional																		
Mission/Vision/Goals																		*
MobyMath																		
Models of Teaching																		
Motor Act. For Testing																		
MSSI																		
Multicultural									*									
New Tech Network										*								
Next Chapter																		
No Excuses University																		
Number Sense & Oper																		
OMA																		
PARCC														*				
Parental Access Bulletin Bd																		
PBIS			*	*				*				*						*
Peer Observ Protocol																		
Plato																		*
PLC	*		*	*					*		*	*				*		*
Poll Everywhere																		
Professional Boundaries																		*
Promethean Bd Trng									*									
Quadrant Teaching																		
Questioning & DOK																		
Questioning Strategies		*						*		*								
Rdg & Math Assess & Intrv																		
Reading Strategies							*					*						

Professional Development activity	**Lineweaver Elem**	**Lynn Urquides Elem**	**Magee MS**	**Maldonado Elem**	**Mansfeld MS**	**Manzo Elem**	**Marshall Elem**	**Mary Meredith K-12**	**Maxwell MS**	**McCorkle K-8**	**Miles K-8**	**Miller Elem**	**Mission View Elem**	**Myers Ganoung Elem**	**Ochoa Elem**	**Palo Verde HS**	**Pistor MS**	**Project MORE HS**
Recess & Playgrd Trng																		
Reggio Leadership Team															*			
Restorative Practices																		
Retention Policy																		
Rltshps & Comm in Clssrm																		
Running Records																		
Save a Heart Training																		
School Climate																		
School Improvement Plan																		
School Letter Grade Trng		*	*															
Science Inquiry																		
Science Olympiad																		
Second Semester Planning																		
SFA Component Mtgs		*																
SHAC Meeting																		
SLP																		*
SMART Goal Develop																		
Social/Emotional Climate															*			
Socratic Seminar																*		
Spanish EXITO Protocols																		
Special Education - Topics																		
SQ3R Reading Strategies												*						
Standards & Lesson Design						*												
Standards Based Obj						*												
Standford 10 Prep	*																	
STEM					*													
Strategic Instrl Planning										*		*						
Strategies & Common Lang.															*			
Stud Achiev Strategies																		
Student Engagement				*					*	*								
Study Buddies																		
SuccessMaker		*								*	*	*	*					
Survey Monkey																		
Systs Thkg - Multi-Tiered																		
Systs Thkg -Proj Based Lrng																		
TAT Procedures																		
Teaching Reading Effectively																		
Teachscape	*	*		*	*						*	*			*			
Technology Integration								*										
Technology Update																		
TEP Home Energy Prog						*												

Professional Development activity	**Lineweaver Elem**	**Lynn Urquides Elem**	**Magee MS**	**Maldonado Elem**	**Mansfeld MS**	**Manzo Elem**	**Marshall Elem**	**Mary Meredith K-12**	**Maxwell MS**	**McCorkle K-8**	**Miles K-8**	**Miller Elem**	**Mission View Elem**	**Myers Ganoung Elem**	**Ochoa Elem**	**Palo Verde HS**	**Pistor MS**	**Project MORE HS**
Test Taking Strategies														*				
Thematic Instruction														*				
Thinking Maps																		
Title I Plan/Update	*		*	*								*						
Unitary Status Plan		*		*								*						
UNRAAVEL Rdg in Cont																		
Vocabulary																		
Volunteer DIT Meeting																		
Walkthroughs - various topics																		
Waterford										*								
WIP Lesson Plans												*						
Writer's Workshop																		
Writing Process																		*
Writing Prompts&Scoring	*			*			*				*			*				
Zoo Phonics																		

Professional Development activity	**Pueblo Gardens K-8**	**Pueblo HS**	**Rincon HS**	**Roberts Naylor K-8**	**Robins K-8**	**Robison Elem**	**Rose K-8**	**Sabino HS**	**Safford K-8**	**Sahuaro HS**	**Santa Rita HS**	**Secrist MS**	**Sewell Elem**	**Soleng Tom Elem**	**Steele Elem**	**TAP HS**	**Tolson Elem**	**Tucson HS**
212°																		
301 PLC	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*
Acad Foci - Math, Rdg, Wrtg																		
Acad Tchr/Parent Team																		
Academic Vocabulary			*															
Academic Writing																		
active Participation Strat																*		
active Shooter Training																		
AIMS	*				*		*	*	*	*		*	*	*		*	*	*
Anchor Charts w/ AES																		
Anti-Bullying																		
Art																		
Assessing Reading																		
ATI	*	*			*	*	*		*	*	*	*	*	*		*	*	*
AVID												*						
AZ K-12 Camp Plug & Play																		
AZ Learns Letter Grade							*											
Balanced Literacy																		

Professional Development activity	**Pueblo Gardens K-8**	**Pueblo HS**	**Rincon HS**	**Roberts Naylor K-8**	**Robins K-8**	**Robison Elem**	**Rose K-8**	**Sabino HS**	**Safford K-8**	**Sahuaro HS**	**Santa Rita HS**	**Secrist MS**	**Sewell Elem**	**Soleng Tom Elem**	**Steele Elem**	**TAP HS**	**Tolson Elem**	**Tucson HS**
Balanced Math																		
Behavior																		
Beyond Bridging													*					
Beyond Textbooks																		
Budgeting/Staffing																		
C Danielson Training	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Century 21 Tutoring																		
Child Assistance Team							*							*				
CIP			*													*		
Circle of Control																		
Classroom Assessment																		
Collaborative Planning																		
Collective Inquiry									*									
Common Core							*				*							
Common Core - ELA																*		
Common Core - Intel Math																		
Common Core - Pthwys Rdg																		
Common Core - Spkg & Lstg																		
Common Core - Writing				*											*			
Communication												*						
Community Building									*			*						*
Cornell Notes		*					*											
Corr of Highly Eff Schs																		
CPS Training																		
Critical Friends																		
Culturally Resp Practices																		
Culture of Learning									*									
Curr Dev/ Planning											*			*		*		*
Cynthia Lee Math																		
Daily 5																		
Data Analysis	*			*		*		*	*	*	*			*		*	*	
Davis Span Immersion Model																		
Debbie Miller Literacy																		
Department/Team Mtgs		*	*					*	*	*								*
Depth of Knowledge																		
Differentiated Instruction							*											
DRA																		
EEI																	*	
Elementary Leadership																		
Elements of Literature																		
ELL																		

Professional Development activity	**Pueblo Gardens K-8**	**Pueblo HS**	**Rincon HS**	**Roberts Naylor K-8**	**Robins K-8**	**Robison Elem**	**Rose K-8**	**Sabino HS**	**Safford K-8**	**Sahuaro HS**	**Santa Rita HS**	**Secrist MS**	**Sewell Elem**	**Soleng Tom Elem**	**Steele Elem**	**TAP HS**	**Tolson Elem**	**Tucson HS**
Emergency Plan																		
Engineering is Elementary																		
EOY Data & Evaluation																		
EPI Pens																		
eSource																		
Evolution of Kindness																		
Expeditionary Learning																		
Expert Groups															*			
Formative Assessment		*																
Galileo																		
GATE																	*	
GLSEN																		
Grade Level Data																		
Grade Level/Team Mtgs					*		*						*	*				
GSRR & Discipline																		
Guided Reading Strategies	*						*											
Handle w/ Care Strategies																		
Harcourt Training																		
Harry Wong - The Eff Tchr																		
IB and CAP						*			*									
IEP Training											*							
Inclusion Model																		
Increasing Rigor								*										
Instructional Calendar																		
Interactive Notebooks	*																	
Interdisciplinary Planning																		
Interventions - Tier 1,2,3																		
Interventions						*												
Investigations Support																		
Job-Embedded Observ			*															
Kind Kids School																		
Korean Cultural Awareness									*									
Language Acquisition																		
Leadership Points Mtg											*							
Lesson Design																		
Literacy																		
Love & Logic Training																		
Love of Reading																		*
Lucy Caulkins Writing																		
MAC-Ro Math																		
Magnet Curr Mapping																		

Professional Development activity	**Pueblo Gardens K-8**	**Pueblo HS**	**Rincon HS**	**Roberts Naylor K-8**	**Robins K-8**	**Robison Elem**	**Rose K-8**	**Sabino HS**	**Safford K-8**	**Sahuaro HS**	**Santa Rita HS**	**Secrist MS**	**Sewell Elem**	**Soleng Tom Elem**	**Steele Elem**	**TAP HS**	**Tolson Elem**	**Tucson HS**
Magnet Overview & Focus						*												
Marzano Strategies					*													
Masonic Model Asst Prog																		
Math																		
Math Across Curriculum																		
Math Habits																		
Math Interventions																		
McKinney Vento Trng				*														
Meaningful Work																		
Mindfulness/Social Emotional																		
Mission/Vision/Goals	*								*	*	*			*				
MobyMath																	*	
Models of Teaching												*						
Motor Act. For Testing																		
MSSI																		
Multicultural																		
New Tech Network																		
Next Chapter									*									
No Excuses University																		
Number Sense & Oper																		
OMA													*					
PARCC																		
Parental Access Bulletin Bd								*										
PBIS		*		*	*	*							*			*	*	
Peer Observ Protocol			*															
Plato																		
PLC		*	*		*	*				*			*			*		
Poll Everywhere								*										
Professional Boundaries																		
Promethean Bd Trng													*					
Quadrant Teaching																		
Questioning & DOK			*															
Questioning Strategies		*																
Rdg & Math Assess & Intrv																		
Reading Strategies																*		
Recess & Playgrd Trng														*	*			
Reggio Leadership Team																		
Restorative Practices											*							
Retention Policy																		
Rltshps & Comm in Clssrm																		
Running Records																		

Professional Development activity	**Pueblo Gardens K-8**	**Pueblo HS**	**Rincon HS**	**Roberts Naylor K-8**	**Robins K-8**	**Robison Elem**	**Rose K-8**	**Sabino HS**	**Safford K-8**	**Sahuaro HS**	**Santa Rita HS**	**Secrist MS**	**Sewell Elem**	**Soleng Tom Elem**	**Steele Elem**	**TAP HS**	**Tolson Elem**	**Tucson HS**
Save a Heart Training														*				
School Climate										*	*							
School Improvement Plan																		
School Letter Grade Trng																		
Science Inquiry																		
Science Olympiad																		
Second Semester Planning																		
SFA Component Mtgs																		
SHAC Meeting																		
SLP																		
SMART Goal Develop																		
Social/Emotional Climate																		
Socratic Seminar		*																
Spanish EXITO Protocols																		
Special Education - Topics											*							
SQ3R Reading Strategies																		
Standards & Lesson Design																		
Standards Based Obj																		
Standford 10 Prep																		
STEM																		
Strategic Instrl Planning																		
Strategies & Common Lang.																		
Stud Achiev Strategies																		
Student Engagement	*								*							*		
Study Buddies																		
SuccessMaker							*		*				*	*			*	
Survey Monkey								*										
Systs Thkg - Multi-Tiered																		
Systs Thkg -Proj Based Lrng																		
TAT Procedures																		
Teaching Reading Effectively																		
Teachscape	*	*	*	*				*	*	*			*					*
Technology Integration																		
Technology Update													*				*	
TEP Home Energy Prog																		
Test Taking Strategies						*	*						*					
Thematic Instruction																		
Thinking Maps																		
Title I Plan/Update						*							*		*			
Unitary Status Plan																		
UNRAAVEL Rdg in Cont		*																

Professional Development activity	**Pueblo Gardens K-8**	**Pueblo HS**	**Rincon HS**	**Roberts Naylor K-8**	**Robins K-8**	**Robison Elem**	**Rose K-8**	**Sabino HS**	**Safford K-8**	**Sahuaro HS**	**Santa Rita HS**	**Secrist MS**	**Sewell Elem**	**Soleng Tom Elem**	**Steele Elem**	**TAP HS**	**Tolson Elem**	**Tucson HS**
Vocabulary																		
Volunteer DIT Meeting																		
Walkthroughs - various topics					*		*											
Waterford																	*	
WIP Lesson Plans																		
Writer's Workshop						*												
Writing Process															*			
Writing Prompts&Scoring															*		*	
Zoo Phonics																		

Professional Development activity	**Tully Elem**	**University HS**	**Vail MS**	**Valencia MS**	**Van Buskirk Elem**	**Vesey Elem**	**Warren Elem**	**Wheeler Elem**	**White Elem**	**Whitmore Elem**	**Wright Elem**	**81 Total Schools**	**% Total Schools**
212°												1	1%
301 PLC	*	*	*	*		*	*	*	*	*	*	71	88%
Acad Foci - Math, Rdg, Wrtg												1	1%
Acad Tchr/Parent Team									*			6	7%
Academic Vocabulary												1	1%
Academic Writing												1	1%
active Participation Strat												3	4%
active Shooter Training												1	1%
AIMS	*		*	*		*			*			46	57%
Anchor Charts w/ AES												1	1%
Anti-Bullying												1	1%
Art											*	1	1%
Assessing Reading												2	2%
ATI	*		*	*	*			*		*		48	59%
AVID				*								4	5%
AZ K-12 Camp Plug & Play												1	1%
AZ Learns Letter Grade												1	1%
Balanced Literacy					*							1	1%
Balanced Math					*							1	1%
Behavior												2	2%
Beyond Bridging												1	1%
Beyond Textbooks												1	1%
Budgeting/Staffing												2	2%
C Danielson Training	*	*	*	*	*	*	*	*	*	*	*	78	96%
Century 21 Tutoring									*			1	1%

Professional Development activity	**Tully Elem**	**University HS**	**Vail MS**	**Valencia MS**	**Van Buskirk Elem**	**Vesey Elem**	**Warren Elem**	**Wheeler Elem**	**White Elem**	**Whitmore Elem**	**Wright Elem**	**81 Total Schools**	**% Total Schools**
Child Assistance Team						*	*					6	7%
CIP												2	2%
Circle of Control												1	1%
Classroom Assessment												1	1%
Collaborative Planning												1	1%
Collective Inquiry												1	1%
Common Core					*							6	7%
Common Core - ELA												6	7%
Common Core - Intel Math												2	2%
Common Core - Pthwys Rdg												2	2%
Common Core - Spkg & Lstg												1	1%
Common Core - Writing			*									3	4%
Communication												1	1%
Community Building												4	5%
Cornell Notes												3	4%
Corr of Highly Eff Schs												1	1%
CPS Training												4	5%
Critical Friends												1	1%
Culturally Resp Practices					*							4	5%
Culture of Learning												2	2%
Curr Dev/ Planning					*							8	10%
Cynthia Lee Math												1	1%
Daily 5												1	1%
Data Analysis	*			*	*	*					*	44	54%
Davis Span Immersion Model												1	1%
Debbie Miller Literacy												1	1%
Department/Team Mtgs		*		*	*							15	19%
Depth of Knowledge					*							1	1%
Differentiated Instruction												3	4%
DRA												2	2%
EEI				*	*							7	9%
Elementary Leadership												1	1%
Elements of Literature												1	1%
ELL												1	1%
Emergency Plan												1	1%
Engineering is Elementary											*	1	1%
EOY Data & Evaluation												2	2%
EPI Pens												1	1%
eSource												3	4%
Evolution of Kindness												1	1%
Expeditionary Learning												1	1%
Expert Groups												1	1%

Professional Development activity	**Tully Elem**	**University HS**	**Vail MS**	**Valencia MS**	**Van Buskirk Elem**	**Vesey Elem**	**Warren Elem**	**Wheeler Elem**	**White Elem**	**Whitmore Elem**	**Wright Elem**	**81 Total Schools**	**% Total Schools**
Formative Assessment			*									6	7%
Galileo	*											3	4%
GATE												2	2%
GLSEN												1	1%
Grade Level Data				*								2	2%
Grade Level/Team Mtgs	*			*	*	*	*			*		21	26%
GSRR & Discipline												1	1%
Guided Reading Strategies												5	6%
Handle w/ Care Strategies												1	1%
Harcourt Training												1	1%
Harry Wong - The Eff Tchr					*							1	1%
IB and CAP												3	4%
IEP Training							*					4	5%
Inclusion Model												1	1%
Increasing Rigor												1	1%
Instructional Calendar												1	1%
Interactive Notebooks												1	1%
Interdisciplinary Planning												1	1%
Interventions - Tier 1,2,3												3	4%
Interventions						*	*	*				11	14%
Investigations Support												1	1%
Job-Embedded Observ												1	1%
Kind Kids School												1	1%
Korean Cultural Awareness												1	1%
Language Acquisition												1	1%
Leadership Points Mtg												3	4%
Lesson Design												1	1%
Literacy												5	6%
Love & Logic Training												1	1%
Love of Reading												1	1%
Lucy Caulkins Writing												1	1%
MAC-Ro Math												2	2%
Magnet Curr Mapping												1	1%
Magnet Overview & Focus												7	9%
Marzano Strategies					*						*	4	5%
Masonic Model Asst Prog												1	1%
Math								*				12	15%
Math Across Curriculum												1	1%
Math Habits												1	1%
Math Interventions												2	2%
McKinney Vento Trng						*						7	9%
Meaningful Work												1	1%

Professional Development activity	**Tully Elem**	**University HS**	**Vail MS**	**Valencia MS**	**Van Buskirk Elem**	**Vesey Elem**	**Warren Elem**	**Wheeler Elem**	**White Elem**	**Whitmore Elem**	**Wright Elem**	**81 Total Schools**	**% Total Schools**
Mindfulness/Social Emotional												1	1%
Mission/Vision/Goals												11	14%
MobyMath												1	1%
Models of Teaching												1	1%
Motor Act. For Testing												1	1%
MSSI												1	1%
Multicultural												1	1%
New Tech Network												1	1%
Next Chapter												1	1%
No Excuses University												1	1%
Number Sense & Oper												1	1%
OMA												1	1%
PARCC												1	1%
Parental Access Bulletin Bd												1	1%
PBIS										*	*	21	26%
Peer Observ Protocol												1	1%
Plato												1	1%
PLC	*	*	*				*	*		*		33	41%
Poll Everywhere												1	1%
Professional Boundaries												1	1%
Promethean Bd Trng							*			*		4	5%
Quadrant Teaching												1	1%
Questioning & DOK												2	2%
Questioning Strategies												6	7%
Rdg & Math Assess & Intrv												1	1%
Reading Strategies											*	5	6%
Recess & Playgrd Trng									*			4	5%
Reggio Leadership Team												1	1%
Restorative Practices												1	1%
Retention Policy												1	1%
Rltshps & Comm in Clssrm												1	1%
Running Records												1	1%
Save a Heart Training												1	1%
School Climate												2	2%
School Improvement Plan												1	1%
School Letter Grade Trng												2	2%
Science Inquiry											*	1	1%
Science Olympiad												1	1%
Second Semester Planning												1	1%
SFA Component Mtgs												1	1%
SHAC Meeting												1	1%
SLP												1	1%

Professional Development activity	**Tully Elem**	**University HS**	**Vail MS**	**Valencia MS**	**Van Buskirk Elem**	**Vesey Elem**	**Warren Elem**	**Wheeler Elem**	**White Elem**	**Whitmore Elem**	**Wright Elem**	**81 Total Schools**	**% Total Schools**
SMART Goal Develop		*										1	1%
Social/Emotional Climate												1	1%
Socratic Seminar												3	4%
Spanish EXITO Protocols												1	1%
Special Education - Topics												2	2%
SQ3R Reading Strategies												1	1%
Standards & Lesson Design												1	1%
Standards Based Obj												1	1%
Standford 10 Prep												3	4%
STEM	*										*	3	4%
Strategic Instrl Planning												2	2%
Strategies & Common Lang.												1	1%
Stud Achiev Strategies									*			2	2%
Student Engagement												9	11%
Study Buddies												1	1%
SuccessMaker					*	*	*			*		23	28%
Survey Monkey												1	1%
Systs Thkg - Multi-Tiered												1	1%
Systs Thkg -Proj Based Lrng												1	1%
TAT Procedures												2	2%
Teaching Reading Effectively												1	1%
Teachscape					*					*	*	39	48%
Technology Integration												2	2%
Technology Update												3	4%
TEP Home Energy Prog												1	1%
Test Taking Strategies										*		7	9%
Thematic Instruction												1	1%
Thinking Maps												1	1%
Title I Plan/Update						*		*				17	21%
Unitary Status Plan	*											9	11%
UNRAAVEL Rdg in Cont												1	1%
Vocabulary											*	2	2%
Volunteer DIT Meeting												1	1%
Walkthroughs - various topics												6	7%
Waterford												2	2%
WIP Lesson Plans												2	2%
Writer's Workshop												2	2%
Writing Process						*				*		7	9%
Writing Prompts&Scoring			*	*				*			*	15	19%
Zoo Phonics												1	1%

Appendix C

Formulas for Calculating Achievement Gaps and Years to Parity Analysis
Tucson Unified School District
January 2014

Tucson Unified School District's *Unitary Status Plan* requires the staff to work toward the goal of eliminating achievements gaps among student groups. In order to help the district gauge the magnitude of this task, the audit team used formulae to calculate the number of years needed to close the district's achievement gaps at current rates of progress (called "years to parity" in this report). The *AIMS* tests selected for these calculations were reading and mathematics.

To determine the existence and magnitude of achievement gaps among the district's student groups, auditors analyzed *AIMS* test scores for a period of five years to identify achievement gaps. Then, they calculated the number of years necessary to close those gaps—or to achieve parity. The "years to parity" calculation is an estimation of the number of years necessary to close the achievement gap between two groups at current rates of progress.

Simply stated, the years to parity estimates for the district were prepared by calculating, for a grade and subject, the gap between two groups at the beginning and end of a five-year period—2008-09 through 2012-13—to determine the rate of change of the lagging group during that period. The rate of change was then divided into the gap at the end of the period to determine the number of years necessary to close the gap, provided there are no interventions to influence that rate of change. The following student groups were considered in these analyses: African Americans, Asian Americans, Hispanics, Multi-racial, Native Americans, Whites, English language learners (ELL), students with disabilities (Exceptional Ed), and the economically disadvantaged. In most calculations, White students had the highest percentages of students scoring proficient in 2012-13 and were the leading group against which lagging groups were compared. Multi-racial students were the leading group for grades 4 and 5 reading and mathematics, and Asian Americans were the leading group for grade 6 mathematics in 2012-13. The Multi-racial category was established in 2009-10. Therefore, for comparisons involving Multi-racial students, auditors used of four years of data beginning in school year 2009-10 and ending in 2012-13.

Tables containing years to parity calculations are displayed in this appendix. Two cautions are in order regarding the calculations. First, years to parity have limited utility where the leading group has a low or decreasing proficiency rate. In such cases, closing the gap will not solve the overall achievement problem. Second, the calculations in this appendix were based on the most recent proficiency rates available at the time of the audit—those for 2012-13—and the average change in proficiency rates during the period 2008-09 through 2012-13 (2009-10 through 2012-13 in calculations involving Multi-racial students). Proficiency rates may decline or increase. In any event, the calculations must be revised after each subsequent testing period.

Exhibit A.C.1 displays the following calculations related to the performance of selected student groups on the *AIMS* reading tests for school years 2008-09 through 2012-13: (1) rates of students who met or exceeded standard (proficiency), and (2) additional percentages of students who needed a passing score to close the achievement gap with the leading group in 2012-13.

Exhibit A.C.1

***AIMS* Proficiency Rates in Reading Grades 3-8, and 10, by Grade and Group, Years to Parity**
Tucson Unified School District
January 2014

Student Group	Percent Meeting or Exceeding Standard on *AIMS* Tests					Average Annual Gain/Loss In Relation to the Leading Group*	Years to parity (Years to close the achievement gap)
	2008-09	2009-10	2010-11	2011-12	2012-13		
Reading, Grade 3							
White	79	77	79	78	78	N/A	N/A
Hispanic	63	65	65	63	69	1.8	5.14
African American	57	52	60	54	58	0.5	40.0
Asian American	74	70	68	75	72	-0.3	Never
ELL	24	15	9	11	23	0.0	Never
Exceptional Ed	36	31	30	27	26	-2.3	Never
FARM	63	61	63	61	62	0.0	Never
Multi-racial	N/A	78	79	80	73	-2.0	Never
Native American	61	59	56	47	55	-1.3	Never
Reading, Grade 4							
Multi-racial	N/A	74	79	82	87	N/A	N/A
Asian American	N/A	65	70	76	81	1.0	6.0
ELL	N/A	7	15	12	24	1.3	47.3
African American	N/A	53	53	62	60	-2.0	Never
Econ Disadvantaged	N/A	59	65	66	67	-1.7	Never
Exceptional Ed	N/A	29	30	30	32	-3.3	Never
Hispanic	N/A	62	69	68	69	-2.0	Never
Native American	N/A	56	59	50	61	-2.7	Never
White	N/A	76	78	81	82	-2.3	Never
Reading, Grade 5							
Multi-racial	N/A	77	82	81	87	N/A	N/A
African American	N/A	51	61	57	65	1.3	16.5
ELL	N/A	2	13	9	21	3.0	22.0
Asian American	N/A	71	67	75	72	-3.0	Never
Econ Disadvantaged	N/A	63	68	70	70	-1.0	Never
Exceptional Ed	N/A	26	35	28	32	-1.3	Never
Hispanic	N/A	64	71	73	73	-0.3	Never
Native American	N/A	61	63	63	64	-2.3	Never
White	N/A	80	84	81	81	-3.0	Never
Reading, Grade 6							
White	76	**79**	82	80	79	N/A	N/A
Multi-racial	N/A	**70**	77	78	78	2.7	0.4
Hispanic	54	63	69	69	71	3.5	2.3
Econ Disadvantaged	54	60	66	66	68	2.8	4.0
Native American	45	59	57	58	62	3.5	4.9
African American	47	51	58	58	57	1.8	12.6
ELL	6	1	2	1	15	1.5	42.7
Exceptional Ed	22	25	28	31	27	-0.5	Never
Asian American	76	70	78	65	78	-0.3	Never

Exhibit A.C.1 (continued)
***AIMS* Proficiency Rates in Reading Grades 3-8, and 10, by Grade and Group, Years to Parity**
Tucson Unified School District
January 2014

Student Group	Percent Meeting or Exceeding Standard on *AIMS* Tests					Average Annual Gain/Loss In Relation to the Leading Group*	Years to parity (Years to close the achievement gap)
	2008-09	2009-10	2010-11	2011-12	2012-13		
Reading, Grade 7							
White	75	**81**	86	84	85	N/A	N/A
Multi-racial	N/A	**74**	76	77	85	1.75	At Parity
Hispanic	59	62	70	72	78	2.3	3.1
Native American	51	55	65	58	71	2.5	5.6
Econ Disadvantaged	57	59	67	70	74	1.8	6.3
Exceptional Ed	22	28	30	34	42	2.5	17.2
ELL	3	4	5	4	16	0.8	92.0
African American	60	54	58	62	67	-0.8	Never
Asian American	74	65	69	76	69	-3.8	Never
Reading, Grade 8							
White	75	**75**	75	74	76	N/A	N/A
Hispanic	53	58	55	58	60	1.5	10.7
Exceptional Ed	19	19	19	22	22	0.5	108.0
Native American	44	48	45	52	46	0.3	120.0
Econ Disadvantaged	51	55	52	55	57	1.3	15.2
African American	53	54	48	48	49	-1.3	Never
Asian American	72	70	57	68	66	-1.8	Never
ELL	3	2	2	0	3	-0.3	Never
Multi-racial	N/A	**78**	65	53	70	-3.0	Never
Reading, Grade 10							
White	83	**85**	84	87	91	N/A	N/A
Multi-racial	N/A	**73**	80	82	86	2.3	2.1
Hispanic	62	69	69	75	77	1.8	8.0
Econ Disadvantaged	60	63	63	70	73	1.3	14.4
Exceptional Ed	23	28	28	33	35	1.0	56.0
African American	60	53	62	60	65	-0.8	Never
Asian American	77	76	67	68	66	-4.8	Never
ELL	7	4	2	7	11	-1.0	Never
Native American	66	65	58	68	69	-1.3	Never

Notes:
* "leading group" refers to the ethnic subgroup that had the highest percentage of students scoring at or above proficient.
Average annual gains shown are rounded up to one decimal place.
Negative number indicates that the gap will never close at rates of progress recorded during the period 2008-09 through 2012-13 (2009-10 through 2012-13 for Multi-racial students).
ELL = English language learners. Exceptional Ed = Students with disabilities.
Econ(omically) Disadvantaged = Eligible for Free and Reduced Meals. N/A = Not applicable.

Source: Annual AIMS results by subgroup, grade, and subject provided by TUSD Department of Accountability and Research. Achievement Data -AIMS_5Yrs_District_ELL_SPED_GATE_ by subject.xlsx

Exhibit A.C.2 displays the following calculations related to the performance of selected student groups on the *AIMS* mathematics tests for school years 2008-09 through 2012-13: (1)rates of students who met or exceeded standard (proficiency), and (2) additional percentages of students who needed a passing score to close the achievement gap with the leading group in 2012-13.

Exhibit A.C.2

***AIMS* Proficiency Rates in Mathematics Grades 3-8, and 10, by Grade and Group, Years to Parity**
Tucson Unified School District
January 2014

Student Group	Percent Meeting or Exceeding Standard on *AIMS* Tests					Annualized Gain/Loss in Relation to Leading Group	Years to parity
	2008-09	2009-10	2010-11	2011-12	2012-13		
Mathematics, Grade 3							
White	79	69	71	72	71	N/A	N/A
Hispanic	61	52	58	57	57	1.0	14.0
Econ Disadvantaged	60	50	55	54	54	0.5	34.0
Native American	55	43	46	39	49	0.5	44.0
ELL	29	16	12	18	24	0.8	62.7
African American	52	40	48	44	41	-0.8	Never
Asian American	80	64	64	71	68	-1.0	Never
Exceptional Ed	40	30	29	26	26	-1.5	Never
Multi-racial	N/A	66	75	71	61	-2.3	Never
Mathematics, Grade 4							
Multi-racial	N/A	59	58	70	75	N/A	N/A
African American	N/A	33	41	47	36	-4.3	Never
Asian American	N/A	58	67	67	70	-1.3	Never
Econ Disadvantaged	N/A	45	48	53	49	-4.0	Never
ELL	N/A	8	12	10	17	-2.3	Never
Exceptional Ed	N/A	21	22	21	21	-5.3	Never
Hispanic	N/A	47	51	56	51	-4.0	Never
Native American	N/A	37	43	43	36	-5.7	Never
White	N/A	66	65	68	69	-4.3	Never
Mathematics, Grade 5							
Multi-racial	N/A	53	61	56	67	N/A	N/A
African American	N/A	36	24	34	42	-2.7	Never
Asian American	N/A	63	54	67	65	-4.0	Never
Econ Disadvantaged	N/A	41	44	49	49	-2.0	Never
ELL	N/A	5	7	7	15	-1.3	Never
Exceptional Ed	N/A	18	18	16	17	-5.0	Never
Hispanic	N/A	44	46	52	53	-1.7	Never
Native American	N/A	34	39	38	34	-4.7	Never
White	N/A	64	66	65	63	-5.0	Never
Mathematics, Grade 6							
Asian American	71	**51**	60	52	66	N/A	N/A
Hispanic	46	29	34	39	47	1.5	12.7
Native American	36	25	22	29	36	1.3	24.0
ELL	7	1	1	0	10	2.0	28.0
Econ Disadvantaged	46	27	31	37	44	0.8	29.3
Exceptional Ed	15	8	10	12	12	0.5	108.0
White	71	48	56	57	58	-2.0	Never
African American	36	20	27	26	31	0.0	Never
Multi-racial	N/A	**51**	42	57	47	-6.3	Never

Exhibit A.C.2 (continued)
AIMS Proficiency Rates in Mathematics Grades 3-8, and 10, by Grade and Group, Years to Parity
Tucson Unified School District
January 2014

Student Group	Percent Meeting or Exceeding Standard on *AIMS* Tests					Annualized Gain/Loss in Relation to Leading Group	Years to parity
	2008-09	2009-10	2010-11	2011-12	2012-13		
Mathematics, Grade 7							
White	76	59	59	60	65	N/A	N/A
Multi-racial	N/A	45	44	45	58	2.3	3.0
Hispanic	56	33	36	39	48	0.8	22.7
Native American	43	23	31	29	36	1.0	29.0
ELL	10	4	5	0	6	1.8	33.7
Exceptional Ed	21	11	11	10	14	4.0	51.0
Econ Disadvantaged	55	31	33	37	45	0.3	80.0
African American	56	22	27	30	34	-2.8	Never
Asian American	78	55	54	55	60	-1.8	Never
Mathematics, Grade 8							
White	69	**56**	55	54	58	N/A	N/A
Hispanic	45	36	30	34	40	1.5	12.0
Econ Disadvantaged	43	32	27	32	37	1.3	16.8
African American	40	30	20	25	34	1.3	19.2
ELL	5	5	2	1	2	2.0	28.0
Exceptional Ed	16	11	9	9	11	1.5	31.3
Native American	37	22	21	27	28	0.5	60.0
Asian American	77	62	47	56	53	-3.3	Never
Multi-racial	N/A	**44**	43	40	44	-0.7	Never
Mathematics, Grade 10							
White	79	**67**	68	70	71	N/A	N/A
Multi-racial	N/A	**45**	50	58	60	3.7	3.0
ELL	12	4	6	4	6	0.5	130.0
African American	51	36	38	36	32	-2.8	Never
Asian American	76	65	61	67	58	-2.5	Never
Econ Disadvantaged	57	37	36	40	40	-2.3	Never
Exceptional Ed	20	9	9	13	10	-0.5	Never
Hispanic	58	41	41	44	45	-1.3	Never
Native American	45	37	30	25	33	-1.0	Never

Notes:
Average annual gains shown are rounded up to one decimal place.
Negative number indicates that the gap will never close at rates of progress recorded during the period 2008-09 through 2012-13 (2009-10 through 2012-13 for Multi-racial students). ELL = English language learners. Exceptional Ed = Students with disabilities.
Econ(omically) Disadvantaged = Eligible for Free and Reduced Meals. N/A = Not applicable.

Source: Annual AIMS results by subgroup, grade, and subject provided by TUSD Department of Accountability and Research. Achievement Data -AIMS_5Yrs_District_ELL_SPED_GATE_ by subject.xlsx

Appendix D

List of Documents Reviewed
by the
Tucson Unified School District No. 1 Audit Team

Background
- Background and history of TUSD.docx
- Names and Addresses of Schools.doc
- TUSD Schools and Principals.docx

History
- Background and history of TUSD.docx
- Link to TUSD History.docx

Demographics
- 10 Years of Projections - Alternative Ed Schools.xlsx
- 10 Years of Projections - Elementaries - A to L.xlsx
- 10 Years of Projections - Elementaries - M to Z.xlsx
- 10 Years of Projections - High Schools.xlsx
- 10 Years of Projections - K-8 Schools.xlsx
- 10 Years of Projections - Middle Schools.xlsx
- Districtwide Enrollment and Projections by Grade 2013.xlsx
- Next 10 Years of Projections - District.xlsx

Audit Statement - TUSD
- Audit Statement.doc

Sample Memoranda
- The Express - SSL.pdf
- The Express - SSL.pub
- The Express - SSL.pdf
- The Express - SSL.pub
- African American Student Services Calendar of Events
- Curriculum Connection for August 27 2013.msg
- Curriculum Connection for November 5 2013.msg
- Curriculum Connection for October 8 2013.msg
- Curriculum Connection for October 22 2013.msg
- Curriculum Connection for September 10 2013.msg
- Curriculum Connection for September 24 2013.msg
- Educational Development Support Enrichment Series at GCU.msg
- Friday Secondary Express.pdf
- LEADERSHIP LINK - AUGUST 16 2013.msg
- LEADERSHIP LINK - JULY 26 2013.msg
- LEADERSHIP LINK - NOVEMBER 1 2013.msg
- LEADERSHIP LINK - NOVEMBER 8 2013.msg
- LEADERSHIP LINK - NOVEMBER 15 2013.msg
- LEADERSHIP LINK - NOVEMBER 22 2013.msg
- LEADERSHIP LINK - OCTOBER 4 2013.msg
- LEADERSHIP LINK - OCTOBER 18 2013.msg
- LEADERSHIP LINK - SEPTEMBER 6 2013.msg
- LEADERSHIP LINK - SEPTEMBER 13 2013.msg
- LEADERSHIP LINK - SEPTEMBER 27 2013.msg
- LEADERSHIP LINKS.pdf
- Link to Superintendent Weekly Newlsetters.docx
- Memo_TestingCalendars_09-23-2011.pdf
- Metropolitan Education Commission Crystal Apple Award C…ination Form.docx
- Payroll Processing Winter Info for Express 11-22-13.pdf
- The Secondary Express for 9-13-13 with Attachments.msg
- The Secondary Express for 10-4-13 with Attachments.msg
- The Secondary Express for 10-11-13 with Attachments.msg

Appendix D (continued)
List of Documents Reviewed

The Secondary Express for 11-1-13 with attachments.msg
The Secondary Express with Attachments 8-30-13.msg
The Secondary Express with Attachments for 9-20-13.msg

Mission Statement - District

2012-2013 Superintendent Goals.pdf
Tucson Unified School District - Vision and Core Values.htm

Mission Statement - Schools

Blenman Elementary - Mission and Vision.docx
Booth Fickett K-8 - Goals.docx
Booth Fickett K-8 - Mission.docx
Borton Elementary - Mission.doc
Cavett Elementary - Mission and Goals.docx
Cragin Elementary - Mission and Goals.docx
Davidson Elementary - Mission.pdf
Dodge Middle School - Mission and Goals.docx
Dunham Elementary - Mission.pdf
Erickson Elementary - Mission.docx
Ford Elementary - Mission and Goals.docx
Fruchthendler Elementary - Mission.docx
Grijalva Elementary - Mission.docx
Howell Elementary - Mission.pdf
Hughes Elementary - Vision Statement.doc
Mary Meredith K-12 - Mission and Goals.docx
Miles K-8 - Mission and Goals.pub
Pistor Middle School - Mission.pdf
Rincon High School - Mission.doc
Robins K-8 - Mission.pdf
University High School - Mission.docx

Board Members

List of Board Members with Terms.pdf

Superintendents

List of Superintendents.pdf

Accreditation Reports

AdvanceED - Accreditation - Catalina Magnet HS.pdf
AdvanceEd - Accreditation - Cholla Magnet HS.pdf
AdvanceEd - Accreditation - Howenstine Magnet HS.pdf
AdvanceEd - Accreditation - Mary Meredith K12.pdf
AdvanceEd - Accreditation - Palo Verde Magnet HS.pdf
AdvanceED - Accreditation - Project MORE HS.pdf
AdvanceEd - Accreditation - Pueblo Magnet HS.pdf
AdvanceED - Accreditation - Rincon HS.pdf
AdvanceED - Accreditation - Sabino HS.pdf
AdvanceED - Accreditation - Sahuaro HS.pdf
AdvanceED - Accreditation - Santa Rita HS.pdf
AdvanceED - Accreditation - TeenAge Parent HS.pdf
AdvanceED - Accreditation - Tucson Magnet HS.pdf
AdvanceED - Accreditation - University HS.pdf

Organizational Charts

Culturally Relevant Pedagogy and Instruction Org Chart.pptx
Elementary School Leadership Org Chart SY 2013-2014.pdf
Exceptional Education Org Chart SY 2013-2014.doc
Grants and Partnerships.msg
Health Services Org Chart SY 2013-2014.doc
Interscholastics Org Chart SY 2013-2014.xlsx

Appendix D (continued)
List of Documents Reviewed

Language Acquisition Org Chart SY 2013-2014.doc
Magnet Programs Org Chart SY 2013-2014.doc
OMA Fine Arts Org Chart SY 2013-2014.ppt
School Improvement ORG Chart.docx
School Improvement - Staff and pay.xlsx
Secondary School Leadership Org Chart SY 2013-2014.pub
Teaching and Learning Org Chart SY 2013-2014.docx
Title 1 Org Chart SY 2013-2014.docx
TUSD District Org Chart SY 2013-2014.pdf

Staff and Faculty Handbooks

Blenman Elementary.doc
Bloom Elementary.docx
Booth-Fickett K-8.docx
Borman Elementary.docx
Borton Primary.doc
Cragin Elementary.pdf
Erickson Elementary PBIS.docx
Erickson Elementary.doc
Ford Elementary - Lock Down Directions.doc
Ford Elementary.doc
Holladay Elementary.doc
Hudlow Elementary.doc
Hughes Elementary.doc
Palo Verde Magnet HS.doc
Rincon HS.doc
Robins K-8.docx
Sahuaro HS.pdf
Secrist MS.docx
Tolson Elementary Compact.pub
Tucson Magnet HS.doc
Valencia MS.pdf
Wheeler Elementary School - Student Handbook.pdf

Office of Civil Rights Documents

110413 FINAL supplement to 101513 Report with EXHIBITS (08121080).pdf
Final version of 080213 report to OCR re para 4 (08121170).pdf
Signed copy of Lang Acq Svcs annual report to OCR re Lau.pdf
TUSD Report to OCR 101513 (08121080).pdf

Employee Appraisal Procedures

Administrator_Evaluation.pdf
Counselors_Evaluation_Rubric.pdf
Instructional Specialists_Evaluation_Rubric.pdf
PRINCIPAL EVALUATION_FINAL 07-05-2013.docx
Related Service Provider_Evaluation_Rubric.pdf
TEACHER EVALUATION_FINAL 03-26-2013.docx
Teacher_Evaluation.pdf

Planning Documents

FA Program Elem. Exemplary Budget wo Magnets 2014-2015.xls
FA Program Elem. Mid Range Budget wo Magnets 2014-2015.xlsx
FA Program Elem. Minimal Budget wo Magnets 2014-2015.xlsx
FA Program Grades 6,7,8 Budget wo Magnets 2014-2015.xlsx
Vesey Elementary - Small Group Reading Intervention Lesson Plan.docx

District Improvement Plans

TUSD Continuous Improvement Plan 2013-2014.docx

Appendix D (continued)
List of Documents Reviewed

Curriculum Guides

Air and Weather grade 2 standards alignment.pdf
Algebra1.pdf
Algebra2.pdf
Common_Core_ELA_K-5_Avenues_A-F.pdf
Diverse Learner (ELLs).doc
EDGE Curriculum Guide.pdf
ELA_9-10.pdf
ELA_11-12.pdf
ELA_Eighth.pdf
ELA_Fifth.pdf
ELA_First.pdf
ELA_Fourth.pdf
ELA_Kinder.pdf
ELA_Second.pdf
ELA_Sixth.pdf
ELA_Third.pdf
Elem ILLP Guidelines for online lesson plan template 13_14.doc
FNL_AVENUES A_AZ ELPS_GrK.pdf
FNL_AVENUES B_AZ ELPS_Gr1.pdf
FNL_AVENUES C_AZ ELPS_Gr1-2.pdf
FNL_AVENUES D_AZ ELPS_Gr3-5.pdf
FNL_Avenues_E_AZ_ELPS_Gr3-5.pdf
FNL_AVENUES_F_AZ ELPS_Gr3-5.pdf
Geometry.pdf
gr8 FME Storyline.doc
Link to TUSD Curriculum.docx
MATH_Fifth.pdf
MATH_First.pdf
MATH_Fourth.pdf
MATH_Kinder.pdf
MATH_Seventh.pdf
MATH_Sixth.pdf
MATH_Third.pdf
MFE Grade 8 supplemental packet.doc
MFE standard 1 matrix.doc
MFE Standard 2 matrix.doc
MFE Standard 3 matrix.doc
MFE Standard 5 matrix.doc
Mixtures and Solutions grade 5 standard alignment.pdf
Preschool - Behavioral Goals and Objectives.doc
State Monitoring Key Points for Elementary 09_ 19_ 11.doc
Structured_English_Immersion (SEI in TUSD).doc
Structures of Life 4th grade standards alignment.pdf
VISIONS Curriculum Guide.pdf

Other Curriculum Documents

CRC Assessment Framework-grade 9.doc
CRC Assessment Framework-grade 10.doc
CRC Assessment Framework-grade 11.doc
CRC Assessment Framework-grade 12.doc
ELA_6-8_Reading-History-Social Studies.pdf
ELA_6-8_Reading-Scie-Tech.pdf
ELA_6-8_Writing_History_Social Studies.pdf
ELA_6-8_Writing-Scie-Tech.pdf

Appendix D (continued)
List of Documents Reviewed

HMH_Trophies_CC_G1.1.pdf
HMH_Trophies_CC_G2.1.pdf
HMH_Trophies_CC_G3.1.pdf
HMH_Trophies_CC_G4.1.pdf
HMH_Trophies_CC_G5.1.pdf
HMH_Trophies_CC_Rev_K.pdf
Link to TUSD Adopted ELA and Math Curriculum.docx
Scoring Rubric for Analytic and Narrative Writing.doc

Textbook or Instructional Materials Adoption Documents

Supplementary Materials Adoption Flow Chart - IJJ-E.pdf
TUSD Policy IJJ - Textbook - Supplementary Materials Adoption.doc
TUSD Policy Regulation IJJ - Textbook - Supplementary Materials Adoption.doc
TUSD Textbook Adoption Process.doc

Course Description Books

Course Description-TUSD CTE.pdf
Course Description-TUSD ELD.pdf
Course Description-TUSD Electives.pdf
Course Description-TUSD English.pdf
Course Description-TUSD Exceptional Ed.pdf
Course Description-TUSD Fine and Performing Arts.pdf
Course Description-TUSD Health and Physical Ed.pdf
Course Description-TUSD IB.pdf
Course Description-TUSD Mathematics.pdf
Course Description-TUSD Science.pdf
Course Description-TUSD Social Studies.pdf
Course Description-TUSD World Languages.pdf
Link to TUSD HS Course Catalog.docx

Federal Program Implementation Documents

Erickson_Title 1_updated.doc
FY 14 ESEA Consolidated Fiscal Application (10-1-13).pdf
Language Acquisition Dept_Program Grant Title III.pdf
School Improvement Grants 2013-2014.docx

State Program Implementation Documents

Arizona Dept of Ed_CSPD Grant.docx
Autism Grant Submission.docx
Budget 1st Things 1st Grant.xls
IDEA - AZ TIERS Grant Submission.docx
Secondary Transition Mentoring Project Year 2 Pueblo Cholla Submission.docx

Computer Inventory and Distribution

Curriculum Audit EQUIPMENT COUNTS.xls

Staff Development Plans

Banks Elementary - PD Calendar.pdf
Blenman Elementary - PD Calendar.doc
Bloom Elementary - PD Plans.docx
Booth Fickett K-8 - PD Plan.docx
Borman Elementary - PD Plan.docx
Borton Primary - PD Calendar.doc
Catalina HS - Staff Development Plans.docx
Cavett Elementary - PD Calendar.docx
Cragin Elementary - PD Calendar.docx
Davidson Elementary - PD Schedule.pdf
Dodge MS - Staff Development Plans.xls
Dunham Elementary - PD Plans.docx
Erickson Elementary - PD Calendar.doc

Appendix D (continued)
List of Documents Reviewed

Ford Elementary - PD Plan.docx
Fruchthendler Elementary - PD Plan.docx
Grijalva Elementary - PD Schedule.xlsx
Holladay Elementary - PD Schedule.doc
Howell Elementary - PD Schedule.pdf
Hudlow Elementary - PD Calendar.doc
Hughes Elementary - PD Plan.doc
Lawrence 3-8 - PD Calendar.pdf
Mansfeld MS - Staff Development Plans.docx
Miles K-8 - Staff Development Schedule.doc
Robins K-8 - PD Schedule.docx
Sabino HS - Staff Development Plans.pdf
University HS - Staff Development Plans.docx

Documents on Grouping, Retention, and Placement

Davidson Elementary - Interventions.pdf
Grouping, Retention, Placement - Dropout and Grad rates 4 and 5 yrs.xlsx
Grouping, Retention, Placement - Grad and Drop rates.xlsx
Grouping, Retention, Placement - Retention Data 10-11 and 11-12.xlsx.xls
Grouping, Retention, Placement - Retention Data 12-13.xlsx
Holladay Elementary - Teacher Schedules.pdf
Kellond Elementary - Interventions.pdf
Lineweaver Elementary - Interventions.pdf
Lynn Urquides - Computer Lab Intervention Schedule.doc
Marshall Elementary - Successmaker Schedule.docx
Miller Elementary - Intervention Info.docx
Miller Elementary - Intervention.pdf
Pueblo Gardens K-8 - Reading Intervention.pdf
Roberts-Naylor K-8 - Intervention Schedule.docx
Robison Elementary - Lab and Interventions Schedule.xls
Roskruge Bilingual K-8 Interventions.docx
Safford K-8 Reading Interventions.xlsx
Safford Middle School Intervention Schedule.docx
Sewell Schedule - Reading Interventionist - 2013-2014.pdf
Soleng Tom Elementary - Interventions.pdf
Tolson Elementary - Reading Intervention 2013-2014.xlsx
Vesey Elementary - Math Intervention Groups Oct. 2013.xlsx
Vesey Elementary - Reading Intervention Groups Oct. 2013.docx
Warren Elementary Interventions.docx
Whitmore Elementary - Interventions.pdf
Wright Elementary - Interventions.doc
Discipline DATA.xlsx
Restorative Justice and Practices.pdf

Tests Administered

AIMS State Testing Calendar_2013-14.doc
State and District Assessments - Elementary.doc
State and District Assessments - High Schools.doc
State and District Assessments - Middle.doc

Student Test Data

AdHoc - Five Years of AIMS by Subject etc.xlsx

Approved District Budget

2009-2010 Adopted Budget.pdf
2010-2011 Adopted Budget.pdf
2011-2012 Adopted Budget.pdf
2012-2013 Adopted Budget.pdf

Appendix D (continued)
List of Documents Reviewed

2013-2014 Adopted Budget.pdf
Link to TUSD Financial Services Webpage.docx

Budget Planning Process

TUSD Budget Process Documentation.pdf
Work Flow Charts - Departments and Schools.pdf

Certified Public Accountant Audits

2007-2008 Comprehensive Annual Financial Report.pdf
2008-2009 Comprehensive Annual Financial Report.pdf
2009-2010 Comprehensive Annual Financial Report.pdf
2010-2011 Comprehensive Annual Financial Report.pdf
2011-2012 Comprehensive Annual Financial Report.pdf

Facilities Studies

2011-2012 TUSD Strategic Plan.pdf
2012-2013 Master Plan - Background Information Fact Sheet.docx
2012-2013 Master Plan - Benefits of larger schools.docx
2012-2013 Master Plan - High Performing Classroom Fact Sheet.doc
2012-2013 Master Plan - School Council Training Oct 10.pptx
2012-2013 Master Plan - Summary of Consolidation Option…d Boundaries.docx
2012-2013 Master Plan - Survey Results condensed for Foc…oup (11Sep12).pptx
2012-2013 Master Plan - to Governing Board Nov2012.pptx
2012-2013 Master Plan - to Governing Board Nov2012(2).pptx
2012-2013 Master Plan - to Governing Board Oct23.pptx
Architectural Assessment Surveys.xls
BAI Duffy Merger 1Jul10.doc
BAI Fort Lowell Merger 1Jul10.doc
BAI info WTN-HEN May11.doc
BAI Jefferson Park Merger 1Jul10.doc
BAI Reynolds Merger 15Jun10.doc
BAI Richey Merger 1Jul10.doc
BAI Roberts Merger 15Jun10.doc
BAI Rogers Merger 1Jul10.doc
BAI Van Horne Merger 15Jun10.doc
Closed WO's and Info 10-28-12 to 10-28-13.xlsx
Portables Facilities Condition Index (PFCI).xlsx

District Technology Plan

2012-2015 Technology Strategy.pdf

Unitary Status Plan

Unitary Status Plan Review and Assessment.docx
13-14 McCorkle Addendum updated 11-4-13.doc
13-14 McCorkle CIP from ALEAT.pdf
2013 School Letter Grade Statistics.pptx
2013-2014 Office of Student Equity & Intervention - Org Chart (New).doc

Miscellaneous Documents Requested On Site and Reviewed by Auditors

Accountability and Research Department Info.docx
Achievement Data_AIMS_5Yrs_District_ELL_SPED_GATE_by Subject.xlsx
ACT and SAT Scores.xlsx
ACT_AP Course vs Test Data by Subgroup.xlsx
ACT_NSC Summary - Fall 2013.xlsx
actUAL SURVEY - Support Services Provided to Schools.pdf
Addendum - Pima County Charter Schools 2013.pdf
AdHoc - Five Years of AIMS by Subject etc.xlsx
ALE Budget SY 2014.xlsx
ALE Requests - Enrollment Request by Subgroups.xlsx
ALE_GATE_HONORS_Curriculum Audit - Enrollment Reques…oups - Update.xlsx

Appendix D (continued)
List of Documents Reviewed

ARID Plans - At Risk Interventions Data.pdf
012 Administrator Meeting.pdf
AzLearns 2011 multi-year Comparison Rev with Level Cros… Rev 10_11_2011.xls
Borman ALEAT Plan 2013-14.docx
Borman Elementary School CIP 2013-14.pdf
Budget - PD Budget SY 2011-2012.xls
Budget - PD Budget SY 2012-2013.xlsx
Budget - PD Budget SY 2013-2014.xlsx
Budget Process and Timelines.xls
Charter School Impact on TUSD Enrollment.pdf
Communications Plan 2013-2014.pdf
Communications Plan Presentation 2013-2014.pdf
Comparison of AIMS Math vs Co-Administered Nationally Normed Test.xlsx
Consolidation Map.pdf
Courses with Counts for High Schools due 1-31-14.xlsx
Culturally Relevant Courses - Fall 2013.pdf
Curriculum Audit - AIMS and *ATI* by Subgroup by ALE Participation.xlsx
Curriculum Audit - AIMS and *ATI* by Subgroup.xlsx
Curriculum Audit - Student Growth for Self-Contained GAT…ar Ed Students.xlsx
Dani Tarry - Family and Community Outreach.pdf
David Scott Email to Eve_GATE_01-31-2014.pdf
Declaration of Curricular & Instructional Alignment to the A…emic Standards.pdf
Demographics - Distribution of Students - Enrollment by S… and Subgroup.xlsx
Deseg Budget_Final_SY_2013-2014.pdf
Discipline DATA.xlsx
District Enrollment Update - September 10 2013 Governing…oard Meeting.pptx
Dropout Rate for ELD vs Non-ELD Students.pdf
Dropout Stats_SPED (ExEd).xlsx
DropoutPrevention_2nd Quarter Composite.docx
DropoutPrevention_2012-1013 Year End Composite.doc
ELL - Additional Requests_01-27-2014.pdf
ELL - Years in Program.xlsx
ELL Budget FY2014.xls
Employees by Site - Elementary and K-8 Schools.xlsx
Employees by Site - High Schools.xlsx
Employees by Site - Middle Schools.xlsx
Facilities_Main Report.xlsx
FARM - Number and Percent of Free and Reduced Lunch_as of 01-28-2014.pdf
Friday Report - Closure Impact on Enrollment 2_15_2013.pdf
Gale Elementary School CIP 2013-2014.pdf
GATE Itinerant Count SY 2013-2014.xls
GATE Self Contained Count SY 2013-2014.xls
GATE Student Growth for Self-Contained students vs Regular Ed Students.xlsx
GATE_Professional Materials for Checkout.docx
GB Follow up for Enrollment Presentation.docx
GB Follow up to Questions about Closures and Charter Schools.docx
Graduation Rates_SPED (ExEd) 2008-2013 FINAL.xlsx
HR_13-14_Agreement_ExemptAdministrators.pdf
HR_13-14_Agreement_ExemptCoordinators.pdf
HR_13-14_Consensus Agreement.pdf
HR_2013-2014 vacancy list by site.xlsx
HR_Administrator Separations since 2008.xlsx
HR_Recruitment_Plan_13-14.pdf
HR_Spring Process Timeline SY14.xlsx

Appendix D (continued)
List of Documents Reviewed

HR_Teachers - In Non HQT Positions_LEA(1) 11-13-13.xls
HR_TUSD_Employee Certification 02-04-2014.xlsx
Hughes Elementary School ALEAT Plan 13-14.docx
Job Description - Deputy Superintendent of Operations - JOB04458.doc
Job Description - Deputy Superintendent of Teaching and L…ing - JOB06539.doc
Job Description - Director of Accountability and Research.doc
Job Description - Director of Employee Relations.doc
Job Description - Executive Director of HR.doc
Job Description - Superintendent - JOB06538.doc
List of TUSD Committees.docx
Magnet Programs - Comprehensive Review Jan 2013.pdf
Materials Purchased for SPED.xlsx
Mexican American Student Support Annual Plan.pdf
Miles ELC_13-14_CIP from ALEAT.pdf
MOJAVE_Interscholastic Modifications 12-13.docx
MOJAVE_Interscholastic Modifications.docx
OCR - 063006 TUSD Final Monitoring Report MA OCR 08011157.pdf
OCR - 083006 TUSD Supplement to final report MA OCR 08011157.pdf
OCR - 101606 OCR MA Closeout letter 08011157.pdf
OCR_Meaningful Access Instruction_Report.pdf
Org Chart - Technology Services.pdf
PD_Evaluation.xlsx
PD_Evidence of teacher and admin attendance for past 2 years.xlsx
PD_List of all formal PD for past 2 years.xlsx
PD_List of all formal PD re Desegregation Order.xlsx
PD_Procedures, Courses & Payment.docx
Retention Data_10-11 and 11-12.xls
Retention Data_SPED.xls
Retention Data_Student Retention Rates SY 8-09 to 12-13.xlsx
Rubrics - Referenced in Dr Vega's Interview.docx
Sabino High School_CIP_Staff Development Plan.pdf
School Accountability Systems - October 25 Governing Board Meeting.ppt
School Information with Age.xlsx
School Letter Grades 2012 - Comparison by Composition.xlsx
Software, Textbooks, Materials Requests_01-27-2014.docx
SPED Primary Need by School.xlsx
SPED_Budget.pdf
SPED_Criteria for Evaluation_Fall2013.docx
SPED_Criteria for Referral_PlacementProcess.docx
SPED_Ethnicity and Gender and SPED_Monitoring Reports.xlsx
SPED_Number of Students - Delivery Models.docx
SPED_SelfAssessment_Pilot_Investigative_Student_Form.docx
Staff Demographics.xlsx
State of the District Presentation.ppt
Student Enrollment with Ethnicity - 1996-2013.xlsx
Student Enrollment with Ethnicity - 2008-2013.xlsx
Supplemental Materials - GATE.doc
SURVEY - Support Services Provided to Schools.docx
SURVEY DATA - Support Services.xls
Teacher Turnover and Average Salary.docx
Technology Budget_FY12_TS_GL_Budget_Report.pdf
Technology Budget_FY13_TS_GL_Budget_Report.pdf
Technology Budget_FY14_TS_GL_Budget_Report_as_of_01.28.2014.pdf
Textbooks and Software _ELL_01-28-2014.pdf

Appendix D (continued)
List of Documents Reviewed

Three Years Summary of School Letter Grades (Final).xlsx
Training_PD_Board Members_Five Years.doc
Transfers by Public and Charter by Ethnicity for 2014.xlsx
TUSD Enrollment Presentation.ppt
UHS Admissions Process (Jan. 2014).docx
University High School Plan 13-14 comments.docx

Appendix E

Teacher and Principal Survey Instruments
Tucson Unified School District
January 2014

Parent's Survey (English version)

Tucson Unified School District leaders have contracted with an external evaluation team from Curriculum Management Systems, inc. (CMSi) to complete a Curriculum Audit. The team is on site January 27-31, 2014. The audit team will visit campuses during that time, and will be conducting interviews during the week. However, the team will not have the opportunity to speak with everyone in the district. We would like to use the following survey to gather input from as many people as possible. Please take a few minutes to complete this survey so your opinion can be represented.

All answers will remain anonymous and survey information will only be reported in aggregate. Please complete this survey by February 1. Thank you very much for your assistance.

Appendix E (continued)
Parent's Survey (English version)

1. What grade level is your student (or students) in?

- [ ] Elementary School
- [ ] Middle School
- [ ] High School

Other (please specify)

2. What are the strengths of this school district?

3. What are the areas that need improvement in this school district?

4. My child's school does a good job equipping my student with the skills he/she needs to be successful.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Disagree
- ◯ Strongly Disagree

5. I can easily access the curriculum my child is being taught.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Disagree
- ◯ Strongly Disagree

Other (please specify)

6. I am frequently updated regarding my child's progress in mastering the district curriculum.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Disagree
- ◯ Strongly Disagree

Appendix E (continued)
Parent's Survey (English version)

7. I know my child's teacher(s) uses/use assessment data to plan instruction that meets my child's needs.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Disagree
- ◯ Strongly Disagree

Comment

8. My child frequently uses technology in the classroom to complete activities and/or projects.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Disagree
- ◯ Strongly Disagree
- ◯ Don't Know

Please respond to the following questions about addressing different student needs

9. My child's teacher(s) successfully engages my child in challenging, hands-on learning activities.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Disagree
- ◯ Strongly Disagree

Other (please specify)

10. My child receives services/programming in the following area(s):

- ☐ Gifted/talented or advanced academics programming
- ☐ English Language Learning (ELL)/English as a Second Language (ESL)
- ☐ Special Education
- ☐ Other disability/504 planning and services
- ☐ Dual Language/Immersion programming

Appendix E (continued)
Parent's Survey (English version)

11. My child's needs for academic acceleration and cognitively rigorous instruction are being met.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Disagree
- ◯ Strongly Disagree

Other (please specify)

12. There is an explicit instructional model teachers use for English language development and sheltered instruction.

- ◯ strongly agree
- ◯ agree
- ◯ disagree
- ◯ strongly disagree

13. My child has full support in learning the curriculum through sheltered instruction or primary language support.

- ◯ strongly agree
- ◯ agree
- ◯ disagree
- ◯ strongly disagree

14. My child has an Individualized Education Plan (IEP) that outlines how his or her academic needs will be met.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Disagree
- ◯ Strongly Disagree

15. My child's teachers closely follow my child's IEP.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Disagree
- ◯ Strongly Disagree

Appendix E (continued)
Parent's Survey (English version)

16. My child's learning needs are taken into acount when his/her teacher(s) is planning instruction.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Disagree
- ◯ Strongly Disagree

17. My child's teacher(s) makes modifications to instruction and assignments in response to my child's 504 or specific needs.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Disagree
- ◯ Strongly Disagree

Parent's Survey (Spanish version)

El Distrito Escolar Unificado de Tucson ha contratado a un equipo externo de evaluación de CMSi para completar una Auditoría del Currículo. El equipo estará presente del 27. hasta el 31. de enero del 2014. El equipo auditor visitará los campus durante este periodo y realizará entrevistas durante la semana. Sin embargo, el equipo no tendrá oportunidad de hablar con todos en el distrito. Nos gustaría utilizar la siguiente encuesta para recabar información de la mayor gente posible. Por favor tome algunos minutos para completar la siguiente encuesta para que su opinión pueda ser representada.

Todas las respuestas se mantendrán anónimas y sólo se reportarán en conjunto. Por favor complete esta encuesta para el 7 de febrero. Muchas gracias por su apoyo.

Appendix E (continued)
Parent's Survey (Spanish version)

1. ¿En qué grado está(n) su(s) estudiante(s)?

- [ ] la escuela primaria
- [ ] la escuela secundaria
- [ ] la preparatoria

Otra (por favor especifique)

2. ¿Cuáles son las fortalezas de este distrito escolar?

3. ¿Cuáles son las áreas que necesitan mejorar en este distrito escolar?

4. La escuela de mi hijo(a) hace un buen trabajo preparando a mi estudiante con las habilidades que necesita para tener éxito.

- ◯ Fuertemente de acuerdo
- ◯ De acuerdo
- ◯ En desacuerdo
- ◯ Fuertemente en desacuerdo

5. Puedo fácilmente accesar el currículo que está siendo impartido a mi hijo(a).

- ◯ Fuertemente de acuerdo
- ◯ De acuerdo
- ◯ En desacuerdo
- ◯ Fuertemente en desacuerdo

Otra (por favor especifique)

6. Me actualizan frecuentemente sobre el progreso de mi hijo(a) en dominar el currículo del distrito.

- ◯ Fuertemente de acuerdo
- ◯ De acuerdo
- ◯ En desacuerdo
- ◯ Fuertemente en desacuerdo

Appendix E (continued)
Parent's Survey (Spanish version)

7. Yo sé que el maestro(s) de mi hijo(a) utiliza asesoramiento de datos para planear instrucción que satisfaga las necesidades de mi hijo(a).

- ◯ Fuertemente de acuerdo
- ◯ De acuerdo
- ◯ En desacuerdo
- ◯ Fuertemente en desacuerdo

Comentario

8. Mi hijo(a) frecuentemente utiliza tecnología en el salón de clases para completar actividades y/o proyectos.

- ◯ Fuertemente de acuerdo
- ◯ De acuerdo
- ◯ En desacuerdo
- ◯ Fuertemente en desacuerdo
- ◯ No sé

Por favor responda a las siguientes preguntas sobre dirigirse a las diferentes necesidades de los estudiantes.

9. El maestro(s) de mi hijo(a) exitosamente aborda a mi hijo(a) en actividades desafiantes y prácticas de aprendizaje.

- ◯ Fuertemente de acuerdo
- ◯ De acuerdo
- ◯ En desacuerdo
- ◯ Fuertemente en desacuerdo

Otra (por favor especifique)

10. Mi hijo(a) recibe servicios/programación en la(s) siguiente(s) área(s):

- ☐ Dotado/talentoso (GT) o programación académica avanzada
- ☐ Aprendizaje del idioma inglés (ELL)/Inglés como segunda idioma (ESL)
- ☐ Educación especial
- ☐ Otra incapacidad/504 servicios y planificación
- ☐ Bilingüe/Programación de inmersión

Appendix E (continued)
Parent's Survey (Spanish version)

11. Las necesidades de mi hijo(a) para aceleración académica e instrucción cognitiva rigurosa están siendo cumplidas.

- ◯ Fuertemente de acuerdo
- ◯ De acuerdo
- ◯ En desacuerdo
- ◯ Fuertemente en desacuerdo

Otra (por favor especifique)

12. Hay un modelo explícito de instrucción que usan los maestros para el desarrollo del idioma inglés e instrucción contextualizada.

- ◯ Fuertemente de acuerdo
- ◯ De acuerdo
- ◯ En desacuerdo
- ◯ Fuertemente en desacuerdo

13. Mi hijo(a) tiene completo apoyo en el aprendizaje del currículo a través de instrucción contextualizada o apoyo del lenguaje primario.

- ◯ Fuertemente de acuerdo
- ◯ De acuerdo
- ◯ En desacuerdo
- ◯ Fuertemente en desacuerdo

14. Mi hijo(a) tiene un programa de educación individualizado (IEP por sus siglas en inglés) que enmarca como sus necesidades académicas serán cumplidas.

- ◯ Fuertemente de acuerdo
- ◯ De acuerdo
- ◯ En desacuerdo
- ◯ Fuertemente en desacuerdo

15. Los maestros de mi hijo(a) siguen atentamente el IEP (por sus siglas en inglés) de mi hijo(a).

- ◯ Fuertemente de acuerdo
- ◯ De acuerdo
- ◯ En desacuerdo
- ◯ Fuertemente en desacuerdo

Appendix E (continued)
Parent's Survey (Spanish version)

16. Las necesidades de aprendizaje de mi hijo(a) son tomadas en cuenta cuando su maestro(s) planean instrucción.

- ◯ Fuertemente de acuerdo
- ◯ De acuerdo
- ◯ En desacuerdo
- ◯ Fuertemente en desacuerdo

17. El maestro(s) de mi hijo(a) hace(n) modificaciones a la instrucción y tareas en respuesta a las necesidades específicas o 504 de mi hijo(a).

- ◯ Fuertemente de acuerdo
- ◯ De acuerdo
- ◯ En desacuerdo
- ◯ Fuertemente en desacuerdo

Appendix E (continued)
Principal's Survey

The CMSi team has concluded its site visit portion of the TUSD curriculum audit, and we sincerely appreciate your assistance and cooperation. We need to ask for further assistance, as building administrators are critical to sound curriculum management. If you could provide answers to the following questions it would help us immeasurably in finalizing our conclusions concerning the major strengths and weaknesses of the district. Your answers are confidential and will not reflect on you or your position. Again, thank you for all data and information you have submitted for the CMSi audit to date!

Your response is needed by February 10, if possible. Thanks!

What level is your school?

- ◯ Elementary
- ◯ Middle School
- ◯ High School
- ◯ Alternative School/Program

Other (please specify)

How long have you been an administrator in your building?

- ◯ One year or less.
- ◯ 1-3 years
- ◯ 4-7 years
- ◯ 8-10 years
- ◯ 10-15 years
- ◯ 15+ years

What are the strengths of the district?

What are the weaknesses of the district?

Appendix E (continued)
Principal's Survey

How often are you able to visit every classroom in your building?

- ◯ Rarely
- ◯ once a month
- ◯ once a week
- ◯ every few days
- ◯ every day

Other (please specify)

* When you are in classrooms, what is the main purpose for your visit?

I have adequate and timely support from central office when I need to hire a teacher in my building.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Disagree
- ◯ Strongly Disagree

I need and use substitute teachers on a regular basis, for both long-term and short-term situations.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Not applicable
- ◯ Disagree
- ◯ Strongly Disagree

Substitute teachers in my building consistently are of high quality and well equipped to deliver sound instruction.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Not applicable
- ◯ Disagree
- ◯ Strongly Disagree

Appendix E (continued)
Principal's Survey

Teachers in my building are effective at improving student learning and their subsequent test scores.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Neutral
- ◯ Disagree
- ◯ Strongly Disagree

What letter grade was designated for your school by the Arizona Department of Education this past year?

- ◯ A
- ◯ B
- ◯ C
- ◯ D or lower

Please comment:

I am satisfied with the response time to maintenance issues in my building.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Disagree
- ◯ Strongly Disagree
- ◯ N/A (have not had opportunity to know)

I am satisfied with the professional development I receive in my position as a building administrator.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Disagree
- ◯ Strongly Disagree
- ◯ N/A (have not been in position long enough to receive training)

Appendix E (continued)
Principal's Survey

There is adequate direction in policy for all building-level decision making.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Disagree
- ◯ Strongly Disagree
- ◯ N/A

The teachers in my building are effective at differentiating instruction to meet individual students' needs.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Disagree
- ◯ Strongly Disagree
- ◯ N/A (have not had opportunity to observe)

The teachers in my building are sensitive to the linguistic, cultural, and economic diversity among our students.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Disagree
- ◯ Strongly Disagree
- ◯ N/A (have not had opportunity to observe)

The teachers and support personnel in my building have consistently high expectations for student performance.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Disagree
- ◯ Strongly Disagree
- ◯ N/A (have not had opportunity to observe)

The teachers in my building are consistently respectful and caring toward all students and their families.

- ◯ Strongly agree
- ◯ Agree
- ◯ Disagree
- ◯ Strongly disagree

Appendix E (continued)
Principal's Survey

The support personnel (office staff, custodial, etc.) in my building are consistently respectful and caring toward all students and their families.

- ◯ Strongly agree
- ◯ Agree
- ◯ Disagree
- ◯ Strongly disagree

The teacher mentor that serves my building is effective in supporting new teachers and assisting them in delivering improved instruction, as indicated by gains in student achievement.

- ◯ Strongly Agree
- ◯ Agree
- ◯ No opinion
- ◯ Disagree
- ◯ Strongly Disagree

The responsibilities of the Learning Support Coordinator have been clearly defined and communicated to principals in the district.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Disagree
- ◯ Strongly Disagree
- ◯ N/A (not applicable because I do not have an LSC)

The Learning Support Coordinator in my building is effective in fulfilling his/her responsibilities.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Disagree
- ◯ Strongly Disagree
- ◯ N/A (not applicable because I do not have an LSC)

Appendix E (continued)
Principal's Survey

I have all the information I need regarding what support services are available in the community for the students in my building.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Disagree
- ◯ Strongly Disagree

* What guides your teachers' decisions regarding what they are going to teach on a given day?

Please rate the adequacy of services for students with IEPs at your campus.

- ◯ Completely adequate
- ◯ Adequate
- ◯ Inadequate
- ◯ Completely inadequate

Teachers in my building consistently use individual student data in planning their daily instruction.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Disagree
- ◯ Strongly Disagree

Teachers in my building consistently select instructional interventions based on formative student achievement data.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Disagree
- ◯ Strongly Disagree

Appendix E (continued)
Principal's Survey

All teachers in my building are adequately trained in meeting the needs of English language learners.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Disagree
- ◯ Strongly Disagree

Teachers in my building are very effective in meeting the needs of English language learners and are successful in improving their test performance.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Disagree
- ◯ Strongly Disagree

There are adequate assessment tools available to teachers on a daily basis to determine student progress in mastering curriculum objectives.

- ◯ Strongly Agree
- ◯ Agree
- ◯ No opinion
- ◯ Disagree
- ◯ Strongly Disagree

I am familiar with the district curriculum and its expectations for student learning.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Disagree
- ◯ Strongly Disagree

My teachers are familiar with the district curriculum and its expectations for student learning, and they use it regularly to plan instruction.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Disagree
- ◯ Strongly Disagree

Appendix E (continued)
Principal's Survey

I am well aware of the district's goals and mission that drive our work.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Disagree
- ◯ Strongly Disagree

I have adequate support from central office in dealing with instructional issues in the building.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Disagree
- ◯ Strongly Disagree

I have adequate support from central office in dealing with non-instructional building management issues.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Disagree
- ◯ Strongly Disagree

Appendix E (continued)
Teacher's Survey

The Tucson Unified School District has contracted with an external evaluation team from Curriculum Management Systems, Inc. to complete a curriculum management audit of the district. The team is on site January 27-31, 2014.

The team will visit campuses during that time and will be conducting interviews during the week. On Tuesday, January 28, 2014, there will be an opportunity for teachers to be individually and privately interviewed by a curriculum auditor in the Wright Elementary School Cafeteria from 4 to 6 pm.

However, the team will not have the opportunity to speak with everyone in the district. We would like to use this confidential survey to gather input and information about issues in the school system from as many teachers as possible.

Please take a few minutes to complete this survey so your opinion can be represented.

It is important for you to know that all survey responses will remain anonymous and survey information will only be reported in aggregate. Please do not disclose your name anywhere in the survey.

PLEASE COMPLETE THIS SURVEY NO LATER THAN 10 PM ON WEDNESDAY, JANUARY 29, 2014.

Your cooperation and assistance is greatly appreciated.

1. What is the job title for your current position?

- ◯ Teacher
- ◯ Department Chair
- ◯ Specialist or Coach
- ◯ Counselor

Other (please specify)

Appendix E (continued)
Teacher's Survey

2. What is your level or area of assignment?

- ◯ Elementary School
- ◯ Middle School
- ◯ High School
- ◯ District-wide

Other (please specify)

3. What is your primary instructional content area?

- ◯ All core content areas
- ◯ Reading/English
- ◯ Mathematics
- ◯ Science
- ◯ Social Studies
- ◯ Foreign Language
- ◯ Music/Art
- ◯ Physical Education/Health
- ◯ Career and/or Technology

Other (please specify)

4. I have been teaching in this school system for the following number of years:

- ◯ 1-3 years
- ◯ 4-10 years
- ◯ 11-20 years
- ◯ 21 years or more

5. What are the strengths of this school district?

Appendix E (continued)
Teacher's Survey

6. What are the areas that need improvement in this school district?

7. What do you use to guide instruction?

- [ ] I use the district adopted textbook to plan my instruction
- [ ] I use the district developed curriculum daily/weekly to plan instruction
- [ ] I use the district developed curriculum monthly to plan instruction
- [ ] I use campus developed curriculum to plan instruction
- [ ] I design instruction based on my own ideas and/or resources
- [ ] In my position I am not responsible for planning instruction

Other (please specify)

8. The district designed curriculum is (check all that apply)

- [ ] Easily accessible
- [ ] Not easily accessible
- [ ] User friendly
- [ ] Useful in planning
- [ ] Not useful in planning

Other (please specify)

9. There are a reasonable number of objectives for my content area (students can master all objectives).

- ◯ Strongly Agree
- ◯ Agree
- ◯ Neutral
- ◯ Disagree
- ◯ Strongly Disagree

Comment

Appendix E (continued)
Teacher's Survey

10. I have had adequate training in the use of curriculum documents and aligned instructional resources.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Neutral
- ◯ Disagree
- ◯ Strongly Disagree

Comment

11. I use the results of assessments in my curriculum area to plan instruction on a regular (daily) basis.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Neutral
- ◯ Disagree
- ◯ Strongly Disagree

Comment

12. How do you use student assessment data? (check all that apply)

- ☐ To give grades
- ☐ To plan reteaching
- ☐ To refer students to intervention
- ☐ To group students for instruction
- ☐ To place students in the correct course

Other (please specify)

Appendix E (continued)
Teacher's Survey

13. Technology software is selected based on strong alignment to district curriculum objectives and state assessments.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Neutral
- ◯ Disagree
- ◯ Strongly Disagree
- ◯ Don't Know

Comment

Please respond to the following questions about addressing different student needs

14. Our district has a well designed plan to support students whose primary language is not English.

- ◯ strongly agree
- ◯ agree
- ◯ neutral
- ◯ disagree
- ◯ strongly disagree

15. There is an explicit instructional model teachers use for English language development and sheltered instruction.

- ◯ strongly agree
- ◯ agree
- ◯ neutral
- ◯ disagree
- ◯ strongly disagree

16. All students have full access to the core curriculum through sheltered instruction or primary language support.

- ◯ strongly agree
- ◯ agree
- ◯ neutral
- ◯ disagree
- ◯ strongly disagree

17. My school has fully implemented the district plan for English language learners.

- ◯ strongly agree
- ◯ agree
- ◯ neutral
- ◯ disagree
- ◯ strongly disagree

Appendix E (continued)
Teacher's Survey

18. I have been adequately trained in effective strategies for working with English learners.

- ◯ Strongly agree
- ◯ Agree
- ◯ Neutral
- ◯ Disagree
- ◯ Strongly disagree

19. I have been trained in strategies for differentiating instruction to meet the individual needs of my students.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Neutral
- ◯ Disagree
- ◯ Strongly Disagree

Comments

20. I use strategies for differentiating instruction to meet the individual needs of my students.

- ◯ Daily
- ◯ At least weekly
- ◯ Several times a month
- ◯ Several times a quarter
- ◯ Rarely

21. Individual learning plans and intervention plans are developed for students at this school who are underachieving, as indicated by student assessent data.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Neutral
- ◯ Disagree
- ◯ Strongly Disagree

Comments

Appendix E (continued)
Teacher's Survey

School and professional development information

22. How often does your principal or assistant principal visit your classroom?

- ◯ Daily or almost daily
- ◯ At least weekly
- ◯ At least monthly
- ◯ At least twice a year
- ◯ I rarely see my principal/assistant principal in my classroom

Comments

23. Please check the responses which describe how your principal, assistant principal, other administrator or coach/strategist provides you with useful feedback on informally observed lessons.

	Principal	Assistant principal	District Administrator	Coach/strategist
No feedback given	☐	☐	☐	☐
Feedback is always useful	☐	☐	☐	☐
Feedback is somewhat useful	☐	☐	☐	☐
Feedback is not useful	☐	☐	☐	☐

Comment:

Appendix E (continued)
Teacher's Survey

24. I consider the quality and relevance of professional development to be:

	District provided (coach, mentor, specialist, etc.)	School site provided (principal, department head, etc.)	Region provided
Excellent	☐	☐	☐
Above average	☐	☐	☐
Average	☐	☐	☐
Poor	☐	☐	☐

Other (please specify)

25. At our campus we have a single school improvement plan that spans more than one year and is focused on a limited number of academic goals that direct my work with students.

- ◯ Strongly Agree
- ◯ Agree
- ◯ No opinion
- ◯ Disagree
- ◯ Strongly Disagree

Comments

26. Our school facilities are adequate.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Neutral
- ◯ Disagree
- ◯ Strongly Disagree

Comments

Appendix E (continued)
Teacher's Survey

27. What has been the focus of professional learning this year at your campus? (study groups, professional development days, individual teams, PLCs)

- [ ] Language Arts
- [ ] Mathematics
- [ ] Social Studies
- [ ] Science
- [ ] Fine Arts
- [ ] Strategies for use with English language learners
- [ ] Career/Technology
- [ ] Data Analysis
- [ ] Instructional Strategies
- [ ] Differentiated instruction
- [ ] No particular focus for professional development
- [ ] RTI

Other (please specify)

28. How would you rate the quality of instructional leadership in your building?

- ◯ Highly effective
- ◯ Effective
- ◯ No opinion
- ◯ Somewhat ineffective
- ◯ Not effective

Comment

29. If I ever need help with my teaching, supplies or materials, or lesson planning, my PRIMARY source of help would be:

- ◯ Another teacher
- ◯ A curriculum specialist
- ◯ A professional development specialist
- ◯ My principal
- ◯ Someone outside the system
- ◯ Other (please specify)

30. If there was ONE thing about this school district that you believe needs to be changed or improved, what would it be?

Appendix F

Exhibit 2.2.2
Scope of Curriculum Grades 6-8
Tucson Unified School District
January 2014

Content Area	Grade Level			# Courses Needing Curriculum	# Courses Having Curriculum	% Scope for Content Area
	6	7	8			
English Language Arts						
English Language Arts	X	X	X	3	3	100.0%
English Language Arts Honors	X	X	X	3	0	0.0%
ELD (Levels I-IV)*	X	X	X			
Transition Language Arts	X			1	0	0.0%
Total				**7**	**3**	**42.9%**
Mathematics						
Algebra 1-2*			X			
Geometry 1-2*			X			
Grade Level Math	X	X	X	3	3	100.0%
Grade Level Math, AC	X	X	X	3	0	0.0%
Total				**6**	**3**	**50.0%**
Science						
Grade Level Science	X	X	X	3	0	0.0%
HS Integrated Science*			X			
Total				**3**	**0**	**0.0%**
Social Studies						
Grade Level Social Studies	X	X	X	3	0	0.0%
HS Geography*			X			
Total				**3**	**0**	**0.0%**
World Languages						
American Sign Language*			X			
Spanish	X	X	X	3	0	0.0%
Spanish for Native Speakers	X	X	X	3	0	0.0%
HS Spanish 1-2*			X			
HS Spanish for Native Speakers 1-2*			X			
Arabic	X	X	X	3	0	0.0%
Korean 1-2*			X			
Total				**9**	**0**	**0.0%**
Fine and Performing Arts						
Art	X	X	X	3	0	0.0%
Advanced Art		X	X	1	0	0.0%
Exploratory Arts	X	X	X	3	0	0.0%
Band, Beginning	X	X	X	1	0	0.0%
Band, Intermediate	X	X	X	1	0	0.0%
Band, Advanced	X	X	X	1	0	0.0%
Orchestra, Beginning	X	X	X	1	0	0.0%
Orchestra, Intermediate	X	X	X	1	0	0.0%
Orchestra, Advanced	X	X	X	1	0	0.0%
Guitar	X	X	X	1	0	0.0%

Appendix F (continued)
Exhibit 2.2.2
Scope of Curriculum Grades 6-8
Tucson Unified School District
January 2014

Content Area	Grade Level			# Courses Needing Curriculum	# Courses Having Curriculum	% Scope for Content Area
	6	7	8			
Mariachi	X	X	X	1	0	0.0%
Music	X	X	X	1	0	0.0%
Drama			X	1	0	0.0%
Chorus, Beginning		X	X	1	0	0.0%
Chorus, Advanced		X	X	1	0	0.0%
Performing Arts	X	X	X	1	0	0.0%
Dance, Beginning	X	X	X	1	0	0.0%
Dance, Intermediate	X	X	X	1	0	0.0%
Dance, Advanced	X	X	X	1	0	0.0%
Dance Choreography	X	X	X	1	0	0.0%
Ensemble Dance	X	X	X	1	0	0.0%
Total				**25**	**0**	**0.0%**
Health and Physical Education						
Phys Ed	X	X	X	1	0	0.0%
Total				**1**	**0**	**0.0%**
Electives						
Academic Literacy	X	X	X	1	0	0.0%
Rocketry	X	X	X	1	0	0.0%
Journalism	X	X	X	1	0	0.0%
Yearbook	X	X	X	1	0	0.0%
CORE Enrichment	X	X	X	3	0	0.0%
GATE CORE Enrichment	X	X	X	3	0	0.0%
Exploratory	X	X	X	3	0	0.0%
Environmental Design	X	X	X	3	0	0.0%
Media Arts/Tech Cluster*			X			
E Tech GATE	X	X	X	1	0	0.0%
Exploring Engineering*			X			
Citizenship Education	X	X	X	1	0	0.0%
Total				**18**	**0**	**0.0%**

*Courses included under high school scope

Sources: building master schedules, administrative interviews, district web site

Exhibit 2.2.3
Scope of Curriculum Grades 9-12
Tucson Unified School District
January 2014

Course	Grade(s) Taught	Number of Courses Needing Curriculum	Number of Courses with Curriculum Available	% Scope
English Language Arts				
English 9	9	1	1	100.0%
English 10	10	1	1	100.0%
English 11	11	1	1	100.0%
English 12	12	1	1	100.0%
English 9 GATE	9	1	0	0.0%
English 10 GATE	10	1	0	0.0%
English 11 GATE	11	1	0	0.0%
English 9 Honors	9	1	0	0.0%
English 10 Honors	10	1	0	0.0%
English 11 Honors	11	1	0	0.0%
English 12 Honors	12	1	0	0.0%
English Language AP	9-12	1	0	0.0%
English Literature AP	9-12	1	0	0.0%
21st Century Workplace English	9-12	1	0	0.0%
Contemporary World Literature	11-12	1	0	0.0%
Native American Literature	11	1	0	0.0%
Exploring Literature	9-12	1	0	0.0%
Women's Literature	12	1	0	0.0%
Creative Writing	11-12	1	0	0.0%
ELD I Listening and Speaking	9-12	1	0	0.0%
ELD II Listening and Speaking	9-12	1	0	0.0%
ELD I Grammar	9-12	1	0	0.0%
ELD II Grammar	9-12	1	0	0.0%
ELD I Reading	9-12	1	0	0.0%
ELD II Reading	9-12	1	0	0.0%
ELD I Writing	9-12	1	0	0.0%
ELD II Writing	9-12	1	0	0.0%
ELD III Academic Reading	9-12	1	0	0.0%
ELD IV Academic Reading	9-12	1	0	0.0%
ELD III Academic Writing	9-12	1	0	0.0%
ELD IV Academic Writing	9-12	1	0	0.0%
ELD III Language Arts	9-12	1	0	0.0%
ELD III Language Arts and Support	9-12	1	0	0.0%
ELD IV Language Arts	9-12	1	0	0.0%
ELD IV Language Arts and Support	9-12	1	0	0.0%
Reading	9	1	0	0.0%
English 5-6 Cul Rel African Am Viewpoint	11	1	1	100.0%
English 7-8 Cul Rel African Am Viewpoint	12	1	1	100.0%
English 5-6 Cul Rel Mexican Am Viewpoint	11	1	1	100.0%
English 7-8 Cul Rel Mexican Am Viewpoint	12	1	1	100.0%
Total		**40**	**8**	**20.0%**

Exhibit 2.2.3 (continued)
Scope of Curriculum Grades 9-12
Tucson Unified School District
January 2014

Course	Grade(s) Taught	Number of Courses Needing Curriculum	Number of Courses with Curriculum Available	% Scope
Mathematics				
Algebra I	9-12	1	1	100.0%
Algebra I Honors	9-10	1	0	0.0%
Geometry	9-12	1	1	100.0%
Geometry Honors	9-12	1	0	0.0%
Algebra II	10-12	1	1	100.0%
Algebra II Honors	10-12	1	0	0.0%
Precalculus	11-12	1	0	0.0%
Precalculus Honors	11-12	1	0	0.0%
Calculus AB AP	11-12	1	0	0.0%
Calculus BC AP	11-12	1	0	0.0%
Calculus Honors	11-12	1	0	0.0%
College Algebra	11-12	1	0	0.0%
Mathematical Finance	11-12	1	0	0.0%
Statistics AP	11-12	1	0	0.0%
Statistics and Probability	11-12	1	0	0.0%
Trigonometry I	11-12	1	0	0.0%
Trigonometry I Honors	11-12	1	0	0.0%
Total		**17**	**3**	**17.6%**
Science				
Anatomy and Physiology	11-12	1	0	0.0%
Applied Biological Systems Intro	9-10	1	0	0.0%
Applied Biological Systems Adv	9-10	1	0	0.0%
Astronomy Observation Honors	11-12	1	0	0.0%
Biology 1-2	9-12	1	0	0.0%
Biology Honors 1-2	9-12	1	0	0.0%
Biology AP	9-12	1	0	0.0%
Biology, Environmental	9-12	1	0	0.0%
Biology, Forensic	11-12	1	0	0.0%
Integrated Science	9-12	1	0	0.0%
Marine Biology	9-12	1	0	0.0%
Plant Science I Honors	11-12	1	0	0.0%
Biotechnology 1-2	10-12	1	0	0.0%
Biotechnology 3-4	11-12	1	0	0.0%
Biotechnology Internship	12	1	0	0.0%
Chemistry 1-2	10-12	1	0	0.0%
Chemistry Honors 1-2	9-12	1	0	0.0%
Chemistry AP	9-12	1	0	0.0%
Conceptual Physics	9-12	1	0	0.0%
Conceptual Science	9-12	1	0	0.0%
Earth Science	9-12	1	0	0.0%
Genetics	11-12	1	0	0.0%
Geology	9-12	1	0	0.0%

Exhibit 2.2.3 (continued) Scope of Curriculum Grades 9-12 Tucson Unified School District January 2014				
Course	**Grade(s) Taught**	**Number of Courses Needing Curriculum**	**Number of Courses with Curriculum Available**	**% Scope**
Oceanography Honors	11-12	1	0	0.0%
Physics 1-2	10-12	1	0	0.0%
Physics B AP	11-12	1	0	0.0%
Physics C AP	11-12	1	0	0.0%
Planetary Science Honors 1-2	11-12	1	0	0.0%
Exploring Engineering	9-12	1	0	0.0%
Problem Solving and Engineering Design	10-12	1	0	0.0%
Project Engineering	11-12	1	0	0.0%
Research Methods	12	1	0	0.0%
Research Methods Advanced	12	1	0	0.0%
Total		**33**	**0**	**0.0%**
Social Studies				
American History 1-2	11-12	1	0	0.0%
American History Multiple Perspectives	11-12	1	0	0.0%
US History Cul Rel African Am View	11-12	1	1	100.0%
US History Cul Rel Mexican Am View	11-12	1	1	100.0%
US History AP	9-12	1	0	0.0%
Global Studies GATE	9-12	1	0	0.0%
US Government and Policies AP	9-12	1	0	0.0%
US Government Cul Rel Mexican Am View	11-12	1	1	100.0%
US Government Cul Rel African Am View	11-12	1	1	100.0%
US Government Multicultural Viewpoint	11-12	1	0	0.0%
Economics	11-12	1	0	0.0%
Macroeconomics AP	9-12	1	0	0.0%
Microeconomics AP	9-12	1	0	0.0%
Psychology	9-12	1	0	0.0%
Psychology AP	9-12	1	0	0.0%
Western Civilization GATE	9-12	1	0	0.0%
World History AP	9-12	1	0	0.0%
World History Honors 1-2	9-12	1	0	0.0%
World History/Geography 1-2	9-12	1	0	0.0%
Total		**19**	**4**	**21.1%**
World Languages				
American Sign Language 1-2	9-12	1	0	0.0%
American Sign Language 3-4	9-12	1	0	0.0%
American Sign Language 5-6	10-12	1	0	0.0%
American Sign Language 7-8	10-12	1	0	0.0%
Chinese I	9-12	1	0	0.0%
Chinese II	9-12	1	0	0.0%
Chinese (Mandarin)	9-12	1	0	0.0%
French 1-2	9-12	1	0	0.0%
French 3-4	9-12	1	0	0.0%
French 5-6	9-12	1	0	0.0%

Exhibit 2.2.3 (continued) Scope of Curriculum Grades 9-12 Tucson Unified School District January 2014				
Course	**Grade(s) Taught**	**Number of Courses Needing Curriculum**	**Number of Courses with Curriculum Available**	**% Scope**
French 7-8	9-12	1	0	0.0%
French Language AP	9-12	1	0	0.0%
Korean 1-2	9-12	1	0	0.0%
Korean 3-4	9-12	1	0	0.0%
Russian 1-2	9-12	1	0	0.0%
Russian 3-4	9-12	1	0	0.0%
Russian 5-6	9-12	1	0	0.0%
Russian 7-8	9-12	1	0	0.0%
Spanish 1-2	9-12	1	0	0.0%
Spanish 3-4	9-12	1	0	0.0%
Spanish 5-6	9-12	1	0	0.0%
Spanish 1-2 Honors	9-12	1	0	0.0%
Spanish 3-4 Honors	9-12	1	0	0.0%
Spanish 5-6 Honors	9-12	1	0	0.0%
Spanish 7-8 Honors	9-12	1	0	0.0%
Spanish Language AP	9-12	1	0	0.0%
Spanish Literature AP	9-12	1	0	0.0%
Spanish for Native Speakers 1-2	9-12	1	0	0.0%
Spanish for Native Speakers 3-4	9-12	1	0	0.0%
Total		**29**	**0**	**0.0%**
Fine and Performing Arts				
Fine Arts				
2D Studio Art Design AP	9-12	1	0	0.0%
Art Appreciation	9-12	1	0	0.0%
Art History AP	9-12	1	0	0.0%
Art Beginning	9-12	1	0	0.0%
Art Intermediate	9-12	1	0	0.0%
Art Advanced	9-12	1	0	0.0%
Art Advanced Studio Studies	9-12	1	0	0.0%
Clay and Ceramics 1-2	9-12	1	0	0.0%
Clay and Ceramics 3-4	9-12	1	0	0.0%
Commercial Art	9-12	1	0	0.0%
Commercial Art Advanced	9-12	1	0	0.0%
Drawing and Painting Beginning	9-12	1	0	0.0%
Drawing and Painting Advanced	9-12	1	0	0.0%
Music Appreciation	9-12	1	0	0.0%
Music Theory AP	9-12	1	0	0.0%
Studio Art -Drawing AP	9-12	1	0	0.0%
Performing Arts				
Band, Beginning	9-12	1	0	0.0%
Band, Intermediate	9-12	1	0	0.0%
Band , Advanced	9-12	1	0	0.0%
Band Color Guard	9-12	1	0	0.0%

Exhibit 2.2.3 (continued) Scope of Curriculum Grades 9-12 Tucson Unified School District January 2014				
Course	**Grade(s) Taught**	**Number of Courses Needing Curriculum**	**Number of Courses with Curriculum Available**	**% Scope**
Marching/Symphonic Band	9-12	1	0	0.0%
Dance 1-2	9-12	1	0	0.0%
Dance 3-4	9-12	1	0	0.0%
Dance 5-6	9-12	1	0	0.0%
Dance 7-8	9-12	1	0	0.0%
Ballet 1-2	9-12	1	0	0.0%
Ballet 3-4	9-12	1	0	0.0%
Ballet 5-6	9-12	1	0	0.0%
Ballet 7-8	9-12	1	0	0.0%
Choreography and History 1-2	9-12	1	0	0.0%
Folklorico 1-2	9-12	1	0	0.0%
Folklorico 3-4	9-12	1	0	0.0%
Folklorico 5-6	9-12	1	0	0.0%
Folklorico 7-8	9-12	1	0	0.0%
Jazz Dance 1-2	9-12	1	0	0.0%
Jazz Dance 3-4	9-12	1	0	0.0%
Jazz Dance 5-6	9-12	1	0	0.0%
Jazz Dance 7-8	9-12	1	0	0.0%
Modern Dance 1-2	9-12	1	0	0.0%
Modern Dance 3-4	9-12	1	0	0.0%
Modern Dance 5-6	9-12	1	0	0.0%
Modern Dance 7-8	9-12	1	0	0.0%
Guitar 1-2	9-12	1	0	0.0%
Guitar 3-4	9-12	1	0	0.0%
Guitar 5-6	9-12	1	0	0.0%
Jazz Band 1-2	9-12	1	0	0.0%
Jazz Band 3-4	9-12	1	0	0.0%
Jazz Band 5-6	9-12	1	0	0.0%
Mariachi 1-2	9-12	1	0	0.0%
Mariachi 3-4	9-12	1	0	0.0%
Mariachi 5-6	9-12	1	0	0.0%
Mariachi 7-8	9-12	1	0	0.0%
Orchestra 1-2	9-12	1	0	0.0%
Orchestra 3-4	9-12	1	0	0.0%
Orchestra 5-6	9-12	1	0	0.0%
Orchestra 7-8	9-12	1	0	0.0%
Chamber Orchestra Ensemble	9-12	1	0	0.0%
Percussion Master Class	9-12	1	0	0.0%
Piano and Theory 1-2	9-12	1	0	0.0%
Piano and Theory 3-4	9-12	1	0	0.0%
Piano and Theory 5-6	9-12	1	0	0.0%
Steel Drums 1-2	9-12	1	0	0.0%
Steel Drums 3-4	9-12	1	0	0.0%

Exhibit 2.2.3 (continued) Scope of Curriculum Grades 9-12 Tucson Unified School District January 2014				
Course	**Grade(s) Taught**	**Number of Courses Needing Curriculum**	**Number of Courses with Curriculum Available**	**% Scope**
Steel Drums 5-6	9-12	1	0	0.0%
Steel Drums 7-8	9-12	1	0	0.0%
Theater Arts Beginning	9-12	1	0	0.0%
Theater Arts Intermediate	9-12	1	0	0.0%
Theater Arts Advanced	9-12	1	0	0.0%
Theater Arts Directing	9-12	1	0	0.0%
Theater Arts Film acting	9-12	1	0	0.0%
Theater Arts Musical Theater	9-12	1	0	0.0%
Stage Management 1-2	9-12	1	0	0.0%
Stage Management 3-4	9-12	1	0	0.0%
Stage Management 5-6	9-12	1	0	0.0%
Vocal Music Beginning Boys	9-12	1	0	0.0%
Vocal Music Beginning Girls	9-12	1	0	0.0%
Vocal Music Advanced Girls	9-12	1	0	0.0%
Vocal Music Beginning Mixed	9-12	1	0	0.0%
Vocal Music Advanced Mixed 1-2	9-12	1	0	0.0%
Vocal Music Advanced Mixed 3-4	9-12	1	0	0.0%
Vocal Music Ensemble	9-12	1	0	0.0%
Total		**81**	**0**	**0.0%**
Health and Physical Education				
Health Education	9-12	1	0	0.0%
Body Conditioning I	9-12	1	0	0.0%
Body Conditioning II	9-12	1	0	0.0%
Dance 1-2 PE	9-12	1	0	0.0%
Lifeguard Training	9-12	1	0	0.0%
Physical Education	9-12	1	0	0.0%
Physical Education Co-ed	9-12	1	0	0.0%
Weight Training	9-12	1	0	0.0%
Yoga Beginning	9-12	1	0	0.0%
Yoga Advanced	9-12	1	0	0.0%
Total		**10**	**0**	**0.0%**
Electives				
Broadcast Journalism/Radio Production 1-2	9-12	1	0	0.0%
Broadcast Journalism/Radio Production 3-4	9-12	1	0	0.0%
Broadcast Journalism/Radio Production 5-6	9-12	1	0	0.0%
Driver Education	9-12	1	0	0.0%
Introduction to the Middle East	10-12	1	0	0.0%
Journalism, Beginning	9-12	1	0	0.0%
Journalism Advanced, Newspaper	9-12	1	0	0.0%
Journalism Advanced, Yearbook	9-12	1	0	0.0%
Speech	9-12	1	0	0.0%
Student Government	9-12	1	0	0.0%
Student Service Learning	9-12	1	0	0.0%
Total		**11**	**0**	**0.0%**

Exhibit 2.2.3 (continued) Scope of Curriculum Grades 9-12 Tucson Unified School District January 2014				
Course	**Grade(s) Taught**	**Number of Courses Needing Curriculum**	**Number of Courses with Curriculum Available**	**% Scope**
Career and Technical Ed				
Accounting				
Accounting 1-2	9-12	1	0	0.0%
Accounting 3-4	9-12	1	0	0.0%
Agriscience				
Agriscience I	10-11	1	0	0.0%
Agriscience II	11-12	1	0	0.0%
Allied Health Services				
Fundamentals of Sports Medicine	9-10	1	0	0.0%
Sports Medicine/Athletic Training	10-12	1	0	0.0%
Sports Medicine Lab	11-12	1	0	0.0%
Allied Health Internship	12	1	0	0.0%
Business Management and Administration				
Entrepreneurship 1-2	9-12	1	0	0.0%
Entrepreneurship 3-4	10-12	1	0	0.0%
Entrepreneurship 5-6	11-12	1	0	0.0%
Publications for Business 1-2	9-12	1	0	0.0%
Publications for Business 3-4	10-12	1	0	0.0%
Publications for Business 5-6	11-12	1	0	0.0%
Publications for Busines 7-8	12	1	0	0.0%
Technology Applications 1-2	9-12	1	0	0.0%
Technology Applications 3-4	10-12	1	0	0.0%
Technology Applications 5-6	11-12	1	0	0.0%
Technology Applications 7-8	11-12	1	0	0.0%
Business Operations 1-2	9-10	1	0	0.0%
Business Operations 3-4	10-12	1	0	0.0%
Construction Technologies				
Construction Technology 1-2	9-12	1	0	0.0%
Construction Technology 3-4	10-12	1	0	0.0%
Construction Technology 5-6	11-12	1	0	0.0%
Construction Technology 7-8	12	1	0	0.0%
Construction Technology 9-10 (residential)	12	1	0	0.0%
Culinary Arts				
Culinary Arts 1-2	9-12	1	0	0.0%
Culinary Arts 3-4	10-12	1	0	0.0%
Culinary Arts 5-6	11-12	1	0	0.0%
Culinary Arts 7-8	12	1	0	0.0%
Design and Merchandising				
Design and Merchandising 1-2	9-12	1	0	0.0%
Design and Merchandising 3-4	10-12	1	0	0.0%
Design and Merchandising Internship	12	1	0	0.0%
Drafting and Design Technology				
Design Drafting 1-2	9-12	1	0	0.0%

Exhibit 2.2.3 (continued) Scope of Curriculum Grades 9-12 Tucson Unified School District January 2014				
Course	**Grade(s) Taught**	**Number of Courses Needing Curriculum**	**Number of Courses with Curriculum Available**	**% Scope**
Design Drafting 3-4	10-12	1	0	0.0%
Design Drafting 5-6	11-12	1	0	0.0%
Mechanical Drafting 3-4	10-11	1	0	0.0%
Mechanical Drafting 5-6	11-12	1	0	0.0%
Mechanical Drafting 7-8	12	1	0	0.0%
Early Childhood Education				
Early Childhood Professions 1-2	9-12	1	0	0.0%
Early Childhood Professions 3-4	10-12	1	0	0.0%
Early Childhood Professions 5-6	11-12	1	0	0.0%
Education Professions 1-2	9-12	1	0	0.0%
Education Professions 3-4	10-12	1	0	0.0%
Electronic Technology				
Electronics 1-2	9-12	1	0	0.0%
Electronics 3-4	10-12	1	0	0.0%
Electronics 5-6	11-12	1	0	0.0%
Family and Consumer Science				
Cosmetology 1-2	12	1	0	0.0%
Fire Science				
Fire Science 1-2		1	0	0.0%
Communication Media Technology				
Digital Media 1-2	9-12	1	0	0.0%
Digital Media 3-4	10-12	1	0	0.0%
Digital Media 5-6	11-12	1	0	0.0%
Digital Media 7-8	12	1	0	0.0%
Photo Imaging 1-2	10-12	1	0	0.0%
Photo Imaging 3-4	11-12	1	0	0.0%
Photo Imaging 5-6	9-12	1	0	0.0%
Photo Imaging 7-8	10-12	1	0	0.0%
Photo Publication 7-8	11-12	1	0	0.0%
Heating/Air Conditioning Maintenance				
Heating/AC Maintenance 1-2	11-12	1	0	0.0%
Heating/AC Maintenance 3-4	10-12	1	0	0.0%
Heating and Air Conditioning Internship	10-12	1	0	0.0%
Information Technology				
PC Management/Maintenance 1-2	11-12	1	0	0.0%
PC Management/Maintenance 3-4	12	1	0	0.0%
Computer Networking 1-2	9-12	1	0	0.0%
Web Page Development 1-2	10-12	1	0	0.0%
Web Page Development 3-4	9-12	1	0	0.0%
Marketing-Management/Entrepreneurship				
Marketing	9-12	1	0	0.0%
Nursing Services				
Patient Care Technician	10-12	1	0	0.0%

Exhibit 2.2.3 (continued)
Scope of Curriculum Grades 9-12
Tucson Unified School District
January 2014

Course	Grade(s) Taught	Number of Courses Needing Curriculum	Number of Courses with Curriculum Available	% Scope
Precision Manufacturing				
Precision Machining 1-2	9-12	1	0	0.0%
Precision Machining 3-4	10-12	1	0	0.0%
Precision Machining 5-6	11-12	1	0	0.0%
Precision Machining 7-8	12	1	0	0.0%
Metals Manufacturing 1-2	10-12	1	0	0.0%
Automotive and Aviation Technology				
Automotive Technology 1-2	9-12	1	0	0.0%
Automotive Technology 3-4	10-12	1	0	0.0%
Automotive Technology 5-6	11-12	1	0	0.0%
Automotive Technology 7-8	11-12	1	0	0.0%
Automotive Technology 9-10	12	1	0	0.0%
Automotive Collision Repair 1-2	9-12	1	0	0.0%
Automotive Collision Repair 3-4	10-12	1	0	0.0%
Automotive Collision Repair 5-6	11-12	1	0	0.0%
Automotive Collision Repair 7-8	11-12	1	0	0.0%
Welding Technology				
Welding Design and Fabrication 1-2	9-12	1	0	0.0%
Welding Design and Fabrication 3-4	10-12	1	0	0.0%
Welding Design and Fabrication 5-6	11-12	1	0	0.0%
Welding Design and Fabrication 7-8	11-12	1	0	0.0%
Total		**86**	**0**	**0.0%**

Sources: District Course Catalog, High School Schedules, administrator interviews

Appendix G

Board Policies and Regulations for Finding 3.3
Tucson Unified School District
January 2014

- *Regulation AC R2*: *Discrimination—Americans with Disabilities Act Notice* extends nondiscrimination on the basis of a disability to the hiring, advancement, reassignment or discharge of employees. This regulation provides legal definitions of disability and reasonable accommodations for employment and the job.
- *Regulation AD-F: Intercultural Proficiency* states, "All District events and activities incorporate equity of opportunity, access, and outcome for all persons." Specifically,
  - "Each school provides all students equal access to quality educational programs and learning experiences.
  - Each school facilitates the students' family, language, and culture as foundations and resources for learning.
  - Classroom practices encourage multiple intelligences and reflect an understanding of different learning styles, both in individual and in cultural applications.
  - All teachers know how to use students' informal home language as a tool for developing formal literacy.
  - The assessment methods reflect the diversity of students' learning styles, language, and culture.
  - Classroom management techniques reflect the variety of cultures in the classroom."

  This policy further informs that TUSD provides opportunities for staff to gain knowledge about different cultural groups. Teachers receive training to help them use students' family, language, and culture as foundations for learning as well as training to help them work with culturally and linguistically diverse students and parents. Specifically, professional development of all employees is designed:
  - "To provide educational programs in human relations, racial/ethnic relations and human rights.
  - To provide educational programs for staff to develop the skill necessary to relate knowledgeably and sensitively to people of different racial and ethnic origins.
  - To provide educational programs for staff on integration of multicultural curriculum materials into existing programs."

  Curriculum and Learning Resources are:
  - "Designed and implemented appropriately as school-based experiences to combat oppression, racism and prejudice.
  - Encouraged and supported by the selection and/or development of all types of learning resources which reflect cultural and ethnic diversity and which present an accurate view of racial/ethnic groups."
- *Board Policy DD: Funding Proposals, Grants, and Special Projects* supports the use of state, federal, and other funds for supporting the schools and "for the enhancement of educational opportunities." The superintendent is to apprise the board of its eligibility for general or program funds and to make recommendations for board action.
- *Board Policy GCI: Professional Staff Development* directs that, "Employees are encouraged to participate in professional meetings, conferences, and approved in-service activities for the purpose of professional growth. As far as possible, Tucson Unified School District funds will be budgeted for these purposes."

- *Board Policy IGA: Curriculum Development* states, "The need and value of a systematic, ongoing program of curriculum development and evaluation involving students, parents, teachers, and administrators is recognized. It is essential that the school system continually develop and modify its curriculum to meet changing needs. The Board authorizes the Superintendent to develop the curriculum for the school system and to organize committees to review the curriculum. It shall be the responsibility of the Superintendent to develop proposals relating to curriculum modifications and additions that, in the opinion of the professional staff and consultants, are essential to the maintenance of a high-quality program of education from prekindergarten (PK) through grade twelve (12)."
- *Board Policy IHAA: English Instruction* stipulates, "All students have a right to the opportunity to develop a full command of the English language and to be provided at their local school with an English language public education and, as permitted by law, to develop skills in the use of other languages. English Language Learners (ELLs) shall be educated through Structured English Immersion (SEI). All students, however, whose parents have requested and received approval for waivers shall have their children taught through bilingual education techniques or other generally approved methodologies. In the majority of educational research studies, Dual Language Instruction (DLI) is considered the most effective form of bilingual education and shall be implemented, wherever possible, as part of the curriculum for students with an approved waiver. The goal of Dual Language Instruction is to promote individual student achievement, to provide students full access to the curriculum, to ensure students' rapid acquisition of Basic English language skills, and to secure for students the opportunity to demonstrate mastery of at least two languages, one of which will be English." This policy directs the superintendent to develop regulations to address services for ELLs and "will establish a plan for language education which shall include the training and professional growth of employees involved in the educational programs and activities governed by this policy."
- *Regulation IHB-R: Exceptional Education Instructional Programs* provides details for district compliance with federal and state requirements including:
    - Accomplish the requirements of the governing board set out in *Policy IHB: Special Instructional Programs*.
    - Assure district compliance with the requirements of applicable federal and state laws and the lawful regulations of the State Board of Education.
    - Aid district personnel in fulfilling their duties relating to the topic by presenting the procedural information in a format that aligns with the Arizona Department of Education/Exceptional Student Services (ADE/ESS) compliance checklists.

  The 39-page regulation addresses eligibility, Free Appropriate Public Education (FAPE), Child-Find, Evaluation and Eligibility, Individual Education Plans (IEP), least restrictive environment (LRE), Confidentiality, Discipline, extended school year (ESY), private schools, graduation and pupil-teacher ratios, and preschool. The LRE requirement stipulates, "Educate the students in special classes, school them separately, or otherwise remove them from the regular environment only when the nature or severity of the disability is such that education in regular classes, even with the use of supplementary aids and services, cannot be achieved satisfactorily." The district will document consideration of any potential harmful effects of the placement on the child or the quality of services. Further, "A child with a disability will not be removed from education in age-appropriate regular classrooms solely because of needed modifications in the general curriculum." "Students with disabilities will participate with non-disabled students in non-academic and extracurricular services and activities which may include: counseling services, athletics, transportation, health services, recreational activities, special interest groups or clubs sponsored by the District, referrals to agencies that provide assistance to individuals with disabilities and employment of students, including both employment by the District and assistance in making outside employment available."
- *Board Policy IHBB: Gifted Talented Education* guides gifted education by directing, "Tucson Unified School District recognizes that gifted students have special educational needs that should be met within

the context of educating the whole child through a variety of services and options. Each of these services and options should be available on a district wide basis." The role of the program is to:

- "Identify the particular abilities and needs of these students.
- Challenge students functioning at the highest level of ability.
- Encourage underachieving students who are capable of the highest performance.
- Promote higher level creative and productive thinking skills throughout the District.
- Promote creative or productive achievement."

The policy stipulates that "Gifted and talented students shall be provided with appropriate instruction and/or special ancillary services (from first grade through high school) that are designed to meet their educational needs" and "No students shall be excluded from the program(s) because of their ethnic status, handicapping condition, creed, gender, or religious convictions if they meet the eligibility criteria and have parent or guardian approval for participation."

- *Board Policy IJ: Instructional Materials* outlines the foundation for instructional materials provisions within the district. Specifically, "All students in the elementary (K-8) schools will have required textbooks and supplies furnished by the District and The District shall furnish required text materials and related printed subject matter materials for high school students in grades nine (9) through twelve (12)."
- *Board Policy IJJ: Textbook/Supplementary Materials Selection and Adoption* provides, "As required by State law, the Board will have final approval and adopt all new textbooks, supplementary course books, E-textbooks and course software." The superintendent was directed to establish textbook selection procedures that provide for the appropriate involvement of staff members, students, and community members. The board will approve the selection. Provision is also made for supplemental materials approved by assistant superintendents and by the board. The policy provides that "the committees will strive for continuity of textbooks throughout the different grades and use the same book series in all classes of the same grade and any exceptions must be approved by the Superintendent."
- *Board Policy IKA: Grading/Assessment* addresses the direction for student progress and grading for the general population. This policy stipulates that "Grades reporting achievement of special education students not taking regular education classes shall be given on a basis commensurate with the students' abilities and based on their individual progress rather than in competition with classmates. The permanent record cards for such students shall indicate enrollment in special education for those classes."
- *Regulation IKA-R: Grading/Assessment Systems* directs, "The subject grade should be based upon pupil mastery of the content of the course. The teacher will establish a reasonable standard for average achievement in each of the subjects." This regulation provides direction for letter grades, points, FAME scale, two grades per week, definition of formative and summative, progress reports, homework, honor roll, grade replacement, and report cards. Direction stipulates that grades shall be based on performance and discipline is to be marked separately.
- *Board Policy IK-AB: Report Cards/Progress Reports* provides for student progress reporting in a timely manner and to parents. Specifically, "Each school will report students' progress to the students and to their parents or guardians as appropriate. The reports will be clear, concise, and accurate, and will provide a basis of understanding among teachers, parents, and students for the benefit of the individual students. Reports of progress for students qualified for services under the Individuals with Disabilities Education Act (I.D.E.A.) shall be based on their progress in the general curriculum and shall address whether the progress is sufficient to enable the student to achieve the goals stated in the student's individualized education program (IEP) by the end of the school year."
- *Board Policy IKE: Promotion, Retention, Acceleration and Appeal* states that the Tucson Unified School District is dedicated to the continuous development of each student. This policy then further

describes the promotion, retention, and acceleration provision. Within the policy exceptions are made for exceptional education learners and ELL by stipulating, "In addition to the above, such decisions, when applied to students eligible and receiving special education services, and/or 504 plans, shall be on a case-by-case basis, consistent with the individualized education plan and in accordance with A.A.C. R7-2-301 and R7-2-401," and " The District will employ assessment and interventions strategies with English Language Learners in a way that language considerations will not be a factor in any retention decision. The intervention will be designed to provide students with additional and intensive help in learning English and acquiring core academic content knowledge."

- *Regulation IKE-R1: Promotion, Retention, Acceleration and Appeal* defines the requirements for promotion from grade to grade and level to level as well as the retention, acceleration, and appeal process. Nothing was addressed related to any special subpopulation.
- *Regulation IKE-R2: Competency Requirement for Promotion of Students from Third Grade* provides direction for how TUSD will address the requirement for students to be promoted from third grade based on the reading section of the *AIMS* test. It specifies the notice to parents, including the description of the reading deficiency and the intervention services available to the student. The regulation further provides, "The Governing Board may promote a student from the third (3rd) grade if the student obtains a score on the reading portion of the *AIMS* test, or a successor test, that demonstrates the student's reading skills fall far below the third (3rd) grade level for any of the following:
    - A good cause exemption if the student is an English learner or a limited proficient student as defined in section 15-751 and has had fewer than two (2) years of English language instruction.
    - A student with a disability as defined in section 15-761 if the pupil's individualized education program team and the student's parent or guardian agrees that promotion is appropriate based on the student's individualized education program."
- *Board Policy IKF: Graduation Requirements* stipulates, "Graduation requirements for Tucson Unified School District are to be completed during grades nine to twelve with some courses offered for high school credit at the 8th grade level." This policy defines the number of credits in specific courses that must be achieved, as well as a statement that students must "demonstrate proficiency/competency in the areas determined by the State Board of Education by achieving a passing score on established tests." The policy further addresses acceleration for graduation, as well as students with alternative needs. The policy states that the graduation requirements for students receiving special education and who have IEPs will be the same as those for students receiving regular education with the following exceptions:
    - "One-course substitution from any required academic area may be considered. The maximum number of course substitutions allowed is four.
    - The alternative course that will serve as a substitution must contain comparable content material.
    - The IEP will guide the *AIMS* test for graduation requirements. All exceptional education students must take the *AIMS* test or the alternative assessment to the *AIMS*."
- *Regulation IKF-R: Graduation Requirements* outlines the verification of student accomplishment of subject area requirements and credits. This includes the demonstration of mastery of the district standards and course curriculum as well as a passing score on the *AIMS* reading, writing, and math tests. It provides that "Students with disabilities shall meet general graduation requirements with appropriate accommodations and curricular modification as determined by their Individual Education Plans (IEPs). Graduation issues will be addressed by the IEP team on an individual basis. The IEP is the vehicle for making changes to graduation requirements, including *AIMS* requirements, to meet the unique educational needs for students with disabilities. As such, the IEP must document the nature and extent of modifications, substitutions, and/or exemptions made to accommodate a student with disabilities. The decision to terminate services, through graduation, for a student with disabilities under the age of twenty-two, is an IEP team decision. Exceptional education students who turn twenty-two within the school year and will meet the graduation requirements for graduation by year-end may stay

to complete the program." The regulation addresses *g*raduation options for students with disabilities whose age mates will graduate during a given academic year.

- *Board Policy JG: Equal Education Opportunities & Anti-Harassment* provides, "The right of a student to participate fully in classroom instruction shall not be abridged or impaired because of race, color, religion, sex, sexual orientation, age, national origin, and disability, or any other reason not related to the student's individual capabilities. The right of students to participate in extracurricular activities shall be dependent only upon their maintaining the minimum academic and behavioral standards established by the Board, and their individual ability in the extracurricular activity."
- *Regulation JG-R: Equal Education Opportunities & Anti-Harassmen*t directs TUSD to conduct a prompt and equitable investigation of every complaint of discrimination or harassment as defined under *Board Policy AC: Discrimination* and *Board Policy ACA: Sexual Harassment*.
- *Regulation JG-R: Assignment of Students to Classes and Grade Levels* addresses the process for determining placement, credit status, and assignment to a grade level. It stipulates that "The assignments shall be made consistent with policy, regulations, and approved school guidelines."
- *Board Policy JK: Student Discipline* stipulates, "A Student Code of Conduct (entitled Guidelines for Student Rights and Responsibilities), describing this policy and the disciplinary procedures utilized by the District shall be made available to all students and their parent(s)/guardian(s) as required by A.R.S. §15-843. All disciplinary actions shall be in accordance with these *Guidelines for Student Rights and Responsibilities* which are incorporated herein by reference. To ensure fairness, a student whose conduct may warrant discipline, suspension or expulsion will be provided due process as required by law. The Superintendent is responsible for establishing Administrative Regulations that set forth the discipline process including the process for hearing and appealing long-term suspensions or expulsions. Students with disabilities – Because the Individuals with Disabilities Education Act (IDEA) requires additional procedural safeguards, all district personnel administering discipline to students will always follow discipline procedures for students with disabilities when dealing with a student in the exceptional education programs or Section 504."
- *Regulation JK-R1: Short Term Suspensions* provides definitions of short term suspension, the use within the district for disciplinary action, the documentation, the notice to parents and the conference, the appeals procedures, and the hearing process.
- *Regulation JK-R2: Long Term Suspensions* gives direction for long term and short term suspensions and the use within the district for disciplinary actions. This regulation defines the procedures for implementing long term suspensions, the documentation, the appeals procedures, and the hearing process.
- *Board Policy JKAA: Discipline, Suspension, Expulsion for 504 Handicapped Students* directs, "The Governing Board is committed to providing a Free Appropriate Public Education (FAPE) to all disabled students, pursuant to the Rehabilitation Act of 1973 (§504), and federal and state laws and regulations. In accordance with Section 504, all children with disabilities, as defined by Section 504, and their parents or legal guardians, shall be provided with all rights and protections afforded them under the Act. The District shall also provide such students and their parents or legal guardians with written procedural safeguards and all notices required by Section 504. The Policy shall be implemented by a companion Administrative Regulation and the procedures set forth therein."
- *Board Policy JKAB*: *Discipline of, and Alternative Interim Education Placements for Special Education Students* stipulates, "The Governing Board is committed to providing a free appropriate public education (FAPE) to all disabled students, pursuant to the Individuals with Disabilities Education Act (IDEA), as amended, and federal and state laws and regulations. In accordance with IDEA, all 'children with disabilities' as defined by IDEA, and their parents or legal guardians, shall be provided with all rights and protections afforded them under the act. The District shall also provide such students and their parents or legal guardians with written procedural safeguards and all notices required by IDEA. The

Policy shall be implemented by a companion Administrative Regulation and the procedures set forth herein."

- *Board Policy KBF: Interpreter and Translator Support Services for Students and Parents/Guardians* states, "In order to ensure equal access to District education and support services, Tucson Unified School District is committed to ensuring communication with Limited English Proficient (LEP) students and their families in a language they understand. To achieve this goal, TUSD commits to the following core principles: Identification of LEPs; Notice to LEPs; Provision of interpreter/translation services; Staff training; Documentation and quality control."

Appendix H

***AIMS* Third Grade Reading and Mathematics: Percent Meeting or Exceeding Standards**
By Percent Low Socioeconomic Status
Tucson Unified School District
January 2014

School Name	Percent of Tested Students Identified as Low SES	Percent Meeting or Exceeding 3rd Grade Reading Standards *AIMS* 2013	Percent Meeting or Exceeding 3rd Grade Math Standards *AIMS* 2013
Safford Magnet	100%	70%	45%
Naylor	98%	47%	65%
Myers-Ganoung	98%	57%	65%
Van Buskirk	98%	52%	58%
Cavett	98%	51%	37%
Menlo Park	98%	67%	57%
Lynn/Urquides	98%	44%	41%
Mission View	97%	54%	46%
Ochoa	97%	57%	37%
Wright	97%	66%	63%
Hollinger	96%	61%	55%
Pueblo Gardens	96%	71%	60%
Cragin	95%	64%	54%
Rose	95%	70%	57%
Davidson	94%	52%	33%
Lawrence	94%	48%	46%
Holladay	93%	59%	45%
Manzo	93%	54%	46%
Dietz	93%	69%	53%
Maldonado	92%	54%	39%
Tully	92%	69%	61%
Blenman	92%	59%	51%
Grijalva	91%	66%	63%
Miller	91%	56%	60%
Erickson	90%	73%	69%
Fort Lowell/Townsend	90%	45%	37%
Tolson	90%	61%	51%
Schumaker	88%	64%	58%
Brichta	87%	59%	39%
Howell	86%	76%	66%
Drachman	86%	70%	68%
Robison	86%	72%	58%
McCorkle PreK-8	86%	53%	46%
Warren	84%	65%	62%
Ford	83%	56%	56%
Carrillo	83%	76%	76%

Appendix H (continued)
***AIMS* Third Grade Reading and Mathematics: Percent Meeting or Exceeding Standards**
By Percent Low Socioeconomic Status
Tucson Unified School District
January 2014

School Name	Percent of Tested Students Identified as Low SES	Percent Meeting or Exceeding 3rd Grade Reading Standards *AIMS* 2013	Percent Meeting or Exceeding 3rd Grade Math Standards *AIMS* 2013
Hudlow	83%	78%	63%
Laura N Banks	83%	75%	63%
Bonillas	82%	65%	62%
Vesey	82%	64%	62%
White	82%	78%	70%
Henry (Hank) Oyama	80%	59%	43%
Lyons	80%	75%	53%
Steele	80%	62%	50%
Roskruge Bilingual Magnet	80%	72%	67%
Sewell	79%	73%	71%
Fickett Magnet	78%	57%	50%
Dunham	71%	59%	49%
Wheeler	70%	78%	60%
Corbett	68%	60%	56%
Kellond	66%	83%	71%
Marshall	65%	50%	31%
Whitmore	58%	71%	49%
Henry	58%	68%	58%
Bloom	56%	84%	65%
Davis	54%	67%	50%
Borton	53%	72%	67%
Lineweaver	49%	84%	86%
Gale	37%	92%	90%
Miles - E. L. C.	37%	77%	63%
Robins	36%	87%	76%
Hughes	31%	77%	69%
Borman	30%	82%	76%
SolengTom	28%	90%	78%
Collier	25%	93%	90%
Fruchthendler	14%	91%	80%

Appendix I

Revised Bloom's Taxonomy
Tucson Unified School District
January 2014

Excerpts taken from:

Anderson, L.W., Krathwohl, D.R. (Eds.), (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives.* Complete edition, New York: Longman.

TAXONOMY TABLE FOR BLOOM'S TAXONOMY

The Knowledge Dimension	The Cognitive Process Dimension					
	1 Remember	2 Understand	3 Apply	4 Analyze	5 Evaluate	6 Create
A. Factual Knowledge						
B. Conceptual Knowledge						
C. Procedural Knowledge						
D. Metacognitive Knowledge						

Appendix I (continued)
Revised Bloom's Taxonomy
Tucson Unified School District
January 2014

THE MAJOR TYPES AND SUBTYPES OF THE KNOWLEDGE DIMENSION

Major types and Subtypes	Examples
A. Factual Knowledge—The basic elements students must know to be acquainted with a discipline or solve problems in it	
Aa. Knowledge of terminology	Technical vocabulary, musical symbols
Ab. Knowledge of specific details and elements	Major natural resources, reliable sources of information
B. Conceptual knowledge – the interrelationships among the basic elements within a larger structure that enable them to function together	
Ba. Knowledge of classifications and categories	Periods of geological time, forms of business ownership
Bb. Knowledge of principles and generalizations	Pythagorean theorem, law of supply and demand
Bc. Knowledge of theories, models, and structures	Theory of evolution, structure of Congress
C. Procedural knowledge—How to do something, methods of inquiry, and criteria for using skills, algorithms, techniques, and methods	
Ca. Knowledge of subject-specific skills and algorithms	Skills used in painting with watercolors, whole number division algorithm
Cb. Knowledge of subject-specific techniques and methods	Interviewing techniques, scientific method
Cc. Knowledge of criteria for determining when to use appropriate procedures	Criteria used to determine when to apply a procedure involving Newton's second law, criteria used to judge the feasibility of using a particular method to estimate business costs
D. Metacognitive knowledge—Knowledge of cognition in general as well as awareness and knowledge of one's own cognition	
Da. Strategic knowledge	Knowledge of outlining as a means of capturing the structure of a unit of subject matter in a textbook, knowledge of the use of heuristics
Db. Knowledge about cognitive tasks, including appropriate contextual and conditional knowledge	Knowledge of the types of tests particular teachers administer, knowledge of the cognitive demands of different tasks
Dc. Self-knowledge	Knowledge that critiquing essays is a personal strength, whereas writing essays is a personal weakness; awareness of one's own knowledge level

Appendix I (continued)
Revised Bloom's Taxonomy
Tucson Unified School District
January 2014

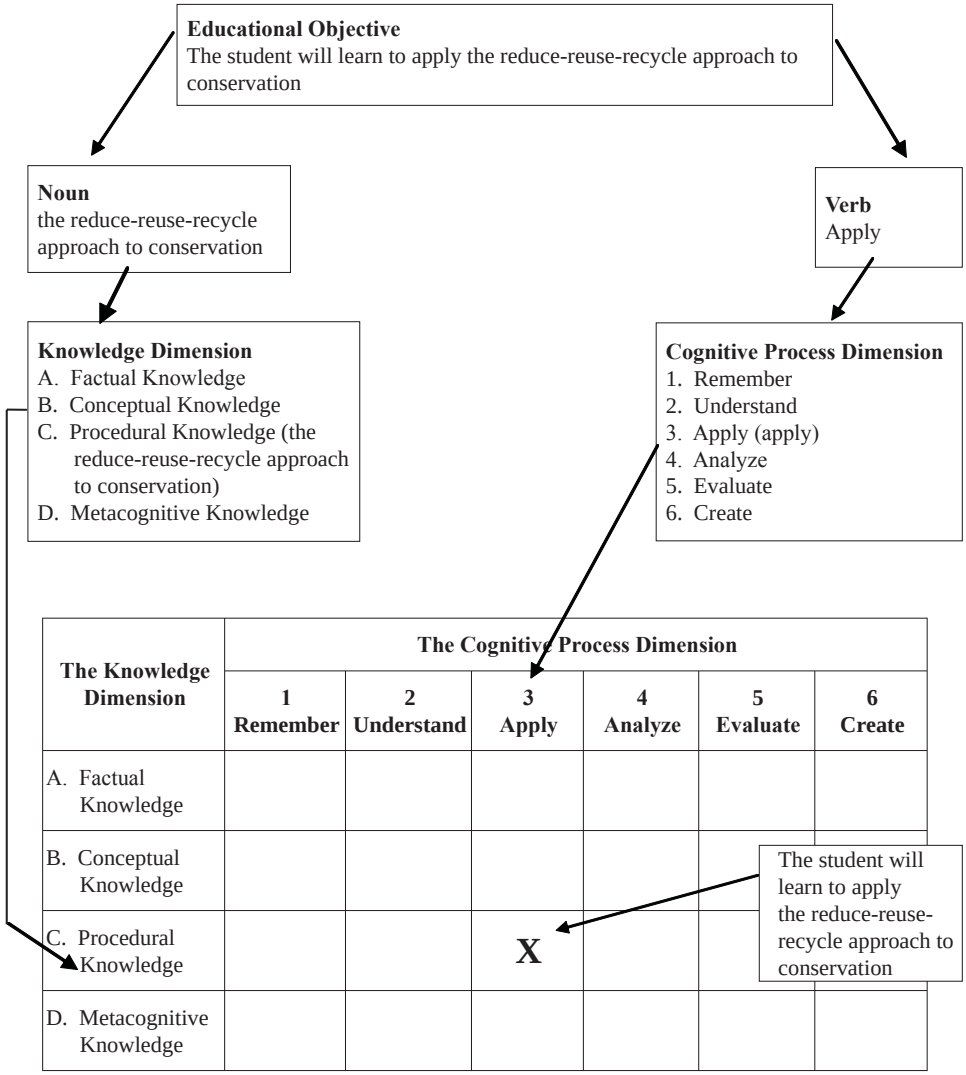
THE SIX CATEGORIES OF THE COGNITIVE PROCESS DIMENSION AND RELATED COGNITIVE PROCESSES

Process Categories	Cognitive Processes and Examples
1. Remember—Retrieve relevant knowledge from long-term memory	
1.1) Recognizing	Locating knowledge in long-term memory that is consistent with presented material (e.g., Recognize the dates of important events in U.S. History)
1.2) Recalling	Retrieving relevant knowledge from long-term memory (e.g., Recall the dates of important events in U.S. History)
2. Understand—Construct meaning from instructional messages, including oral, written, and graphic communication	
2.1) Interpreting	Changing from one form of representation (e.g., numerical) to another (e.g., verbal) (e.g., Paraphrase important speeches and documents)
2.2) Exemplifying	Finding a specific example or illustration of a concept or principle (e.g., Give examples of various artistic painting styles)
2.3) Classifying	Determining that something belongs to a category (e.g., concept or principle) (e.g., Classify observed or described cases of mental disorders)
2.4) Summarizing	Abstracting a general theme or major point(s) (e.g., Write a short summary of the events portrayed on videotape)
2.5) Inferring	Drawing a logical conclusion from presented information (e.g., In learning a foreign language, infer grammatical principles from examples)
2.6) Comparing	Detecting correspondences between two ideas, objects, and the like (e.g., Compare historical events to contemporary situations)
2.7) Explaining	Constructing a cause-and-effect model of a system (e.g., Explaining the causes of important 18th century events in France)
3. Apply—Carry out or use a procedure in a given situation	
3.1) Executing	Applying a procedure to a familiar task (e.g., Divide one whole number by another whole number, both with multiple digits)
3.2) Implementing	Applying a procedure to an unfamiliar task (e.g., Use Newton's second law in situations where it is appropriate)
4. Analyze—Break material into constituent parts and determine how parts relate to one another and to an overall structure or purpose	
4.1) Differentiating	Distinguishing relevant from irrelevant parts or important from unimportant parts of presented material (e.g., Distinguish between relevant and irrelevant numbers in a mathematical word problem)
4.2) Organizing	Determining how elements fit or function within a structure (e.g., Structure evidence in a historical description into evidence for and against a particular historical explanation)
4.3) Attributing	Determine a point of view, bias, values, or intent underlying presented material (e.g., Determine the point of view of the author of an essay in terms of his or her political perspective)

Appendix I (continued) Revised Bloom's Taxonomy Tucson Unified School District January 2014	
5. EVALUATE—Make judgments based on criteria and standards	
5.1) Checking	Detecting inconsistencies or fallacies within a process or product; determining whether a process or product has internal consistency; detecting the effectiveness of a procedure as it is being implemented (e.g., Determine if a scientist's conclusions follow from observed data)
5.2) Critiquing	Detecting inconsistencies between a product and external criteria, determining whether a product has external consistency; detecting the appropriateness of a procedure for a given problem (e.g., Judge which of two methods is the best way to solve a given problem)
6. CREATE—Put elements together to form a coherent or functional whole; reorganize elements into a new pattern or structure	
6.1) Generating	Coming up with alternative hypotheses based on criteria (e.g., Generate hypotheses to account for an observed phenomenon)
6.2) Planning	Devising a procedure for accomplishing some task (e.g., Plan a research paper on a given historical topic)
6.3) Producing	Inventing a product (e.g., build habitats for a specific purpose)

Appendix I (continued)
Revised Bloom's Taxonomy
Tucson Unified School District
January 2014

Figure 1 How an Objective (the student will learn to apply the reduce-reuse-recycle approach to conservation) is classified in the Taxonomy Table.



The Knowledge Dimension	The Cognitive Process Dimension					
	1 Remember	2 Understand	3 Apply	4 Analyze	5 Evaluate	6 Create
A. Factual Knowledge						
B. Conceptual Knowledge						
C. Procedural Knowledge			X			
D. Metacognitive Knowledge						

Appendix I (continued)
Revised Bloom's Taxonomy
Tucson Unified School District
January 2014

THE COGNITIVE PROCESS DIMENSION

Bloom's Taxonomy – The Cognitive Process Dimension		
Categories and Cognitive Processes	**Alternative Names**	**Definitions and Examples**
1) REMEMBER—retrieve relevant knowledge from long term memory		
1.1) RECOGNIZING	Identifying	Locating knowledge in long-term memory that is consistent with presented material (e.g., Recognize the dates of important events in U.S. History)
1.2) RECALLING	Retrieving	Retrieving relevant knowledge from long-term memory (e.g., Recall the dates of important events in U.S. History)
2) UNDERSTAND—construct meaning from instructional messages, including oral, written, and graphic communication		
2.1) INTERPRETING	Clarifying, Paraphrasing, Representing, Translating	Changing from one form of representation (e.g., numerical) to another (e.g., verbal) (e.g., Paraphrase important speeches and documents)
2.2) EXEMPLIFYING	Illustrating, Instantiating	Finding a specific example or illustration of a concept or principle (e.g., Give examples of various artistic painting styles)
2.3) CLASSIFYING	Categorizing, Subsuming	Determining that something belongs to a category (e.g., concept or principle) (e.g., Classify observed or described cases of mental disorders)
2.4) SUMMARIZING	Abstracting, Generalizing	Abstracting a general theme or major point(s) (e.g., Write a short summary of the events portrayed on videotape)
2.5) INFERRING	Concluding, Extrapolating, Interpolating, Predicting	Drawing a logical conclusion from presented information (e.g., In learning a foreign language, infer grammatical principles from examples)
2.6) COMPARING	Contrasting, Mapping, Matching	Detecting correspondences between two ideas, objects, and the like (e.g., Compare historical events to contemporary situations)
2.7) EXPLAINING	Constructing models	Constructing a cause-and-effect model of a system (e.g., Explaining the causes of important 18th century events in France)
3) APPLY—Carry out or use a procedure in a given situation		
3.1) EXECUTING	Carrying out	Applying a procedure to a familiar task (e.g., Divide one whole number by another whole number, both with multiple digits)

Appendix I (continued) Revised Bloom's Taxonomy Tucson Unified School District January 2014		
3.2) Implementing	Using	Applying a procedure to an unfamiliar task (e.g., Use Newton's second law in situations where it is appropriate)
4) Analyze—Break material into its constituent parts and determine how the parts relate to one another and to an overall structure or purpose		
4.1) Differentiating	Discriminating, Distinguishing, Focusing, Selecting	Distinguishing relevant from irrelevant parts or important from unimportant parts of presented material (e.g., Distinguish between relevant and irrelevant numbers in a mathematical word problem)
4.2) Organizing	Finding coherence, Integrating, Outlining, Parsing, Structuring	Determining how elements fit or function within a structure (e.g., Structure evidence in a historical description into evidence for and against a particular historical explanation)
4.3) Attributing	Deconstructing	Determine a point of view, bias, values, or intent underlying presented material (e.g., Determine the point of view of the author of an essay in terms of his or her political perspective)
5) Evaluate—make judgments based on criteria and standards		
5.1) Checking	Coordinating, Detecting, Monitoring, Testing	Detecting inconsistencies or fallacies within a process or product; determining whether a process or product has internal consistency; detecting the effectiveness of a procedure as it is being implemented (e.g., Determine if a scientist's conclusions follow from observed data)
5.2) Critiquing	Judging	Detecting inconsistencies between a product and external criteria, determining whether a product has external consistency; detecting the appropriateness of a procedure for a given problem (e.g., Judge which of two methods is the best way to solve a given problem)
6) Create—Put elements together to form a coherent or functional whole; reorganize elements into a new path or structure		
6.1) Generating	Hypothesizing	Coming up with alternative hypotheses based on criteria (e.g., Generate hypotheses to account for an observed phenomenon)
6.2) Planning	Designing	Devising a procedure for accomplishing some task (e.g., Plan a research paper on a given historical topic)
6.3) Producing	Constructing	Inventing a product (e.g., build habitats for a specific purpose)

Appendix J

Characteristics of Cognitively Engaging Instruction
Tucson Unified School District
January 2014

Note: The term, "Cognitively engaging instruction" is intended to describe classrooms where the emphasis is on meaningful, challenging student learning that makes kids think, involves them in their own academic progress, and creates a climate that encourages risk-taking, thinking outside the box, and real-life scenarios.

Cognitively engaging instruction is focused on the most important role schools play: promoting student learning. It is built on the foundation of rigor. Rigor is not determined by the quantity of work a student completes; rather, rigor refers to the *nature* of the work a student performs in completing an assignment or project; i.e., the amount of thinking that is involved, the nature of that thinking, and how it is manifested in students' work.

The following characteristics are extrapolated from research and have been shown to be effective in improving achievement among all student groups: at-risk students, gifted students, learning disabled students, and ELL students. These characteristics, when coupled with challenging academic content, describe courses that would be considered "advanced" or "enrichment"-type courses.

1. **Teaching approaches and student learning** act**ivities reflect a constructivist philosophy regarding student learning. Such approaches are typified by the following char**act**eristics:**

   - ☐ The focus of all learning activities is to keep them meaningful for the student. The student understands why he/she is doing the activity, the goal or purpose behind it, and how he/she will ultimately benefit from completing it. Activities are student-centered, not teacher-centered.
   - ☐ Learning focuses more on larger, connected or related concepts rather than on discrete, specific facts.
   - ☐ The student can relate their learning to real-life scenarios; the learning is seen as relevant to themselves, personally, or to their social context.
   - ☐ Every student is an active participant in his/her learning. Students are involved in setting learning goals and in monitoring their own progress in mastering objectives and meeting their goals.
   - ☐ Learning activities are intrinsically interesting. They are modified to suit student preferences, learning styles, and academic needs. Students have a certain degree of autonomy, or choice, in their learning activities and the product they are responsible for.

2. **Students are divided into smaller groups (or pairs) for various instructional purposes. These groupings are accomplished in the following ways and for the various purposes:**

   - ☐ Students are grouped or paired heterogeneously to foster collaboration with others and to encourage communication and positive, productive social interaction. Working in heterogeneous, collaborative groupings involves accountability and respects prevailing rules governing group members' conduct (to ensure accountability for all group members).
   - ☐ Students are grouped homogeneously, typically by need, to allow for instruction at the students' level and in response to diagnosed gaps in learning. These groupings are never static; they change constantly—usually weekly or even daily—to reflect varying rates of student progress in mastering objectives.
   - ☐ Groupings may be cooperative, where students work with each other to accomplish assigned tasks; pairs, where students review and learn from one another; or varied-size groups, pulled together to allow for small group, targeted instruction.

3. Act**ivities are personally relevant and culturally responsive. Such** act**ivities are char**act**erized by the following char**act**eristics:**

   - ☐ Students are led to connect their learning to real-life scenarios or personal experiences, such as things they've seen or done themselves.

Appendix J (continued)
Characteristics of Cognitively Engaging Instruction
Tucson Unified School District
January 2014

- ☐ Learning scenarios are culturally responsive—learning activities always take into account and build on students' linguistic, ethnic, and socioeconomic diversity.
- ☐ Students are encouraged to view new learning through a lens of their personal cultural perspective: what about that learning has significance in their own ethnic/cultural context? What is similar? What is different? What learning is culturally neutral?

4. **Students are encouraged to think independently and critically:**
   - ☐ The overall focus of learning activities is on thinking, not acquiring facts or knowledge. Knowledge acquisition is accomplished through projects and assignments.
   - ☐ Students engage in learning scenarios and activities that require them to think independently—in contrast to mainstream thinking or against majority opinion or stance. In such scenarios, students are encouraged to adopt a specific position or formulate an argument, whether it reflects their personal opinion or not, and research and defend that position to those possessing opposing viewpoints.
   - ☐ Students are involved in analytical thinking—breaking down concepts or processes into their various parts and demonstrating an understanding of how the parts relate to one another, or evaluating the advantages and disadvantages of all parts or perspectives.
   - ☐ Students are given tasks that require reviewing large quantities of information and data and summarizing them into brief, meaningful synopses.
   - ☐ Student activities reflect active cognitive processing, as first conceptualized by Bloom in his Taxonomy of Learning.
5. **The teacher engages students in metacognitive strategies. These strategies include the following characteristics.**
   - ☐ Students are asked to think and reflect on their own thinking. They can explain how they arrived at an answer, describe their thought processes in completing a task or solving a problem, and describe their progress in mastering a specific concept or skill.
6. **Language structures and vocabulary are deliberately, consciously taught and integrated into all learning activities across all content areas.**
   - ☐ Classroom activities explicitly integrate and teach vocabulary using authentic text and context-embedded approaches.
   - ☐ Learning activities across content areas simultaneously focus on content mastery as well as language skills: language structure, punctuation, vocabulary.
   - ☐ Students are engaged in multiple modes of communication—speaking, reading, writing, listening. Writing (for essays, projects) is implemented across content areas as a means to demonstrate critical, analytical thinking.
7. **Instruction is differentiated to meet specific student academic needs and preferences:**
   - ☐ Teachers utilize a variety of student groupings and multiple diagnostic tools and instructional resources to determine and teach required content (concepts, skills, knowledge, and vocabulary).
   - ☐ Teachers plan instruction based on data from formative, diagnostic tools, which reveal gaps in student learning and specific weaknesses in student mastery of intended objectives.

Appendix K

Characteristics of Culturally Responsive Teaching
Tucson Unified School District
January 2014

1. **The teacher consistently compares and contrasts different cultures, languages, experiences, and values with the dominant community cultures in the classroom, regardless of the content area.**

   The teacher consistently allows students the opportunity to discuss their own and their families' experiences, values, and cultural experiences during the course of lessons and activities, within a context of acknowledging differences and similarities with the predominant community culture. The teacher displays an attitude of appreciating differences, presenting them in a positive light. This is a consistent approach every day, during various lessons or classroom scenarios.

2. **Actively researches different cultural perspectives and examples connected to instructional content and incorporates these into classroom lessons and discussions.**

   The teacher actively seeks examples, from his/her students' own representative cultures as well as from other cultures, that tie into classroom lessons and discussions. For example, in a lesson on basic mathematical algorithms (division/multiplication), the teacher researches common global approaches to the same and introduces them in the classroom.

3. **Involves students, parents, and the community in contributing to cultural awareness and appreciation.**

   Whenever possible, the teacher invites contributions from students, parents, and the community at large in learning activities that focus on curriculum content being taught with diverse cultural perspectives.

4. **Facilitates and encourages students to discuss concepts and new learnings in their native language in earlier stages of language development (not translating).**

   When possible or desirable, the teacher allows small groups or pairs of students to discuss new learnings in their native language, to assure understanding of key curriculum concepts and vocabulary. For example, when reading a novel in class, students are occasionally grouped by native language to allow discussion of the plot and themes in the book, so students' comprehension is supported.

   This approach is not to be confused with translating for students, although occasional translation (among students only) is acceptable. The teacher also allows students to contribute to classroom discussions in their native language if their English is not yet strong enough, with another student translating. This enables all students to contribute to discussions and activities.

5. **Incorporates cross-language, as well as cross-cultural, comparison and development.**

   The teacher facilitates comparing languages and cultures in a deliberate way. For example, word walls, graphic organizers, and concept maps may be used with bilingual terms and expressions.

6. **Respects and values student input and frequently (daily) elicits student involvement and supports their personal connection to the learning.**

   Students are always encouraged to contribute to classroom activities and discussions, sharing personal experiences that relate to new content. Such approaches also support scaffolding of curriculum content and make learning more personally relevant.

7. **Respects students' affective needs with regard to participation and involvement in classroom activities and discussions, particularly during the early stages of English development.**

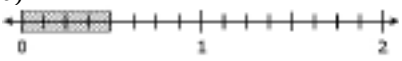
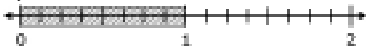
   The teacher allows students periods of silence or non-involvement, if a student feels uncomfortable participating or is struggling with communication issues. Such scenarios can be extremely stressful to children and emotionally challenging, and the teacher responds accordingly with sensitivity and tolerance. Every student is unique and should be encouraged but never forced to participate in every activity. Consider alternative forms of involvement if the activity is a type of assessment.

Appendix L

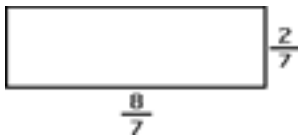
Exhibit 2.4.4a
Congruency of Mathematics Classroom Artifacts to *ATI* Benchmark Assessments for Grades 2 to 10
Tucson Unified School District
January 2014

Classroom Artifact Description and Sample Items	**Grade Equivalent *ATI* Item(s)**	**Content Congruence of Assessment**		**Cognitive Congruence of Assessment**		**Comments on Assessment Congruency**
		Yes	**No**	**Yes**	**No**	
Grade 2 Math, Worksheet "Wednesday Math" 14 – 5 = _____ 10 + 10 = _____ Name the pattern: ☺☻ ☻☺☻ ☻☺☻ ☻ If Walter eats ½ of his candy bar for lunch and ½ of his candy bar for a snack after school, how much is left? _____ is left Mark the even numbers. 1 2 3 4 5 6	Grade 2, *ATI* PM1, Item 19 Mano hid 48 pieces of candy. His brother found the hiding place and began to eat the candy. He ate 19 pieces before Mano found out. Which number sentence could be used to figure out how many pieces of candy were left for him to hide again? a. 19 – 48 = b. 48 + 19 = c. 48 – 19 = d. 19 - __ = 48	X			X	Auditors noted the *ATI* example used a word problem, but most of the sample artifacts collected did not utilize word problems.
Grade 2 Math, Worksheet "Mountain Math" Write this number ___ Is this number even or odd? Round this number to the nearest ten. What number is 1 less than this number? What number is 1 more than this number?	Grade 2 *ATI* PM1, Item 20 Which model shows the number 14 in the correct place value columns? a) Hundreds | Tens | Ones 4 | 1 | 0 b) Hundreds | Tens | Ones 1 | 4 | 0 c) Hundreds | Tens | Ones 0 | 4 | 1 d) Hundreds | Tens | Ones 0 | 1 | 4	X			X	Content is partially present in the sample asking students to round to the nearest ten, but that alone would not allow students to complete the *ATI* example.

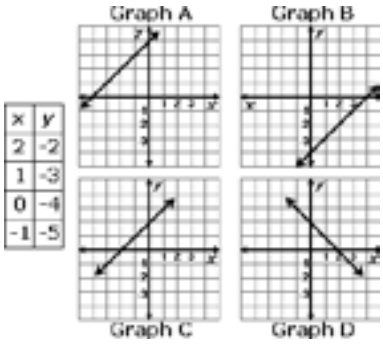
Appendix L (continued)
Exhibit 2.4.4a
Congruency of Mathematics Classroom Artifacts to *ATI* Benchmark Assessments for Grades 2 to 10
Tucson Unified School District
January 2014

Classroom Artifact Description and Sample Items	**Grade Equivalent *ATI* Item(s)**	**Content Congruence of Assessment**		**Cognitive Congruence of Assessment**		**Comments on Assessment Congruency**
		Yes	**No**	**Yes**	**No**	
Grade 3 Math, Worksheet "Set 14: Multiplying by 2" 2 x 4 = 2 x 9 = 2 x 1 = 2 x 6 = 2 x 2 =	Grade 3 *ATI* PM1, Item 17 Paul put 28 rocks into boxes. Each box has 7 rocks. Which equation's solution shows how many boxes Paul used? a. 4 x ◯ = 28 b. 7 x 28 = ◯ c. 28 ÷ ◯ = 7 d. 28 ÷ 4 = ◯		X		X	The worksheet collected involved only multiples of 2 and students only worked the problems in one direction where the *ATI* example involved students working the problems in multiple directions.
Grade 3 Math, Worksheet "Area Model" Students are given a fraction and then asked to create a model showing shaded area representing the fraction. Students are then asked to place the fraction on a number line.	Grade 3 *ATI* PM1, Item 23 Which number line shows the following fraction? 5/8 a)  b)  c)  d) 	X		X		
Grade 4 Math, Worksheet "Daily Math Practice" Add a sign. 3 5 1 1 = 46 7 1 0 = 70 I am a number between 10 and 25. I am a multiple of 8, and one of my digits is a 2. What number am I?	Grade 4 *ATI* PM1, Item 10 Holly is showing how to use the distributive property with 8 x 12. What number should she put in the box? 8 x 12 8 x (□ + 2) (8 x 10) + (8 x 2) a. 10 b. 12 c. 16 d. 80		X		X	The worksheet begins work with multiplying, but the *ATI* example uses the distributive property of multiplying.

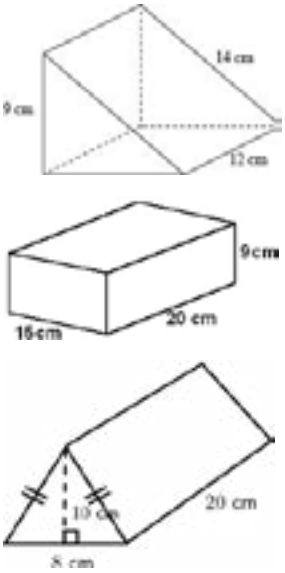
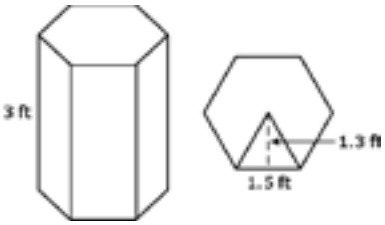
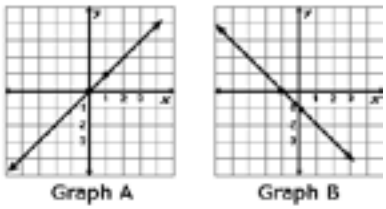
Appendix L (continued)
Exhibit 2.4.4a
Congruency of Mathematics Classroom Artifacts to *ATI* Benchmark Assessments for Grades 2 to 10
Tucson Unified School District
January 2014

Classroom Artifact Description and Sample Items	**Grade Equivalent *ATI* Item(s)**	**Content Congruence of Assessment**		**Cognitive Congruence of Assessment**		**Comments on Assessment Congruency**
		Yes	**No**	**Yes**	**No**	
Grade 5 Math, Worksheet "Fractions" 4/8 = 6/12 = 3/9 = 8/12 = 4/16 =	Grade 5 *ATI* Posttest, Item 22 Which answer shows the fraction below in the lowest terms? 2/22 a. 1/2 b. 2/11 c. 1/11 d. 0/2	X		X		
Grade 5 Math, Test "Unit 5 – Measuring Polygons" Joe built a 6-inch by 4-inch rectangle. What is the perimeter of his rectangle? a. 10 inches b. 24 inches c. 20 inches d. 40 inches Samantha says this figure is called a rhombus. Felix says it is called a square. Joshua says it is called a parallelogram. Can they all be right? Explain. Ms. Dell decides to make a garden. She has to put a fence round it to keep out the rabbits. She has 24 feet of fencing. To help her choose a garden shape, use whole numbers and find as many different rectangles as you can that each have a perimeter of 24. Label the dimensions and the area of each rectangle.	Grade 5 *ATI* Posttest, Item 23 What is the area of the rectangle in units squared?  a. 10/49 b. 16/49 c. 10/7 d. 16/7	X			X	The test, like the *ATI* item, looked for the area of a rectangle, but the *ATI* item used fractions.

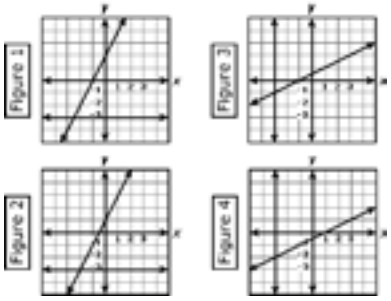
Appendix L (continued)
Exhibit 2.4.4a
Congruency of Mathematics Classroom Artifacts to *ATI* Benchmark Assessments for Grades 2 to 10
Tucson Unified School District
January 2014

Classroom Artifact Description and Sample Items	**Grade Equivalent *ATI* Item(s)**	**Content Congruence of Assessment**		**Cognitive Congruence of Assessment**		**Comments on Assessment Congruency**
		Yes	**No**	**Yes**	**No**	
Grade 6 Math, Worksheet "Daily Bellwork" 3 ÷ 963 = 2 ÷ 532 = 3 ÷ 861 =	Grade 6 *ATI* PM1, Item 31 2 5/8 ÷ 3/4 = a. 3 1/2 b. 3 3/8 c. 2 3/8 d. 2 1/4		X		X	The worksheet dealt with division, but the *ATI* sample used division of fractions. This is an example of where the students should be working on the same level or above the *ATI* sample item which was administered one month prior to the on-site visit.
Grade 6 Math, Worksheet "Simplifying Algebraic Expressions" 6b – b use b = 7 W + 8w use w = 2 4h – 3h use h = 3	Grade 6 *ATI* Posttest, Item 4 What is the value of *n*? 2/3n + 16 = 18 a. 8 b. 16 c. 18 d. 36		X		X	The basic idea of the worksheet and the *ATI* problem is the same, but the *ATI* problem used fractions.
Grade 7 Math, Worksheet "Graphing Inequalities in Two Variables" The graph shows $y = x + 2$. Shade the inequality $y \leq x + 2$. [The students have a graph to shade.] Solve each inequality for *y*. $x + y \geq 8$ $3x - y > 6$	Grade 7 *ATI* PM1, Item 21 Which of the following graphs best represents the table of values?  x y 2 -2 1 -3 0 -4 -1 -5 a. Graph A b. Graph B c. Graph C d. Graph D	X		X		

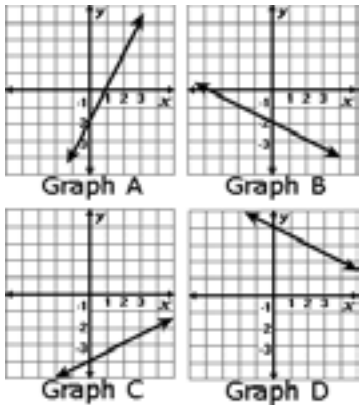
Appendix L (continued)
Exhibit 2.4.4a
Congruency of Mathematics Classroom Artifacts to *ATI* Benchmark Assessments for Grades 2 to 10
Tucson Unified School District
January 2014

Classroom Artifact Description and Sample Items	**Grade Equivalent *ATI* Item(s)**	**Content Congruence of Assessment**		**Cognitive Congruence of Assessment**		**Comments on Assessment Congruency**
		Yes	**No**	**Yes**	**No**	
Grade 7 Math, Worksheet "Volume of Prisms and Cylinders" Find the volume of each figure to the nearest tenth.  	Grade 7 *ATI* PM1, Item 11 A fish tank is in the shape of a regular hexagonal prism that is 3 feet in height. The hexagonal base is shown below. Which of these represents the volume of the fish tank?  a. $\text{Volume} = \left(\frac{1}{2} \cdot 1.5 \cdot 1.3\right) \cdot 6 \text{ ft}^3$ b. $\text{Volume} = \left(\frac{1}{2} \cdot 1.5 \cdot 1.3\right) \cdot 3 \text{ ft}^3$ c. $\text{Volume} = \left(\frac{1}{2} \cdot 1.5 \cdot 1.3\right) \cdot 6 \cdot 3 \text{ ft}^3$ d. $\text{Volume} = (1.5 \cdot 1.3) \cdot 6 \cdot 3 \text{ ft}^3$	X		X		Students can make the connection from the worksheet to the volume in the fish tank.
Grade 8 Math, Worksheet "Graphing Inequalities in Two Variables" The graph shows $y = x + 2$. Shade the inequality $y \leq x + 2$. [The students have a graph to shade.] Solve each inequality for y. $x + y \geq 8$ $3x - y > 6$	Grade 8 *ATI* PM1, Item 6 Which of these graphs shows a line with a slope of -3/4?  a. Graph A b. Graph B c. Graph C d. Graph D		X		X	Auditors noted this is the same worksheet used in the seventh grade math for the school site.

Appendix L (continued)
Exhibit 2.4.4a
Congruency of Mathematics Classroom Artifacts to *ATI* Benchmark Assessments for Grades 2 to 10
Tucson Unified School District
January 2014

Classroom Artifact Description and Sample Items	**Grade Equivalent *ATI* Item(s)**	**Content Congruence of Assessment**		**Cognitive Congruence of Assessment**		**Comments on Assessment Congruency**
		Yes	**No**	**Yes**	**No**	
Grade 9 Algebra I, Worksheet "Bingo for Systems of Equations" $x - 5y = 0$ $2x + 3y = -13$ Graph it in your blank square: $5x + 3y = 15$ $4x - 3y = 12$ Which is a solution? (0,3)…(-6,0)…(4,5)… $-2x + 4y = 12$ $5x - 2y = 10$	Grade 9 *ATI* PM1, Item 5 Which figure represents both linear functions that make up the equation below? $2(x + 1) = -3$  a. Figure 1 b. Figure 2 c. Figure 3 d. Figure 4	X		X		
Grade 10 Geometry, Worksheet "Absolute Value and Radical Equations" What is the solution to this equation? $\lvert 2x - 3 \rvert - 4 = 3$ a. x = -2, x = 5 b. x = 2, x = 5 c. x = -5, x = 2 d. x = -5, x = -2	Grade 10 *ATI* PM1, Item 51 Which is the solution of the equation below? $2 \lvert x + 2 \rvert = 4$ a. x = -10 or x = 6 b. x = -4 or x = 0 c. x = -1 or x = 1 d. x = 1 or x = 3	X		X		

Appendix L (continued)
Exhibit 2.4.4a
Congruency of Mathematics Classroom Artifacts to *ATI* Benchmark Assessments for Grades 2 to 10
Tucson Unified School District
January 2014

Classroom Artifact Description and Sample Items	**Grade Equivalent *ATI* Item(s)**	**Content Congruence of Assessment**		**Cognitive Congruence of Assessment**		**Comments on Assessment Congruency**
		Yes	**No**	**Yes**	**No**	
Grade 10 Honors Geometry, Worksheet "Linear Equations and Proportions" Solve: $7x - 4 = 24$ $-2x + 9 = 17$ $7x + 3 = 11x + 35$ $x/4 = 3/2$	Grade 10 *ATI* PM1, Item 9 Which graph best represents the equation? $-2y = x - 8$  a. Graph A b. Graph B c. Graph C d. Graph D	X		X		
Total		**10**	**5**	**7**	**8**	

Appendix M

Exhibit 2.4.4b
Congruency of ELA Classroom Artifacts to *ATI* Benchmark Sample Items for Grades 2 to 10
Tucson Unified School District
January 2014

Classroom Artifact Description and Sample Items	**Grade Equivalent *ATI* Item(s)**	**Content Congruence of Assessment**		**Cognitive Congruence of Assessment**		**Comments on Assessment Congruency**
		Yes	**No**	**Yes**	**No**	
Grade 2 ELA, Worksheet "Plurals" Write the word on the line that names the picture.  Calf Cuff Calves  Calfs Caves Calves Grade 2 ELA, Worksheet "Complete the sentences." Mimicked Fussed Pale Admired Notice Haze Jake liked the ____ colors in this painting. "There's a blue ____ over the hills," he said. In another painting, baby birds ____ for food.	Grade 2, *ATI* PM1 Item 1 Students are to read the passage "The Fox and the Crow." From "The Fox and the Crow" How does Miss Crow feel when Mr. Fox asks her to sing? a. Beautiful b. Smart c. Happy d. Hungry		X		X	Students are being asked to remember simple grammar rules for the worksheets, where they are asked to read on the *ATI* example.

Appendix M (continued)
Exhibit 2.4.4b
Congruency of ELA Classroom Artifacts to *ATI* Benchmark Sample Items for Grades 2 to 10
Tucson Unified School District
January 2014

Classroom Artifact Description and Sample Items	**Grade Equivalent *ATI* Item(s)**	**Content Congruence of Assessment**		**Cognitive Congruence of Assessment**		**Comments on Assessment Congruency**
		Yes	**No**	**Yes**	**No**	
Grade 3 ELA, Worksheet "Spelling Homework" Write each spelling word neatly and correctly 5 times on a piece of lined paper. Pulled Hugged Correct Matter Common Grade 3 ELA, Worksheet "Joe Louis" [Students are given a short story of 201 words to read about Joe Louis.] List three reasons Joe Louis is remembered as a great champion boxer. Write a Retell of "Joe Louis"	Grade 3 *ATI* PM1, Item 24 Students are to read the passage "Puppies for Sale." From "Puppies for Sale" How much does the author want for each puppy? a. They are free to a good home. b. They are $100.00 to a good home. c. They are several hundred dollars. d. The text doesn't say how much they are.	X		X		

Appendix M (continued)
Exhibit 2.4.4b
Congruency of ELA Classroom Artifacts to *ATI* Benchmark Sample Items for Grades 2 to 10
Tucson Unified School District
January 2014

Classroom Artifact Description and Sample Items	**Grade Equivalent *ATI* Item(s)**	**Content Congruence of Assessment**		**Cognitive Congruence of Assessment**		**Comments on Assessment Congruency**
		Yes	**No**	**Yes**	**No**	
Grade 4 ELA, Worksheet "Spelling Words" Write each Spelling Word under the guide words that could appear on its page in a dictionary. Make sure each list is in alphabetical order. Inactive-Inward *or* Nominate-Normal Income Nonprofit Nonsense Involved Grade 4 ELA, Worksheet "Story Map 2" Write notes in each section: Setting: Major Characters: Minor Characters: Plot/Problem: Event 1: Event 2: Event 3: Outcome: Grade 4 ELA, Worksheet "Identifying Narrative Perspective 3" "Sunday was my only leisure time. I spent this in a sort of beast-like stupor, between sleep and wake, under some large tree. Narrator's Point of View? How do you know?	Grade 4 ELA PM1, Item 1 Students are to read the passage "Ouray." Read the sentence. "The Ute had to move elsewhere in the state." In which sentence does the word "state" have the same meaning that it has in the sentence above. a. I am in a strange state of mind. b. I would like to travel to a state such as Florida. c. I need to state the answer very clearly. d. The State of the Union address is tonight.		X		X	Students are being asked to work on spelling and remember simple parts of stories they read from their worksheets; whereas, they are asked for words in context on what they have read for the *ATI* example.

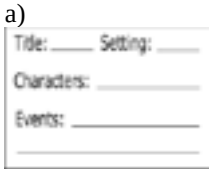
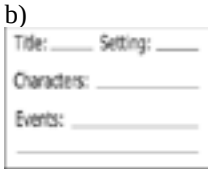
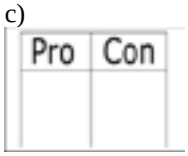
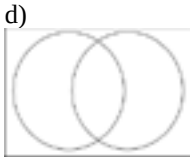
Appendix M (continued)
Exhibit 2.4.4b
Congruency of ELA Classroom Artifacts to *ATI* Benchmark Sample Items for Grades 2 to 10
Tucson Unified School District
January 2014

Classroom Artifact Description and Sample Items	**Grade Equivalent *ATI* Item(s)**	**Content Congruence of Assessment**		**Cognitive Congruence of Assessment**		**Comments on Assessment Congruency**
		Yes	**No**	**Yes**	**No**	
Grade 5 ELA, Worksheet "Add the Prepositions to Complete the Story" Preposition Word Bank: in, with, into, until… Scott's allergies were really severe. This season, he was having a lot of trouble ___ them. He kept on sneezing ___ the tissue he carried ___ his hand wherever he went. Grade 5 ELA, Worksheet "Island of the Blue Dolphins" Students were to read the story *Island of the Blue Dolphins* and answer questions regarding geography, title, author, copyright, setting (time), setting (place), genre, characters, vocabulary, and point of view. Grade 5 ELA, Worksheet "Seeing Eye to Eye" Students were to read a short article from National Geographic Explorer and make predictions from the story based on details from the text. Students then completed a small graphic organizer giving main points from the article and supporting details.	Grade 5 *ATI* Posttest, Item 1 Gail went to Carlsbad Caverns. She described the experience to her friends. Which of Gail's statements is an example of literal language? a. "When the lights were turned out, I was blind as a bat." b. "The cavern was out in the middle of nowhere." c. "I was very impressed with how beautiful it was." d. "It seemed that we traveled forever to get there."		X		X	Students are asked to perform simple grammar procedures or remember simple parts to the stories they read on their worksheets; whereas, they are asked to interpret language meaning on the *ATI* example.

Appendix M (continued)
Exhibit 2.4.4b
Congruency of ELA Classroom Artifacts to *ATI* Benchmark Sample Items for Grades 2 to 10
Tucson Unified School District
January 2014

Classroom Artifact Description and Sample Items	**Grade Equivalent *ATI* Item(s)**	**Content Congruence of Assessment**		**Cognitive Congruence of Assessment**		**Comments on Assessment Congruency**
		Yes	**No**	**Yes**	**No**	
Grade 6 ELA, Worksheet "Word-Building" Add **er** or **or** to the end of each word below to show what people do. Write the new word on the lines. Bookkeep_____ Conduct_____ Bricklay_____ Direct_____ Grade 6 ELA, Worksheet "District Formative Assessment – Extended Response" Students were to read a short passage and answer the two following multiple choice questions: 1. Which of the following sentences is the main idea of the passage shown above? 2. Which of the following is a critical detail from the passage above? Grade 6 ELA, Worksheet "Onomatopoeia" Students are to brainstorm words that are onomatopoeias. They are to then write sentences using the words. They are finally to create a comic strip using their onomatopoeias.	Grade 6 *ATI* PM1, Item 1 Students are to read the passage "Yard Work Done Right" From "Yard Work Done Right" Which quotation supports the argument that weeds can be kept from growing in yards by planting trees and bushes? a. "The rainy season means one thing for yards: weeds. It is a good idea to remove them as soon as possible." b. "Even better, getting rid of the roots means that your yard will stay neat and beautiful for a long time." c. "Far easier even than using a Dutch hoe is to keep weeds from taking root." d. "Most weeds need space and sunlight to grow. You can take away these things by planting bushes and trees."	X		X		

Appendix M (continued)
Exhibit 2.4.4b
Congruency of ELA Classroom Artifacts to *ATI* Benchmark Sample Items for Grades 2 to 10
Tucson Unified School District
January 2014

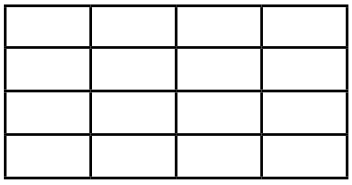
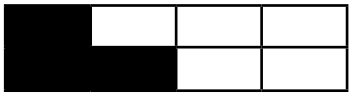
Classroom Artifact Description and Sample Items	**Grade Equivalent *ATI* Item(s)**	**Content Congruence of Assessment**		**Cognitive Congruence of Assessment**		**Comments on Assessment Congruency**
		Yes	**No**	**Yes**	**No**	
Grade 7 ELA, Worksheet "Daily Language Review" Choose the best word to complete each sentence. When ___ you need to catch the bus? does, do, was, is My parents ___ married in 1980. was, were, been, did Grade 7 ELA, Project "Analyzing informational text/Reading a newspaper article and identifying its structure" Students are to work in pairs on this assignment. They are to take a newspaper article and determine the reasons for the author writing the article. They are then to use a graphic organizer and analyze the article.	Grade 7 ELA PM1, Item 15 Sandra wants to compare and contrast the lives of two characters from a book she has read. Which graphic organizer should she use? a)  b)  c)  d) 		X		X	Most of the work examples from classroom artifacts do not align with the question from the *ATI* example with the exception of the last classroom artifact.
Grade 8 ELA, Worksheet "Cartoon Analysis Worksheet" Students are to use the worksheet to analyze political cartoons presented by the teacher. Grade 8 ELA, Project "3rd Quarter Project – Civil Rights Movement" Students are to create a news magazine on the Civil Rights Movement. This project was an ongoing project that totaled five weeks.	Grade 8 ELA PM1, Item 3 Students are to read two different passages from "Repeal Seatbelt Laws" and "Seatbelt Laws Save Lives" On which point do the authors of "Repeal Seatbelt Laws" and "Seatbelt Laws Save Lives" disagree? a. Seatbelts help keep the cost of healthcare down. b. Seatbelt laws are an acceptable part of a free society. c. High fines encourage people to buckle up. d. Seatbelts can trap people in cars.	X		X		

Appendix M (continued)
Exhibit 2.4.4b
Congruency of ELA Classroom Artifacts to *ATI* Benchmark Sample Items for Grades 2 to 10
Tucson Unified School District
January 2014

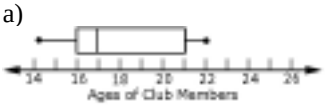
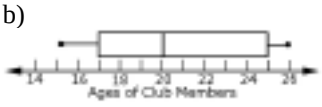
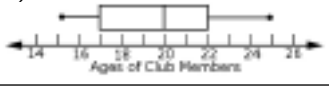
Classroom Artifact Description and Sample Items	**Grade Equivalent *ATI* Item(s)**	**Content Congruence of Assessment**		**Cognitive Congruence of Assessment**		**Comments on Assessment Congruency**
		Yes	**No**	**Yes**	**No**	
Grade 9 Honors English, Worksheet "Rhetorical Devices in Brutus' and Antony's Speeches" Students are to read excerpts from *Julius Caesar* and identify the type of rhetorical device used.	Grade 9 *ATI* PM1, Item 50 Read the sentences. I wanted to live outdoors, surrounded by nature. I wanted to live outdoors, surrounded by the wilderness. While "nature" and "wilderness" have the same denotation, they have quite different connotations. Why would an author choose the word "wilderness" over the word "nature"? a. To show a sense of peaceful surroundings. b. To show a sense of adventure. c. To show a sense of being alone. d. To show a sense of enjoying the outdoors.		X		X	Students were asked to understand the usage of rhetorical speech in their classroom work; whereas, the *ATI* example asked students to identify words in context.
Grade 10 English, Worksheet "Vocabulary in Context Dictionary" Students are to identify words from their readings with which they are unfamiliar. They are to give a definition of the word and part of speech. Finally, the students are to guess the meaning of the word in context.	Grade 10 *ATI* PM1, Item 13 From "The Roots of Organic Farming" "The soil could only support so many crops before its nutrients were exhausted. When this happened, there was little to do but let the field lie fallow and wait for the soil to build back up naturally." What does the word "fallow" mean? a. Unplanted b. Faulty c. Flooded d. Overlooked	X		X		
Total		**4**	**5**	**4**	**5**	

Appendix N

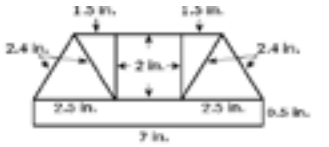
Exhibit 2.4.5a
Congruency of Arizona College and Career Readiness Standards to *ATI* Benchmark Assessments for Mathematics Grades 3, 6, 8, and 10
Tucson Unified School District
April 2014

AZ Objectives "The student is expected to:"	Assessment Item from *ATI* Curriculum Document	Content Congruence of Assessment		Cognitive Congruence of Assessment		Comments on Assessment Congruency
		Yes	No	Yes	No	
AZ-5.OA.A.2 Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. For example, express the calculation "add 8 and 7, then multiply by 2" as 2 × (8 + 7). Recognize that 3 × (18932 + 921) is three times as large as 18932 + 921, without having to calculate the indicated sum or product.	Grade 3, *ATI* PM1, Item 9 Which statement shows 6 less than 15? a. 6 + 15 b. 6 – 15 c. 15 ÷ 6 d. 15 - 6	X			X	The Arizona standard has two steps involved; whereas, the *ATI* example has only one.
AZ-3.MD.C.7a Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths.	Grade 3, *ATI* PM1, Item 11 What is the area of the rectangle?  a. 8 square units b. 12 square units c. 16 square units d. 20 square units	X		X		
AZ-3.NF.A.1 Understand a fraction 1/b as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size 1/b.	Grade 3, *ATI* PM1, Item 22 What fraction of the model is shaded?  a. 1/8 b. 2/8 c. 3/8 d. 4/8	X		X		

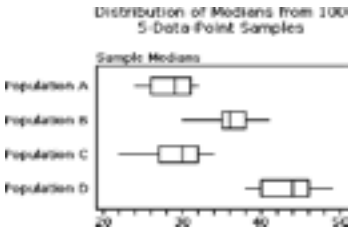
Appendix N (continued)
Exhibit 2.4.6
Congruency of Arizona College and Career Readiness Standards to *ATI* Benchmark Assessments for Mathematics Grades 3, 6, 8, and 10
Tucson Unified School District
April 2014

AZ Objectives "The student is expected to:"	Assessment Item from *ATI* Curriculum Document	Content Congruence of Assessment		Cognitive Congruence of Assessment		Comments on Assessment Congruency
		Yes	No	Yes	No	
AZ-4.G.A.3 Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.	Grade 3, *ATI* PM1, Item 37 Which figure below appears to have exactly 2 lines of symmetry? Figure 1  Figure 2  Figure 3  Figure 4  a. Figure 1 b. Figure 2 c. Figure 3 d. Figure 4	X		X		
AZ-4.NBT.A.2 Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.	Grade 3, *ATI* PM1, Item 56 Which is true? a. 48,923 > 48,932 b. 48,196 > 48,199 c. 48,916 > 48,919 d. 48,162 > 48,136	X		X		
AZ-6.SP.B.4 Display numerical data in plots on a number line, including dot plots, histograms, and box plots.	Grade 6, *ATI* PM1, Item 1 The club secretary created a box-and-whisker plot which reported the top 25% of the members as 21 or 22 years of age. Which plot did she make? a)  b)  c)  d) 	X		X		

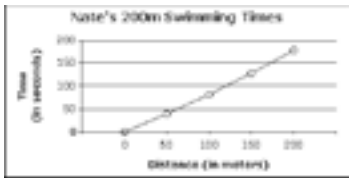
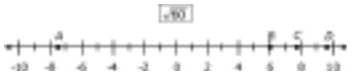
Appendix N (continued)
Exhibit 2.4.6
Congruency of Arizona College and Career Readiness Standards to *ATI* Benchmark Assessments for Mathematics Grades 3, 6, 8, and 10
Tucson Unified School District
April 2014

AZ Objectives "The student is expected to:"	Assessment Item from *ATI* Curriculum Document	Content Congruence of Assessment		Cognitive Congruence of Assessment		Comments on Assessment Congruency
		Yes	No	Yes	No	
AZ-8.EE.A.2 Use square root and cube root symbols to represent solutions to equations of the form x^2 = p and x^3 = p, where p is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that SQRT2 is irrational.	Grade 6, *ATI* PM1, Item 3 Which is equal to the following? a. 4 b. 21 c. 60 d. 192	X		X		
AZ-7.G.B.6 Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.	Grade 6, *ATI* PM1, Item 8 Clark was trying to find the area of the figure below by splitting the shape into parallelograms and triangles. Is his method correct?  A = (7 x 0.5) + (2 x 2) + (2.4 x 2.5) + (2.4 x 1.5) A = 3.5 + 4 + 6 + 3.6 A = 17.1 square in. a. Yes, his method is correct. b. No, he should have multiplied the entire area of the shape by one half. c. No, he used the length of the slanted side instead of the height in the area of the triangles. d. No, he should have multiplied the areas of the shapes together.	X		X		
AZ-6.RP.A.1 Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. For example, "The ratio of wings to beaks in the bird house at the zoo was 2:1, because for every 2 wings there was 1 beak." "For every vote candidate A received, candidate C received nearly three votes."	Grade 6 *ATI* PM1, Item 28 There are 2 books for every 3 students. Which of the following expresses the ratio below as a fraction? 2:3 a. 1/3 b. 2/3 c. 3/3 d. 3/2		X		X	The Arizona standard asks students to understand ratios; whereas, the *ATI* example gives the ratio and asks the students to convert it to a fraction.

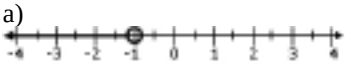
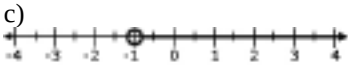
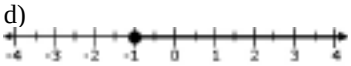
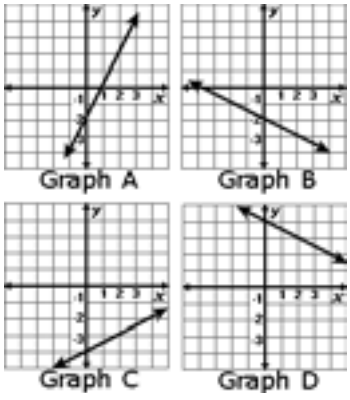
Appendix N (continued)
Exhibit 2.4.6
Congruency of Arizona College and Career Readiness Standards to *ATI* Benchmark Assessments for Mathematics Grades 3, 6, 8, and 10
Tucson Unified School District
April 2014

AZ Objectives "The student is expected to:"	**Assessment Item from *ATI* Curriculum Document**	**Content Congruence of Assessment**		**Cognitive Congruence of Assessment**		**Comments on Assessment Congruency**
		Yes	**No**	**Yes**	**No**	
AZ-6.NS.C.9 Convert between expressions for positive rational numbers, including fractions, decimals, and percents.	Grade 6 *ATI* PM1, Item 59 A 12-foot ribbon is cut into pieces three-quarters of a foot long. How many pieces can be made? a. 9 b. 11 c. 13 d. 16	X		X		
AZ-7.SP.B.4 Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations. For example, decide whether the words in a chapter of a seventh-grade science book are generally longer than the words in a chapter of a fourth-grade science book.	Grade 8 *ATI* PM1, Item 2 One hundred samples of five data points were randomly selected from each of four populations. The medians of each population's samples were plotted as shown below. Another random sample was then taken from one of the populations and recorded as follows: {40, 32, 21, 31, 24} From which population was this sample LEAST likely selected?  a. Population A b. Population B c. Population C d. Population D	X			X	The Arizona standard asks students to make informal comparative inferences about populations; whereas, the *ATI* example does not require this.

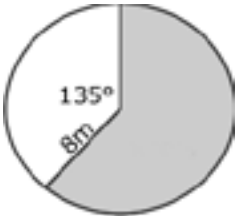
Appendix N (continued)
Exhibit 2.4.6
Congruency of Arizona College and Career Readiness Standards to *ATI* Benchmark Assessments for Mathematics Grades 3, 6, 8, and 10
Tucson Unified School District
April 2014

AZ Objectives "The student is expected to:"	Assessment Item from *ATI* Curriculum Document	Content Congruence of Assessment		Cognitive Congruence of Assessment		Comments on Assessment Congruency
		Yes	No	Yes	No	
AZ-8.F.B.5 Describe qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear). Sketch a graph that exhibits the qualitative features of a function that has been described verbally.	Grade 8 *ATI* PM1, Item 14 Nate's swim coach records his time at 50 meter intervals throughout a 200 meter race. Would the coach's recorded times and the distances represent a linear relationship?  a. Yes, because Nate swims each 50 meters in about the same time. b. Yes, because Nate swims each 50 meters in progressively slower times. c. No, because Nate became much slower with each 50 meters he swam. d. No, because Nate consistently swam each 50 meters in 40 seconds.	X		X		
AZ-8.NS.A.2 Use rational approximations of irrational numbers to compare the size of irrational numbers, locate them approximately on a number line diagram, and estimate the value of expressions (e.g., pi^2). For example, by truncating the decimal expansion of SQRT2, show that SQRT2 is between 1 and 2, then between 1.4 and 1.5, and explain how to continue on to get better approximations.	Grade 8 *ATI* PM1, Item 25 According to the number line below, which letter best represents the location of the number?  a. A b. B c. C d. D		X		X	The *ATI* example is only one small part of the overall Arizona standard.

Appendix N (continued)
Exhibit 2.4.6
Congruency of Arizona College and Career Readiness Standards to *ATI* Benchmark Assessments for Mathematics Grades 3, 6, 8, and 10
Tucson Unified School District
April 2014

AZ Objectives "The student is expected to:"	**Assessment Item from *ATI* Curriculum Document**	**Content Congruence of Assessment**		**Cognitive Congruence of Assessment**		**Comments on Assessment Congruency**
		Yes	**No**	**Yes**	**No**	
AZ-6.EE.B.8 Write an inequality of the form x > c or x < c to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form x > c or x < c have infinitely many solutions; represent solutions of such inequalities on number line diagrams.	Grade 8 *ATI* PM1, Item 47 Which number line represents $x > -1$? a)  b)  c)  d) 		X		X	The *ATI* example is only one small part of the overall Arizona standard.
AZ-7.RP.A.2b Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships.	Grade 8 *ATI* PM1, Item 66 Knee socks are 2 pair for $2.18, and anklets are 3 pair for $3.15. Which of the following is true? a. Knee socks are 9¢ more per pair than anklets. b. Knee socks are 9¢ less per pair than anklets. c. Knee socks are $1.09 per pair. d. Anklets are $1.09 per pair.	X		X		
AZ-HS.F-IF.C.7.a Graph linear and quadratic functions and show intercepts, maxima, and minima.	Grade 10 *ATI* PM1, Item 9 Which graph best represents the equation $-2y = x - 8$  a. Graph A b. Graph B c. Graph C d. Graph D	X		X		

Appendix N (continued)
Exhibit 2.4.6
Congruency of Arizona College and Career Readiness Standards to *ATI* Benchmark Assessments for Mathematics Grades 3, 6, 8, and 10
Tucson Unified School District
April 2014

AZ Objectives "The student is expected to:"	Assessment Item from *ATI* Curriculum Document	Content Congruence of Assessment		Cognitive Congruence of Assessment		Comments on Assessment Congruency
		Yes	No	Yes	No	
AZ-HS.G-C.B.5. Derive using similarity the fact that the length of the arc intercepted by an angle is proportional to the radius, and define the radian measure of the angle as the constant of proportionality; derive the formula for the area of a sector.	Grade 10 *ATI* PM1, Item 18 What is the area of the shaded sector?  a. 5π square meters b. 10π square meters c. 24π square meters d. 40π square meters	X		X		
AZ-HS.A-CED.A.4. Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations. For example, rearrange Ohm's law V = IR to highlight resistance R.	Grade 10 *ATI* PM1, Item 30 The formula describes how to find the area (*A*) of a triangle with base length (*b*) and height (*h*). Which equation correctly solves for the base length (*b*) in terms of height (*h*)? $A = \frac{1}{2}bh$ a. $b = \frac{1}{2}Ah$ b. $b = 2Ah$ c. $b = \frac{2A}{h}$ d. $b = \frac{2h}{A}$	X		X		
AZ-HS.S-CP.B.9. Use permutations and combinations to compute probabilities of compound events and solve problems.	Grade 10 *ATI* PM1, Item 52 Four people enter a diner where there are 6 vacant seats. How many ways can they seat themselves? a. 30 b. 36 c. 360 d. 720	X		X		

Appendix N (continued)
Exhibit 2.4.6
Congruency of Arizona College and Career Readiness Standards to *ATI* Benchmark Assessments for Mathematics Grades 3, 6, 8, and 10
Tucson Unified School District
April 2014

AZ Objectives "The student is expected to:"	**Assessment Item from *ATI* Curriculum Document**	**Content Congruence of Assessment**		**Cognitive Congruence of Assessment**		**Comments on Assessment Congruency**
		Yes	**No**	**Yes**	**No**	
AZ-7.NS.A.1c Understand subtraction of rational numbers as adding the additive inverse, $p - q = p + (-q)$. Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts.	Grade 10 *ATI* PM1, Item 58 The distance between which two numbers equals $\lvert -9 \rvert$? a. 4; -5 b. -4; -5 c. 11; -2 d. -11; 2	X		X		There is no real-world context in the *ATI* example.
Total		**17**	**3**	**15**	**5**	

Appendix O

Exhibit 2.4.5b
Congruency of Arizona College and Career Readiness Standards to *ATI* Benchmark Assessments for ELA Grades 3, 6, 8, and 10

Tucson Unified School District
April 2014

AZ Objectives "The student is expected to:"	Assessment Item from *ATI* Curriculum Document	Content Congruence of Assessment		Cognitive Congruence of Assessment		Comments on Assessment Congruency
		Yes	No	Yes	No	
AZ-L.3.2e Conventions of Standard English: Use conventional spelling for high-frequency and other studied words and for adding suffixes to base words (e.g., sitting, smiled, cries, happiness).	Grade 3 ATI PM1, Item 17 Look at the word. Taste What would be the correct spelling if you added –ing? a. Tasting b. Tasting c. Tasting d. Tasting	X		X		
AZ-L.3.4b Vocabulary Acquisition and Use: Determine the meaning of the new word formed when a known prefix is added to a known word (e.g., agreeable/ disagreeable, comfortable/ uncomfortable, care/careless, heat/preheat).	Grade 3 ATI PM1, Item 19 Read the sentence. He was the large__ animal in the whole zoo. Which is the correct suffix to add to the word "large"? a. –er b. –est c. –ing d. –ful	X			X	The ATI example uses suffixes, but no meaning is asked in the example.
AZ-RI.3.1 Key Ideas and Details: Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.	Grade 3 ATI PM1, Item 24 "Puppies for Sale" Adorable Puppies for Sale! These puppies are smart. They are easy to train. They love to play….Give a puppy to the one you love. $100.00 to a good home. From "Puppies for Sale" How much does the author want for each puppy? a. They are free to a good home. b. They are $100.00 to a good home. c. They are several hundred dollars. d. The text doesn't say how much they are.	X		X		

Appendix O (continued)
Exhibit 2.4.5b
Congruency of Arizona College and Career Readiness Standards to *ATI* Benchmark Assessments for ELA Grades 3, 6, 8, and 10
Tucson Unified School District
April 2014

AZ Objectives "The student is expected to:"	Assessment Item from *ATI* Curriculum Document	Content Congruence of Assessment		Cognitive Congruence of Assessment		Comments on Assessment Congruency
		Yes	No	Yes	No	
AZ-RI.3.2 Key Ideas and Details: Determine the main idea of a text; recount the key details and explain how they support the main idea.	Grade 3 ATI PM1, Item 25 "Puppies for Sale" They are the perfect gift for your little boy or girl…You can give the best gift. From "Puppies for Sale" What words convince the reader that puppies are a good gift? a. "boy," "girl" b. "opening," "face" c. "Imagine," "smile" d. "perfect," "best"	X			X	The example does not link back to the main idea which is the purpose of the Arizona standard.
AZ-RL.3.5 Craft and Structure: Refer to parts of stories, dramas, and poems when writing or speaking about a text, using terms such as chapter, scene, and stanza; describe how each successive part builds on earlier sections.	Grade 3 ATI PM1, Item 42 Read the Sentence. Maryann's teacher told her that each ___ of her poem must have four lines. Which word best completes the sentence? a. Chapter b. Scene c. Stanza	X			X	The ATI example identifies a part of the poem as stated in the Arizona standard, but the example does not ask the student to build upon this idea.

Appendix O (continued)
Exhibit 2.4.5b
Congruency of Arizona College and Career Readiness Standards to *ATI* Benchmark Assessments for ELA Grades 3, 6, 8, and 10
Tucson Unified School District
April 2014

AZ Objectives "The student is expected to:"	Assessment Item from *ATI* Curriculum Document	Content Congruence of Assessment		Cognitive Congruence of Assessment		Comments on Assessment Congruency
		Yes	No	Yes	No	
AZ-RI.6.8 Integration of Knowledge and Ideas: Trace and evaluate the argument and specific claims in a text, distinguishing claims that are supported by reasons and evidence from claims that are not.	Grade 6 ATI PM1, Item 1 Students are to read the passage "Yard Work Done Right" From "Yard Work Done Right" Which quotation supports the argument that weeds can be kept from growing in yards by planning trees and bushes? a. "The rainy season means one thing for yards: weeds. It is a good idea to remove them as soon as possible." b. "Even better, getting rid of the roots means that your yard will stay neat and beautiful for a long time." c. "Far easier even than using a Dutch hoe is to keep weeds from taking root." d. "Most weeds need space and sunlight to grow. You can take away these things by planting bushes and trees."	X		X		
AZ-RI.6.6 Craft and Structure: Determine an author's point of view or purpose in a text and explain how it is conveyed in the text.	Grade 6 ATI PM1, Item 3 From "Yard Work Done Right" What is the author's purpose for writing the section *What Not to Do*? a. To explain why it is a mistake to remove weeds at certain times of the day. b. To warn the reader against certain ways of removing weeds. c. To warn the reader about what can happen if weeds are not removed quickly. d. To explain what the reader should do if he or she makes a mistake while removing weeds.	X			X	The ATI example asks the student to identify the author's purpose, but does not go beyond this as is indicated in the Arizona standard.

Appendix O (continued)
Exhibit 2.4.5b
Congruency of Arizona College and Career Readiness Standards to *ATI* Benchmark Assessments for ELA Grades 3, 6, 8, and 10
Tucson Unified School District
April 2014

AZ Objectives "The student is expected to:"	Assessment Item from *ATI* Curriculum Document	Content Congruence of Assessment		Cognitive Congruence of Assessment		Comments on Assessment Congruency
		Yes	No	Yes	No	
AZ-RI.6.5 Craft and Structure: Analyze how a particular sentence, paragraph, chapter, or section fits into the overall structure of a text and contributes to the development of the ideas.	Grade 6 ATI PM1, Item 6 From "Yard Work Done Right" Which best describes how the first paragraph is organized? a. Step-by-step order b. Order of importance c. Chronological order d. Argument and support	X			X	The example looks only at how the first paragraph is organized. The Arizona standard asks the students demonstrate how the paragraph fits into the overall structure of the text and contributes to the development of ideas in the text.
AZ-L.6.4a Vocabulary Acquisition and Use: Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.	Grade 6 ATI PM1, Item 10 Read the sentence. I placed the test in my <u>file</u> of schoolwork. Without changing the meaning of the sentence, which word can *best* be used to replace the underlined part? a. Column b. List c. String d. Folder	X		X		

Appendix O (continued)
Exhibit 2.4.5b
Congruency of Arizona College and Career Readiness Standards to *ATI* Benchmark Assessments for ELA Grades 3, 6, 8, and 10
Tucson Unified School District
April 2014

AZ Objectives "The student is expected to:"	Assessment Item from *ATI* Curriculum Document	Content Congruence of Assessment		Cognitive Congruence of Assessment		Comments on Assessment Congruency
		Yes	No	Yes	No	
AZ-RL.6.1 Key Ideas and Details: Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	Grade 6 ATI PM1, Item 24 Students are to read the passage "Anansi and Snake." From "Anansi and Snake" According to the story, what do some West African communities do in the evening? a. Make farming and hunting tools. b. Play games long into the night. c. Listen as a storyteller tells tales d. Eat the evening meal as a group.	X			X	The example asks only for evidence to support what the text says explicitly, but does not ask the higher level thinking question of inference.
AZ-RI.8.9 Integration of Knowledge and Ideas: Analyze a case in which two or more texts provide conflicting information on the same topic and identify where the texts disagree on matters of fact or interpretation.	Grade 8 ELA PM1, Item 3 Students are to read to different passages. From "Repeal Seatbelt Laws" and "Seatbelt Laws Save Lives" On which point do the authors of "Repeal Seatbelt Laws" and "Seatbelt Laws Save Lives" disagree? a. Seatbelts help keep the cost of healthcare down. b. Seatbelt laws are an acceptable part of a free society. c. High fines encourage people to buckle up. d. Seatbelts can trap people in cars.	X		X		

Appendix O (continued)
Exhibit 2.4.5b
Congruency of Arizona College and Career Readiness Standards to *ATI* Benchmark Assessments for ELA Grades 3, 6, 8, and 10
Tucson Unified School District
April 2014

AZ Objectives "The student is expected to:"	Assessment Item from *ATI* Curriculum Document	Content Congruence of Assessment		Cognitive Congruence of Assessment		Comments on Assessment Congruency
		Yes	No	Yes	No	
AZ-L.8.4a Vocabulary Acquisition and Use: Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.	Grade 8 ELA PM1, Item 13 Read the sentence. The colony of ants seemed to expand each day. The word "colony" has several meanings. What is the meaning of the word "colony" in this sentence? a. A group of the same kind of animal, plant, or insect. b. A visible growth of tiny organisms. c. A region controlled by a distant country. d. A group of people organized in a remote area.	X		X		
AZ-RI.8.2 Key Ideas and Details: Determine a central idea of a text and analyze its development over the course of the text, including its relationship to supporting ideas; provide an objective summary of the text.	Grade 8 ELA PM1, Item 19 Students are to read the passage "Who Was Guy Fawkes?" From the passage "Who Was Guy Fawkes?" Read the topic sentence of each paragraph. Who devised the plan to blow up the House of Lords? a. Guy Fawkes b. Robert Catesby c. King James d. Members of Parliament		X		X	The ATI example asks students to identify one aspect of the story from reading topic sentences, but the Arizona standard asks students to analyze the development of the text.

Appendix O (continued)
Exhibit 2.4.5b
Congruency of Arizona College and Career Readiness Standards to *ATI* Benchmark Assessments for ELA Grades 3, 6, 8, and 10
Tucson Unified School District
April 2014

AZ Objectives "The student is expected to:"	Assessment Item from *ATI* Curriculum Document	Content Congruence of Assessment		Cognitive Congruence of Assessment		Comments on Assessment Congruency
		Yes	No	Yes	No	
AZ-RL.8.2 Key Ideas and Details: Determine a theme or central idea of a text and analyze its development over the course of the text, including its relationship to the characters, setting, and plot; provide an objective summary of the text.	Grade 8 ELA PM1, Item 34 Students are to read the passage "A Busy, Happy Summer" From the passage "A Busy, Happy Summer" Read the sentence. "We would come up over the top of a hill into the glory of a beautiful sunset with its gorgeous colors, then down into the little valley already purpling with mysterious twilight." What do the descriptions suggest about nature? a. Its beauty can only be appreciated for a short while. b. It appears different to each viewer. c. It becomes more menacing as the sun sets. d. Its beauty can take different forms.	X			X	The ATI example does look at the setting, but the Arizona standard also asks the student to analyze the development of the text.
AZ-RL.8.4 (Use also L.8.4a & L.8.5a) Craft and Structure: Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.	Grade 8 ELA PM1, Item 35 Students are to read the passage "A Busy, Happy Summer" From "A Busy, Happy Summer" Read the sentence. "Once we saw a bunch of antelope gallop over a hill, but we were out just to be out, and game didn't tempt us." The word "game" has several meanings. What is the meaning of the word "game" in this sentence? a. Total number of points required to win a given game. b. A competitive activity or sport. c. Wild animals, fish, or birds hunted for sport or food. d. An illegal business deal.	X			X	The ATI example asks students to determine the meaning of the word in context, but the Arizona standard also asks that students analyze the impact of specific words on the impact they have on the text.

Appendix O (continued)
Exhibit 2.4.5b
Congruency of Arizona College and Career Readiness Standards to *ATI* Benchmark Assessments for ELA Grades 3, 6, 8, and 10
Tucson Unified School District
April 2014

AZ Objectives "The student is expected to:"	Assessment Item from *ATI* Curriculum Document	Content Congruence of Assessment		Cognitive Congruence of Assessment		Comments on Assessment Congruency
		Yes	No	Yes	No	
AZ-L.10.5b Vocabulary Acquisition and Use: Analyze nuances in the meaning of words with similar denotations.	Grade 10 ATI PM1, Item 7 Read the sentences. Whenever Sally and Martha got on the telephone, they talked forever. Whenever Sally and Martha got on the telephone, they chattered forever. In many dictionaries, "chatter" is a synonym for "talk." Why would an author choose to use "chatter" instead of "talk" in the sentence above? a. More people are familiar with the word "chatter" than with the word "talk." b. The word "chatter" shows a level of noise and excitement not found in "talk." c. The word "talk" refers to a specific type of conversation that isn't what Sally and Martha have. d. The world "talk" implies that Sally and Martha discussed irrelevant issues like gossip.	X		X		
AZ-RI.10.4 Craft and Structure: Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language of a court opinion differs from that of a newspaper).	Grade 10 ATI PM1, Item 13 From "The Roots of Organic Farming" "The soil could only support so many crops before its nutrients were exhausted. When this happened, there was little to do but let the field lie fallow and wait for the soil to build back up naturally." What does the word "fallow" mean? a. Unplanted b. Faulty c. Flooded d. Overlooked	X			X	The ATI example asks students to identify the meaning of a word. The Arizona standard asks for students to determine the meaning and then analyze the impact on tone.

Appendix O (continued)
Exhibit 2.4.5b
Congruency of Arizona College and Career Readiness Standards to *ATI* Benchmark Assessments for ELA Grades 3, 6, 8, and 10
Tucson Unified School District
April 2014

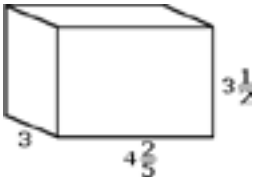
AZ Objectives "The student is expected to:"	Assessment Item from *ATI* Curriculum Document	Content Congruence of Assessment		Cognitive Congruence of Assessment		Comments on Assessment Congruency
		Yes	No	Yes	No	
AZ-RI.10.8 Integration of Knowledge and Ideas: Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning.	Grade 10 ATI PM1, Item 14 From "The Roots of Organic Farming" Why does the author include information about *Silent Spring*? a. To prove that some scientists were against the use of synthetic chemicals in agriculture. b. To suggest that many bird species are extinct because of the use of synthetic chemicals. c. To provide a balanced perspective on the scientists who conducted experiments with organic farming. d. To show why some people began to look for alternatives to produce grown with synthetic chemicals.	X			X	The ATI example asks for students to evaluate a claim, but does not ask students to identify false statement and fallacious reasoning as indicated in the standard.
AZ-RL.10.4 (Use also L.10.4a &L.10.5a) Craft and Structure: Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language evokes a sense of time and place; how it sets a formal or informal tone).	Grade 10 ATI PM1, Item 45 From "The Lark" For what is the lark a symbol? a. Heaven b. Joy c. Music d. Sunshine	X			X	The ATI example asks students to identify the symbolic meaning of the lark in the text, but the Arizona standard also asks students to analyze the impact of specific words and phrases on tone.
AZ-RL.10.1 Key Ideas and Details: Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	Grade 10 ATI PM1, Item 46 From "The Lark" Which word gives a clue to the historical period of the poem? a. Song b. Earth c. Yon d. Vain	X		X		
Total		**19**	**1**	**8**	**12**	

Appendix P

Exhibit 2.4.6a
Internal Consistency of District Assessment Items to
Selected *PARCC* Examples for Mathematics in Grades 3 to 10
Tucson Unified School District
April 2014

Selected *ATI* Items	*PARCC* Sample Items	Content Congruence of Assessment		Cognitive Congruence of Assessment		Comments on Assessment Congruency
		Yes	No	Yes	No	
Grade 3 ATI PM1, Item 17 Paul put 28 rocks into boxes. Each box has 7 rocks. Which equation's solution shows how many boxes Paul used? a. 4 x □ = 28 b. 7 x 28 = □ c. 28 ÷ □ = 7 d. 28 ÷ 4 = □	PARCC Sample Item, Grade 3 Mathematics For a school field trip, 72 students will be traveling in 9 vans. Each van will hold an equal number of students. The equation shows a way to determine the number of students that will be in each van. 72 ÷ 9 = ? The given equation can be rewritten using a different operation. Use the drop-down menus to select the operation and the numbers to complete the equation. 9 / + / 9 / = 72 72 / - / 72 / ? / X / ? /	X		X		
Grade 4 ATI PM1, Item 40 Fred needs to raise $58 for his club. He has collected $32. Which equation can be used to show how much more Fred needs to collect? a. 32 + *d* = 58 b. 32 – *d* = 58 c. 32 + 58 = *d* d. 58 + *d* = 32	PARCC Sample Item, Grade 4 Mathemtaics Complete the subtraction problem by typing the answer in the box. 7263 - 2792	X		X		

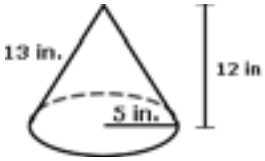
Appendix P (continued)
Exhibit 2.4.6a
Internal Consistency of District Assessment Items to
Selected PARCC Examples for Mathematics in Grades 3 to 10
Tucson Unified School District
April 2014

Selected *ATI* Items	*PARCC* Sample Items	Content Congruence of Assessment		Cognitive Congruence of Assessment		Comments on Assessment Congruency
		Yes	No	Yes	No	
Grade 5 ATI Posttest, Item 52 One-fourth of Jeremy's marbles are red. He has 8 red marbles. How many marbles does Jeremy have? a. 2 b. 8 c. 16 d. 32	PARCC Sample Item, Grade 5 Mathematics Mr. Edmunds shared 12 pencils among his four sons as follows: • Alan received 1/3 of the pencils. • Bill received 1/4 of the pencils. • Carl received more than 1 pencil. • David received more pencils than Carl. Part A On the number line, represent the fraction of the total number of pencils that was given to both Alan and Bill combined. [Number line from 0 to 1] Part B What fraction of the total number of pencils did Carl and David **each** receive? Justify your answer.		X		X	The ATI item asks the students to find the solution to the problem includes only one step. The PARCC example which resembles this problem asks the students to plot fractions on a number line and also to do multiple steps with the initial problem.
Grade 6 ATI PM1, Item 20 What is the volume of the prism?  a. 36 1/5 b. 36 3/5 c. 42 2/5 d. 46 1/5	PARCC Sample Item, Grade 6 Mathematics Kelvin ran a 100-meter race at an average speed of v meters per second. He completed the race in 12.5 seconds. Part A Use the drop-down menus to complete an equation that can be used to find v. $\frac{100}{12.5} = \frac{100}{12.5}$ [+ / - / .] v Part B What was Kelvin's average running speed, in meters per second square?		X		X	The ATI formula used is straight forward and the student simply remembers the formula for a rectangular prism to answer the ATI example question. The PARCC item asks the student to deconstruct the formula for velocity and then find the average speed after this.

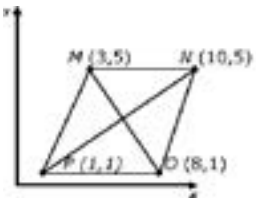
Appendix P (continued)
Exhibit 2.4.6a
Internal Consistency of District Assessment Items to
Selected PARCC Examples for Mathematics in Grades 3 to 10
Tucson Unified School District
April 2014

Selected *ATI* Items	*PARCC* Sample Items	Content Congruence of Assessment		Cognitive Congruence of Assessment		Comments on Assessment Congruency
		Yes	No	Yes	No	
Grade 7 ATI PM1, Item 36 Which is true of the proportional relationship below?  a. Mike scores 3 goals during every soccer game. b. Mike scores 2 goal during every soccer game. c. Mike scores 3 goals every three soccer games. d. Mike scores 1 goal every three soccer games.	PARCC Sample Item, Grade 7 Mathematics Part A Each row of the table identifies a line containing a pair of points. Indicate whether each line represents a proportional relationship between *x* and *y*. You may choose the graphing tool by selecting the two points. Be sure to indicate whether each line represents a proportional relationship or not. Line 1 (1,3) and (2,3) Line 2 (1,2) and (2,4) Line 3 (3,1) and (6,2) Line 4 (0,2) and (5,4) Line 5 (4,4) and (5,5) Part B For the lines in Part A that do **not** represent a proportional relationship, explain why they do not. For each line in Part A that does **not** represent a proportional relationship, describe how you would change the coordinates of one of the two given points on the line to create a proportional relationship.		X		X	The ATI example asks students only to consider proportional relationships. The example from PARCC asks students to create the lines first and then consider proportionality before asking students to explain why certain lines are not proportional and what changes are needed to make the lines proportional.

Appendix P (continued)
Exhibit 2.4.6a
Internal Consistency of District Assessment Items to
Selected PARCC Examples for Mathematics in Grades 3 to 10
Tucson Unified School District
April 2014

Selected *ATI* Items	*PARCC* Sample Items	Content Congruence of Assessment		Cognitive Congruence of Assessment		Comments on Assessment Congruency
		Yes	No	Yes	No	
Grade 8 ATI PM1, Item 37 Which of the following should be used to find the volume of the cone?  a. $\frac{4}{3} \cdot \pi \cdot 5^2 \cdot 13$ cubic in. b. $\frac{1}{3} \cdot \pi \cdot 5^2 \cdot 12$ cubic in. c. $\frac{4}{3} \cdot \pi \cdot 5^3$ cubic in. d. $\frac{1}{3} \cdot \pi \cdot 5^2 \cdot 13$ cubic in.	PARCC Sample Item, Grade 8 Mathematics A right circular cone is shown in the figure. Point *P* is the vertex of the cone and point *S* lies on the circumference of the base of the cone.  The cone has a height of 24 units and a diameter of 20 units. What is the distance from point *P* to point *S*?		X		X	The formula for a cone's volume is necessary for both problems, but students have an example of what the formula may look like in the ATI example; whereas, the PARCC sample asks the students to use not only the formulae related to cones, but other mathematical formulae to determine their answer.

Appendix P (continued)
Exhibit 2.4.6a
Internal Consistency of District Assessment Items to
Selected PARCC Examples for Mathematics in Grades 3 to 10
Tucson Unified School District
April 2014

Selected *ATI* Items	*PARCC* Sample Items	Content Congruence of Assessment		Cognitive Congruence of Assessment		Comments on Assessment Congruency
		Yes	No	Yes	No	
Grade 9 ATI PM1, Item 16 Sally's humanities test is next week. She knows it takes 15 to 20 minutes to read one page. She has 10 pages to read before the test. She estimates it will take her two hours and will plan to read the morning of the test. What is the result of her estimate? a. Sally's estimate is accurate and she will be finished with her reading in time. b. Sally's estimate is close enough and she will be finished with her reading in time. c. Sally's estimate is not accurate, but she will complete most of the assignment. d. Sally's estimate is low, and she will not finish her reading in time.	PARCC Sample Item, Grade 9 Algebra I Myla's swimming pool contains 16,000 gallons of water when it is full. On Thursday, her pool was only partially full. On Friday, Myla decided to fill her pool completely using a hose that flowed at a rate of 10 gallons per minute. It took her 5 hours to completely fill her pool Part A Before Myla started filling her pool, there were _____ gallons of water in the pool. The rate at which water is being added to the pool is _____ gallons per **hour**. Part B On the coordinate plane provided, graph a linear function that represents the number of gallons of water in Myla's pool given the amount of time in minutes, she spent filling her pool in Friday.		X		X	The ATI example asks for students to determine the basic rate of an item. The PARCC example takes this a step further and asks the students to determine the basic rate and then to graph their answer on a coordinate plane.
Grade 10 ATI PM1, Item 19 *MNOP* is a parallelogram. What are the coordinates of the point of the intersection of the diagonals?  a. (1.5, 2.5) b. (4, 2.5) c. (5.5, 2.5) d. (5.5, 3)	PARCC Sample Item, Grade 10 Geometry  Use the steps in the construction to prove that bisects angle *BAC*.		X		X	This ATI example is the closest related problem to the sample PARCC item. The items do not match because the ATI item asks students to use their knowledge of coordinate planes while the PARCC item asks students to use geometric skills involved with bisecting angles.
Total		**2**	**6**	**2**	**6**	

Appendix Q

Exhibit 2.4.6b
Internal Consistency of District Assessment Items to Selected *PARCC* Examples for ELA in Grades 3 to 10
Tucson Unified School District
April 2014

Selected *ATI* Items	*PARCC* Sample Items	Content Congruence of Assessment		Cognitive Congruence of Assessment		Comments on Assessment Congruency
		Yes	No	Yes	No	
Grade 3 ATI PM1, Item 3 Students are to read "Elizabeth's Old Shoes" Read the sentences. "She dragged her toes all the way home. Once inside the door, she tossed her book bag on the floor and flopped down on the couch." What does this tell you about Teri? a. She is upset. b. She is excited. c. She is glad to be home. d. She does not like the shoes she is wearing.	PARCC Sample Item, Grade 3 ELA Students are to read an excerpt from *Eliza's Cherry Trees: Japan's Gift to America* Part A: The article includes these details about Eliza's life: • She wrote newspaper articles to tell others about what she saw in Alaska to inform those who had not been there. (paragraph 1) • She wrote the first guidebook about Alaska. (paragraph 1) What do these details help show about Eliza? a. They show that she shared the benefits of her experiences with others. b. They show she had many important jobs during her lifetime, but becoming a photographer was one of her proudest moments. c. They show that her earlier travels were more exciting than the work she did later in her life. d. They show that she had a careful plan for everything she did in her life. Part B Ideas from paragraphs 1 and 11 were used to help you learn about Eliza. Click on <u>two</u> other paragraphs that include additional support for the answer in Part A.	X			X	The ATI example asks the student to make one level of interpretation regarding the text; whereas, the PARCC example asks the students to do the same activity as the ATI example, but then asks for supporting evidence to support the student's choice.

Appendix Q (continued)
Exhibit 2.4.6b
Internal Consistency of District Assessment Items to Selected PARCC Examples for ELA in Grades 3 to 10
Tucson Unified School District
April 2014

Selected *ATI* Items	*PARCC* Sample Items	Content Congruence of Assessment		Cognitive Congruence of Assessment		Comments on Assessment Congruency
		Yes	No	Yes	No	
Grade 4 ATI PM1, Item 15 Read the paragraph. Roller coasters have rules that must be followed. Usually, there is a minimum height rule. This rule might say that a person must be at least 48 inches tall to ride the roller coaster. People who are less than 48 inches tall cannot ride the roller coaster. What does the word "minimum" mean? a. Free from danger b. Taller than normal c. Not necessary or important d. Smallest amount possible	PARCC Sample Item, Grade 4 ELA Students are to read "Cricket and Cougar" Part A: What is the meaning of the word **avenge** as it is used in the story? a. Believe b. Get even c. Make friends with d. Scare Part B: Which detail from the story best supports the answer to Part A? a. "In this forest, I am chief of the animals!" b. "I don't believe you, little insect, snarled Cougar." c. "Ahrr! Ahrr!" cried the cougar in pain. "Get out of my ear!" d. "Cricket, come out! Let me meet your mighty cousin!"	X			X	The ATI example asks for word meaning; whereas, the PARCC example asks for word meaning and then asks students to choose supporting evidence for their choice.
Grade 5 ATI Posttest, Item 11 Students are to read "The Panther and the Shepherds" In the first paragraph, what does "pelted" mean? a. The skin of a furry animal b. Threw things at c. Gave d. Rushed or hurried	PARCC Sample Item, Grade 5 ELA Students are to read "Life in the Limbs" Part A: What is the meaning of the word **dictate** as it is used in paragraph 23? a. Hint b. Fix c. Understand d. Decide Part B: Which phrase helps the reader understand the meaning of **dictate**? a. "recreate the tree house" b. "determine the shape" c. "is less expensive to build" d. "has all the time in the world"	X			X	The ATI example asks for word meaning; whereas, the PARCC example asks for word meaning and then asks students to choose supporting evidence for their choice.

Appendix Q (continued)
Exhibit 2.4.6b
Internal Consistency of District Assessment Items to Selected PARCC Examples for ELA in Grades 3 to 10
Tucson Unified School District
April 2014

Selected *ATI* Items	*PARCC* Sample Items	Content Congruence of Assessment		Cognitive Congruence of Assessment		Comments on Assessment Congruency
		Yes	No	Yes	No	
Grade 6 ATI PM1, Item 14 Students are to read "Pet Tarantulas" Which is the main idea of this text? a. Why owning a tarantula is rewarding. b. How to care for a tarantula. c. How a molting tarantula behaves. d. How to choose the right tarantula.	PARCC Sample Item, Grade 6 ELA Students are to read *Julie of the Wolves* Part A: What statement best describes the central idea of the text? a. Miyax is far from home and in need of help. b. Miyax misses her father and has forgotten the lessons he taught her. c. Miyax is cold and lacks appropriate clothing. d. Miyax is surrounded by a pack of unfriendly wolves. Part B: Which sentence helps develop the central idea? a. "Miyax pushed back the hood of her sealskin parka and looked at the Arctic sun." b. "Somewhere in this cosmos was Miyax; and the very life in her body, its spark and warmth, depended upon these wolves for survival." c. "The next night the wolf called him from far away and her father went to him and found a freshly killed caribou." d. "He had ignored her since she first came upon them, two sleeps ago."	X			X	The ATI example asks students to identify the main idea while the PARCC example asks students to identify the main idea and then choose evidence that supports the main idea.

Appendix Q (continued)
Exhibit 2.4.6b
Internal Consistency of District Assessment Items to Selected PARCC Examples for ELA in Grades 3 to 10
Tucson Unified School District
April 2014

Selected *ATI* Items	*PARCC* Sample Items	Content Congruence of Assessment		Cognitive Congruence of Assessment		Comments on Assessment Congruency
		Yes	No	Yes	No	
Grade 7 ATI PM1, Item 12 Students are to read "Choose the Best Pet for You" What is the purpose of the second paragraph? a. To convince readers to buy a pet. b. To identify pets that are not difficult to exercise. c. To explain what kinds of cages different pets need. d. To identify how many hours pets need to exercise.	PARCC Sample Item, Grade 7 ELA Students are to read "The Biography of Amelia Earhart" Part A: In paragraph 6, Earhart is quoted as saying "**After scaring most of the cows in the neighborhood…I pulled up in a farmer's back yard.**" How does the quotation contribute to the meaning of the paragraph? a. It demonstrates Earhart's sense of humor when describing a potentially frightening situation. b. It shows that Earhart loved taking risks but regretted when her actions put others in danger. c. It suggests that Earhart was humble about her accomplishments and able to admit serious mistakes. d. It illustrates Earhart's awareness of her responsibility as a role model for other women. Part B: In which other paragraph in the article odes a quotation from Earhart contribute to the reader's understanding of her character in a similar way as does the quotation in Part A? a. Paragraph 7 b. Paragraph 8 c. Paragraph 9 d. Paragraph 11	X			X	The ATI example asks the students to identify the purpose of a paragraph; whereas, the PARCC example asks the students to identify the meaning of a paragraph and then asks the students to provide supporting evidence.

Appendix Q (continued)
Exhibit 2.4.6b
Internal Consistency of District Assessment Items to Selected PARCC Examples for ELA in Grades 3 to 10
Tucson Unified School District
April 2014

Selected *ATI* Items	*PARCC* Sample Items	Content Congruence of Assessment		Cognitive Congruence of Assessment		Comments on Assessment Congruency
		Yes	No	Yes	No	
Grade 8 ELA PM1, Item 13 Read the sentence. The colony of ants seemed to expand each day. The word "colony" has several meanings. What is the meaning of the word "colony" in this sentence? a. A group of the same kind of animal, plant, or insect. b. A visible growth of tiny organisms. c. A region controlled by a distant country. d. A group of people organized in a	PARCC Sample Item, Grade 8 ELA Students are to read *Brian's Winter* Part A: What is the meaning of the word **adversary** as it is used in paragraph 21? a. Problem's solution b. Indication of trouble c. Opposing force d. Source of irritation Part B: Which phrase from paragraph 21 **best** helps clarify the meaning of **adversary**? a. "own worst enemy" b. "the primary rule" c. "missed the warnings" d. "most dangerous things"	X			X	The ATI example asks students for words in context; whereas, the PARCC example asks for words in context and then for additional clarification information.

Appendix Q (continued)
Exhibit 2.4.6b
Internal Consistency of District Assessment Items to Selected PARCC Examples for ELA in Grades 3 to 10
Tucson Unified School District
April 2014

Selected *ATI* Items	*PARCC* Sample Items	Content Congruence of Assessment		Cognitive Congruence of Assessment		Comments on Assessment Congruency
		Yes	No	Yes	No	
Grade 9 ATI PM1, Item 2 Students are to read "Up From Slavery" Which evidence supports the claim that slavery robbed the author of a carefree childhood? a. "The earliest impressions I can now recall are of the plantation and the slave quarters – the latter being the part of the plantation where the slaves had their cabins." b. "In this cabin I lived with my mother and brother and sister till after the Civil War, when we were all declared free" c. "The early years of my life, which were spent in the little cabin, were not very different from those of thousands of other slaves." d. "Until that question was asked it had never occurred to me that there was no period of my life that was devoted to play."	PARCC Sample Item, Grade 9 ELA Students are to read "Fields of Fingerprints: DNA Testing for Crops" Part A: According to the information in paragraph 1, how is solving crop crimes similar to solving high-profile murder cases? a. Solving crop crimes uses the science of human fingerprint analysis to examine evidence. b. Solving crop crimes uses genetic material inside the cells of living things to examine evidence. c. Solving crop crimes uses specialized computers at crime scenes to examine evidence. d. Solving crop crimes uses information about the general appearance of living things to examine evidence. Part B: Which detail from the article **best** supports the answer to Part A? a. "Several organizations have started offering DNA testing to the North American plant breeding and seed industry." b. "…the test will be used by plant breeders and research scientists to identify important genes." c. "…DNA fingerprinting will make it possible for police investigators or researchers to pinpoint specific plant traits and accurately identify seed varieties." d. "Easy to use DNA test kits for certain crops should be on the market within the next few years."		X		X	The ATI example asks students to select supporting evidence of a claim; whereas, the PARCC example asks the students to compare and contrast two viewpoints.

Appendix Q (continued)
Exhibit 2.4.6b
Internal Consistency of District Assessment Items to Selected PARCC Examples for ELA in Grades 3 to 10
Tucson Unified School District
April 2014

Selected *ATI* Items	*PARCC* Sample Items	Content Congruence of Assessment		Cognitive Congruence of Assessment		Comments on Assessment Congruency
		Yes	No	Yes	No	
Grade 10 ATI PM1, Item 16 Students are to read "The Roots of Organic Farming" Which statement is supported by the text? a. Organic dairy products contain more nutrients than non-organic dairy products. b. Masanobu Fukuoka's findings inspired organic farm certification programs in Japan. c. Agricultural chemicals may contaminate produce. d. Fertilizers prevent soil from retaining nutrients.	PARCC Sample Item, Grade 10 ELA Students are to read "Daedalus and Icarus" and "To a Friend Whose Work Has Come to Triumph" Write an essay that analyzes how Icarus's experience of flying is portrayed differently in the two texts. Develop your essay by providing textual evidence from both texts. Be sure to follow the conventions of standard English.		X		X	The ATI example asks students for supporting information; whereas, the PARCC example asks students to write an essay.
Total		**6**	**2**	**0**	**8**	

EXHIBIT 9B

Final Report
May 2014

Operational Efficiency Audit for the Tucson Unified School District

Submitted by:

GIBSON CONSULTING GROUP

Operational Efficiency Audit

for the

Tucson Unified School District

Final Report

May 2014

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Contents

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Introduction

In October 2013, Gibson Consulting Group, Inc. (Gibson) was contracted by the Tucson Unified School District (TUSD) to conduct an Operational Efficiency Audit. This study began in November 2013 and was completed in May 2014. The objectives of this project were to identify opportunities to improve efficiency, to achieve cost savings, and to make recommendations for improving management practices in the district. This report presents the results of the audit.

Gibson wishes to express our appreciation to the TUSD management and staff for its responsiveness in providing us with the information needed to perform this important work, and for its cooperation and willingness to assist us during our site work.

Context of Study

It is important that this efficiency audit report be read in the context of several factors related to Arizona public education and the history of TUSD in particular:

Lower State Spending

Arizona spends less on public education per student than most states in the United States. In 2013, the statewide expenditure per student was $7,496, while the estimated national average was $11,068 (unadjusted for cost of living differences). Some school districts in the northeastern United States have expenditures per student that are more than double that of Arizona's average, the difference due in part to a higher cost of living in that region. This lower spending on Arizona public education reinforces the need for efficient school systems.

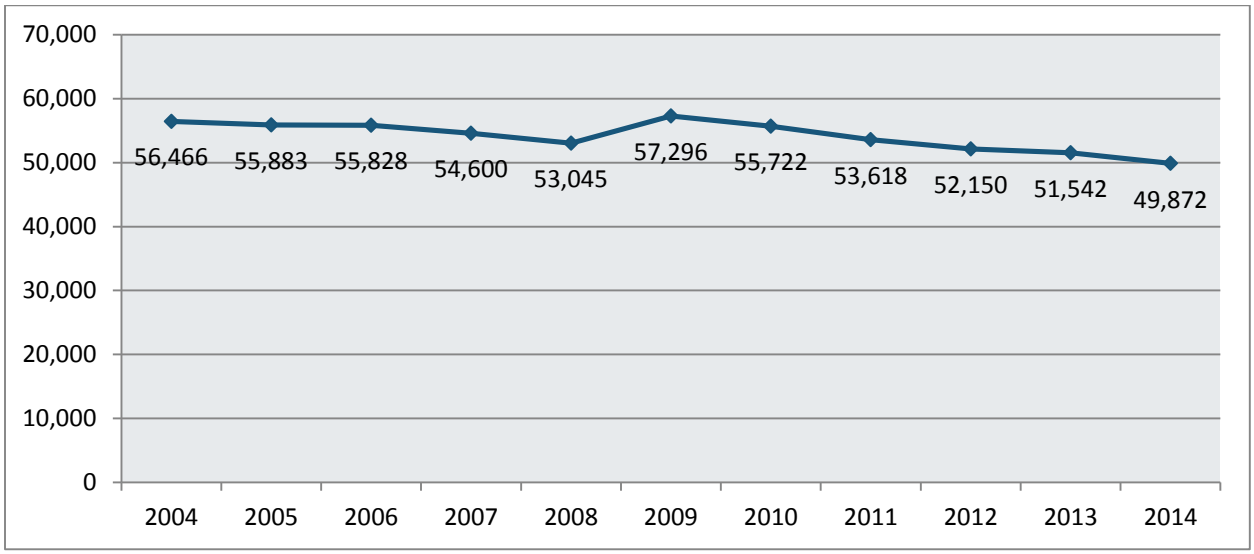
Declining State Spending

Between 2008 and 2013, Arizona had the highest percentage decrease in public education spending per student with a decrease of 21.8 percent. Most states went through budget cuts during this time, but none more so than Arizona. Low funding, combined with declining funding, creates challenges in managing school district resources, particularly with the current environment of increasing standards for student achievement.

Declining Enrollment

A third factor is TUSD's enrollment decline. Because state funding for TUSD is based largely on enrollment, declines in enrollment have contributed to reduce funding. Figure 1 provides TUSD enrollment trends over the past 10 years. Enrollment has declined from 56,466 students to 49,872 students during this time, a drop of 12 percent. TUSD currently projects a continued decline to 45,000 students by 2019.

Figure 1. TUSD Enrollment, 2003-2013



Source: TUSD

This enrollment decline has led to a $50 million decrease in funding over the past 10 years. Many attribute the decline in enrollment to strong competition from charter schools.

Because of the nature of school district costs, expenditures do not drop at the same rate as enrollment. Enrollment declines are generally dispersed among many schools, and within schools among many grade levels. The loss of one student from a class will likely not result in a commensurate reduction in costs. If TUSD were a growing district, the opposite would be true. Students could be added to many classes without having to hire additional resources or purchase additional equipment.

Because Arizona school funding, like most states, does not recognize the nature of school district costs, school systems like TUSD with declining enrollment are in essence penalized financially – the loss of funding is larger than the reduction in cost.

Desegregation Lawsuit

The district has been involved in desegregation litigation for decades, and currently funds a $64 million desegregation plan, also known as the Unitary Status Plan. This plan addresses the concerns and requirements resulting from a nearly 40-year legal battle, and sets a goal to achieve unitary status by 2017. While a separate local tax helps support this investment, it does not cover all the resources applied to plan activities.

TUSD has endured these financial pressures by closing schools and reducing costs through budget cuts and improved efficiency. Over the past five years, TUSD spending per student has declined by 5 percent, most of which occurred in 2012-13.[1] However, total spending per student at TUSD ($8,421) remains

[1] Arizona School District Spending, Fiscal Year 2013, Office of the Auditor General, February 2014

significantly higher than both the Arizona peer district average ($7,185) and the state average ($7,496). This efficiency audit seeks to find ways to further improve the efficiency of TUSD.

Report Summary

This report contains 62 recommendations to improve efficiency and management effectiveness at TUSD. The district is already moving forward on some of these and other initiatives. For example, TUSD does not currently have a long-range strategic plan to guide its organization, but has moved forward with the decision to develop one this year. Many district processes are also inefficient, manual, and paper-intensive, but the district engaged with an outside firm last year to assist in streamlining many of these processes and is considering a different route for its finance, human resources, and student information systems. TUSD has recognized problems with salary compression, a pay inequity of their salary structure, and has taken steps to remedy the situation. Negotiations with labor unions have resulted in streamlined approaches to employee leave and helped the district save money. In summer 2013, TUSD staff worked diligently to identify ways to achieve class sizes closer to the district targets, resulting in additional savings. Several improvements have been made to improve the efficiency of facilities management. Separately, and occurring simultaneously with this audit, the district is conducting a curriculum audit to support improved student achievement. These efforts demonstrate a culture for continuous self-improvement at TUSD, and increase the chance for success in implementing recommendations contained in this report as well as other studies.

TUSD was also found to be extremely lean in certain areas. School clerical staff levels are lower than industry standards, and lower than any school system reviewed by Gibson over the past 20 years. This is particularly noteworthy because the operating processes applied by school clerical staff are highly manual, paper-intensive, and take more time than what would be applied in an efficient model. The same is true for custodial services. Recent cuts to custodial services have left staffing levels significantly below what industry standards would prescribe, and custodial work efficiency is adversely affected by the lack of current equipment.

Several of the recommendations in this report are not new. However, it was important to provide a snapshot of current operations to inform district leadership of where things stand today. In several chapters of this report, references are made to recommendations from prior studies and, where applicable, concur with those recommendations.

One of the factors contributing to TUSD's higher cost structure is the number of schools relative to the student population. The district has closed schools in recent years, but several schools remain significantly under capacity. Unless the enrollment decline rebounds, TUSD should consider closing additional schools and eliminating portable building space at underutilized schools. These two initiatives will result in significant savings to the district.

Human Resources represents another area where significant improvements and streamlining are needed. The recruiting process is not as effective as it needs to be and takes too long, resulting in the loss of qualified candidates. The district maintains its position control inventory on a spreadsheet

instead of application software, lengthening a cumbersome approval process for new or changing positions. The district is also significantly underutilizing its substitute management system, creating unnecessary work at the schools and central office. With the exception of Food Services, all hourly personnel record their time on manual timesheets, also requiring excessive work.

The district also needs to move forward in implementing integrated information systems and re-engineered processes. TUSD has used technologically advanced software to support its human resources and financial operations for eight years; however, as of January 2014 most of the manual, inefficient processes remain. The district was previously criticized for not employing effective methods for the selection, implementation, and integration of information systems – this is part of the reason the existing systems are not meeting district needs. Implementing information systems – and implementing redesigned processes that take advantage of the technological capabilities of these systems – will lower the work demands of TUSD staff at the school and district level, will improve internal control over the accuracy of their work, and will increase the efficiency and responsiveness of their day-to-day activities.

Other major recommendations in this report include:

- Implement performance measures and targets throughout the district to improve accountability and transparency. These measures should be linked to the district's new strategic plan, and should also be used to justify budgeted expenditures in each department.
- Implement an internal audit function that reports directly to the governing board. It is unusual for a district the size of TUSD not to have such a function. Internal audit helps ensure that the district meets its objectives; complies with applicable laws, policies, and regulations; adequately protects taxpayer funds and district resources; and operates in an efficient manner.
- Reorganize the Student Equity and Intervention Department to be more functionally aligned by type of service (e.g., discipline management, social services, and academic support). The current alignment by ethnicity does not support the coordination or leadership of these services.
- Document a decision-making framework to clarify what decisions should be made at the schools versus the central office.
- Reduce finance office staffing to levels commensurate with similar-sized school systems after implementing new information systems and streamlined processes.
- Improve financial reporting at the board and department/school levels.
- Develop procedures and controls for the district's procurement card program.
- Reorganize the Human Resources Department to focus resources on operational improvements.
- Improve and streamline the hiring process through several initiatives.
- Conduct a dependent eligibility audit to ensure that only eligible family members receive benefits.

- Develop a technology project management methodology using industry standards to improve the ability of TUSD to implement technology projects successfully, on time, and within budget.
- Bring all technology-related positions and resources located in other departments under the responsibility of the Technology Services Department to improve accountability and coordination.
- Update technology job descriptions to reflect current technology requirements. Current job descriptions reference technical capabilities that are 10 years old, resulting in an under-qualified staff.
- Implement a new Computerized Maintenance Management System (CMMS) to support more effective and efficient processes, and to provide more useful management information.
- Enhance the district's preventive maintenance program to lengthen the life of facilities and maintain them at a lower cost.
- Centralize the management of custodial services.
- Implement additional energy conservation measures to reduce utility expenditures.
- Implement new bus routing and scheduling software to optimize routing efficiency.
- Renegotiate labor agreements to pay bus drivers and bus monitors for actual hours worked.
- Implement a more effective bus replacement program.
- Allocate additional Maintenance and Operating Fund costs to the Food Services Fund. The Food Services Department can continue to be financially self-supported by increasing student meal participation.

The recommendations contained in this report can be implemented over the next five years (2014-15 through 2018-19). Once fully implemented, these recommendations will result in net annual savings of $10,833,171 by 2018-19. If fully implemented, recommendations contained in this report will require one-time investments of $1,798,000 and additional investments in subsequent years with a five-year net savings of $37,439,087.

For those recommendations involving position reductions, average pay for that position was applied in calculating savings. It is expected that some of these positions can be eliminated through attrition. A benefits rate of 30 percent was applied in calculating gross savings from position reductions.

Appendix A lists all recommendations made as a result of the review, by operational area, along with estimated savings, investments, and net fiscal impacts.

Methodology

Data Collection

To conduct a comprehensive review of TUSD, Gibson used a variety of data collection and analysis approaches. This comprehensive review of TUSD's non-instructional areas included the following data collection approaches:

- Existing TUSD data
- Interviews with district staff
- School site visits
- Focus group sessions
- Arizona state average and peer data
- National peer data

Existing TUSD Data

To provide proper context for the review, Gibson requested from TUSD a broad spectrum of data and documents related to the operational areas under review. Gibson collected over 1,000 documents from TUSD staff. The purpose of this data request and subsequent analyses was to gain a deeper understanding of TUSD operations and to provide background and context for the review. In addition, these data and documents were utilized to help formulate questions for the interviews and focus group sessions held with district administrators, department heads and staff, school administrators and staff, and teachers. Data analyses, discussed later, were conducted to determine levels of efficiency within the organization.

Interviews with District Staff

To ensure a complete and thorough understanding of district processes, procedures, operations, and issues, the review team conducted interviews with key TUSD staff involved in day-to-day operations from January 6 through 17, 2014. Interviews included governing board members, district leadership, department heads and staff, school administrators and staff, operational leads, and support staff, among others.

Since some preliminary data analyses were completed prior to the site visit, interview time was dedicated more to understanding performance trends, in addition to learning about system processes and staff responsibilities. Through these interviews and focus groups, the review team was able to develop a better overall understanding of district operations and to clarify any data questions that arose during preliminary analysis, including the investigation of possible causes of unfavorable variances, of current efficiency or performance measurement systems, of current plans and initiatives, of the current approach to cost savings, of recent cost savings or cost cutting measures, of decision-making frameworks, and of additional areas of concern for the staff.

School Site Visits

A sample of TUSD schools was selected for site visits based on school type and geographic location within the district. The review team selected and conducted site visits to TUSD elementary, K-8, middle, and high schools. The purpose of the school visits was to gather information on school operations, facilities, and staff members' perceptions of the services provided by the central office.

Focus Group Sessions

Focus groups are an effective way of obtaining more in-depth information from staff than a one-on-one formal interview or other data collection instrument. In addition, the dynamics of a focus group often stimulate the expression of ideas that might otherwise go unstated. The project team conducted focus group sessions with varying groups of stakeholders (e.g., principals, teachers, operational area leads, departmental staff, and school staff). These focus groups were conducted during the January 2014 site visit.

State and National Peer Data Analysis

Gibson used the most recent State Auditor's report to compare TUSD to state and peer averages as well as to other selected peers. This report is published annually; the most recent report available at the time of this study was for information relating to the 2012-13 school year. In other instances, research of individual school systems was conducted to provide additional peer comparisons.

Analysis

Data Analysis

As discussed previously, existing TUSD data were requested and analyzed to provide background and context for this review. During the assessment phase of this project, each functional area was reviewed individually to determine whether efficient financial and operational management practices were in place.

Interview and Focus Group Data

Qualitative interview and focus group data were analyzed by functional area leads conducting the focus group sessions to determine common trends across the various stakeholder groups (e.g., district administration, school leaders and staff, and department heads and staff). Other sources of input (e.g., observations, district data, and industry best practices) were also included in analyses.

Organization of Report

The remainder of this report is organized into the following:

- Chapter 1 – District Organization and Management
- Chapter 2 – Financial Management
- Chapter 3 – Human Resources
- Chapter 4 – Technology Management
- Chapter 5 – Facilities Management
- Chapter 6 – Transportation Management
- Chapter 7 – Food Services
- Chapter 8 – Other
- Appendices

Chapter 1 – District Organization and Management

Introduction

The effective and efficient education of students depends heavily on a school system's governance structure, administrative management, and planning processes. The role of the governing board (board) is to set goals and priorities, to establish policies, and to approve the plans and funding necessary to achieve district goals and objectives. The superintendent is responsible for managing school district operations, recommending staffing levels, and preparing a plan for spending financial resources in order to carry out the governing board's goals and objectives. Department and school administration execute the plans and measure performance against established targets that are aligned with the district's goals and objectives. Each component of this system of governance and administration helps ensure that goals and objectives are in fact achieved, and that departments, schools, and the individuals that oversee them are held accountable for results.

This chapter provides commendations and recommendations related to board governance and district administration in two sections: *governance* and *management and administration*.

The Tucson Unified School District (TUSD) is the second largest school district in Arizona. In 2013-14, the district served approximately 50,000 students in 87 schools, including 49 elementary schools, 13 K-8 schools, 10 middle schools, 10 high schools, and five other special purpose schools.

Compared to its Arizona peer districts, TUSD has high administration costs. Table 1.1 shows three measures of efficiency for district administration tracked by the Arizona Office of the Auditor General in its most recent report to the legislature: the percentage of administration cost to total operating expenditures; administration cost per pupil; and students per administrator. Administration costs include salaries and benefits for superintendents, principals, business managers, department managers, and clerical staff.

In Table 1.1, TUSD is compared to its peer average and to Mesa Public Schools (MPS), the largest school district in the state. For the ratio of students to administrators, the lower the ratio is, the larger the number of administrators relative to the student population. TUSD has 23 percent more administrators than the peer average and 16 percent more than MPS relative to their respective student populations.

Table 1.1. Comparative Administration Efficiency Ratios, TUSD and Peers, 2012-13

Efficiency Measure	TUSD	Peer Average	MPS
Administration Cost as a Percentage of Total Operating Cost	10.2%	Not Available	7.9%
Administration Cost per Pupil	$865	$640	$611
Ratio of Students to Administrators	62/1	80/1	74/1

Source: Arizona School District Spending, Fiscal Year 2013, Office of the Auditor General

One of the factors contributing to higher administration costs at TUSD is smaller schools. In 2011-12, TUSD's average school size was 490 students. MPS' average was 742 students, 51 percent larger than TUSD. While TUSD has closed 10 schools since 2011-12, the gap likely remains significant. A smaller average school size means more schools relative to the student population, which in turn means more school administrators. At the school level, TUSD school administrator levels are at or below recommended guidelines. The issue is with the number of open schools in the district. This topic is discussed separately in *Chapter 5 – Facilities Use and Management* of this report.

Other factors appear to be contributing to this variance. TUSD, unlike its peer districts, receives $60 million in desegregation funding through a separate tax rate, and some of these funds are dedicated to administrative costs for program oversight.

As noted in other chapters of this report, inefficient and manual, paper-intensive processes are contributing to greater work demands and larger staff levels at the central office. TUSD human resources and finance offices have higher administration and clerical staffing levels than other large districts relative to their student populations.

The remainder of this chapter focuses on TUSD's governance and administration practices not addressed in other chapters of this report.

Governance

TUSD is governed by a five-member school board. Each member serves a four-year term and is elected at-large. Board member terms commence on January 1st of the year following the election. Table 1.2 lists the current TUSD board members, their role on the governing board, and the date their term expires.

Table 1.2. TUSD Governing Board Members

School Board Member	Title	Current Term Expires
Adelita S. Grijalva	Board President	December 31, 2014
Kristel Ann Foster	Board Clerk	December 31, 2016
Michael Hicks	Board Member	December 31, 2014
Cam Juarez	Board Member	December 31, 2016
Dr. Mark Stegeman	Board Member	December 31, 2016

Source: TUSD website, http://www.tusd1.org/contents/govboard/govboard.html.

Regular board meetings are held on the second Tuesday of each month. In addition, at least one special board meeting is conducted monthly. Board meeting agendas and supporting information are posted online on the district's web site.

The governing board appoints the superintendent, establishes district policies, adopts the budget, and votes on TUSD decisions requiring board approval, such as purchases and contracts exceeding a predetermined dollar limit. The TUSD policy manual and the district's budget are both presented on the TUSD web site.

Recommendation 1-1: Develop a long-range strategic plan and related performance measures.

TUSD has a document entitled *Strategic Plan 2011-12*. This document was prepared by an architectural firm, and actually represents a long-range facilities plan as opposed to a school system strategic plan. Facility management is only one element of an organization's strategic plan.

TUSD does not have any other document that constitutes a strategic plan. These plans are generally five to seven years in duration, and outline the school system's mission, vision, goals, and specific measurable objectives. A strategic plan provides guidance to the development of other district planning documents, including the facilities master plan and a long-range technology plan. Strategic plans also drive shorter term academic improvement plans and more detailed measurable objectives. TUSD schools currently prepare an annual School Continuous Improvement Plan with measurable objectives, but these are not based on any districtwide objectives.

The State of Arizona establishes baseline achievement expectations and measures schools and school districts on an A through F grading scale.[2] In the most recent results, TUSD received an overall grade of "C" with 30 percent of the schools receiving a grade of "B" or higher. However, TUSD has improved its overall performance, moving from a "D" grade to two points away from a "B" grade in three years.

[2] Title 15, Section 15-241 of the Arizona Revised Statutes

Some efforts at TUSD have been implemented to develop pieces of a strategic plan. In 2012, TUSD announced its new *Vision for Action* and *Core Values*. The district's *Vision for Action* is "Delivering Excellence in Education Every Day." The *Core Values* are:

- **Student-Centeredness** – making every decision with student success in mind
- **Caring** – acting with respect, dignity, and concern for all
- **Diversity** – celebrating and accepting our differences as our strength
- **Collaboration** – partnering to reach common goals
- **Innovation** – embracing new ideas and challenging assumptions
- **Accountability** – taking responsibility to do things right and to do the right thing

In 2013 academic and business leadership teams were developed to implement a more structured approach to planning. These planning initiatives have been effective in identifying critical needs and solutions for TUSD. Each planning initiative identifies a TUSD staff member responsible for the initiative, the desired outcome or product, and a target date of completion.

The leadership team plans are effective in identifying what TUSD is expected to "do." It does not effectively define what TUSD is expected to "achieve." Herein lies the primary benefit of a strategic plan – establishing specific performance expectations to support accountability for results. TUSD should develop a long-range strategic plan that establishes such expectations.

Below is a model for a strategic plan recommended by one of the leading providers of strategic planning for school districts[3]:

- **Beliefs** – A statement that is a formal expression of the organization's (and community's) fundamental values: its ethical code, its overriding convictions, its inviolate commitments. (TUSD has already established beliefs.)
- **Mission** – A statement that is a clear and concise expression of the district's identity, purpose, and the means of action. (TUSD has a *Vision of Action*.)
- **Strategic Parameters** – Limitations the organization places upon itself. They are things the organization either will never do or will always do. The intent is concentration of effort on the mission and objectives.
- **Objectives** – The planning organization's commitment to achieve specific, measurable end results in terms of student success, achievement, and/or performance.
- **Strategies** – The most important part of the planning discipline; the articulation of bold initiatives through which the organization will deploy its resources toward the stated mission and objectives.

[3] Cambridge Strategic Services website: http://www.cambridgestrategicservices.org/services/strategic-planning.html

- **Other Elements:**
  - Internal Factors: A thorough, unbiased, examination of the organization: strengths, weaknesses, and a critique of the organizational design.
  - External Factors: An examination of those forces which an organization has little or no control, such as social, political, economic, demographic, technological, or educational trends.
  - Competition: Any other organization providing the same service in the marketplace (e.g., charter schools).
  - Critical Issues: Threats and opportunities redefined strategically.

The difference between a goal (e.g., all students will achieve academic success) and a measureable objectives is important. A measureable objective will establish the short-and long-term timetable for performance growth. For student achievement, this could be measured by standardized test results, graduation rates, college entrance exam participation, and college entrance exam results. These items are presented in TUSD's school continuous improvement plans but are not linked to any districtwide objectives or growth targets. The objective should establish the five-year growth target, and this should support annual improvement rates for each school. However, this does not necessarily mean that each school will have the same annual growth rate expectations. TUSD should ensure that the collective achievement of school-level objectives meet or exceed the district-level targets.

With respect to operational efficiency, there are no current short- or long-term measurable objectives established at TUSD. Some TUSD departments track some measures of performance (e.g., gross square feet cleaned per custodian, energy cost per square foot), however most do not. Performance measures and related targets should be developed for each major operational and administrative area for the school district. Appendix B provides a sample of performance measures that can be used to support the development of objectives related to operational efficiency.

Fiscal Impact

TUSD has already taken the step to hire a consultant at a cost of $92,500 to assist in its strategic planning effort. No additional cost should need to be incurred. The two Deputy Superintendents should be designated by the Superintendent to be the primary owner of the strategic plan's development and devote (or designate) 160 hours per year each to the assembly of information for the strategic plan and plan updates. Most of the development can be facilitated by the existing academic and business leadership teams. On average, department leaders and staff will need to spend 40 to 80 hours per year developing targets, measuring results, analyzing performance, and identifying plans to improve performance.

Recommendation 1-2: Implement an internal audit function at TUSD that reports directly to the governing board.

TUSD does not have an internal audit function, which is unusual for such a large school district. Internal audit provides the necessary checks and balances for large organizations to minimize organizational risks such as non-compliance, theft, inefficient practices, or other unfavorable circumstance. Internal audit functions should report directly to the governing board and the work of internal audit should be based on a comprehensive assessment of district risks. Other special projects requested by the governing board may be warranted, but the vast majority of the internal audit effort should relate to the highest risks of the district identified through an independent risk assessment. A risk assessment is an independent evaluation of the each area of an organization in the context of different types of risk, including the budget and number of staff in the area, complexity of compliance requirements, turnover in staff, risk of theft, risk that objectives are not achieved, risk of inefficiency, risks associated with implementing new technologies, and other factors.

TUSD should develop an internal audit charter, conduct a risk assessment, and then identify the amount and types of resources it needs to implement an internal audit program. A risk assessment will result in a focused and impactful internal audit function. It will define the technical requirements of the district's in-house and contracted resources and result in the development of a five-year internal audit plan.

The items listed below represent examples of risk factors that should be addressed in a comprehensive risk assessment.

- Injury, accident, illness, or death of students or employees
- Violation of laws, regulations, or rules
- Fraud and theft risk factors
- Violation of contract terms or grant provisions
- Department failure to meet stated objectives or goals
- Ineffective – or inefficient – use of TUSD resources
- Risk of inaccurate data for administrative management reporting
- Negative public sentiment towards TUSD

Internal audit functions are commonly associated with accounting and financial matters, but the function should address all program, operational, and administrative areas in a school system, including special education, technology and information systems, safety and security, construction management, and transportation. Accordingly, an internal audit function should be staffed with an internal audit director, and two to three additional staff with experience in traditional financial auditing, program compliance auditing, and student information auditing. The district could decide to outsource a portion or all of its internal audit function.

The internal audit function should report directly to the TUSD governing board so that it is independent of the organization it is auditing. TUSD currently has a board audit committee, but the committee does

not have any board members as committee members, and is in essence an advisory board (as prescribed by TUSD board Policy BDFA). The audit committee charter includes the following provisions:

- To assist the governing board in complying with its fiduciary oversight obligations.
- To provide advice and assistance to TUSD staff and make recommendations to the governing board regarding strengthening internal financial controls.
- To provide greater transparency over public funds while improving public trust.

While this advisory committee provides input and advice to TUSD, it cannot oversee the internal audit function because it does not have board members serving on the committee. If the board decides to preserve this advisory committee, it should be renamed the "Board Financial Advisory Committee."

Fiscal Impact

TUSD should hire an outside firm to conduct an independent risk assessment and assist in the development of an audit plan for the district. Hiring an outside firm to conduct a comprehensive risk assessment would cost approximately $75,000.

Based on the size of TUSD, it should invest $250,000 a year in an internal audit function, likely through a combination of in-house (one to three full-time equivalents) and contracted resources. While there is no guarantee, most internal audit functions experience a return on their investment through cost savings or improvements in internal controls.

Recommendation 1-2	One-Time Costs/ Savings	2014-15	2015-16	2016-17	2017-18	2017-18
Implement internal audit function.	($75,000)	($250,000)	($250,000)	($250,000)	($250,000)	($250,000)

Note: Costs are negative. Savings are positive.

Recommendation 1-3: Maximize the use of available technologies to streamline board meeting management.

The TUSD governing board has a board office that prepares for board and committee meetings, records the minutes of those meetings, and provides information and support to board members. The governing board office currently has a dedicated staff of three full-time equivalent (FTE) positions – one director and two staff assistants. The mission of the governing board office is:

- To represent board members in their roles as the governing body of the Tucson Unified School District.
- To serve as the support staff for board members by performing services required to carry out the duties of their elected office.

- To execute all requirements and details necessary for the conduct of board meetings, hearings and other activities in accordance with pertinent Arizona laws and regulations.
- To serve as a resource for the superintendent, administrators, staff, parents, students, and the community at large for information and referral in response to their requests and needs.

Board members manage their own communications, but the governing board office receives and forwards some communications for board members and other district staff. Open records requests are fulfilled by the TUSD general counsel's office.

The governing board office uses *NovusAgenda* for posting board agendas and related information. *NovusAgenda* is an electronic board meeting software tool to help create, approve, and track board meeting items. This software also allows organizations to automate their paper-intensive process for providing information to board members and supports online communications between board members. This tool is used by other school districts in Arizona, including Vail and Sunnyside. TUSD pays approximately $8,000 per year to use this system.

The governing board office uses this tool, but the office is also requested by the governing board to provide hard copies of board information. This results in a duplication of effort to photocopy, organize, and bind documents.

Other components of the *NovusAgenda* software are either underutilized or not used at all. For example, *NovusMEETING* allows the tracking of motions, votes, and discussions during the meeting to support the development of minutes immediately after the meeting. The governing board office prepares minutes manually after the meeting. This approach does not take advantage of this software and results in delays in finalizing meeting minutes.

The current approach to board meeting management and board minutes production is duplicative, time consuming, and does not take advantage of the available technology. All board members should be viewing board packets, board agendas, board minutes, and board committee information online.

The Governing Board Office Director, in consultation with the board, should define the functional requirements for online board meeting management and evaluate *NovusAgenda* and other solutions against those requirements. Fully implementing an automated solution will significantly reduce the work demands of the governing board office, and accordingly reduce the number of needed positions.

Fiscal Impact

There should not be any additional cost to expand the use of the existing board management software. However, if a different solution is selected the annual cost could increase by up to $4,000 a year based on cost estimates provided by another vendor. Savings can be achieved through the reduction in governing board office positions over the next two years. By fully utilizing the software and converting to full online document management, TUSD should be able to perform governing board office functions through one director position. Unless the governing board office is handling all board member

communications and/or performing independent research for board members, most school board offices operate with one FTE staff or less.

It is assumed that one senior staff assistant position could be eliminated in 2014-15 and an additional position in 2015-16. The base salary for one senior staff position is $50,300 and $63,580 for the other. With an estimated benefits rate of 30 percent, the estimated savings would be $65,390 in 2014-15 and $148,044 in each year thereafter.

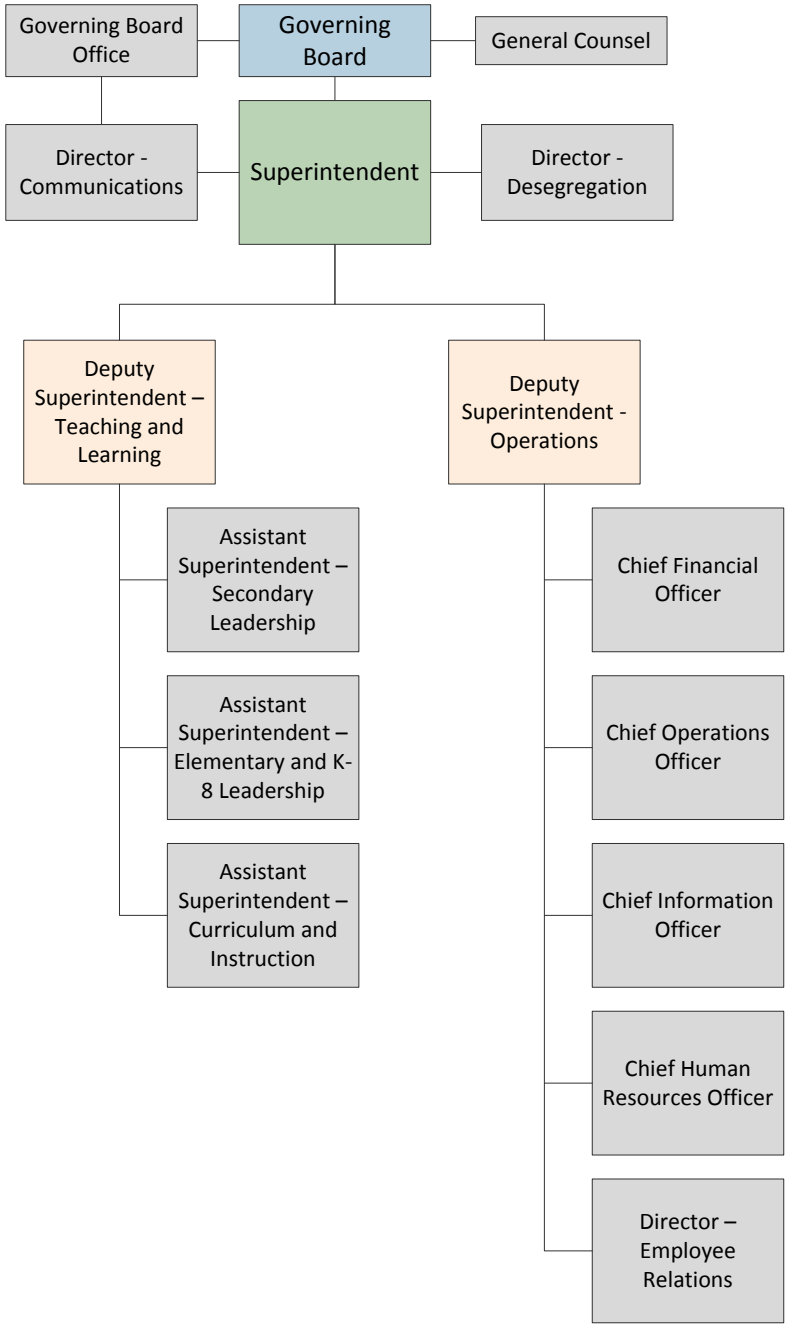
Recommendation 1-3	One-Time Costs/ Savings	2014-15	2015-16	2016-17	2017-18	2018-19
Maximize the use of available technologies to streamline board meeting management.	$0	$65,390	$148,044	$148,044	$148,044	$148,044

Note: Costs are negative. Savings are positive.

District Administration

TUSD's organization structure is presented in Figure 1.1. The district is led by the Superintendent, who reports to the governing board. Two deputy superintendent positions reporting to the Superintendent oversee teaching and learning and operations. Two other functions – communications and desegregation – also report directly to the Superintendent. This organization structure was implemented by the current Superintendent in 2013. The primary change made was the addition of a deputy superintendent position over operations.

Figure 1.1. Current TUSD District Organization Structure



Source: TUSD 2013-2014 district organization chart

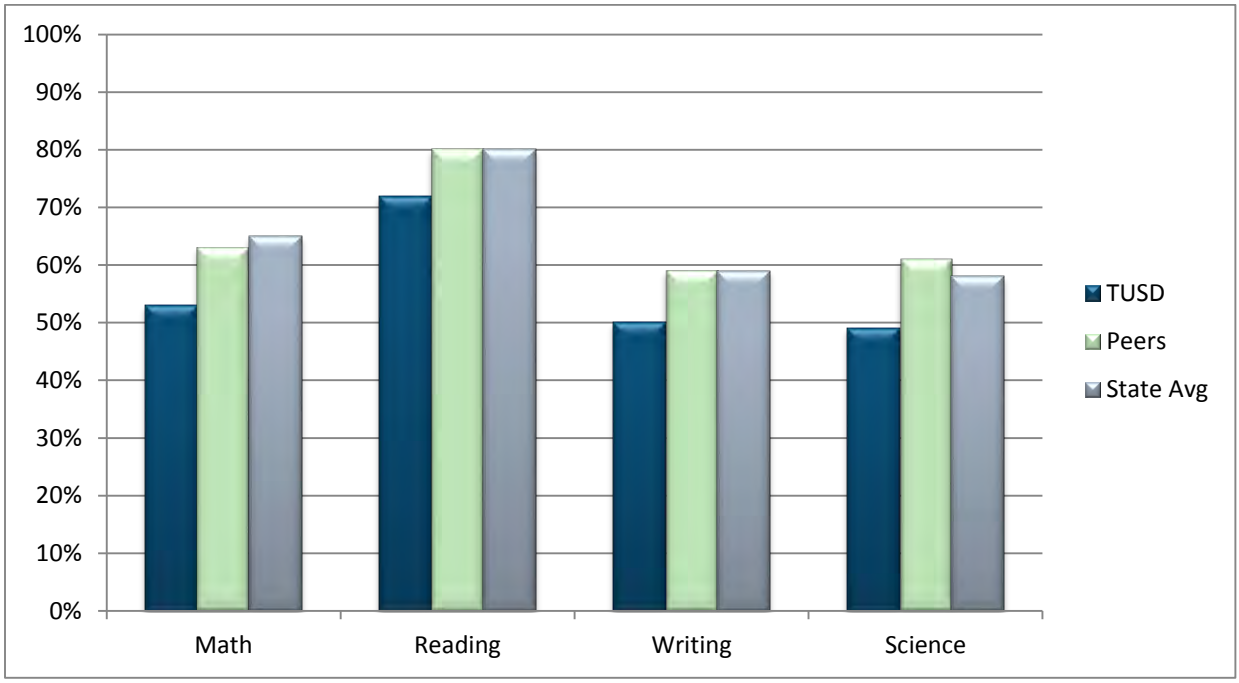
The current district organization chart reflects a logical alignment of functions and reasonable spans of control for a district of 51,000 students. The "deputy superintendent" model is applied by many large school systems. This model recognizes that the superintendent position in a large school system has significant "external" responsibilities with the community and its stakeholders.

Recommendation 1-4: Reorganize instructional and student support services by function.

The Vision for Action of TUSD is "Delivering Excellence in Education Every Day." The extent to which this vision is achieved is largely dependent on the quality of its academic programs and student support services, and the effective and efficient use of district human and financial resources. Having adequate processes in place to identify student educational needs, providing for those needs, and measuring performance as a result of these programs are all critical to the success of an education system.

TUSD has shown some academic gains in recent years, but continues to struggle academically when compared to its Arizona peers and the state average. On the state's A through F grading scale, TUSD has a C grade and 53 percent of TUSD schools have a grade of C or lower. The district scores lower than its Arizona peer districts and the state average in all four core subject areas. Figure 1.2 shows the percentage of TUSD students who met the state standards on the Arizona's Instrument to Measure Standards (AIMS) test compared to its Arizona peer group and the state average for Math, Reading, Writing, and Science. The peer group assigned by the state considers district size, student demographics, and other factors.

Figure 1.2. Percentage of Students who met State Standards (AIMS), TUSD, Peers, and State Average, 2012-13



Source: Arizona School District Spending, Fiscal Year 2013, Office of the Auditor General

TUSD's spending on academic programs and support services is higher than its peers, MPS in particular. MPS is the largest district in Arizona with 62,000 students; TUSD is the second largest at approximately 50,000 students. Table 1.3 shows comparative expenditures per student for TUSD, peer districts, the state average, and MPS. TUSD spends more per student overall and more so in non-classroom areas than classroom spending (as a percentage of the total expenditure). Non-classroom spending, however,

includes amounts for student support and instructional support, both of which are also higher than the peer group, state average, and MPS.

Table 1.3. Comparative Expenditures per Student, 2012-13

Efficiency Measure	TUSD	Peer Average	State Average	MPS
Total Expenditures per Student	$8,421	$7,185	$7,496	$7,706
Classroom Dollars	$4,139	$4,074	$4,031	$4,336
Non-classroom Dollars	$4,282	$3,111	$3,465	$3,370
Student Support	$816	$571	$582	$500
Instruction Support	$589	$374	$448	$533

Source: Arizona School District Spending, Fiscal Year 2013, Office of the Auditor General

As discussed previously in this chapter, most of the higher cost structure can be attributed: to (1) the larger number of schools at TUSD relative to its student population; (2) desegregation spending that is not incurred (or funded) by other Arizona school districts; and (3) higher costs in operational and administrative areas that are discussed in separate chapters of this report. Table 1.4 shows some of the variables that relate to instructional and student support spending. TUSD's pupil-teacher ratio is lower than the state average but in line with the peer average and MPS. A lower pupil-teacher ratio indicates a larger number of teachers relative to the student population. TUSD's average teacher pay is higher than peer and state averages, but significantly lower than MPS.

Table 1.4. Comparative Administration Efficiency Ratios, TUSD and Peers, 2012-13

Efficiency Measure	T USD	Peer Average	State Average	MPS
Pupil-Teacher Ratio	17.9	17.9	18.3	17.7
Average Teacher Salary	$46,592	$44,916	$45,264	$50,188
Poverty Rate (2012)	30%	25%	25%	26%

Source: Arizona School District Spending, Fiscal Year 201, Office of the Auditor General

Overall, TUSD is a higher cost, lower performing district, which suggests that its resources could be better allocated to meet student needs. This recommendation focuses on organizational changes under Teaching and Learning at the district level.

TUSD is under a court-ordered Unitary Status Plan (USP) pursuant to a lawsuit that dates back to the 1970s. Following is a summary of the history of this litigation and the impact on TUSD.

- 1970s – Case brought by parents against TUSD
- 1978-2009 – TUSD operating under court supervision and stipulation of settlement
- 2009-2011 – TUSD declared unitary, no court supervision
- 2011 – TUSD unitary status revoked, returned to court supervision
- 2012 – Special master appointed
- 2013 – USP finalized

The USP requires TUSD to meet specific requirements in order to attain unitary status. To support these requirements, the district is permitted to assess an additional local tax to generate funding. In 2013-14, $62.4 million, or $1,223 per student (based on total enrollment), was budgeted to support district desegregation efforts. These "desegregation" funds are allocated to various functions, as illustrated in Table 1.5.

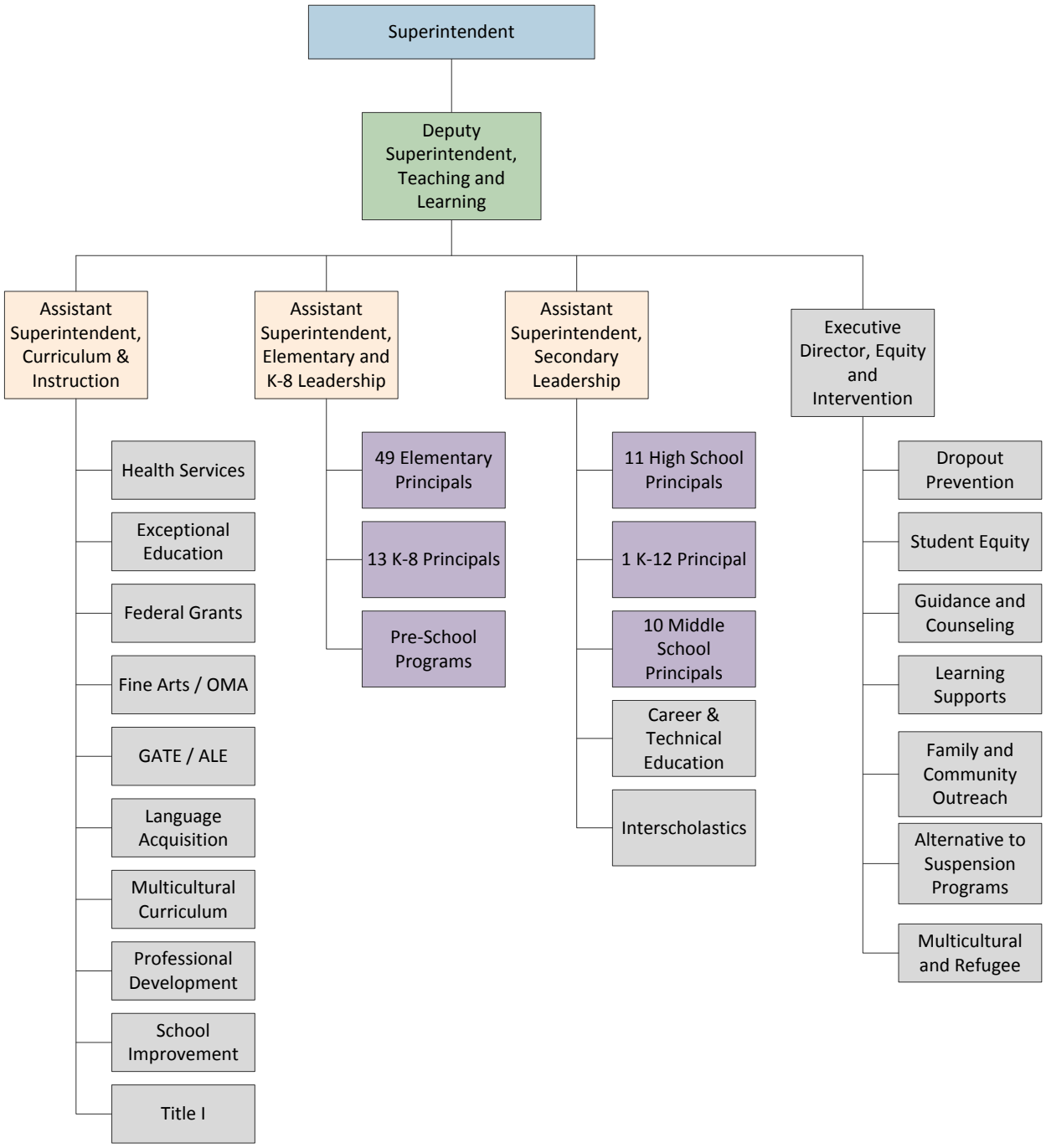
Table 1.5. Budgeted Desegregation Expenditures by Function, 2013-14

Function	Desegregation Expenditures	Percentage of Total
Instructional	$27,531,330	44%
Instructional Support	$13,054,179	21%
District Administrative	$5,043,935	8%
Operations	$520,482	1%
School Administrative	$13,169	0%
Student Support	$8,186,551	13%
Transportation	$8,015,334	13%
Total	**$62,364,980**	**100%**

Source: TUSD FY 2013-14 Budget District Summary

TUSD organizes its academic programs and schools under a Deputy Superintendent, with three Assistant Superintendents and one Executive Director reporting to this position. Figure 1.3 presents the organization chart for TUSD academic programs and support services. TUSD schools and some programs report up through two Assistant Superintendents. Curriculum and instructional services reports to an Assistant Superintendent, and equity and intervention services report to an Executive Director.

Figure 1.3. Current Teaching and Learning Organizational Structure

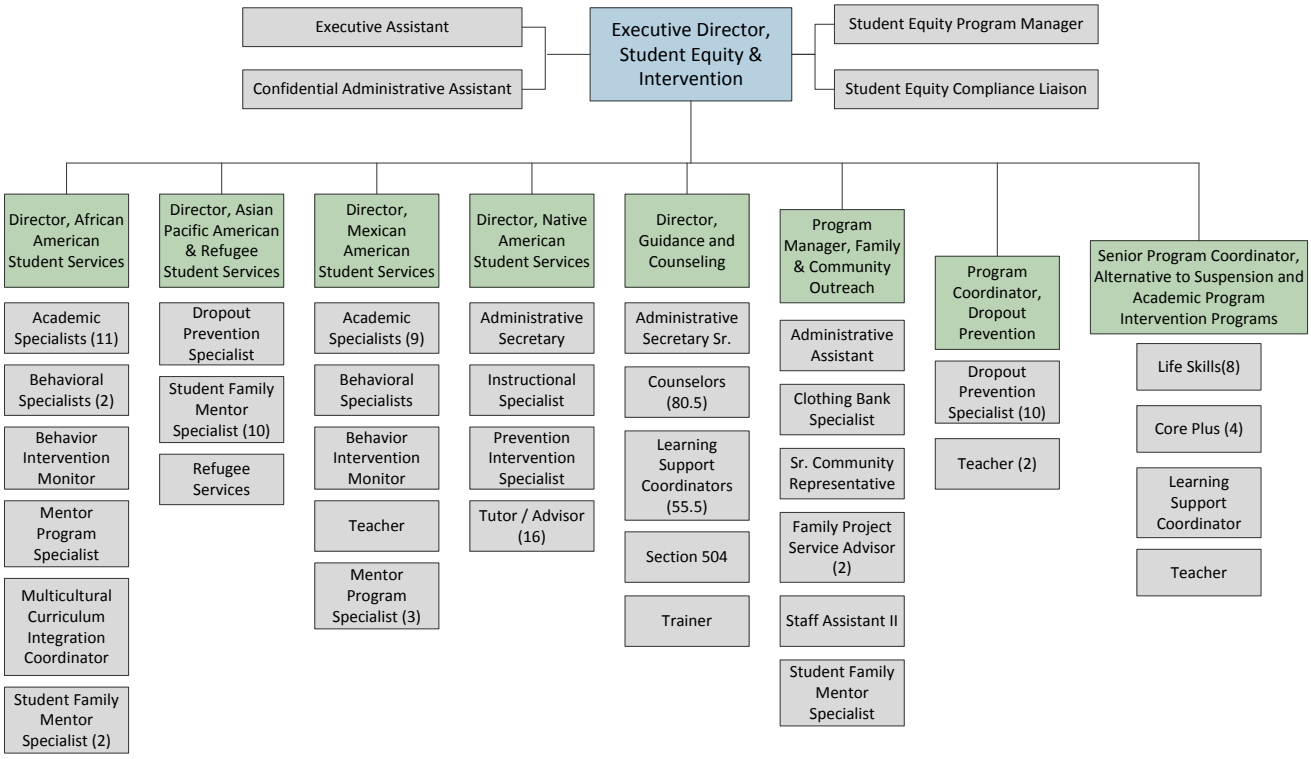


Source: TUSD Teaching and Learning Organization Chart, 2013-2014.pdf

One of the departments under Curriculum and Instruction is Student Equity and Intervention. This department oversees much of the instructional and student support services in the district. The department's organization structure is presented in Figure 1.4. It is led by an Executive Director, who reports to the Deputy Superintendent for Teaching and Learning. Eight managerial positions report to

the Executive Director. Four of these management positions lead student services for particular ethnicities (e.g., African American, Mexican American); the other four relate to functions (e.g., Guidance and Counseling, Dropout Prevention).

Figure 1.4. Current Student Equity and Intervention Organization Structure



Source: TUSD 2013-14 Office of Student Equity Intervention – Org Chart.pdf

The Office of Student Equity and Intervention assigns staff resources to one or more schools based on need, and services under each ethnicity director are not limited to those students. However, the primary focus is on the particular ethnicity. There is no apparent relationship between the number of TUSD students by ethnicity and the number of Student Equity and Intervention staff that support them. Table 1.6 presents the TUSD enrollment, Student Equity and Intervention staff counts that support them, and the respective student-to-staff ratios. The pupil-staff ratios vary widely, ranging from 73 to1 to 2,083 to 1.

Table 1.6. Staff Ratios by Ethnicity, Office of Student Equity and Intervention, 2013-14

Ethnicity	TUSD enrollment	Department Staff FTEs	Pupil-Staff Ratio
African American	2,751	18	153 / 1
Mexican American	31,252	15	2,083 / 1
Pacific American	1,094	15	73 / 1
Native American	1,945	19	102 / 1

Sources: TUSD Ethnic/Gender Enrollment Breakdown for Instructional Day 50, 2013; TUSD 2013-14 Office of Student Equity Intervention – Org Chart.pdf

There are several observations related to the current organization structure for the Office of Student Equity and Intervention:

- Some positions are aligned functionally (counselors, LSCs), others are aligned by ethnicity (academic specialists, behavior specialists), and some are aligned under both (student family mentor specialist).
- Positions exist for some ethnicities and not others:
  - Native American Student Services has 16 tutors/advisors, but no academic specialists; none of the other ethnicity units have tutor/advisor positions.
  - Asian Pacific Student Services has 10 family mentor specialists; African American Student Services has two and the other two ethnicities do not have any.
- The Office of Student Equity and Intervention has several positions that are similar to positions/functions in other departments of TUSD:
  - TUSD's Title I unit under Curriculum and Instruction has community representatives; student equity has family and community outreach staff. There are 47 family and community outreach staff in TUSD, 17 of which report under student equity.
  - Four other academic specialist positions report under the TUSD Internal Compliance Office.
  - Curriculum and Instruction has a multicultural curriculum unit; a multicultural curriculum integration coordinator exists under Student Equity.
- The Office of Student Equity and Intervention provides a wide range of student services, but has no social workers. All social workers report through TUSD's Exceptional Education unit.
- Several position titles do not reflect the type of work being performed:
  - According to departmental leadership, Learning Support Coordinators spend most of their time on behavior program support and training, not student learning matters. The position title does not represent the nature of the work. Section VI of the Unitary Status Plan (Discipline) requires that all schools have a Restorative and Positive Practices Site

Coordinator (RPPSC), yet does allow a school's learning support coordinator to serve as the RPPSC. The RPPSC title more accurately reflects the type of work being done by this position.

- According to departmental leadership and school administrators, academic specialists spend most of their time providing student support services and not academic (instructional) support.

Principals reported that the Student Equity and Intervention staff are very helpful at their schools, but they were not always aware of what the staff did.

The current approach of providing instructional support and student services is organizationally inconsistent and fragmented. Organization structures should represent logical alignments of functions to support coordination and accountability over those functions. TUSD has multiple types of alignments, some of which are functional, others based on ethnicity, and others based on funding source. The district should apply a single, functional approach to its organization of instructional support and student services. Separate organizational units (Desegregation, Title I) can monitor compliance, but service delivery (and the related positions) should be organized functionally.

The Office of Student Equity and Intervention should be re-named the Office of Student Support Services. The current title implies that this department's responsibility is to achieve and maintain student equity, when these should be requirements of every TUSD position connected to students.

Student Equity and Intervention has academic specialists, tutors, and learning support coordinators, but it is unclear to what degree these positions are actually providing instructional support to TUSD students. Before any academic positions are reassigned from Student Equity and Intervention, each instructional and student support services position should be analyzed and observed to validate what the position does.

Once a complete and accurate inventory of all instructional and student support services is validated, all instructional support positions should be moved under Curriculum and Instruction, either under the School Improvement unit or a newly created separate Instructional Services unit. All teaching and multi-cultural curriculum positions should also be moved under Curriculum and Instruction. The remainder of support services should be functionally aligned under the Office of Student Support Services as follows:

- Social Services – including family and community outreach. The Family Engagement Coordinator required by Section VII.B. of the Unitary Status Plan should report under this unit
- Behavior programs / discipline management – all RPPSC positions should report under this unit
- Guidance and Counseling
- Drop-out Prevention
- Alternate Education Programs (Life Skills, Core Plus)

Any TUSD positions providing these direct services under other departments or units should be moved under the respective functional area under the Office of Student Support Services.

The implementation of this change will have several important impacts and benefits:

- Demonstrate organizationally that the entire district is dedicated to student equity, not just one department.
- Improve coordination of instructional (academic) support to students, and in turn improve student achievement.
- Establish functional/technical leaders in each of the functional areas (e.g., discipline management, social services).
- Organizationally support a more coordinated approach to providing support services. This, in turn, will improve accountability over those functions and should help improve students' readiness to learn.
- The validation and possible redefinition and renaming of positions will help clarify and communicate expectations of what that position is to accomplish.
- Identify duplicative and/or overlapping services that could result in either a reallocation or reduction of positions to best meet student needs.

Each functional area should establish goals and measureable objectives and track actual performance against them.

Fiscal Impact

The reduction of director positions under Student Equity will be offset by a new director position over Behavior Programs. The Program Manager for Family and Community Outreach should be upgraded to a director position over Social Services. Curriculum and Instruction will require a director position over Instructional Support Services. The district may choose to eliminate two director positions or reassign them to other purposes.

The fiscal impact of this recommendation cannot be determined at this time. A position inventory and validation exercise needs to occur first in order to determine the types and number of positions for each student support service. Also, all of the recommended changes related to instructional and student support services should not be made without considering recommendations from the district's curriculum audit, which may also have fiscal implications. Because of financial constraints, district leadership should be able to implement this recommendation without incurring additional costs. It is possible that cost savings can be achieved after the position inventory is validated and the curriculum audit is complete.

Recommendation 1-5: Develop a decision-making framework for instructional and school administrators.

TUSD currently does not have a decision-making framework or any single document that defines decision-making authority between the central office and the schools.

TUSD governing board Policy CF (Leadership Principles) states that "All duties, authority, and responsibilities of the principal will be delegated only by the Superintendent or designee." This same

policy states that the principal is "responsible for the operation of the educational program of the school." This implies some level of authority but it is not specific. TUSD Regulation CF-R (Leadership Principles) outlines additional expectations for administrators but does not define decision authority.

The job descriptions for principals outline specific responsibilities, including providing direction on curriculum and instruction, using and promoting the use of assessment data, modeling and supporting professional growth at the school, hiring and evaluating school staff, communicating the school accountability plan, and being responsive to the parents and community. Job description tasks provide a deeper level of detail related to the above responsibilities, but do not define the decision authority of principals. The TUSD policy manual provides guidance on some decisions (e.g., TUSD board policy CFC defines the authority of school councils), but there is no single source for principals or district management to reference in making decisions.

During principal focus groups, teacher focus groups, and school visits, the review team identified examples where the lack of a decision-making framework was contributing to inefficient practices. For example:

- **School leadership.** In years past, schools were provided significant flexibility in determining school leadership positions. In fact, several schools decided to eliminate the principal position at the schools. This led to a leadership vacuum and was later changed.
- **Custodial services.** School principals have decision authority over custodial services at their schools, yet principals are not trained in the operation of a custodial function. Certain decisions related to equipment, cleaning frequencies, and custodial supplies should be made by positions that are trained in such matters. A decision-making framework will help identify where current decision authority may be displaced in an organization.
- **Manual logs.** Some schools continue to use manual logs and spreadsheets as a back-up to the district information systems. Decisions to use these tools are school-based, and contribute to duplicative and inefficient practices.

Historically, TUSD has experienced a wide range of decision-making approaches based on the preference of the Superintendent. Some superintendents exercised more central office authority; others promoted a highly decentralized decision process. At one point, TUSD schools could decide whether to have a principal and two schools actually eliminated the position. While these actions were later reversed, the example shows the potential impact of a management approach that is perhaps too decentralized.

Some decisions, such as curriculum decisions, should be made or guided centrally in order to provide consistent application and efficient operations at the school and district administration levels. Other decisions, such as differentiation of instruction for individual students, can and should be made at the school level. Documentation of a single decision-making framework will help ensure that all principals and district administrators understand the criteria for making certain decisions. Adopting a decision-making framework will ensure its consistent use by all positions involved in decision making. At a minimum, decisions should be identified in the following four categories:

1. **Site-based decisions not requiring district administration approval**. These are decisions that can be made or approved independently by principals or their designees without intervention or approval by district administration. These decisions might include teaching strategies used and assignments of special projects to staff.
2. **Site-based selection from a list of district-provided options**. Examples of selection lists might include computer and instructional software available for purchase. Schools can be provided choices of computer brands and software as long as they meet minimum specifications established by district administration's technology function. Purchasing items that are not on the approved list could result in the inability of the technology function to effectively support the hardware or software. Selecting from a list provides decision-making flexibility within a framework that helps ensure districtwide efficiency and effectiveness.
3. **Site-based decisions requiring central office approval**. Certain decisions, such as hiring or terminating school staff, should require the approval of district administration to ensure compliance with state and federal laws and district policy.
4. **Central office decisions**. There are certain decisions that should be made by district administration and enforced at all schools. A single standardized curriculum and the school bell schedule are examples of decisions that should be established, or standardized, by district administration. In making these decisions, however, district administration should elicit input from schools to ensure that decisions make sense for the schools, as well as the district.

In developing a site-based decision-making framework, the authority, using the four options above, should be defined for the types of decisions. Differing types of decisions are included in the following list.

- Curriculum / curriculum guides
- Academic program decisions
- Ability to re-allocate instructional and/or non-instructional staff to meet needs identified by school
- Response to Intervention
- Benchmark testing
- Course offerings (secondary)
- Identification of professional development needs
- School calendar
- School bell schedule
- Class size
- Bus routes
- Cafeteria schedule
- Authority over custodians and how they spend their time
- Authority over food service workers and how they spend their time
- Work schedules for any categories of staff
- Number of work days per year for any categories of staff

- Block scheduling (secondary)
- Terminating school staff
- Establishing staffing needs
- Establishing non-staff budget needs
- School facility renovations
- Student discipline – code of conduct
- Student activity funds – software / processes
- Class rank determination / computation
- Purchasing decisions as they relate to teachers' or principals' authority to select vendors, versus using the district administration purchasing department or only pre-approved vendors
- Computers / servers
- Instructional software purchases
- Hiring school staff

In implementing this recommendation, district administration should first conduct a brief online staff survey to gauge perceptions of decision-making authority based on the list of decisions, and any additional decision areas desired by district management. A committee of school principals, the deputy superintendents, assistant superintendents, and district leaders from all program and operational areas should be convened to review the survey results and develop the decision-making framework.

Job descriptions for all affected instructional and school administrative positions, assistant superintendent positions, and central office leadership positions should reference the decision-making framework.

Fiscal Impact

The district is expected to need outside assistance ($50,000 in consulting or contractor fees) in implementing this recommendation. This is based on an estimated 250 hours of facilitation and advisory services at an hourly rate of $200. In addition, school and district administrators will need to dedicate approximately 20 hours each to the development of the framework and modification of job descriptions. The outside consultant/contractor will serve as an independent facilitator for the committee and be primarily responsible for developing the decision-making framework materials.

Recommendation 1-5	One-Time Costs/ Savings	2013-14	2014-15	2015-16	2016-17	2017-18
Develop site-based decision-making framework.	($50,000)	$0	$0	$0	$0	$0

Note: Costs are negative. Savings are positive.

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Chapter 2 – Financial Management

Introduction

School districts are public entities entrusted with federal, state, and local funds to pursue their educational mission. Financial managers of school districts are charged with implementing the processes and procedures to manage those funds in accordance with the law, regulations, and district policy. As resources for education become increasingly limited, effective financial management is critical to ensuring that the school system meets objectives.

To thrive in an environment of increasing expectations and limited resources, a successful school district must continue to look for ways to leverage available resources while maximizing learning opportunities for all students. Stated simply, a successful school district operates efficiently, manages its costs wisely, and streamlines operations. Sound financial management includes:

- Developing an organizational structure that balances the responsibilities of financial management, fosters good communication within the department and with other TUSD schools and departments, and enhances the ability of the department to accomplish tasks in a timely manner.
- Formulating budgets to monitor spending, control costs, and enforce accountability across the district.
- Employing processes, procedures, and controls to ensure that vendors and employees are paid accurately and timely, and to ensure that financial transactions are recorded properly.
- Implementing information management systems that facilitate the efficient processing of transactions and the reliable reporting of financial information.
- Accounting for funds entrusted to the district in accordance with applicable federal and state laws.

TUSD's financial operations include payroll, budgeting, purchasing, accounts payable, student fund management, and general accounting functions. These are critical functions because goods and services must be acquired, paid for, and recorded if the district is to accomplish its core mission of educating children.

TUSD's budgeted expenditures (all funds) for the 2014 and 2013 fiscal years were $405.7 million and $400.1 million, respectively. Of the total budget, approximately $188.6 million (46.5%) was allocated for instruction in 2014 and $201.3 million (50.3%) was so allocated in 2013.

Table 2.1 provides summary information about TUSD's Maintenance and Operations Fund (M&O) for the most recent five years.

Table 2.1. TUSD M&O Summary Actual Revenues/Expenditures, Fiscal Years 2008 through 2012

Year	Revenues	Expenditures	Other Sources	Change in Fund Balance	Ending Fund Balance
2008	$357,209,751	$351,123,943	$269,435	$6,355,243	$19,222,087
2009	$333,423,113	$350,241,266	$10,316,895	$(6,501,258)	$12,720,829
2010	$349,809,829	$335,625,193	$16,088,219	$30,272,855	$42,993,684
2011	$313,517,069	$313,919,030	$1,597,981	$1,196,020	$44,189,704
2012	$317,809,992	$316,438,103	$1,084,148	$2,456,037	$46,645,741

Source: TUSD 2012 Comprehensive Annual Financial Report.

Table 2.2 presents information on undesignated or unrestricted fund balances (i.e., funds available to meet future obligations). Since 2008, the unrestricted portion of fund balance has risen to its current level of $44.9 million, or 14.4 percent of budgeted expenditures for fiscal year 2012-13 of $310.5 million. Both total fund balance and the undesignated portion thereof have increased each year, except in 2009. The percentage of future year's budgeted expenditures covered by available funds has also increased substantially since 2010. This trend demonstrates increased financial stability for the district.

Table 2.2 TUSD Appropriations, Expenditures, and Fund Balances (FB), Fiscal Years 2008–2012

Year	Final Budget	Actual Expenditures	Expenditures as a Percentage of Budget	Total FB	Undesignated Fund Balance	Undesignated FB as a Percentage of Total FB	Undesignated FB as a Percentage of Future Years' Budget
2008	$359,680,996	$351,123,943	97.6%	$19,222,087	$17,065,201	88.8%	4.7%
2009	$363,498,623	$350,241,266	96.4%	$12,720,829	$10,247,050	80.6%	3.0%
2010	$338,273,999	$335,625,193	99.2%	$42,993,684	$24,431,693	56.8%	7.6%
2011	$319,887,126	$313,919,030	98.1%	$44,189,704	$41,673,112	94.3%	13.2%
2012	$314,886,520	$316,438,103	100.5%	$46,645,741	$44,949,257	96.4%	14.5%

Source: TUSD 2012 Comprehensive Annual Financial Report.

TUSD expenditures per student in fiscal year (FY) 2013 were $8,421, higher than both the state average of $7,496 and the peer average of $7,185. Table 2.3 compares TUSD's various per student spending amounts to its Arizona peer districts and the state average. TUSD is close to peer districts and the state average on classroom expenditures per student, but is substantially above both averages (37.6 percent and 23.6 percent, respectively) in non-classroom spending.

Table 2.3. Comparative Expenditures per Student, TUSD, Peer Districts, and State Average, FY 2013

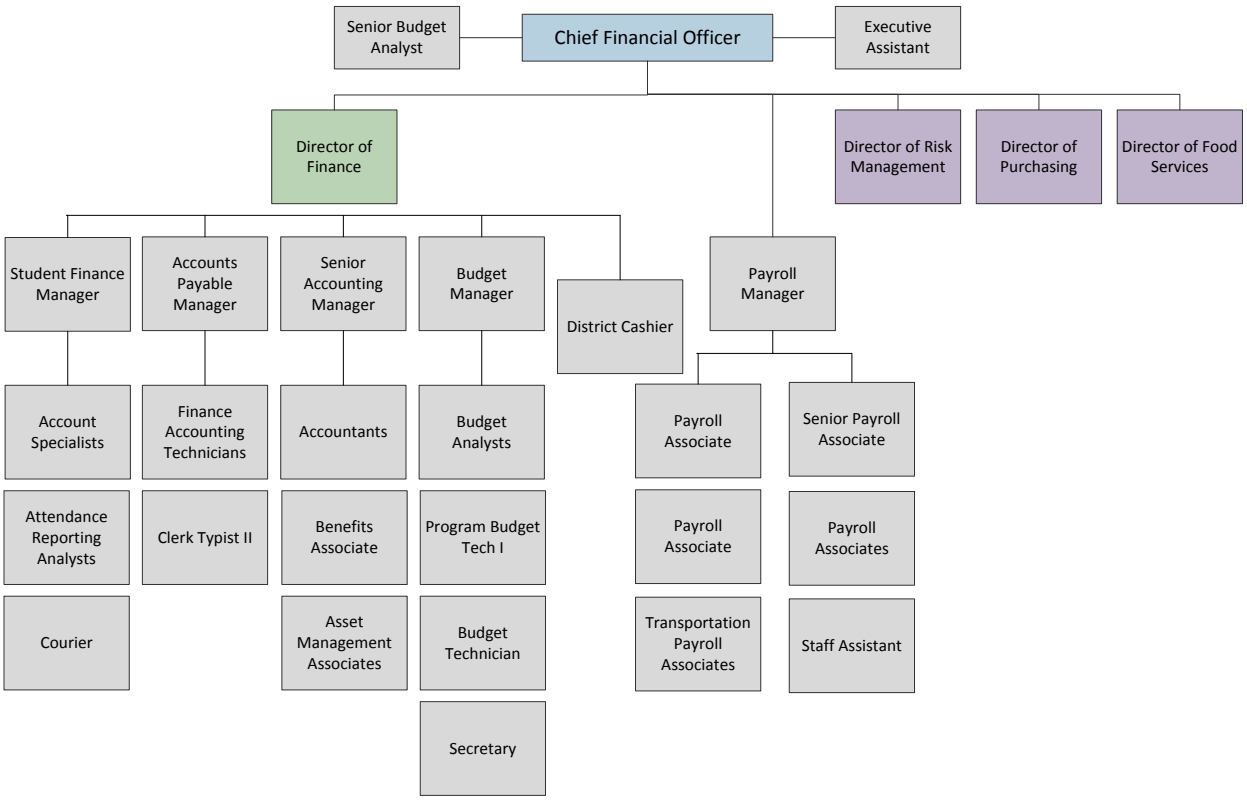
Spending Measure	TUSD	Peer Average	State Average
Total Expenditures per Student	$8,421	$7,185	$7,496
Classroom Expenditures per Student	$4,139	$4,074	$4,031
Non-classroom Expenditures per Student	$4,282	$3,111	$3,465

Source: Arizona School District Spending, Fiscal Year 2013, Office of the Auditor General

Several chapters in this report address causes of this higher cost structure. This chapter focuses on the TUSD Finance Office and opportunities that exist there to streamline operations and reduce administrative costs.

TUSD's financial management functions are executed through the Office of the Chief Financial Officer which is composed of the Chief Financial Officer (CFO), the Senior Budget Analyst, and an Administrative Assistant. The CFO coordinates budget activities for the district and estimates and monitors state funding and other revenues. This office oversees several functions, including finance, payroll, risk management, purchasing, and food services. Purchasing is discussed later in this chapter and the food services area is addressed in a *Chapter 7 – Food Services* of this report. The Finance Office organization structure is presented in Figure 2.1.

Figure 2.1. Current Finance Office Organizational Structure



Source: TUSD CFO-Finance Org Chart.pdf

The Student Finance Manager oversees student activity funds and attendance reporting. The Accounts Payable Manager oversees payment to vendors from all other funds. The Senior Accounting Manager oversees general accounting functions, benefits management, and asset management. The Budget Manager oversees the development of the budget and the approval of positions and budget transfers.

Recommendation 2-1: Reduce Finance Office staffing after new information systems and re-engineered processes are implemented.

In 2012, TUSD implemented the Lawson Financial Information System to support its financial processes and reporting. Previously, the district used PeopleSoft as its financial systems and continues to use PeopleSoft for human resources and payroll functions. The district is considering changing both Finance and Human Resources/Payroll systems. (See related discussion in *Chapter 4 – Technology Management.*)

In 2013, many of the processes in the finance office were analyzed and re-engineered (on paper) to streamline operations and take advantage of available technologies, including those in the current information systems. As of the date of this review, few of the re-engineered processes have been implemented, primarily because the district is considering changing financial information systems again. Once all operational streamlining has occurred, the resulting work demands will decrease and the Finance Office will not need as many positions to perform the work. Districts of similar size using streamlined processes have approximately 60 percent of the positions that TUSD has now. As a result, TUSD will be able to achieve a return on its investment in its information systems once the processes are re-engineered and streamlined, and once the job descriptions are redefined.

Below are examples of inefficient processes identified during this review that have been noted in previous TUSD consultant studies.

Payroll Processing

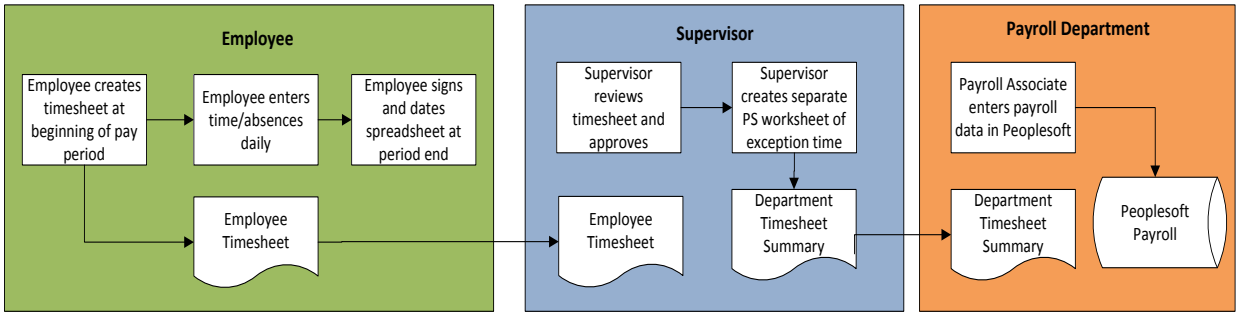
Payrolls are processed using the PeopleSoft application. Payroll data are processed in PeopleSoft and uploaded to the district's primary general ledger accounting system maintained in Lawson. Until recently, TUSD received "partial patches" from PeopleSoft to update the system for various tax tables. However, in the past year, the PeopleSoft vendor has not provided TUSD with these partial patches, so the Payroll Manager has made those revisions in the software manually. This increases the time spent by the Payroll Manager to perform a function that should be automated, but it greatly increases the likelihood of systematic errors in processing. The district has recognized this risk and has engaged a law firm to perform periodic reviews of quarterly taxes, withholdings, and other reported amounts to minimize the risk of errors.

Payroll – Timekeeping

The district uses an automated timekeeping system (Kronos) in only three departments: the Food Service Department, the central district Finance Office, and the Technology Services Department. Altogether, these three departments account for approximately 500 employees out of a workforce of over 7,000.

The rest of the district uses a highly manual and paper-intensive process for time reporting. The process in TUSD for tracking time involves multiple spreadsheets and manual data entry. The process is depicted in Figure 2.2.

Figure 2.2. Timekeeping Process



Source: Gibson Consulting Group, developed from interviews of TUSD staff

The employee timesheet (in Excel format) is downloaded from templates created by the Payroll Department for each pay period. Employees complete the spreadsheet with standard weekly hours, employee department, and identification number. Each employee must print out his/her spreadsheet at the end of each pay period in order to sign the timesheet and provide it to his/her supervisor. The supervisor maintains one spreadsheet for his/her employees and records exception data (i.e., any hours worked in excess of standard time and any leave time [vacation, sick leave, etc.]) taken. This summary spreadsheet is forwarded to the Payroll Department for data entry in PeopleSoft. Because the process is manual, the payroll associates must track all employees in each department to ensure that the supervisor worksheet includes all departmental employees.

There are several benefits of automated timekeeping systems. Automated timekeeping systems, or time clocks, eliminate the need for paper timesheets. Paper timesheets must be completed by the employee, physically transferred to the supervisor and central payroll office, and maintained in paper file storage. Paper records are also copied at various stages. The employee, the department where the employee works, and the Payroll Department will all likely maintain their copy of the timesheet.

Paper timesheets can also be lost or misplaced. It is easier to track electronic records and route these records to the supervisor and Payroll for review and approval. Outstanding records are easier to track using an automated timekeeping system.

Finally, automated timekeeping systems reduce the time and resources necessary for data entry of data from the paper timesheet to the payroll system. Errors in data entry are also minimized using automated time clocks.

TUSD has not updated the Kronos system since its implementation and more recent versions of the software are available. The district should move forward with its plans to fully implement Kronos for all employees districtwide.

Payroll – Integration with Substitute Management System

The district uses an automated system for substitute management called SubFinder. This system manages the process of reporting an absence by a teacher and notifying a substitute of the vacancy. The SubFinder system is designed to track, for payroll purposes, the leave taken by the absent teacher and the time worked by the substitute. However, the SubFinder system is not being used as designed by all schools. Some TUSD schools do not use SubFinder at all, preferring instead to call substitutes directly. Because of the inconsistent use, the TUSD Payroll Department is not using SubFinder to capture substitute days worked for entry to PeopleSoft during the payroll process. Instead, paper worksheets are submitted for each teacher to document the leave taken each pay period, and the individual who substituted for that teacher. All of the steps in the payroll process require the additional time of:

- Teacher – must complete a leave form
- School secretary or administrative staff – must maintain leave documents and, for certain schools, call the substitute teachers
- Substitute Teacher – must review the leave form and sign-off as proof of working as a substitute
- Payroll Associates – must review forms, input leave, and input substitute data directly to PeopleSoft

Chapter 3 – Human Resources of this report contains a recommendation to fully implement SubFinder as the software was designed. Integrating this system with the district's payroll system will provide additional benefits by eliminating manual payroll and leave reporting functions.

Paycheck Stubs

The TUSD Payroll Department produces few actual paychecks each month. Approximately 50 paychecks are issued within any given pay period, and most employees receive compensation through direct deposit to their bank account. The department also utilizes approximately 1,300 pay cards to further reduce the number of paper paychecks issued.

The district still produces hundreds of hard copy pay stubs each pay period, despite the fact that PeopleSoft has a function allowing employees to access their pay stub information online. According to the Payroll Manager, the implementation of eBenefits in PeopleSoft in 2012 resulted in the corruption of certain data files that are used when employees access their leave balances online. The district should resolve the errors in accumulated leave balances to allow the department to discontinue printing and distributing paper payroll stubs for all district employees.

Budgeting – Position Control

Approximately 70 percent of TUSD's expenditures are personnel related. Position control is a critical component of effective district budgeting and financial management. Within the Budget Office, position control is currently managed using a spreadsheet. For smaller districts with only a few schools and modest central office staffing, position control can be maintained adequately using tools such as

spreadsheets; however, for districts the size of TUSD, this method is very cumbersome, labor intensive, and more susceptible to error. Manually updating each personnel change in a spreadsheet (TUSD's position control spreadsheet contains over 10,000 rows of information) creates additional and unnecessary work demands for the Budget Office staff. Changes must be made to the spreadsheet whenever a position is added, when a position becomes vacant, and when the vacant position is filled. The spreadsheet must also be kept in sync with actual personnel records, which requires time for another manual process of reconciliation. Most enterprise resource planning (ERP) systems automate the processing of requests for personnel changes.

Budgeting – Processing of Personnel Action Forms and Recruiting Action Forms

According to data received from the TUSD Budget Manager, the office processed approximately 12,500 personnel action forms (PAFs) and recruiting action forms (RAFs) in the most recent fiscal year, or approximately 4,200 per Budget Analyst. PAFs and RAFs are paper forms and the manual routing procedures for the review and approval of these forms are described in further detail later in this report section. The manual nature for PAF/RAF processing requires additional time for school and departmental staff involved in the process for scanning, copying, and filing each form. Staff in the Budget Office, as well as those of each school and department involved, have established additional procedures to track the status of each form, which requires additional time for processing. Most ERP systems automate the routing of requests for personnel changes. Automated routing would eliminate the additional time spent scanning, copying, filing, and tracking these forms.

Staffing

Other school systems operate with a smaller finance office staff. TUSD was compared to Mesa Public Schools (MPS), Arizona's largest school district, and Katy Independent School District and Arlington Independent School District (ISD), two Texas school districts that have integrated information systems and streamlined processes – best practice districts. All districts are larger than TUSD yet have smaller finance office staff levels. Table 2.4 compares TUSD's Finance Office staffing to these benchmarks.

Table 2.4. TUSD Finance Office Staffing Level Comparisons, FY 2014

Finance Area	TUSD	MPS	Katy ISD (Texas)	Arlington ISD (Texas)
Student Enrollment	49,852	60,404	57,213	64,913
Total Finance Office Employees (FTE)	44	35.5	23	27
Selected Areas:				
Payroll (FTE)	13	8	5	8
General Accounting (FTE)	6	7	5	4
Accounts Payable (FTE)	7	5	8	7
Student Activity Funds (FTE)	4	6.5	-	1
Grant Accounting and Reporting (FTE)	1	4	-	2
Budgeting and Cash Management (FTE)	8	5	2	4

Source: TUSD Finance Office organization chart; MPS information obtained directly from Finance Office; Katy ISD web site: http://www.katyisd.org/dept/bf/Pages/StaffDirectory.aspx; Arlington ISD: AISD Office of the Internal Auditor

Note: Other TUSD finance office positions are not represented in this table as only financial reporting functions are included.

The payroll and budgeting areas appear to represent the most significant opportunities for operational streamlining.

Fiscal Impact

The implementation of new/upgraded information systems and streamlined procedures will reduce the work demands in the Finance Office, primarily in payroll, accounts payable, and budgeting.

The fiscal impact of the reduced work demands assumes a 33 percent reduction (16 FTEs) in TUSD Finance Office positions, beginning in 2015-16 and phasing in over the following three years (five positions in 2015-16, five additional positions in 2016-17, and six additional positions in 2017-18). Assuming an average annual salary of $40,000 and benefits of 30 percent, the estimated savings after full implementation is $832,000 per year.

Recommendation 2-1	One-Time Costs/Savings	2014-15	2015-16	2016-17	2017-18	2018-19
Reduce Finance Office staffing after new information systems and re-engineered processes are implemented.	$0	$0	$260,000	$520,000	$832,000	$832,000

Note: Costs are negative. Savings are positive.

Budgeting and Financial Reporting

The TUSD budget development process begins in August of the prior year and most of the staff effort is fundamentally completed by March. Arizona Revised Statutes Section 15-905 requires that a public hearing and budget adoption occur by July 15th of each year.

Once the budget is approved, the Finance Office enters the budget into the district's financial information systems and compares actual to budgeted expenditures throughout the year. Budget transfers (not requiring board approval) and budget amendments (requiring board approval) may occur during the year as unforeseen events transpire.

Recommendation 2-2: Improve financial reporting to the board and ensure accessibility of financial reporting to department and school leaders.

TUSD Board Policy BBAA specifies that:

> *The role of the Governing Board is to establish District wide policy and direction and otherwise to direct the affairs of the District in the manner specified by law, with day-to-day management of the District primarily being the responsibility of District Administration.*

One of the legal responsibilities of the board is to adopt the district's annual budget. This responsibility includes monitoring the district's budget status throughout the year. TUSD periodically provides budget status reports to the board.

At the February 11, 2014 board meeting, the board received a budget status report of the fiscal year, which began on July 1st. The report contained the financial information through November 30, 2013. Table 2.5 presents the financial data provided to the board for the M&O Fund.

Table 2.5. TUSD Budget Status, November 30, 2013 (in $ millions)

Category	M&O
Projected Budget	$245
Expected Expenditure	$90
Expenditures as of July 31, 2013	$150
Remaining Expenditure	$5

Source: TUSD Board Agenda Item, February 11, 2014, Budget Update FY 2014

The budget update presentation included other budget comparisons to the prior year and more details related to the FY 2014 budget, but no other information was presented regarding the budget-to-actual comparisons nor were explanations as to what the variances meant provided.

A similar presentation was delivered to the board in 2013 on October 22nd for the July 31st budget status. No other budget status reports have been provided to the board during FY 2014. It is important to note that the CFO position at TUSD was vacant from the beginning of the fiscal year to January 2014.

However, in the prior year, the first budget status update (in a format similar to above) was provided at the November 13th board meeting for the end of September financial reporting period.

Neither the level of detail nor the frequency of reporting is sufficient for the board to carry out its responsibilities with respect to monitoring the budget. These variances are analyzed at lower levels by TUSD management, but the results of the analysis are not communicated to the board. TUSD should adopt the following procedures in its budget to actual reporting to the board:

- Submit a budget status report to the board monthly at each regular board meeting.
- Provide budget status by fund, major object category (e.g., salaries, contract services, supplies, etc.), and department (e.g., technology, human resources, middle schools combined).
- Provide percentage of budget expended to date, and the expected percentage of budget expended to date. This is important because the percentage expected does not necessarily represent the number of months to date divided by the 12-month fiscal year. Some expenditures are planned for the beginning of each year or semester; other expenditures are extremely light during the summer months.
- Provide explanations of variances noted in expected versus actual budget variances.

This information will provide the board with sufficient information to know that the budget is being spent according to the plan approved by the board. During the year, certain situations will arise that cause the budget to be amended. Improved budget status reporting will help explain these amendments.

Online budget to actual reporting is also insufficient at the department and school level. Based on interviews with department and school leaders, monthly budget-to-actual reports from the district's financial information systems are not routinely monitored. The district's current financial system is not able to generate this information in the desired format. In addition, there may be several factors as to why available reports are not being reviewed:

- The department leader (or individual having budget responsibility) does not have access to the district's financial information systems.
- The department or school leader has the ability to access the information, but does not do so
  - because lower level staff have the access;
  - and because their own spreadsheet systems are used to monitor budget status (out of concerns that the district's financial system was not up-to-date).

Insufficient reporting leads to those with budget authority not having the information that they need in order to be accountable for their budget. In order to hold department and school leaders, those with budget authority, accountable for spending, real-time access to budget and actual information should be granted to them, and they should use the information to monitor their budget status.

Fiscal Impact

TUSD can implement this recommendation with existing resources.

Recommendation 2-3: Implement the feature in Lawson that checks for available funds for requisitions and budget transfers.

When budget technicians review budget transfer/modification requests, they must also determine the availability of budget funds in each budget code involved in the potential transaction. Lawson has not been configured to automatically check for available funds when purchase requisitions or budget transactions are initiated.

The district should implement the feature in Lawson that checks for available balances whenever the school or department initiates a purchase requisition or budget transfer/modification. The funds available feature would ensure that available funds exist before the school or department can initiate transactions and also would reduce the time and effort of budget and accounting staff.

Fiscal Impact

TUSD can implement this recommendation with existing resources.

Recommendation 2-4: Reduce the volume of Personnel Action Forms by eliminating multiple codes for substitutes.

The PAF is used to document and approve any changes in personnel or payroll. For example, when an employee changes his/her position or moves to another school, a PAF is required to approve the change and record the new job code number in PeopleSoft. The PAF is a paper form and requires manual routing for review and approval. Each PAF must be approved by the following:

- School or department (initiating employee)
- School principal or department director
- Finance – Budget Office
- Human Resources – Recruitment
- Human Resources – Records
- Payroll

Multiple job codes are used for substitute teachers that correspond to certain schools, length of service, and other factors. One individual working as a substitute for the district over time may have several different position numbers. Whenever a change occurs, a new PAF must be completed and approved before that person's pay can be processed. These changes include substituting for teachers at different schools and working for more than 10 consecutive days (for pay differential). These types of changes occur frequently.

The district should eliminate the multiple codes used for substitute teachers by implementing a substitute management system that captures all necessary information automatically.

Other school systems use one position control number for all substitutes and the substitute management system can determine what differential rate of pay is appropriate based on the school location and tenure – no personnel action is required unless the substitute becomes a regular teacher.

Fiscal Impact

TUSD can implement this recommendation with existing resources.

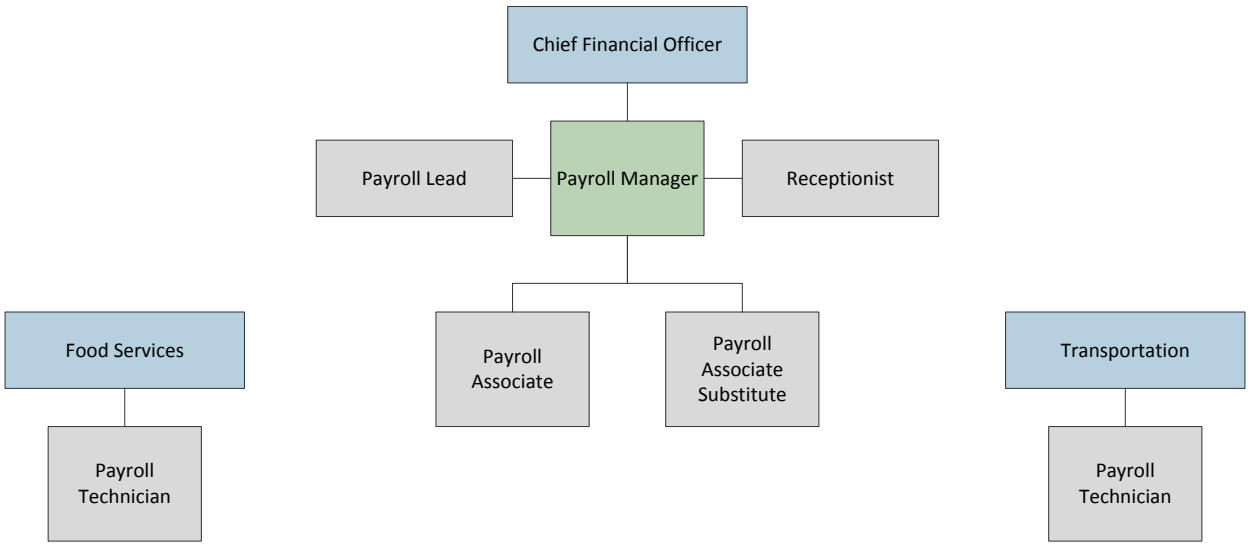
Payroll

The goal of an effective payroll system is to pay valid district employees on a timely basis. The Payroll Department is a critical TUSD support function that requires sound fiscal and operational management because of the federal and state laws governing the compensation of district staff. The Payroll Department utilizes specialized timekeeping and information processing software to record employee time, to track leave balances, and to pay district staff on a timely basis.

Recommendation 2-5: Consolidate district payroll functions under the Chief Financial Officer/Payroll Manager.

TUSD employs 16 payroll staff in three departments: the central district payroll office under the CFO, Transportation, and Food Services. The staffing for the payroll function is shown in Figure 2.3 below.

Figure 2.3. TUSD Payroll Functions



Source: TUSD Organization Charts

The Payroll Manager in the Finance Office is responsible for all district payroll functions. The staffing within the central district payroll office also includes a vacant lead position and eight payroll associates. Two of these payroll associates are responsible for processing substitute teacher payrolls, and the other associates process monthly and bi-weekly payrolls. Two of the associates are hourly employees and not permanently budgeted in the Payroll Department.

In addition to the central Payroll Department, the district also employs payroll staff in Transportation and Food Services. The Transportation Department includes three payroll technicians who assist the central office in gathering and processing timesheets, leave, and other payroll data for approximately 560 transportation employees located in the East, Central, and West bus terminals, respectively. The Food Service Department employs two payroll technicians with responsibilities similar to their counterparts in Transportation. Approximately 360 food service employees are paid on a bi-weekly basis.

TUSD should realign and consolidate its payroll staff under the CFO to support increased accountability over the payroll function. Supervisory review of time sheets will still occur at the departmental level for all departments.

Fiscal Impact

TUSD can implement this recommendation with existing resources.

Fixed Asset Management

In addition to general accounting and financial reporting, the General Accounting Office manages the district's inventories of furniture, fixtures, and equipment. The district's current policy is to capitalize (create a depreciable asset account as opposed to an operating expense) all assets with an acquisition cost of $5,000 or more, and to tag and track all assets with value of $1,000 or more. An asset listing provided for this review showed over 12,000 tracked assets of $1,000 or more with cost, applicable depreciation for assets greater than $5,000, and net value as shown in Table 2.6 below.

Table 2.6. TUSD Capital Assets, 2013

	Amount
Original cost	$425,897,255
Accumulated depreciation, to date	$123,672,113
Net book value	$302,225,142

Source: TUSD Detailed Asset Listing, November 2013

Recommendation 2-6: Implement bar codes and scanners to more efficiently track fixed assets.

Of the 12,000 tracked assets, approximately 6,500 have an original cost under $2,000. These assets comprise over 50 percent of the total number of assets, but represent less than 2 percent of the total original cost.

District policies require the physical verification of all assets regardless of age or net book value. The district is also considering tracking additional items less than $1,000 that may have the tendency to "walk away." This includes electronic tablet devices, digital cameras, and other technology purchases.

The district affixes a numerical tag to each equipment item; however, the department does not use a bar-coded asset tagging system that would enable school and departmental staff to efficiently scan equipment items using hand-held scanners or wands.

The efficiency of the asset management function would be improved by utilizing bar codes and hand-held scanners for equipment tagging, and by developing a risk-based hierarchy of assets for annual verification that considers factors such as equipment type, age, and net book value.

Fiscal Impact

This recommendation will require investment in hand-held scanners to streamline the annual inventory process. The district will need to develop a Request for Proposals to purchase the necessary equipment, but it is estimated that the one-time cost will not exceed $50,000.

Recommendation 2-6	One-Time Costs/Savings	2014-15	2015-16	2016-17	2017-18	2018-19
Implement bar codes and scanners to more efficiently track fixed assets.	($50,000)	$0	$0	$0	$0	$0

Note: Costs are negative. Savings are positive.

Purchasing

The Purchasing Department oversees purchasing for most TUSD schools and departments. Purchasing for Food Services and Student Accounts are managed by staff in those departments. Student finance procurement is handled by three student finance account processors. Food Services staff includes two purchasing specialists.

The volume of purchase orders (PO) processed in 2012 and 2013 are shown in Table 2.7. Total POs processed have declined by 6 percent.

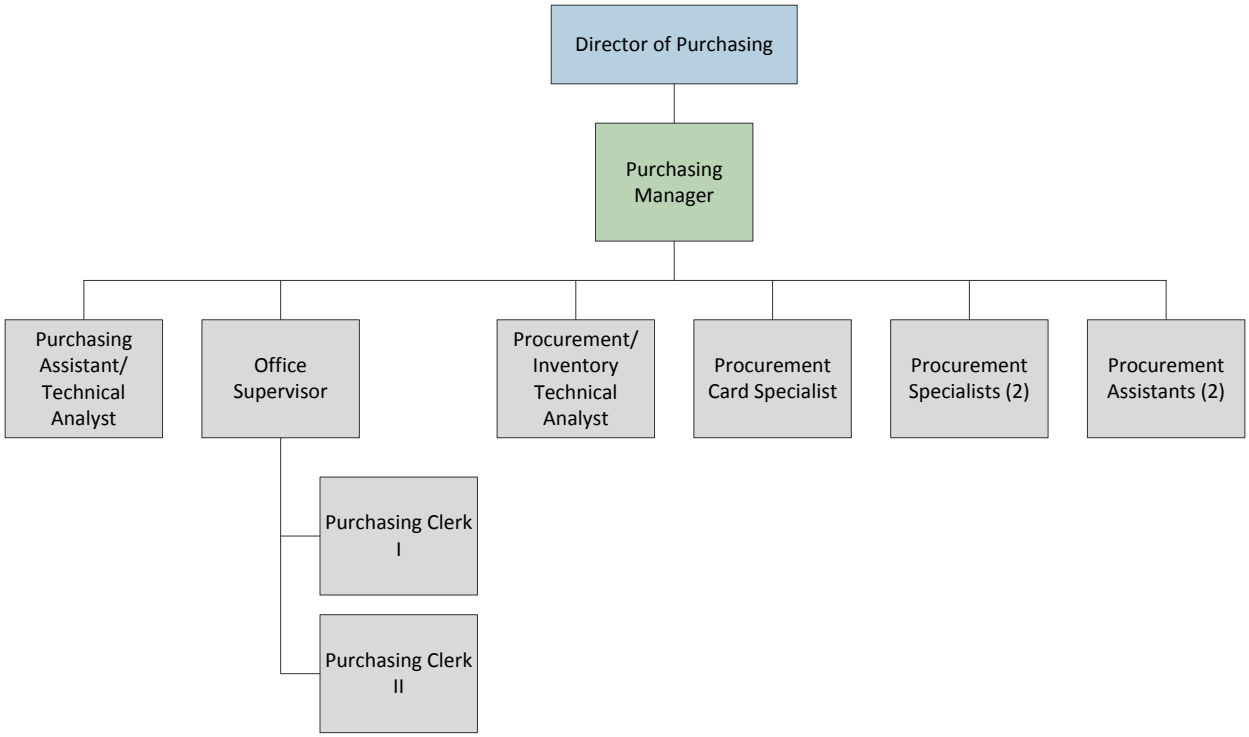
Table 2.7. Purchase Orders Processed, FY 2012 and FY 2013.

Department	2012	2013
Purchasing Department	11,542	10,656
Food Services	5,804	5,687
Student Finance	3,903	3,604
Totals	**21,249**	**19,947**

Source: Tucson Independent School District Purchasing Department

The TUSD Purchasing Department is comprised of 12 positions as shown in Figure 2.4.

Figure 2.4. Current Purchasing Department Organizational Structure



Source: TUSD CFO-Finance Org Chart.pdf

Staff of the department do not all report to the Purchasing Manager as indicated in the organizational chart; supervisory duties of the office are shared by the Director and Manager. Both employees also assist staff in large dollar or complex contractual procurements. The duties of other department staff are as follows:

- Office Supervisor – supervise the work of the purchasing clerks.
- Purchasing Clerk (I and II) – process purchase orders and provide administrative support for the buyers.

- Purchasing Assistant/Technical Analyst – provide technology support for the department and liaise with the TUSD Technology Services Department with respect to purchasing-related application development.
- Procurement/Inventory Analyst, Procurement Specialists, Procurement Assistant – all function as "buyers" by supporting TUSD departments in sourcing goods and services. Each buyer specializes in purchases of different commodity types (maintenance, transportation, academic services/supplies, etc.).

Recommendation 2-7: Develop procedures and controls for the district's procurement card program.

The TUSD procurement card program (the Plan) was presented to the TUSD Board of Trustees at its December 2012 meeting, at which time a contract with a financial institution for procurement card services was discussed and approved. The plan included steps to immediately begin using procurement cards (P-Cards) to facilitate payments to certain vendors to take advantage of rebates offered by the card issuer. The plan also included one step in the implementation to "explore how P-Card can be inserted at the Site/Department in accordance with purchasing rules and regulations." As of the date of our review, this aspect of the plan had not been undertaken, but is planned for next year. Subsequent to the review team's site work in January 2014, the district met with the Arizona Auditor General to address issues of compliance with Arizona regulations and general internal control considerations.

A procurement card, also known as a P-Card, is a type of charge card that allows goods and services to be procured without using a traditional purchasing process (issuing purchase orders, etc.). P-Cards are usually issued to employees who are expected to follow their organization's policies and procedures related to P-Card use, including reviewing and approving transactions according to a set schedule (at least once per month). Unlike typical credit cards, organizations can implement a variety of controls for each P-Card, such as:

- A single-purchase dollar limit
- A monthly limit
- Merchant category code restrictions
- Restricted use for specific vendors

A cardholder's P-Card activity should be reviewed periodically by someone independent of the cardholder, such as the employee's supervisor. The data provided by the credit card issuer can also be analyzed statistically to identify anomalies or inappropriate charges.

Typically, a P-card is used for smaller dollar purchases of goods and services (less than $1,000 per purchase) in lieu of the normal requisition and purchase order process. Procurement cards significantly reduce the time and effort that purchasing staff would normally spend on goods and service where the sourcing and pricing of the items is not considered critical. Procurement cards also significantly reduce the volume of invoices processed by accounts payable staff because only one disbursement – to the credit card issuing bank – is made monthly instead of hundreds of smaller dollar checks.

The data provided by the credit card issuer can also be uploaded directly to the accounting system, eliminating the data entry for thousands of individual transactions each month.

In implementing P-Cards, TUSD should:

- Continue to work with the Arizona Auditor General to determine the best method for satisfying regulatory requirements.
- Develop policies, procedures, and controls for procurement card use, including a user's manual for all cardholders and approvers.
- Implement training for all card holders and approvers.
- Develop tools for the automated upload of cycle-end financial data directly to the district's financial ledger system.

Fiscal Impact

Implementing the procurement card program could be accomplished with existing resources. While the efficiency gained by implementing a procurement card program may not result in the reduction in Purchasing or Finance Office staffing, these staff members may be able to shift their efforts to more valuable account analysis or work with schools and departments to improve the use of resources.

Recommendation 2-8: Expand "punch-out" purchasing programs with high volume merchants.

The district currently has a punch-out catalog with Office Depot; however, the process is not fully automated. In a punch-out system, the communication between high volume vendors and the district is all handled electronically. The district employee logs into the vendor's network to place an order and all related data for the purchase, including the purchase order and invoice, are shared electronically. Typically, the vendor is also paid directly through electronic funds transfer rather than with a regular check, which further simplifies the process. The range of goods available and the prices negotiated can be updated electronically, and the volume of paperwork handled by purchasing and accounts payable staff is greatly reduced.

The district should identify other major vendors that conduct a high volume of business with the district and work with those vendors to develop interfaces through which POs, invoices, and payments can be exchanged electronically.

Fiscal Impact

Expansion of the program to other vendors and the enhancement of the relationship with Office Depot can be accomplished with existing resources.

Recommendation 2-9: Implement performance measures for the Purchasing Department.

Currently, the department tracks only one measure of productivity and efficiency: the average time required to process purchase transactions, from creation of the purchase requisition to the issuance of the PO. That measure has improved from 8.72 days in 2012 to 8.04 days in 2013. Estimates of the time required to process transactions before the automation of the work flow using Lawson in 2011 was approximately 21 days.

Other measures of productivity and efficiency that the department should consider tracking include:

- Competitive Procurements – Total purchase dollars for purchases above the single quote limit that were competitive divided by total purchase dollars for purchases above the single quote limit.
- Strategic Sourcing – Total vendor dollar spend for strategically-sourced goods and services divided by total procurement dollars spent, less construction spending.
- Procurement Card Transactions – Total number of procurement card transactions divided by the total number of procurement transactions.
- Procurement Card Spend – Total dollars spent by the district using procurement cards divided by the total procurement dollars spent by the district.
- Purchasing Office Operating Expense Ratio – Total Purchasing Department (payroll and non-payroll) expenditures divided by total procurement dollars spent by district including procurement cards, less construction.
- Certified Professional Staff – Number of professional purchasing staff and supervisors with certifications divided by the total number of professional purchasing staff and supervisors.
- Processing Time – Average number of days to process all requisitions.
- Electronic Procurement Transactions – Total number of electronic procurement transactions (e.g., punch-out catalog) divided by the total number of procurement transactions, including procurement card transactions.
- Cost per Purchase Order – Purchasing Department expenditures divided by the total number of procurement transactions.

Where practical, comparison of TUSD performance measures should be made to established benchmarks or peer districts. Table 2.8 provides two examples of TUSD calculated performance measures compared to the most recent Council of Great City schools (CGCS) survey. Both of these measures indicate that there is room for greater efficiency at TUSD.

Table 2.8. Performance Measure Comparison

Measure	TUSD	CGCS Median Score
Purchasing Office Operating Expense Ratio	1.47%	0.54%
Cost per Purchase Order	$68.33	$53.51

Source: Financial and operating data per TUSD 2013 and 2014 Budget Book; Council of Great City Schools

Fiscal Impact

TUSD can implement this recommendation with existing resources.

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Chapter 3 – Human Resources

Elementary and secondary education is a labor-intensive undertaking: nationwide personnel costs typically consume at least 80 percent (or more) of the average school district budget, according to ongoing reports by the Association of School Business Officials (ASBO). Consequently, effective school systems place a major emphasis on human resources management.

The employees of any school district are its most valuable asset. The recruitment, selection, orientation, training, salary, and benefits provided to the workforce contribute greatly to the effectiveness of the district. To comply with state and federal laws and to maintain a high-quality, effective workforce, a school district must ensure the appropriate licensing of professional staff and instructional support staff as well as ensure that all teachers and paraprofessionals meet "Highly Qualified" criteria as defined by the Federal law commonly referred to as *No Child Left Behind (NCLB)*.

Leading human resource (HR) and organizational measures from the Society for Human Resources Management (SHRM) provides metrics for benchmarking using a database of more than 1,500 organizations including some public school systems. In its research, *2012 Human Capital Benchmarks Report*, SHRM provided these benchmarks related to HR budgeting:

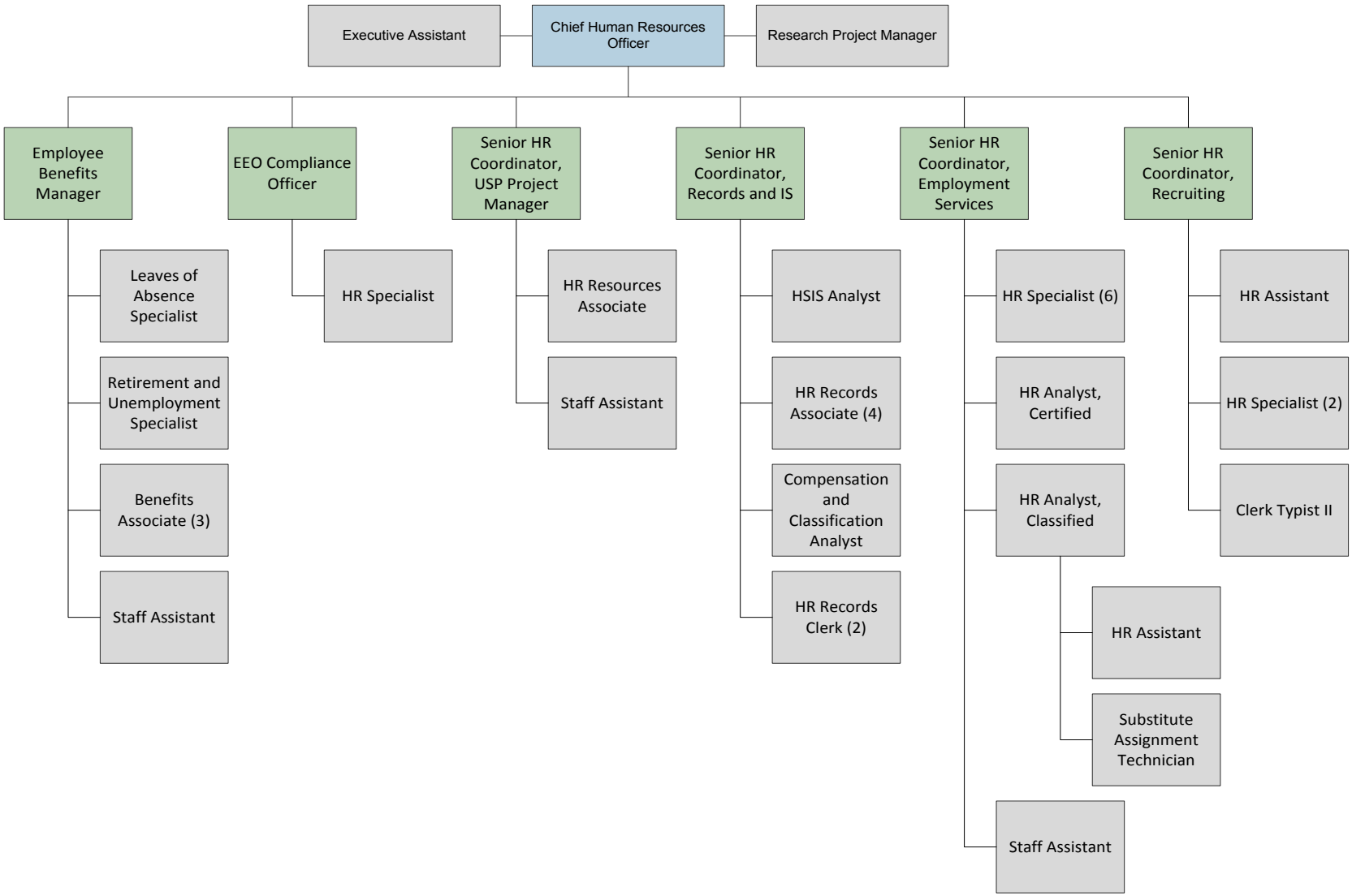
- *HR Expense to Operating Expense Ratio*: This metric depicts the amount of HR expenses as a percentage of the total operating expenses. Although SHRM does not suggest a specific budget percentage to spend on HR functions, it can be used to assess spending trends over time.
- *HR Expense per Full-Time Equivalent (FTE)*: This metric shows the amount of HR dollars spent per FTE. The 2012 SHRM benchmarking study reports that the HR expense per FTE rate remained relatively stable at a median of $1,174.[4] Another report from The Hackett Group reported in September 2013 that companies defined as "world class" – the top 25 percent of companies among the thousands that Hackett studies – spent $1,390 HR dollars per employee annually.[5]

The current organization of the Tucson Unified School District's (TUSD) HR Department is shown in Figure 3.1.

[4] Human Capital Benchmarks Report. (2012). *Society of Human Resource Management*. Retrieved from http://www.shrm.org

[5] Bression, Nathalie and Schneider, Lynne. How leading human resources organizations outperform their peers. The Hackett Group: September, 2013

Figure 3.1. Current Human Resources Department Organizational Structure



Source: TUSD, November 2013

Based on 2013-14 budget figures of $3,092,972 for central HR operations, the department has an HR Expense to Total Operating Expense of $1:$131[6] or 0.8 percent. Based on 2013-14 budgeted FTE, the department has an HR Expense per FTE of $474.36.

Recommendation 3-1: Reorganize the HR Department, creating a development team that will have no daily routine responsibilities but will instead be focused on the myriad of systems and procedural improvements that are needed in the department.

The HR Department is not optimally structured. Although the department and the district have diligently identified, documented, and analyzed a number of operational challenges in work flow processing, digitization, and process improvement, little action has been taken. The 2008 District Management Audit conducted by MGT of America, which made 11 recommendations overall for improving the HR Department, made a number of recommendations regarding these areas:

- Develop and implement a comprehensive human resources strategic plan according to a continuous improvement model to guide decision making and document accomplishments and results.
- Develop a plan for an integrated human resources and payroll management system.
- Conduct a study for an electronic document imaging and file management system, and convert all employee personnel files to an electronic format.
- Develop a comprehensive Web-based employee handbook that cross references key employment information, rules, and regulations related to various contract requirements, and contact information for all human resources departments.
- Develop a TUSD strategy and plan to simplify and standardize employee leave accrual, usage, monitoring, and accountability that can be the basis to revise Governing Board policy and to negotiate with employee bargaining units.

While progress has been made in some of these areas, five years later, none are complete. In 2012, TUSD completed a year-long project of business process mapping roughly 100 separate processes and sub-processes within the payroll, HR, benefits, and recruiting functions of the district. Of these, 46 were deemed to be "high-priority business processes," of which 19 were considered to be related to HR, seven were benefits-related, and six were recruiting-related. The executive summary of the 2012 report noted:

> *Department employees are more comfortable with paper, and therefore have done little to change the status quo with regard to how information travels throughout the district. Paper-based systems are hugely inefficient, as they require more energy to move, to manipulate, to analyze and to archive. Our estimate is that between 25% and 30% of*

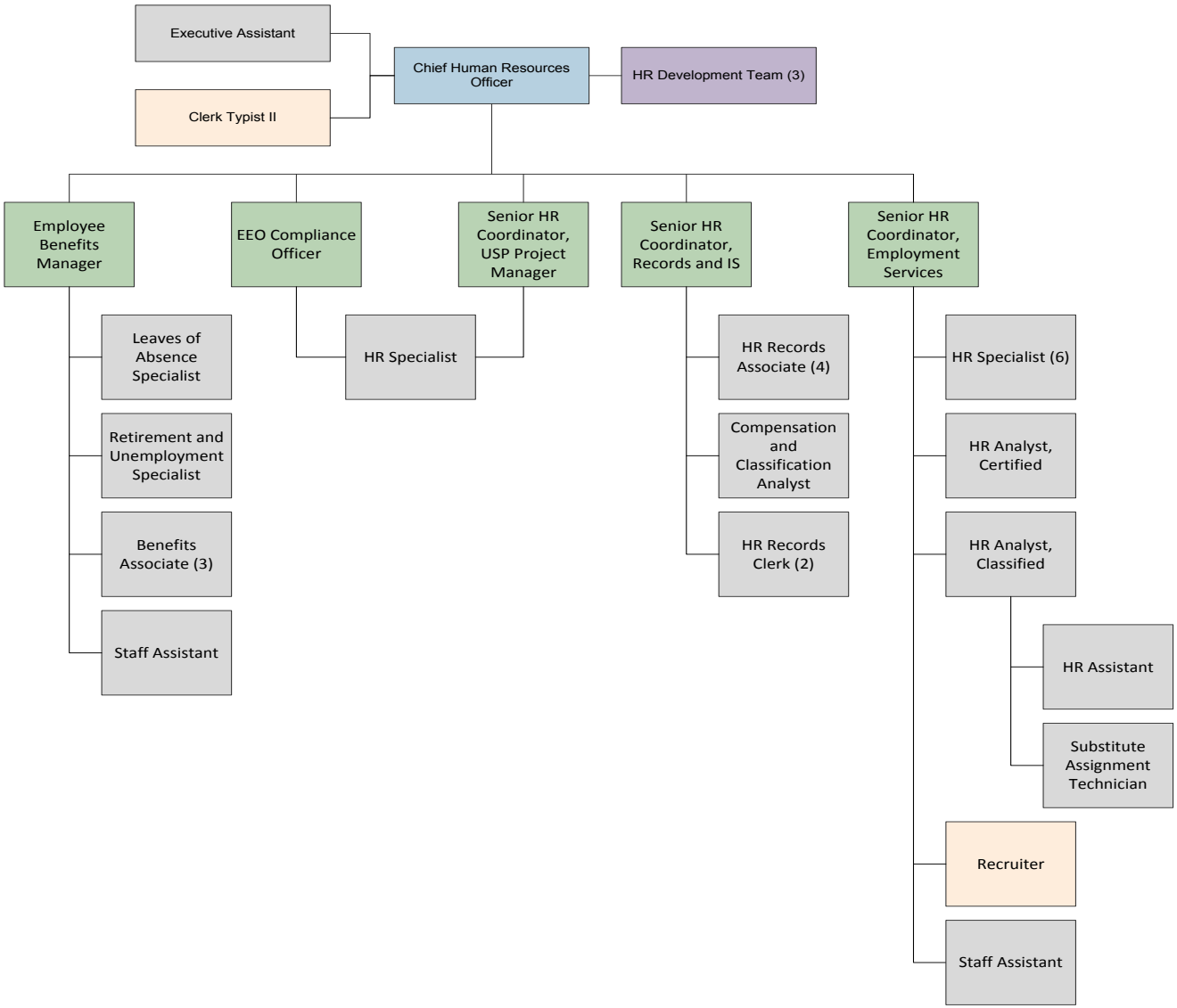
[6] Total Operating Expenses of $405,698,324 less capital expenditures of $15,256,364.

TUSD's administrative workload is wasted on the inefficiencies inherent in paper-based systems.

The report further identified the Personnel Action Form (PAF) and Recruitment Action Form (RAF) as being essentially tipping points for "almost every major inefficiency" and noted that "concentrating heavily on these recommendations will give us the leverage and time that we need to optimize the remaining processes." Yet, the review team found that little actual progress has been made in improving the PAF and RAF since the publication of report. There is a committee of 14 staff members assigned to work on development of the electronic version of the RAF (eRAF), but the work has not been completed.

In discussing the root causes for the district's slow movement on issues its own staff have declared to be "high priority", it appears that one cause is the lack of anyone in the HR Department having sole focus on strategic development. All current HR staff members have day-to-day, transactional responsibilities and are expected to layer strategic work on top of or around those tasks. This has not yielded sufficient progress on the efficiency initiatives. For that reason, the review team recommends the reorganization of the department shown in Figure 3.2.

Figure 3.2. Recommended Human Resources Department Organizational Structure



Source: Gibson Consulting Group, Inc., 2014

Key features of this reorganization include:

- *The creation of a three-person development team, to be staffed by a Senior HR Coordinator, the HSIS Analyst, and one HR Assistant or Specialist.* This team would have no daily, transactional duties but would instead be focused entirely on the implementation of recommendations made in this chapter, implementation of recommendations made in the 2012 process redesign study, and the 2008 MGT study. Although not a typical organizational unit within an HR Department, the review team believes it necessary if the district is ever to move from discussion and analysis to action and improvement.

- *The elimination of two positions that are currently vacant.* As the development team begins its work, the department may find it needs additional personnel in categories not yet defined, or with different skill sets than currently outlined in the two vacant positions. The review team recommends that those positions not be filled at this time so it will have the organizational flexibility to create any new positions that are needed in the future.

The current physical locations of the HR Department do not support development of an effective, efficient, cohesive unit. Team members are physically separated from each other. Ideally, all HR staff members should be more co-located. However, the review team recognizes this is likely not possible in the short term, given the layout of the TUSD central office. If renovation or relocation becomes a possibility, the HR Chief Human Resources Officer should oversee a better physical arrangement of the department that facilities a much higher level of interaction.

Nevertheless, physical accommodations should be made for the recommended development team. To facilitate the transition of development team members from their current focus on daily tasks to strategic development, the team should be relocated into the offices currently occupied by the recruiter and HR staff across the hall. This will place the team in the area immediately adjacent to the HR Director, but will remove them from the daily activity of transactional human resources functions.

Fiscal Impact

Not filling the two vacant positions will save the district approximately $84,243 per year (total department budget of $416,163 divided by 9.88 FTEs). This savings will likely be realized for at least two years. After that, the HR Department may identify a need for additional staffing, based on the work of the development team.

Recommendation 3-1	One-Time Costs/ Savings	2014-15	2015-16	2016-17	2017-18	2018-19
Reorganize the HR Department.	$0	$84,243	$84,243	$0	$0	$0

Note: Costs are negative. Savings are positive.

Recommendation 3-2: Improve the hiring process in several areas.

The TUSD hiring process is lengthy, at least in part due to systems issues. The 2008 MGT study reported that almost none of the TUSD staff felt the recruiting and hiring process for teachers was effective. As noted in the report:

> *…a significant majority of teachers (97 percent), principals and assistant principals (80 percent), and central office administrators (91 percent) indicated disagreement with the statement "Our district has an effective process for staffing critical shortage areas of teachers." On a related survey question, the same respondents were asked their opinions on the following statement: "Our district has an effective teacher recruitment plan." Disagreement with this statement ranged from 90 percent for teachers to 61 percent for principals and assistant principals and 85 percent for central office administrators.*

Based on interview comments from current TUSD leadership, little progress has been made in this area to date. The district identified problems with the RAF as long ago as 2011, but has to date not effectively addressed them. The time to hire in the district is estimated to range from two to 12 weeks.

The review team identified several subareas within recruiting and hiring where improvements are needed.

Recruiting

The recruiting process could be improved. The 2008 MGT report recommended that the district "Develop and implement a strategic comprehensive teacher recruitment and retention plan designed to increase both the number and diversity of applicants, and to provide workplace enhancements to reduce the turnover rate." This has largely not been done yet. Meanwhile, the number of teachers leaving the district each year remains high (Table 3.1), making effective recruiting even more critical to the district.

Table 3.1. Number of Teachers Who Left the District by Year

Calendar Year	Number of Teachers Who Left
2005	196
2006	171
2007	363
2008	465
2009	851
2010	436
2011	333
2012	511

Source: TUSD Human Resources

The district does not have a program to encourage its own non-certified staff, such as teacher aides, to earn teacher certification. It does not analyze its success rates at each recruiting event. As shown in Table 3.2, results from recruiting fairs have been poor. In four years of fairs, only 10 teachers have accepted offers with TUSD. Given that the district hires hundreds of teachers a year (for example, 602 were hired in 2012-13), this is not an effective method of recruiting.

Table 3.2.Results of Recruiting Fairs

School Year	Results
2009-10	22 letters of intent issued 9 accepted
2010-11	3 letters of intent were issued 1 accepted
2011-12	6 letters of intent issued 0 accepted
2012-13	7 letters of intent issued 0 accepted

Source: TUSD

The district should:

- Improve recruiting by developing a realistic, workable strategy. This should include an effort to "grow your own" teachers from among current teaching aides and other staff, as well as high school students. This should also include having outstanding principals and senior teachers assist in recruiting efforts. More so that a recruiter, their enthusiasm and position in the district, can be highly persuasive to potential employees.

- Track and report on recruiting success explicitly. This should also include regular analyses of turnover by school to identify problem areas.

eRAF

The 2012 business process mapping project identified the development of the eRAF as a critical project for the district. That project also identified that the current paper-based RAF undergoes no less than four approval steps and spends between 17 and 41 days shuffling back and forth among departments and schools. Yet, in all this time, staff spends a total of less than one hour actually working on the RAF. The development of an electronic form, a reduction in the number of required approvals, and online approvals for those that must occur would significantly reduce the hiring time in the district.

The district should:

- Dissolve the current committee assigned to the development of the eRAF.
- Reassign development of the eRAF to the HR development team. Once a product is drafted, all affected departments and principals can be invited to provide input and suggestions for the final product.

Applicant Tracking

The district uses Sigma for applicant tracking. It is a locally developed product that staff members believe was never fully implemented. Moreover, staff estimates that only 40 percent of its capabilities are regularly used. Issues with the system include:

- Principals cannot log in to view applicants, requiring the HR Department to provide assistance.
- The district only accepts paper applications from applicants for temporary positions.
- Sigma does not interface with PeopleSoft, so staff members print out various items for rekeying into PeopleSoft.
- Sigma as a product is now part of NEOGOV. The version TUSD is using is not up to date.

The district should:

- Upgrade to the NEOGOV provide (or evaluate other options that may better meet TUSD needs) and purchase sufficient user licenses for principals to be able to review applications.
- Update the applicant tracking system to require all applicants, including ones for temporary positions to complete online applications.
- Assign the development team the tasks of creating an electronic bridge between NEOGOV and PeopleSoft, if the updated NEOGOV package does not already include one.

Position Control

Even though it currently exists only on spreadsheets and in schools' or departmental budget books, the TUSD position control (PC) system tracks information based on positions rather than employees which allows HR and Budget to create a framework of positions for all jobs in TUSD without regard as to

whether or not there is an incumbent in a specific job. Each position has its own unique position number (or ID) and is an entry separate from the incumbents in that position. Information about the position can be tracked over time regardless of changes to the incumbent's history, full-time equivalency (FTE) distribution, termination, or other elements which provides for position history separate from the changes within incumbents. Positions can be tracked when there are no incumbents to fit specific positions.

The basic premises of position control are:

- Schools and departments should not hire more individuals than they have funding for.
- Number of budgeted FTE's should equal the number of positions in the district.
- The PC identification codes for each position should match the employee's job codes.
- Vacant positions that schools and departments have that are not funded should be deactivated or re-classed to job titles for which there is budget.
- Schools and departments should use the availability of PC reports to identify what positions are assigned to their organization.

TUSD principals have their own school budget book that lists positions. The PC office has its own spreadsheets with positions. HR has access to neither. Both budget books and PC spreadsheets are updated manually which increases the potential for error.

HR leadership presented evidence to the review team showing that one of the delays in filling vacancies is caused by HR's inability to determine accurately where vacant positions exist and if they are funded. Currently the only methods to determine which schools have vacancies waiting to be filled depend on principals generating and sending forward through channels a RAF to declare the vacancy and start the recruitment process. Or, HR staff has to call the principal by telephone and ask about vacancies. At times, principals are not able to respond accurately.

More often than not, principals delay sending the RAF in a timely manner. At other times, principals intentionally hold vacancies to avoid the possibility of having to accept the placement of senior teachers who must be transferred because of a district-wide RIF (reduction in force) and/or subsequent recalls. Having to accept RIF mandatory placements by HR means that principals cannot fill vacancies from the applicant pool. With no direct access to PC data, HR cannot verify or double check position availability to prevent "game playing" related to school staffing.

Principals, when making their master schedules for the subsequent school year, may move several teachers from one teaching slot or grade level or subject assignment to another. Sometimes, high school and middle school principals decide to discontinue offering an elective course that does not have sufficient student interest. In effect, they are moving people, and often the new assignment is later found to be not funded in the district-wide budget. Since student enrollment or average daily membership (ADM) changes from one school year to the next, schools may lose budgeted positions, a

situation that normally means that the number of teachers at the school will have to be lowered. Sometimes, however, this reduction that occurs in PC is not necessarily communicated properly to principals. Conversely, positions may be assigned to a school but remain unfilled because the principal is not aware of the allocation. Generally, HR is left out of these staffing decisions and changes.

Ultimately, an online PC system that allows both the principals and HR to track vacant positions immediately will reduce the paper flow and prevent principals from submitting RAFs for positions that do not exist or that have no funding. Until then, a process that includes HR as a critical component in the PC operations must be established. There is no way to fiscally account for the amount of lost work time and subsequent administrative costs for the manual process of PC that is currently in use.

The district should (in the short term):

- Provide read-only access to PC spreadsheets for all principals and HR Department staff immediately.

Employee Onboarding

Currently, all new employees to the district must attend an in-person orientation session before beginning work. The HR Department holds at least one orientation session per week. The review team observed a portion of one orientation session. It largely consisted of a short introduction to employee-related topics by a staff member and the completion of various paper forms by new employees. The district should:

- Develop several professional quality videos for new employees to view that will give the employee an overview of the district, a review of the mission and goals of the district, and an overview of basic district expectations for employees.
- Develop online forms that can be captured electronically for use in the PeopleSoft and other HR systems.
- Require all new employees to complete onboarding online. Completion of video watching and submission of forms would signal to the department that onboarding is complete. The district should provide a dedicated computer within the HR Department for employees who do not have sufficient Internet/technical access elsewhere.

Finally, because the recruiting and hiring process was identified as a continuing problem area, the HR Department should develop and report weekly on explicit performance metrics in this area. These should include:

- Time to Hire
- Sourcing Channel
- Open Vacancies versus Positions Filled
- Offer to Acceptance Ratio
- Other metrics to meet the reporting requirement of the Unitary Status Plan

These should be posted on the webpage of the HR Department and reported in school board meetings.

Fiscal Impact

Development of the eRAF can be completed in-house with the resources of the recommended HR development team. The district's 2012 process mapping report estimated that $32,000 would be saved annually once this process was fixed (reference REC010 in that report), but did not calculate any savings or cost avoidance from not needing substitutes in vacant positions or from having qualified personnel in every position.

Purchase and implementation of an applicant tracking package will cost approximately $70,000 for initial installation, setup, and training, then $50,000 in licensing annually.

Online employee onboarding will have some internal development costs but will eliminate the hours that HR Department members currently spend every other week handling routine tasks in person.

Providing read-only access to the PC spreadsheets and development and reporting on performance metrics can be implemented with existing resources.

Recommendation 3-2	One-Time Costs/ Savings	2014-15	2015-16	2016-17	2017-18	2018-19
Purchase and implement applicant tracking package.	($70,000)	($50,000)	($50,000)	($50,000)	($50,000)	($50,000)

Note: Costs are negative. Savings are positive.

Recommendation 3-3: Conduct dependent eligibility audit.

Exemplary benefits management, especially for self-funded medical coverage programs like those provided by TUSD, requires periodic audits to verify eligibility of health benefits plan dependents. No dependent eligibility audits have been conducted by TUSD Benefits to determine any payments are being made to ineligible persons. The district's health benefits plans cover not just TUSD employees, but their dependents as well. Such audits would ensure that overpayments due to claims by ineligible claimants are not being incurred. In interviews and other correspondence with the employee benefits manager, the review team was told that no dependent eligibility audit has been planned even though TUSD recognizes an audit as one of the most compelling means to obtain immediate savings and protect its health plan(s) from unnecessary and fraudulent claim expenditures.

HRAdvance, one of the business arms of the Society for Human Resources Management, that provides dependent audit services reports that in recent years its clients have found, on average, that 11 percent of dependents receiving coverage have been ineligible. According to the report, generally these included

dependents that were not enrolled as full-time students and not receiving their principle support from the covered employee.[7]

Historically, eligibility audits have required employees with covered dependents to provide proof of relationship, financial responsibility, and student status to prove eligibility. With the implementation of the *Patient Protection and Affordable Care Act* and subsequent modifications (March 2010), however, the eligibility age of dependents advanced to 26 and employees will no longer have to prove financial responsibility or student status for child dependents. As a result, HRAdvance predicts that the potential number of ineligible dependents that could be found in an audit will drop from 11 percent to about 8 percent. Nevertheless, HRAdvance contends, an audit will remain cost effective for employers to continue to find and exclude dependents age 26 or older, as well as other ineligible non-spouse/partner adults receiving coverage through a family plan.[8]

HMS, one of the major U.S. companies dedicated to healthcare cost containment for government-funded, commercial, and private entities, has found that in its own dependent auditing work for its clients, on average, 8.1 percent of dependents enrolled in plans are ineligible for coverage and should be removed.[9] HMS also reported that the average cost per member for medical and prescriptions is $3,000 per year. As of March 2014, TUSD had 4,653 employees enrolled in all tiers of its medical insurance plans. These employees claim 713 dependents.

Fiscal Impact

The district should contract with an external firm conduct the audit. Based on the size of the district, a one-time cost of approximately $72,000 would be incurred.

Using the typical ineligible rate of dependents audited of 8 percent, TUSD can expect to find 57 ineligible dependents. At an average cost of $3,000 per year, the approximate annual savings for TUSD would be $171,000.

Once the initial audit is completed, the district should include a review of dependents upon employment. The most progressive HR and benefits leaders leverage technology to launch the dependent audit as a logical extension of the hiring process. Such a real-time approach maximizes an employer's cost containment efforts by never allowing ineligible dependents to enroll. This approach also demonstrates a high level of adherence to ERISA (Employee Retirement Income Security Act) mandates.

[7] Stephen Miller. "Dependent Eligibility Audits Impacted by Reform Law." April 15, 2010. *www.shrm.org/hrdisciplines/benefits*

[8] *Ibid.*

[9] "Understanding Dependent Eligibility Audits: Straight to the Point." *www.HMS.com*

Recommendation 3-3	One-Time Costs/ Savings	2014-15	2015-16	2016-17	2017-18	2018-19
Conduct dependent eligibility audit.	($72,000)	$171,000	$171,000	$171,000	$171,000	$171,000

Note: Costs are negative. Savings are positive.

Commendation 3-1: The TUSD Governing Board has directed TUSD staff to begin the work of resolving salary compression.

Over the past several years TUSD's employment and salary actions have created the unintended perception that pay is distributed unfairly, a belief which can have undesirable consequences. For example, a 10-year, high-performing TUSD employee would conceivably decide to start looking for a new job after learning that a recently-hired colleague, who has a great deal of potential and enthusiasm but considerably less relevant experience, has been hired also to perform the same job at the same pay level.

This example illustrates one form of salary compression - when the pay of a new employee is very close to the pay of more experienced employees in the same job. Another form of salary compression is when employees in lower-level jobs are paid almost as much as their colleagues in higher-level jobs, including managerial positions.

When salary compression and the policies that enable it are sustained over several years, it is demoralizing to the workforce and can lead to widespread dissatisfaction. Employers should be concerned because salary compression transforms the organization's single largest cost (i.e., compensation) from a motivator into a "demotivator."

Moreover, while salary compression is not illegal, it is often accompanied by pay inequities that often violate equal pay laws. In situations where salary compression causes *salary inversion,* where newer employees make more than experienced staff, it could create a pay equity problem if the experienced staff is a protected class.

The SHRM has developed a listing of the causes of salary compression (Figure 3.3). It is commonly used by organizations to determine if they are experiencing salary compression. Because fixing the problem is more costly than preventing it, the same chart can be used by TUSD as a primer to avoid future salary compression.

Figure 3.3.Causes of Salary Compression

- Annual budgets with salary increases have been modest for 20 years—somewhere between two and four percent has been the norm—yet candidates changing jobs or companies expect raises of more than two to four percent, and thus the salaries of new hires can exceed that of incumbents.
- Reorganizations change peer relationships and can create compression if jobs are not reevaluated.
- In some organizations, certain departments or divisions may be relatively liberal with salary increases, market adjustments, and promotions while others are not.
- Some employers have overlooked their HR policies designed to regulate pay, paying new hires more than incumbents for similar jobs under the mantra of paying what it takes to get the best talent.
- Because of the weak job market, many organizations have found it easy to hire people who had already done the same work for another organization, eliminating the need for training. Rather than hiring people with high potential and developing them for the long term, they have opted for people who could "hit the ground running," regardless of their potential.
- In the case of mergers and acquisitions, if the organizations have not been properly integrated, compression may exist in the newly combined organization.

Source: Jim Kochanski and Yelena Stiles. "Put a Lid on Salary Compression before It Boils Over." www.shrm.org

In July 2013, the TUSD Governing Board directed that work begin on resolving salary compression, a process that will require multiple years. The board has set aside $1 million in the 2013-14 budget to begin to address this issue. Recognizing the inequity of salary assignments and its effect on employee morale as well as taking steps to begin to correct it is commendable.

Commendation 3-2: TUSD employed a creative and highly collaborative effort to reduce the number of teacher vacancies in the fall of 2013.

The number of actual teaching vacancies that existed on paper on August 5, 2013, was greatly reduced through collaborative efforts of leaders in HR, representative principals, and the administrators of both elementary and second schools. For almost two weeks, these TUSD leaders, using actual student enrollment counts, met daily and manually combined classes to bring student enrollments closer to established class caps. This process entailed dissolving vacant positions advertised, stopping active recruitments, moving staff from one school to another and the generation of new positions at sites over projected enrollment.

The HR Department's interest and dedicated effort in implementing staffing guidelines in collaboration with other leaders outside of HR had never been attempted before. At the beginning of the process, there were 170 vacancies. At the end of the collaborative effort, the number was reduced by 62 to 108 vacancies, for a savings of about $4 million in teacher salaries and benefits.

Dedicating time and effort to manually re-schedule and re-assign faculty and students to reduce the number of teaching vacancies, to bring class sizes closer to actual class caps, and to reduce salary costs by $4 million is highly commendable. Moving forward, TUSD should complete the same process at the beginning of each school year, in July, when approximate course/class/school enrollments are known and again each September as enrollments are stabilized.

Recommendation 3-4: Implement needed changes in leave policies and procedures.

For the past two to three years both the TUSD Office of Benefit and Employee Relations, through employee agreement negotiations, have been committed to revising, revamping, updating, and attempting to make the employee leave policies and procedures uniform and equitable, and they have made good progress. Prior to recent recommendations and negotiated efforts, leaves for TUSD employees were often confusing because each employee group had somewhat different leave benefits. Currently, the contracts for each of the eight bargaining units have new provisions for paid leaves which are more equitable than before. The TUSD union negotiator and the benefits manager in conversations with the review team noted that efforts in the immediate future will be directed toward ending employee abuse of the leave provisions, especially in regard to long term leaves of absence.

Governing Board rules require that an employee who is absent from work for more than 10 days must request a leave of absence (LOA) even if the employee is using leave accruals (sick, leave, etc.) Currently in practice, however, TUSD permits MBU's (member of a bargaining unit) in certain employee groups to use all their earned paid leave time before an official leave of absence request is filed with the supervisor and subsequently approved by Governing Board. For example, if an individual has accrued 160 days paid leave by combining sick days with accrued personal days, he or she can be absent from work for 32 weeks without any district approval. After that paid leave has been exhausted, the employee may apply for and use in sequence four categories of leave which the district offers:

1. Medical/Family Medical Leave Act (FMLA) up to 12 weeks
2. Medical 30-day
3. Personal 30-day with a 15-day extension (some employee groups are permitted to use personal leave following a medical leave)
4. Governing Board leave (up to a year)

Theoretically, the example employee could be away from work for over two years and only the last year or so on leave with the district's full approval.

TUSD leadership needs to work with employee bargaining units or groups to remove from the employee agreements any inference to leave request rules and replace it with a districtwide governing board policy applicable to all employees that takes precedence. A sample policy which the TUSD benefits manager has been drafting is provided in Appendix C. This draft policy contains most of the needed and recommended changes which include offering only three types of leave to all employees:

- Medical – Either Family Medical Leave (FML) or 30-Day if employee is not eligible for FML
    - Length of FML: Up to 12 weeks
    - FML: Employee must use any accrued sick and/or personal time, reserving five days for later use
- Personal
    - Used only for personal employee and/or immediate family reasons
    - Employee must use leave accruals, reserving five days for later use
    - Cannot be used in conjunction with medical leave or medical condition of the employee or family members
- Governing Board
    - Eligible to employees with two or more consecutive years' service
    - To be requested after either medical or personal leave is exhausted
    - Requested approval for birth/adoption/foster placement of child or for child care
    - Requested approval for serious illness of employee or family member
    - Requested approval for serious illness of military service member

TUSD leave of absence monitors must insist that rules and regulations pertaining to leave of absence be strictly enforced. In some current situations, many employees request a leave or to request an extension of time for an already approved leave after the initial time of absence has already ended and the employee is expected back at work. Requests for leave or requests for extentions of leave should be filed with supervisor at least two to three weeks before the employee is expected to return to work or at most five days before the current leave expires. As well, TUSD supervisors and HR leadership should enforce the termination provisions of Governing Board Policy GCC, Unauthorized Leave, when absent employees, on authorized leave or not, do not respond to phone calls and direct mails about the status of the leave of absence.

Fiscal Impact

This recommendation can be implemented with existing TUSD resources. Bargaining unit negotiations will also be necessary.

Recommendation 3-5: Require all schools to use Subfinder in order to better control use of leave.

TUSD uses a substantial number of substitute hours each year. As shown in Table 3.3, there have been more than 100 substitute hours paid per teacher FTE for each of the last four years. However, not all of these hours are accounted for through the existing SubFinder system.

Table 3.3. Use of Substitute Hours

School Year	Number of Substitute Hours	Substitute Hours per Teaching FTE
2009-10	332,152.5	88.3
2010-11	450,339.4	127.4
2011-12	443,362.5	125.0
2012-13	484,612.5	140.8
2013-14 (as of January 1, 2014)	155,139.4	NA

Source: TUSD and TUSD 2012 CAFR.

SubFinder, one of the electronic products owned by CRS Advanced Technology, is a fully automated employee absence management and substitute placement system, providing both internet and telephone access. It is used by a considerable number of U.S. school districts. In fact, many districts utilize SubFinder districtwide as an employee absence reporting system, requiring all employees to report their absences through SubFinder even if a substitute employee is not authorized or needed. The payroll department of these districts uploads employee absences into their employee leave records.

TUSD has purchased the license for SubFinder and intended to use it as its method of supplying a substitute whenever a teacher is going to be absent. Teachers are supposed to report their absences to SubFinder and the program then finds and assigns an approved substitute teacher. Not only is the teacher's absence electronically recorded and reported but also there is a record for payroll showing the days that a substitute actually worked.

However, universal use of this effective substitute teacher call-out and placement system is not enforced in TUSD. Some schools use SubFinder as it is designed to be used; some teachers at some schools regularly use SubFinder as well; and, some schools do not use the automated system at all. The review team learned that some principals have told their teachers not to use SubFinder. At schools where SubFinder is not used, teachers themselves call their own substitutes, theoretically from a hard-copy list of approved substitutes regularly updated by HR. However, there are no controls in place to ensure that substitute teachers whose names have been removed from the list are not being called or that some substitutes are called whose names may not ever have be on the approved substitute teacher list. That also means that a teacher's absence is not currently being universally and automatically matched with a substitute teacher's assignment. In other words, teacher absences and substitute records at schools not using SubFinder may not be accurately correlated. A substitute teacher may be paid, but the teacher's absence may not be recorded in payroll.

Some principals and their teachers mistakenly believe that the SubFinder software does not allow a teacher to request a specific substitute or to pre-arrange a substitute for a multiple-day sub assignment. Not only does SubFinder allow these preferences, but it also allows teachers to voice record their lessons plans or other instructional activities for the substitute to hear.

In defense of their decisions not to use SubFinder, principals point to a provision in the teachers' bargaining agreement (*TEA Consensus Agreement – 2013-2014*) that says, "MBUs (members of

bargaining units) shall not be required to make more than one completed phone call to report an absence." These principals require that one phone call be made to the teacher's immediate administrative supervisor at the school. If the teacher communicates an absence to SubFinder either by telephone or by internet, these principals feel this constitutes two calls and thereby violates the terms of the bargaining agreement. However, in lieu of a personal telephone call from a teacher who is going to be absent, principals at schools using SubFinder accept the fax or email generated by SubFinder daily before classes begin, which not only lists all teacher absences for the day but also the substitutes assigned by SubFinder. In this way, they are notified of teacher absences without asking teachers to make two phone calls.

Attempts by HR administrative leaders to enforce use of SubFinder by all schools are not successful because no official written directive has been issued requiring it. A Governing Board policy that mandates all schools and all teachers to use SubFinder would provide sufficient support to the efforts of HR and payroll for more accountability in the system of reporting teacher absences and accurately paying substitute teachers for days worked. This policy should also require a positive match between a request for substitute pay and a teacher absence before the substitute pay is approved.

Finally, the HR Department should review SubFinder capabilities and develop the capacity for teachers to identify the reason for which a substitute is being requested, such as for professional development or personal leave. This will enable the HR Department to develop an understanding of patterns associated with substitute usage and may point to areas in which further improvements can be made to reduce substitute usage. (See related recommendation in *Chapter 5 – Financial Management* of this report regarding the integration of SubFinder and the district's payroll systems.)

Fiscal Impact

This recommendation can be implemented using existing resources. Moving forward, the district should include in its negotiations with TEA removing the provision in the current contract to allow MBU's to make more than one telephone call to report an absence. Ideally, the district should require teachers to telephone their immediate supervisor and request a substitute through SubFinder. There is research supporting the idea that teachers tend to be absent less often if they are required to notify their principal of impending absences by telephone,[10] so it would be preferable to have teachers do both steps.

Recommendation 3-6: Develop strategies to reduce employee absences on Mondays and Fridays.

Employee absences in virtually every school district in the U.S., especially among teachers, are higher on Mondays, Fridays, and the day before a holiday than any other workdays. Although data that would support or dispute this for TUSD were not available, TUSD adminstrative leaders believe the problem also exists in the district. Loss of work time that affects productivity among non-teachers and the

[10] Robert R. Freeman and Franklin D. Grant, "How We Increased Staff Attendance by 16 Percent and Saved $156,000," American School Board Journal 174 (2) (1987): 31

necessity to hire substitutes for absent teachers translate into mega-costs and measureable effects on overall student achievement. Nationally, administrative leaders in school districts are searching for strategies to reduce all absences but especially the preponderance of extended weekends.

Thirty-six percent of teachers nationwide missed more than 10 days of school during the 2009-10 year, according to an analysis of federal data by the Washington-based Center for American Progress.[11] The report estimates that teacher absences cost schools "a minimum of $4 billion annually" and cites research linking teacher absences to lower student achievement. Noting that teacher-absentee rates tend to be greater in schools with high percentages of minority students, the report adds that "it's plausible that [racial] achievement gaps can be attributed, in part, to a teacher attendance gap."

Table 3.4 shows the estimated TUSD costs for substitute teachers for the past three years and the first three months of 2013-14. While reducing the use of substitutes would mean that teachers would continue to accumulate unused leave time, the district could also realize a savings in a direct cost.

Table 3.4. Cost of Substitute Hours

School Year	Substitute Hours	Number of Days[1]	Cost[2]
2010-11	450,339.38	60,045.25	$4,503,394
2011-12	443,362.5	59,115.00	$4,433,625
2012-13	484,612.5	64,615.00	$4,846,125
2013-14[3]	155,139.37	20,685.25	$1,551,394

Source: TUSD data provided in HR-54

Notes: [1] Calculated at 7.5 hours per teaching day

[2] Based on lowest substitute rate of $75 per day

[3] Through November 26, 2013

The ability to find enough substitute teachers on Mondays and Fridays is a challenge that both SubFinder and teachers who call their own substitutes experience. On the Friday for which the review team was present, a small number of substitute needs simply went unmet, forcing other teachers or staff in the school to lose planning periods or other work time in order to cover classes for absent teachers.

Discussions of strategies among HR staff that would affect absenteeism on these days have already begun. One specific strategy that is getting serious consideration would require a new Governing Board policy and negotiated agreements that would charge an employee's leave balance, whether sick or personal, at a rate of 1.5 days if the employee is absent on a Monday or Friday or a day before or after a holiday unless the employee is on approved leave or presents a doctor's excuse for the absence.

[11] Raegen Miller, Teacher Absence as a Leading Indicator of Student Achievement, November 2012, www.AmericanProgress.org

Fiscal Impact

This recommendation can be implemented with existing resources and should result in either a reduction in the amount of leave teachers accrued and/or a reduction in the number of substitute hours paid. Estimated savings cannot be reasonably determined at this time.

Recommendation 3-7: Publish an online employee handbook, as well as detailed HR screens on the district's website to handle the top 10 most frequent calls to the HR Department.

TUSD does not have an employee handbook and there is little HR information available online. As a result, HR staff spend a great deal of time fielding many phone calls for basic requests, such as how to change one's name in the system after marriage.

The only HR-related handbook that TUSD provides for its employees on a regular basis is the benefits handbook, which describes in detail the various insurance and health-related benefits available as an employee of the district. Even though principals produce a faculty-staff manual at the school level, generally other supervisors of other departments in TUSD do not. The school handbooks rarely provide its readers with rules, regulations, and procedures in regard to HR functions. Neither do they communicate important state and federal laws in regard to employment or define the expectations of employees and management. An online employee handbook or manual for all employees would rectify this deficiency and provide a readily-accessible communications tool.

One of the recommendations from the MGT review of TUSD in 2008 reads, "Develop a comprehensive Web-based employee handbook that cross references key employment information, employment rules and regulations related to various contract requirements, and contact information for all human resources departments." Although the review team found some evidence of following-through on the recommendation, the project has never been finished.

Many school districts underestimate the value of an employee handbook. A well-drafted employee handbook provides written documentation of a division's policies and procedures. In addition, a well-drafted handbook includes critical policies based on state and federal labor and employment laws that require mandatory compliance. Some state and federal laws, in fact, require a policy based upon the statute to be included in any employee handbook. For example, all employers must comply with the Social Security Number Privacy Act, including having a statutorily mandated policy covering the act contained in their employee handbook if they have one. A well-drafted handbook is vital for reinforcing policies and allows employees to reference it often as situations arise in the organization. The value that a well-drafted employee handbook contributes is significant.

First, an employee handbook helps hold employees accountable for their conduct. The handbook should set forth the governing board's expectations and the consequences for employees that fail to comply. Second, a well-drafted handbook consistently applied and enforced sets the stage for defending an employer from potential liability. An example is where an employer's Equal Employment Opportunity policy requires an employee to file any complaint of discrimination or harassment internally. Filing an

internal complaint gives the employer the opportunity to investigate, address, and eliminate any discrimination and/or harassment that may be confirmed. If an employee fails to follow the employer's policy, the employer may use the employee's failure to do so as an affirmative defense in a subsequent discrimination and/or harassment lawsuit.

In order to be most accessible to employees and be easily updateable, the HR Department should publish an online employee handbook. It should contain all of the essential information, forms, and applications about any HR procedures, processes, or functions, thereby facilitating easy access by employees and reducing the time HR staff have to spend in copying, printing, collating, stapling, and distributing hard copies of individual documents needed and requested by employees.

Appendix D provides a sample table of contents for an online employee handbook recommended by the Society of Human Resources Management.

In addition to the handbook, the HR Department should significantly expand its webpage with resources for employees so that employees will begin to use the webpage as a first resource, instead of calling the HR Department for instructions on completing simple tasks, such as making a name change after a marriage. The current webpage has a limited number of entries in the FAQ section (five), and only seven forms in its forms section:

- Change of Address/Name/Emergency Contact Form
- Temporary Employment Application
- Request for Leave of Absence
- Intent to Separate (Retirement or Resignation)
- Notice to Rescind 'Intent to Separate'
- Short-Term Disability
- Sick Bank Donation

The newly created HR development team should be tasked with implementing this recommendation.

Fiscal Impact

This recommendation can be implemented with existing resources.

Recommendation 3-8: Discontinue printing hard copies of the TUSD benefits handbook.

Fort the first time, open enrollment for benefits in 2013-14 was conducted and completed totally online and was judged by TUSD leaders to be quite successful, a testament to the fact that employees are capable of conducting HR business totally online. Even though the complete benefits handbook was available online on the TUSD website, hard copies were also printed and distributed prior to open enrollment. Since employees can rely on benefits information online, there is little reason to print the 60-page benefits handbook.

Fiscal Impact

The HR budget manager reported that the total cost of printing the handbook for the past three years has averaged $6,566 per year.

Recommendation 3-8	One-Time Costs/ Savings	2014-15	2015-16	2016-17	2017-18	2018-19
Discontinue printing hard copies of the TUSD benefits handbook.	$0	$6,566	$6,566	$6,566	$6,566	$6,566

Note: Costs are negative. Savings are positive.

Recommendation 3-9: Improve records processing and maintenance.

The district maintains a large amount of paper-based employee records. The records are kept in nearly 100 file cabinets in a basement room of the central office. The file cabinets are not fire-rated, but the file room is plumbed for heavy sprinkling. However, the file cabinets are not waterproof, so while the sprinkler system might save the records in the event of fire, the water will quickly ruin them.

Two full-time employees staff the records room. They file paper records sent to them, respond to requests for information that require records review, and remove files that are scheduled for destruction. They also provide free paper copies of records as employees ask for them. Staff estimate that four reams of paper are consumed each week in making paper copies. The review team estimates that at least 0.25 FTE are required to make all the paper copies requested.

The district has begun a pilot record digitization project. Working with three separate companies, the project covers benefits and payroll records. While the digitization work by the outside vendors is proceeding, it was envisioned by the project creators that TUSD would also develop the capacity to do its own scanning from that point on. This portion of the project has not started. So, while the vendors are digitizing historical records, the district continues to create new paper records.

The district should:

- Complete the digital imaging pilot. These funds have already been committed via purchase order and the vendors are apparently making satisfactory progress. It appears they will be able to support the district in developing an effective structure for digital recordkeeping.

- Start scanning in-house now. TUSD will not overcome its reliance on paper by one-time outsourced projects and should be concurrently developing the processes to: 1) avoid creation of unnecessary paper records in the first place, such as making hard copies of employment applications created online so that a copy can be placed in the paper files; and 2) scan, digitize, and destroy copies of paper records whose creation cannot be avoided, then organize and secure the digital files.

- Charge for making employee record copies.

Fiscal Impact

The estimated cost for an in-house digitizing system is approximately $15,000. This will ultimately be offset by a reduced need for records staff, who can then be redeployed within the HR Department to other tasks.

The district should adopt a procedure of charging current and past employees a fee for making any copies from their files. Based on the time and materials required for this task, the district should charge at least 25 cents per page. The district will realize some income from charging for records copies, but should also recoup staff time from a reduced number of copy requests. Copy income is estimated to be $10,000 including a factor for the volume of requests going down once payment per copy is required.

Recommendation 3-9	One-Time Costs/ Savings	2014-15	2015-16	2016-17	2017-18	2018-19
Improve records processing and maintenance	($15,000)	$10,000	$10,000	$10,000	$10,000	$10,000

Note: Costs are negative. Savings are positive.

Commendation 3-3: The district has made improvements in employee bargaining unit relations and streamlined some aspects of the various agreements since the 2008 MGT study.

TUSD negotiates with a number of bargaining units, covering 5,972 employees (Table 3.5). Currently, the district negotiates eight agreements.

Table 3.5. Number of Employees in Each Bargaining Unit

Bargaining Unit	Description	Number of Employees Covered
WC1/CMB	TEA White Collar/Food Service	1,552
T55/T25/T70/T12/T45/T15/T35	Teacher Education Assoc	2,877
AD1	Admin E.L.I. Educ Leaders Inc.	138
CSP/CSF	Conf/Conf/Supv/Full/Part Time	165
ADE	Exempt Administrators	17
EXS	E.L.I. Exempt Research Elev	8
PSP/PSY	Psychologists Full/Part Time	39
BC1	AFSCME Blue Collar	889
SP1	Superintendent Cabinet	12
SC1	Supervisory/Professional	275
Total		**5,972**

Source: TUSD

The 2008 study recommended that TUSD, "Appoint a well-trained and experienced employee relations expert to conduct good faith Interest Based Bargaining (IBB), and be held accountable for negotiations and improved relations between unions and the TUSD." This has been accomplished. The district's Employee Relations Director and Chief Negotiator has been with the district in the same role for the past six years and has two employee relations assistants. The Director's focus has been on repairing the district's relationship with the various bargaining units and on smoothing out some of the differences between the agreements so that the district can better manage its operations. A key success in this area has been work in consolidating some of the prior leave plans, which were previously very different among the bargaining units. The Director estimates that the new consistency in the leave plans will save TUSD $5 million annually. In 2012-13, the Director estimates the impact of skilled negotiations resulted in a savings of $14 million, partially due to class size negotiations and partially due to the end of a salary increment credit that gave employees salary step increases for taking any class, regardless of whether the class would develop skills of use in the employee's job.

Another example of the success of this position can be found in the district's average benefits percentages by employee groups. As shown in Table 3.6, despite rising health care and benefit costs generally, TUSD has managed to keep its average benefits percentages nearly flat for the past five years.

Table 3.6. Change in Average Benefits Percentages Over Time by Bargaining Unit

Unit	2010	2011	2012	2013	2014	Percent Change
ADE	22.3%	23.0%	24.6%	23.9%	23.2%	3.9%
ADM	22.7%	22.6%	22.9%	24.7%	23.3%	2.6%
BCL	32.5%	33.2%	34.0%	35.2%	30.6%	-5.9%
CCS	26.6%	26.3%	26.8%	27.5%	24.9%	-6.6%
EXC	24.1%	24.6%	24.8%	26.0%	25.3%	5.0%
NON BGU	15.3%	14.8%	21.0%	16.4%	13.8%	-9.8%
OTPT*		23.9%	22.8%	25.2%	25.1%	
PSY	25.4%	25.6%	25.7%	26.2%	26.2%	3.1%
Retiree	9.7%	9.2%	9.0%	17.0%	16.5%	70.1%
SPT	23.2%	18.7%	20.5%	23.7%	20.7%	-10.7%
Sup Prof	28.2%	28.3%	28.3%	29.3%	27.0%	-4.4%
TCH	26.7%	27.0%	27.3%	28.5%	28.4%	6.2%
WHC	33.1%	33.4%	33.9%	35.1%	32.1%	-2.9%
EXM	24.0%	24.7%	25.4%	26.9%	25.7%	6.8%
All Employees	**27.2%**	**27.4%**	**27.7%**	**28.7%**	**27.3%**	**0.4%**

Source: TUSD (HR_53).

Note: *OTPT data not provided for 2010

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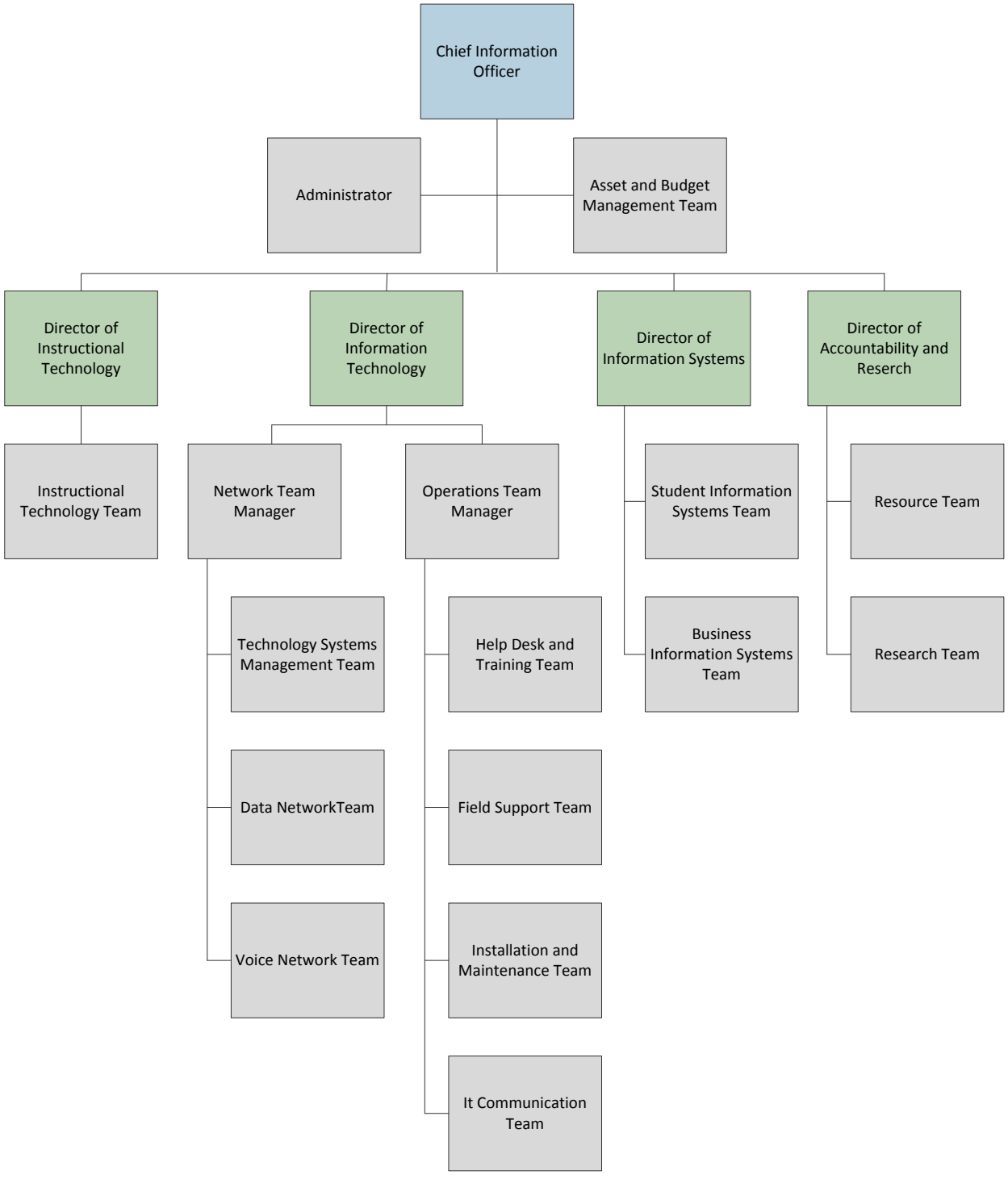
Chapter 4 – Technology Management

Technology plays an integral part in all aspects of school life, from its use to engage students, to being a vehicle to connect teachers from across the district, to streamlining administrative tasks such as payroll, to conducting assessment testing, and as an efficient way to communicate with parents and the community.

The Technology Services Department provides technology support and services for the students and staff in the Tucson Unified School District (TUSD). The department is headed by a Chief Information Officer who reports to the Deputy Superintendent of Operations. The department is organized into four sections: Instructional Technology, Information technology, Information Systems, and Accountability and Research.

Figure 4.1 displays the current organization of the TUSD Technology Services Department.

Figure 4.1. Current Technology Services Department Organizational Structure



Source: TUSD Technology Services Department 2014

According to 2013-14 TUSD budget, the Technology Services Department has 93.8 full-time equivalent (FTE) staff which is 7.8 FTEs less than the previous year. In 2013-14, the Technology Services Department's expenditures for all funds was $12,847,723. This represents an increase of $5,999,206

(88%) from the previous year's expenditures of $6,848,517 (all funds). However, this increase is largely attributed to capital fund expenditures of $5,261,105 (not incurred in 2012-13) and a $771,941 (293%) expenditure increase in desegregation funds. Due to increased use of remote access tools and a reduction in the average age of computers in the district, field service technician positions were decreased in 2013-14. The increase in capital spending was due to the district's multimillion dollar infrastructure project called the Information Technology Infrastructure Modernization Initiative (ITIMI). Table 4.1 shows both department FTEs and expenditures by funds for the last two years.

Table 4.1. Technology Expenditures, 2012-2014

	2012-13	2013-14	Difference
Operations and Maintenance (O&M) Fund	$6,584,730	$6,550,890	($33,840)
Desegregation Fund	$263,787	$1,035,728	$771,941
Capital Fund	$0	$5,261,105	$5,261,105
Total	**$6,848,517**	**$12,847,723**	**$5,999,206**

Source: TUSD 2013-14 and 2012-13 Budget Documents

TUSD has been behind in technology for many years. The district's technological gaps can be attributed to the frequent change in district and departmental leadership, funding issues with the federal e-Rate program, and lack of funding for technology. However, over the past two years, TUSD has made significant investments towards improving the technology in the district. In addition to replacing the districts aging computers and devices in schools, in 2012, the district started the ITIMI project. The primary objectives of the ITIMI were to:

- Upgrade and improve the district's local area network infrastructure and make wireless access possible in each site.
- Upgrade and improve the district's wide area network infrastructure and its speed.
- Upgrade and improve the district's aging telephone systems.

The ITIMI initiative is estimated to be completed in spring 2014.

While this initiative will bring much needed technology upgrades to TUSD, the district will still have significant challenges in the area of technology. The district is using an aging, home-grown student information system that has non-integrated and outdated modules to provide student information system functionality to the district, students, teachers, and parents. The district has two separate enterprise resource planning (ERP) software systems for finance and human resources functions. This not only makes the support of these applications extremely difficult, it also inhibits the district's ability to integrate and automate some of the key processes in finance and human resources.

The district has recently hired experts and consultants to guide the district in business process re-engineering and ERP selection, and has had a detailed departmental review conducted by a third party.

Following are recommendations to further assist TUSD and its Technology Services Department in improving technology within TUSD.

Recommendation 4-1: The district should use a requirements-based application selection process for identifying and selecting an ERP system and student information system.

In 2008, TUSD decided to procure a new ERP system to replace their existing human resource and finance system. According to TUSD staff and a previously published consultant's report, "TUSD Strategic ERP Evaluation Business Case", the decision to procure a new ERP system was primarily to automate the district's manual processes that the outdated and heavily customized old system could not handle. However, after implementing the finance and procurement modules in 2011, the district suspended the implementation of the new ERP system and remaining modules. The suspension was in large part due to the lack of functionality of the system, issues with overly complex district processes, and lack of effective project management both from the district and the ERP vendor. According to the "TUSD Strategic ERP Evaluation Business Case" report, some of the major issues with the selection and implementation included:

- TUSD did not conduct an ERP needs assessment prior to issuing the Request for Proposal (RFP) for software and services.
- TUSD did not invest in Business Process Reengineering prior to the ERP implementation.
- Lack of data driven analysis to make sound business decisions meant that major procurements, such as the RFP for software and services, were awarded based upon vendor presentations rather than an objective analysis of TUSD business needs.
- Lack of change management, planning, and documentation of business requirements resulted in difficulty in overcoming resistance to change.

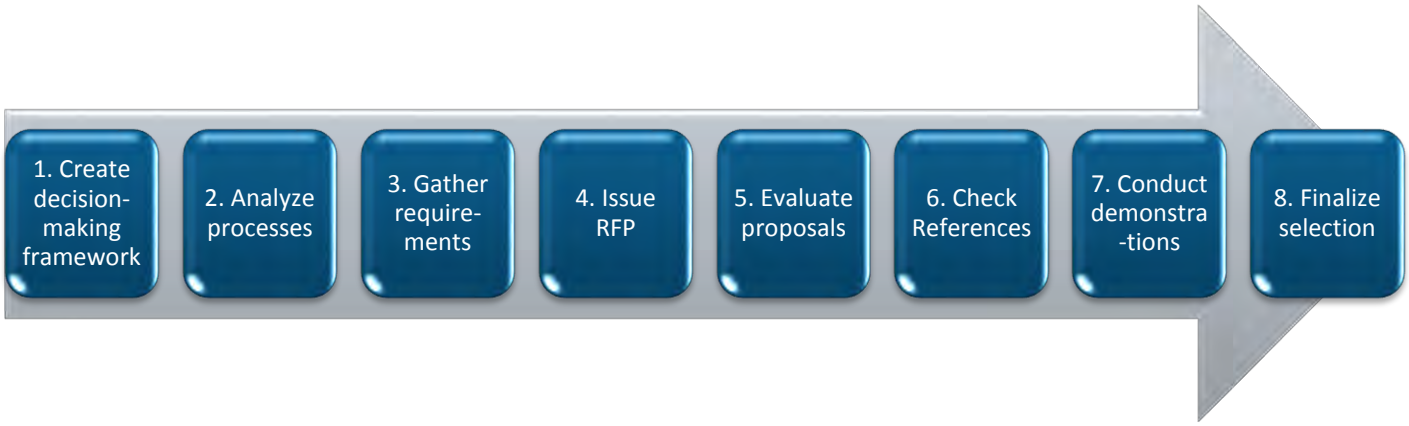
The district could have avoided most of these issues if they had utilized an application selection process that included analyzing existing business processes, gathering system requirements from district staff, and evaluating potential vendors against the district's critical requirements rather than the vendor's generic functionalities.

The district currently has two separate ERP systems that are not integrated. As a result, many of the district process are still manual and/or inefficient. The district is moving towards addressing its ERP system issues. In the process of addressing these issues the district has undertaken a large technology infrastructure project to upgrade its cabling wiring and connectivity infrastructure. In addition, the district has documented over 100 key human resources and payroll processes.

TUSD should use a requirements-based application selection process for identifying and selecting a new ERP system. The district's student information system is also outdated and consists of non-integrated modules that result in teachers having to make duplicate entries for student-grade reporting and not having the functionality they need. The district should use the same application selection process for the student information system and the ERP system.

Following are eight key steps to a sound application selection process (see Figure 4.2).

Figure 4.2. Key Steps for Selecting a districtwide System



- **Step 1: Create a decision-making framework.** This step may include creating committees and selecting staff to key roles for the project. Usually, there are two committees in a system selection project: (1) an executive committee, which consists of senior district leadership and is responsible for making high-level decisions, and (2) an operational committee, which consists of subject matter experts, who performs the day-to-day work related to the system implementation.

- **Step 2: Analyze processes.** The second step in the process includes capturing key "as-is" processes and reviewing the processes to identify how these processes can be changed so that they can be improved and or simplified.

- **Step 3: Gather requirements.** In this step, the district should interview key staff to identify functional user requirements for the new system. The district should also ensure that all state, federal, and district compliance and reporting requirements are captured. Additionally, any requirements gathered from the process analysis are incorporated into the final requirements document. Once user requirements have been captured, the district should prioritize each captured requirement in order to help distinguish between the responding proposers' systems.

- **Step 4: Issue request for proposals**. Step four is developing and publishing a competitive RFP. Prior to preparing the RFP, the district should identify and finalize the vendor evaluation and selection criteria, so that appropriate information is requested from responding vendors. The criteria should include cost, user requirement response scores based on priority, demonstration scores, references, and market information (such as number of installations in Arizona schools).

- **Step 5**: **Evaluate proposals.** Once all proposals have been received, TUSD should begin the evaluation phase of the selection process. This includes evaluating each vendor based on the evaluation and selection criteria developed by the project committees.

- **Step 6: Check references**. Once finalists have been determined, TUSD should perform reference checks for each finalist. The district should create questions for each reference call and, if possible, conduct site visits to referenced school districts.

- **Step 7: Conduct demonstrations**. Finalists should be asked to visit TUSD and provide a product demonstration for the committees and key users. The district should create demonstration scripts that include key and unique processes to their school district that vendors should include in their product demonstration. Score sheets should be created for staff to use for scoring each vendor during demonstrations. If possible, requesting a demo system, or sand box, for further review is recommended. All demonstrations should be recorded, as vendors tend to make representations regarding product capabilities during these sessions.

- **Step 8: Finalize selection**. As a final step, the district should finalize its selection and start the price and contract terms negotiations. TUSD should seek outside legal assistance to ensure that the contract adequately protects the district and holds the vendor accountable.

Fiscal Impact

The cost of implementing the above process for defining requirements, evaluating proposals and vendors, and selecting and contracting with a vendor can be accomplished with existing resources. The cost of new ERP and student information systems will not be known until the RFP process is completed.

Recommendation 4-2: Bring all technology-related staff and resources that are located in other departments into the Technology Services Department.

There are pockets of technology staff and resources that are outside the Technology Services Department in TUSD, which causes inefficiencies and also may potentially cause compliance issues and data loss. Table 4.2 shows some of the technology resources that work outside the Technology Services Department.

Table 4.2. TUSD Technology Resources Outside the Technology Services Department

Department	Software /Hardware	Type of Technical Work	Number of Technical Staff
Operations	▪ MapNet (bus routing system) ▪ MapCon Facilities (work order system)	▪ Web development ▪ Report development ▪ Programming	3
Exceptional Education	▪ TieNet	▪ Web development ▪ Report development ▪ Programming	1
Communications	▪ District Web pages	▪ Web development	1
Food Services	▪ Food Services application, ▪ Point of Sales devices, Servers and workstations	▪ Web development ▪ Report development ▪ Server & device support	2
Human Resources	▪ PeopleSoft Human resources Module	▪ Functional Analyst ▪ Report development	1
Purchasing	▪ Lawson Purchasing Module	▪ Functional Analyst ▪ Report development	1

Department	Software /Hardware	Type of Technical Work	Number of Technical Staff
Curriculum and Instruction	▪ ATI Galileo	▪ Web development ▪ SharePoint Development	1
Desegregation	▪ Unitary Status Plan reporting	▪ Web development ▪ Report development	1
*Accountability and Research	▪ Gradebook, Parent Portal, Assessments	▪ Web development ▪ Report development ▪ Programming	7

Source: Interviews with TUSD staff

Note: (*) The Accountability and Research group has recently been moved under the Technology Services Department. However groups of technology staff still work separately from the Technology Services Department's student information system group despite both groups working on the district's student information system.

There are several issues with having technology resources that are outside the control of the Technology Services Department:

- **Lack of documentation**: Technical staff that are outside the Technology Services Department spend less time documenting information because they are fewer in number and busy with actual work. This becomes a problem when specialized and dedicated technical staff leave the district as it may take a considerable amount of time for the replacement technical staff to bring himself or herself up to speed.
- **Lack of backup**: Technology staff that are outside the department may not recognize the importance of back-ups or may not have the skills necessary to provide the needed redundancy to the department's technology resources such as servers and applications.
- **Lack of standards**: Technology staff that are outside the department may not have standard communications protocols with the technology department staff or with each other. Since they are not part of the Technology Services Department, they cannot be held accountable for standards that are set by the department. As a result the organization may have different, and sometimes conflicting, technology-related processes or hardware and network configurations that may cause issues for the entire organization.
- **Lack of security**: Technology staff that are outside the department may not have the proper training or knowledge for maintaining a secure technology environment. Creating a sufficiently secure environment for the department's technology resources and applications depends on that department's technology staff's knowledge and capability. Like backup and documentation, the risk of not having security or not having security up to industry standards are common with these cases.
- **Lack of efficiency**: Usually technology operations that are outside the department are small and do not share resources with each other or the Technology Services department. As Table 4.2 indicates, each pocket of technology staff have their own servers, individual programmers, or

database administrators. This creates an environment where multiple staff and resources are used. Consolidating the technology needs may save the organization time and money.

Pockets of technology are usually born due to ineffectiveness or limitations of the technology department. Other departments in need of technology resources and staff stop relying on the organization's technology department and start acquiring their own technology resources because they get results faster.

Before consolidating these pockets of technology resources and staff under the Technology Services Department, the department leaders should meet with each TUSD department or group that has these pockets of technology staff and resources and assure them that the level of service they receive from these individuals will not change when they move to the Technology Services Department.

Since TUSD has several pockets of technology, a gradual consolidation of technology services is recommended. The department should start consolidating the Accountability and Research group first.

Fiscal Impact

TUSD can implement this recommendation with existing resources.

Recommendation 4-3: Use staffing formulas and service-level metrics to determine the number of staff necessary to maintain TUSD's computers and devices.

According to the 2013-14 TUSD budget, the Technology Services department has 26 field technicians, which is 7.8 FTEs less than the previous year. Eleven lead field technicians are providing support for the districts estimated 22,000 computers and devices in more than 87 schools and locations.

Interviews with the Technology Services Department and district staff indicated that TUSD is not using a formula and has not established a formal relationship between the number of support staff and the devices they support. This make it difficult for the district to know whether they have enough staff to provide services to the end users.

Based on 22,000 computers and devices with 37 field technicians, the district's device-to-technician ratio is 594 to 1. This ratio is slightly over the Michigan Technology Staffing Guidelines for school districts of 500 to 1, indicating fewer staff relative to the number of computers/devices. However, most school districts operate at much higher ratios (lower staff levels).

Many different formulas for calculating device-to-support-technician ratios exist. However, it is difficult to have one that fits all cases because there are environmental factors that affect each organization's support structure including:

- The organization's geographical size — buildings widely separated or not
- Building's age and the condition of its wiring
- The age and the quality of computers and devices

- Imaging capabilities
- Usage of remote access tools
- Vendor maintenance agreements for computers and devices

Fourteen years ago, The Michigan Department of Education developed the Michigan Technology Staffing Guidelines. According to these guidelines, TUSD needs one technician for every 500 computers. More recently, according to the Help Desk Institute's 2012 Desktop Support Practices and Salary report, organizations that have more than 10,000 end users have an 800 to 1 computers-and-devices-to-technician ratio. Table 4.3 provides information regarding devices-to-technician ratios from school systems that are similar in size to TUSD.

Table 4.3. Device to Technician Ratio, TUSD and Select School Systems

District Name	Student Enrollment	Number of Staff	Number of Schools	Number of Field Support Technicians	Number of Computers / Other Devices	Number of Devices per Technician
Katy Independent School District	64,408	7,741	57	20	50,000	2,500 to 1
Fort Bend Independent School District	69,123	7,943	74	25	52,000	2,080 to 1
Round Rock Independent School District*	45,588	5,661	51	*7	32,000	4,571 to 1
Mesa Public Schools**	65,000	10,500	86	17	28000	1,647 to 1
Tucson Unified School District	49,872	5,586	84	37	22,000	594 to 1

Source: Gibson Consulting Group, Inc.; TUSD 2013

Note: *Round Rock ISD has school-based instructional technology staff assist technicians part time
**Mesa Public Schools has 17 Education Technology Trainers that assist on curriculum hardware support

The district should develop and employ a formula for determining this ratio that is reviewed on a periodic basis as technology variables change. These variables include the amount of equipment to be maintained; the age and condition of equipment; the number of software applications that are installed and maintained; the number of staff required to handle smart boards, projectors, and other non-computer technologies; and the number of management support staff required to maintain efficient operations.

Before the district considers adding/removing technician positions to/from the Technology Services Department, TUSD should determine the device-to-computer ratio that fits their organization. The district should evaluate work-order-management reports to better understand workload and the efficiency of current technicians. Based on these management reports and the needs of the schools in

the district, the district should then make the necessary adjustments to the Technology Services Department's staffing.

Fiscal Impact

This recommendation can be implemented with existing resources.

Recommendation 4-4: Develop a project management methodology using industry standards and implement it throughout the department.

The Technology Services Department does not utilize a project management methodology including tracking expenditures, staff time, and project timeline. When a methodological way of managing a project is lacking, districts run a high risk of over-committing its resources and failing to deliver critical projects on time and on budget. Currently, each area of the Technology Services Department has their own project list. However, not all technology projects are documented and captured on this list. There is not one consolidated list of projects to show all the projects that TUSD as a whole or that the Technology Department staff are working on.

In addition to having a list, the department should have documented project information such as completion percentage, project priority, project budget, and project due date. Without detailed documentation about the projects, it is difficult, if not impossible, for the department leaders to inform district staff about the potential impact of a new project on the existing workload or on the status of an existing project.

The department should create a formal technology project list and project documentation in line with project management industry standards for all existing projects. The department should ensure that department staff follow industry standard project management methodology for all new projects.

Table 4.4 shows some of the key elements of a project management methodology.

Table 4.4. Project Management Methodology

Key Elements	Details
Developing common standard process and templates to formalize project management process.	▪ The department uses a formal project initiation, classification and approval processes. ▪ The department uses project charter template to initiate new projects. ▪ The department uses the status report template to notify project sponsors and participants. ▪ The department uses the post project satisfaction survey to get feedback from project sponsors and participants.
Capture information in writing	▪ Project sponsors ▪ Project requirements ▪ Project due date ▪ Project resources with roles and responsibilities ▪ Project priority ▪ Project status ▪ Project budget

Source: Gibson Consulting Group, Inc.

The Technology Services Department should adopt a project management methodology at minimum that includes the processes and components listed in Table 4.4 and use it for all current and future projects.

Fiscal Impact

TUSD can implement this recommendation with existing resources.

Recommendation 4-5: Update the Technology Services Department job descriptions according to current departmental needs.

Although there are job descriptions on file for all TUSD Technology Services Department staff, not all job descriptions are up-to-date. Current job descriptions do not accurately reflect job duties being performed by the department's staff members.

For example, according to the technology services field technician job description, the technician should be able to support Windows 2000 and Windows XP environments. These operating system environments are 12 to 14 years old. TUSD's computer environment consists of newer and different operating systems as well as other manufacturer's operating systems. There are also devices other than computers that could support TUSD, such as tablets and smartphones. Job description should reflect the current needs of the district.

In addition to updating current job descriptions so that they reflect the true needs of the district, the Technology Services Department should add new job responsibilities to current positions or create new

positions when new technologies that the district needs emerge. Virtualization of servers, desktop computers, and mobile device management functions are becoming critical for all technology organizations. TUSD's Technology Service Department should either create new job descriptions or add these functions to existing job descriptions so that the district can hire new staff or send their existing staff to training on these new critical technical areas.

Job descriptions should be updated on an annual basis to ensure that they clearly reflect current responsibilities. Once job descriptions are up-to-date, the district can better analyze the administrative and technical needs of the department and make informed decisions regarding any changes or adjustments needed for the department's staff.

Fiscal Impact

TUSD can implement this recommendation with existing resources.

Recommendation 4-6: Conduct a feasibility analysis to identify ways to have a data center that is on par with industry standards.

TUSD's data center has not only reached its maximum capacity and cannot accommodate further growth, but less than ideal environmental conditions make it very risky for the district to continue to store and operate their critical servers and network equipment. According to interviews with department staff, TUSD's current data center has experienced a water leakage problem. Also, the review team observed more than 10 portable fans in use to prevent servers from overheating. The data center's current cooling system is not sufficiently cooling the center, and TUSD is using multiple portable fans in attempt to keep the data center at the appropriate temperature. The location of these fans and cables creates a less than ideal environment for staff to operate in the data center. Lastly, the data center does not have a suitable fire prevention or suppressant system.

The Technology Services Department is aware of these issues with the data center and is looking for ways to address them. The department should conduct a feasibility analysis of having an industry standard data center. In this analysis, the department should compare costs, benefits, opportunities, and risks of the potential options. The options for consideration should include building a brand new data center; repurposing an existing school district location for a data center; outsourcing the data center to a private company; sharing data center resources with local governmental entities like City of Tucson, or the University of Arizona; repairing the current data center; and doing nothing. The analysis should include one-time related investments and at least five years of on ongoing expenditures.

The outcome of the study may result in substantial down time of district servers and services. As such, the department should communicate the results and the plan for mitigating these issues to the district in advance and prepare for contingencies.

Fiscal Impact

TUSD can implement this recommendation with existing resources.

Recommendation 4-7: Implement the recommendations from the Dell, Inc. IT Simplification Assessment.

In spring 2012, TUSD hired Dell, Inc. to conduct an IT Simplification Assessment project of the Technology Services Department. The goal of the assessment was to provide TUSD with a detailed analysis of its information technology operations and environment. The review report included a list of findings focused in the following four key areas:

1. Processes and documentation
2. Tools and automation
3. Employee care and training
4. Enterprise risk

Table 4.5 shows a summary of findings in each of these key areas.

Table 4.5. Summary of IT Simplification Assessment Findings

Key Area	Summary Findings
Process and Documentation	▪ Technology Services processes are not documented, integrated and available in a central repository. ▪ District does not have any formal change management processes in place. ▪ The help desk staff does not have a process in place for routing calls to internal support groups. ▪ No formal problem management is in place. ▪ License management in Tucson Unified School District is not formalized.
Tools and Automation	▪ Many processes are manual within Technology Services department. ▪ The ERP in TUSD is on mid-level introductory level storage that is not enterprise class and represents a single point of failure on this critical application. ▪ It is estimated that 91% of data stored in Tucson would be considered permanent and rarely or never retrieved. ▪ Technology metrics in TUSD are not automated and readily available on a central dashboard. ▪ There are no standard processes for tracking, reporting and analyzing operational level and service level agreements. (OLAs and SLAs not in place).
Employee Care and training	▪ Job descriptions within TUSD would be considered limited or partially defined in Technology Services. ▪ The approach to employee training across Technology Services would be considered minimal. ▪ Communication and communication plans are lacking. ▪ There is not a formal mechanism for communication between Technology Services and various departments. ▪ Customer satisfaction surveys are not currently being utilized to drive continuous improvement and provide employee feedback. ▪ Employees are not consistently receiving performance evaluations

Key Area	Summary Findings
Enterprise risk	▪ Physical access to the data center would be considered easily attainable for employees, contractors and guests. ▪ There is no formalized Disaster Recovery Plan in TUSD. ▪ Currently firewall services are disabled by the server team. ▪ TUSD is currently not using any network authentication solutions, but they are moving in that direction. ▪ The wireless in TUSD is WPA2 and everyone uses the same key. ▪ There are no ongoing internal security audit processes in TUSD. ▪ Backup methodologies for key data are not refined or standardized.

Source: Dell, Inc. IT Simplification Assessment, 2012

Based on the findings in Table 4.5, the report made the following recommendations for TUSD (see Table 4.6). The recommendations are listed in order of implementation priority outlined in the assessment report.

Table 4.6. IT Simplification Assessment Recommendations

Recommendations
1. Develop IT governance with formalized strategic planning and communication
2. Enhance the security environment by mitigating risks
3. Develop and implement a disaster recovery plan
4. Develop an industry standard service desk environment
5. Implement a services management framework
6. Develop a service catalog with defined service level agreements
7. Become performance driven by implementing comprehensive monitoring and metrics collection
8. Enhance the Use of Tools and Automation with emphasis on storage
9. Implement employee professional learning plans aligned with job descriptions
10. Become process oriented by enhancing documentation practices
11. Explore cloud readiness upon completion of the modernization project and enhance messaging

Source: Dell, Inc. IT Simplification Assessment, 2012

The review team had similar findings during the current study of the TUSD Technology Services Department and believes the district would benefit from implementing these recommendations.

Fiscal Impact

Some of these recommendations may require TUSD to invest in technology tools, hardware, software, or consulting services. However, without further detailed analysis and a potential RFP process, it is difficult to estimate what the total fiscal impact for the district would be at this time.

Chapter 5 – Facilities Use and Management

Introduction

School facilities should be designed and maintained to support the educational curriculum and to provide an effective learning environment that is educationally adequate to deliver the curriculum. Having suitable facilities requires good planning, which is made possible by accurate measurement of school capacities and enrollment projections. There must be good communication between facilities planning, design and construction, and facilities management. Finally, processes to enable feedback from the operations and maintenance of facilities to planning and design are important to enhance the quality of new and renovated schools.

Once schools are built, preventive maintenance (i.e., an ongoing plan for addressing annual maintenance and operations) and a long-term capital improvement program are critical. One of the most important aspects of maintaining facilities in the long-term is preventive maintenance. Through preventive and predictive maintenance, life-cycle costs are reduced and the serviceable life of facilities is extended. Beyond maintenance, an aggressive energy management program is critical to reducing operating expense and providing a sustainable building environment. In addition, adequate custodial and grounds operations are necessary not only to provide clean buildings and grounds, but healthy and suitable learning environments as well.

This chapter presents commendations and recommendations for facilities use and management for Tucson Unified School District (TUSD) and includes the following major sections:

- School Size and Configuration
- Facility Asset Management and Inventory Control
- Building Maintenance
- Maintenance
- Groundskeeping
- Custodial Services
- Energy Management

The departments reviewed as part of this study fall under the responsibility of the Chief Operations Officer and included: Facilities Maintenance, Buildings and Grounds, Architecture and Engineering, School Safety, Student Assignment (Planning), and the Business Office. The team conducted interviews, reviewed data and documents, assessed processes and visited school sites to support the analyses and efficiency evaluation.

Based on the date when the efficiency audit was conducted, TUSD active facilities included 49 elementary schools, 10 middle schools, 10 high schools, 13 K-8 schools, five alternative schools, and various administrative/support buildings. The total of school and administrative support space throughout the TUSD (including portable buildings) is approximately 9.2 million square feet. At the time

of this review, a number of schools had recently been closed and some were in the process of reopening as daycare facilities. There were a number of disparate databases with facilities data that had different building space values due to the dynamic nature of the facility activation/closures[12].

Table 5.1 presents a summary of the reported number, area, and current replacement value (CRV) of the TUSD facilities as of the date when the study was conducted.

Table 5.1. Summary of TUSD Facilities

Facility Category	Number	Area (gsf)[1]	CRV[3]
Elementary Schools	49	2,183,988[2]	$415 M
Middle Schools	10	983,629	$202 M
K-8 Schools	13	1,058,489	$217 M
High Schools	10	3,341,538	$718 M
Alternative schools	5	132,851	$25 M
Total Active Schools	**87**	**7,700,495**	**$1,577 M**
Support Facilities	26	391,237	$66 M
Closed Schools	21	1,074,969	$211 M
Total	**134**	**9,166,701**	**$1,854 M**

Source: TUSD, 2013

Notes: 1. Total school areas include portables.
2. It was reported that two of the listed closed schools have reopened as daycare centers.
3. Current Replacement Values (CRV) calculated based on the following standard unit rates:
   - Elementary schools - $190/sf
   - Middle schools - $205/sf
   - High schools - $215/sf

In general, leaders of the TUSD Operations organization have recognized the need for better planning, managing, and operating its school buildings. Several efficiency improvement initiatives had been identified and were in the early stages of implementation at the time of the site visits. There appeared to be consensus of the need and desire to implement changes, but concern regarding the availability of resources to implement changes in a timely manner.

This chapter offers recommendations that should be considered in order to improve the effectiveness and efficiency of the TUSD organization, as well as to enhance operations and maintenance and to reduce overall costs.

[12] Reference documents Fac_71 - Building Sqft, Fac_71 - Enr-Cap 2013 EA, Fac_75 School SF Table, Facilities Condition Index Master - SqFt-Yr, and Fac_77-105 - Any Facility Condition Evaluation Studies - FCI Main Sheet.

School Size and Configuration

School sizes and configurations within the district are developed following TUSD Educational Specifications (Ed Specs) and design guidelines. These guidelines were reported to be based on the Council of Educational Facilities Planners International (CEFPI) space standards and in accordance with Arizona Administrative Code Title 7 – Education, Chapter 6 – School Facilities Board, Article 2 – Minimum School Facility Guidelines.

The TUSD Operations Division has made significant progress in consolidating schools over the past few years to increase the utilization of space and decrease underutilized buildings and excess seats. While this is never an easy process, the results have substantially reduced operating and maintenance costs, as well as utility costs across the district. TUSD has reduced the total square footage per student from one of the highest in the state (about 174-175 sf/student) to state average levels (152 sf/student) through the closing of 19 schools.

While TUSD has made significant progress in consolidating schools over the past few years, there is still a substantial amount of excess capacity. Enrollment projections indicate the current enrollment of about 50,000 students will continue to trend down to about 45,000 students within five years and to 43,000 students within the next 10 years.

Trends also indicate that TUSD has gone from a school area to student ratio of 175 sf/student prior to the school closings to 151.2 sf/student overall. This is in line with state averages, but above Arizona peer district numbers. National median school district ratios of school area to student enrollment compared to TUSD ratios and targets are shown in Table 5.2.

Table 5.2. School Ratios of Area per Student

Facility Type	TUSD Actual	TUSD Target	National Average[13]
Elementary Schools	107.6 sf/student	105 sf/student	120 sf/student
Middle Schools	135.7 sf/student	110 sf/student	146 sf/student
High Schools	232.1 sf/student	120 sf/student	163 sf/student

Source: TUSD, 2013; Council of Educational Facility Planners International

The TUSD high schools appear to be the most underutilized facilities within TUSD. The specific high schools currently under capacity include: Catalina HS (68% of operating capacity), Palo Verde HS (46%), Sabino HS (54%), and Santa Rita HS (45%). There are also 11 elementary and middle schools with student to operating capacity ratios of less than 70 percent. Based on a review of school enrollment projections, percent of capacity rates, and school operational capacities, there are between 13,000 and 14,000 available (student) seats across all active schools.

[13] CEFPI Calculating School Capacity: Local, State & National Perspectives, October 2007.

In addition to the excess capacity of the schools, there are approximately 300 portables at school sites across TUSD. Approximately 131 of the portables are located at schools that are well under capacity. These portables are being cleaned, maintained, and using energy at a very high cost to the district.

Recommendation 5-1: Reduce the number of active portable classrooms.

There are 303 portable classroom units listed in the TUSD inventory. Based on a review of the capacity analyses and locations, TUSD could eliminate the use of about 130 portables (approximately 118,500 sf). The portables were reported to be owned (no leases) so the net savings would be due to reduced maintenance and repair, custodial services, and utilities. Portable units are less energy efficient and require more maintenance.

Fiscal Impact

The fiscal impact is based on shutting down 130 portable units and assumes a reduced budget will be required for ongoing operations (utilities, custodial, and maintenance). At 118,000 square feet and a savings of $4.21/SF, this yields a savings of $500,000. This is in comparison to the average plant ops cost of $5.42/SF.

Recommendation 5-1	One-Time Costs/ Savings	2014-15	2015-16	2016-17	2017-18	2018-19
Reduce the number of active portable classrooms.	$0	$500,000	$500,000	$500,000	$500,000	$500,000

Note: Costs are negative. Savings are positive.

Recommendation 5-2: Continue to evaluate school capacities and consider further school consolidation.

Based on a review of the capacity analyses and available reserve seats, there is potential to consolidate up to nine elementary schools and one to two high schools. The capacity analyses should be expanded to include physical, operational, and programmatic variables. The analyses of the high schools should also consider function, program, and temporary capacity in addition to maximum and operational capacities. Program capacity takes into consideration total student seats, support facilities, schedule flexibility, program offerings, and utilization. Typical utilization rates for high schools are between 80 and 85 percent, while elementary school utilization rates are generally between 95 and 100 percent (tighter scheduling yields higher utilization).

Best practices in determining school capacities have been researched and reported by CEFPI. School capacity is defined as the number of students that can be reasonably accommodated by a school building and site. In determining optimal school capacities, it is important to consider physical, operational, and programmatic variables.

- **Physical variables include**: school size, areas by type, site size and amenities, support facilities (e.g., kitchens, cafeterias, multipurpose rooms, etc.), number and types of teaching stations, building infrastructure, building and life safety codes.
- **Operational variables include**: school utilization rates, efficiency of space use, operational policies, staffing levels, funding structures, space management and scheduling, specialty academic and program offerings, and operational budgets.
- **Programmatic variables include**: educational program offerings, specialty programs, schedules, extended use, community use, partnerships (i.e., off-site and distance learning), class sizes, and staff ratios.

Calculating accurate and suitable school capacities is critical to distributing the correct enrollment levels (correct number of students) in each school, as well as planning for schools to best accommodate projected enrollments. Optimizing utilization (the number of students enrolled to school capacity) will minimize operational costs to the district. Other impacts of the school capacity/planning process include: adjustment of attendance boundaries, minimization of overcrowding and underutilization, maximizing educational resources, improved life safety and security, and justification of school construction funding.

The TUSD Student Assignment Department calculates both design and operational capacities for each school. The design capacity is equivalent to a "maximum capacity" – the total number of seats available in a school facility. The operational capacity considers only teaching stations and the desired number of students per classroom. The operational capacity can vary within a school based on reconfiguration or reallocation of classroom space to resource rooms or other functional uses. Many of the TUSD schools appear to have reallocated space, thus reducing the operational capacity and increasing the utilization.

School utilization is the educationally appropriate percentage of the school day that teaching stations can be used for instruction. This may also be viewed as the ratio of unoccupied to occupied seats per teaching station per period of the school day. Typical average utilization benchmarks for schools have been reported as follows (CEFPI):

- Elementary schools – 95 to 100 percent
- Middle schools – 70 to 85 percent
- High schools – 80 to 85 percent

School utilization rates can be increased by appropriate scheduling and efficient use of school space. The tighter the scheduling of space, the better the utilization rate for the school. Utilization rates should be used in conjunction with design (maximum) capacities. TUSD should consider alternative approaches to looking at design capacity in conjunction with utilization rates. A closer look into space use and classroom reallocations to resource rooms should also be considered.

One final complication in the effective planning of school enrollments and capacity analyses is the TUSD open enrollment policy (School Choice). It was reported that up to 40 percent of students do not go to

their home school from a geographic school boundary perspective. This makes it more difficult to project enrollments on a school by school basis.

Fiscal Impact

This cost savings is based on closing nine elementary schools and two high schools. The estimated cost savings reflects TUSD's historical cost data for savings related to schools closing.

Recommendation 5-2	One-Time Costs/ Savings	2014-15	2015-16	2016-17	2017-18	2018-19
Continue to evaluate school capacities and consider further school consolidation.	$0	$0	$7,500,000	$7,500,000	$7,500,000	$7,500,000

Note: Costs are negative. Savings are positive.

Facility Asset Management and Inventory Control

The topic of facility asset management is broad and can be interpreted in various ways. Recently published international standards define asset management as involving "the coordinated and optimized planning, asset selection, acquisition/development, utilization, care (maintenance) and ultimate disposal or renewal of the appropriate assets and asset systems."[14] The U.S. National Research Council defines facility asset management as a systematic process of maintaining, upgrading, and operating physical assets cost-effectively. It combines engineering principles with sound business practices and economic theory and provides tools to achieve a more organized, logical approach to decision making.[15] Asset management is the science of deciding when, where, and how to spend maintenance, facility preservation, and improvement resources in the most cost-effective way.

Each of these definitions incorporates the important functions of asset inventory, control, maintenance, and investments in renewal. For the purposes of this report, the inventory of assets (maintainable equipment), maintenance, and asset management standards and technologies will be covered in the Building Maintenance section of this chapter. This section addresses asset management as it relates to warehouse inventory control and facility asset management (i.e., school facility capital renewal and forecasting).

Inventory Control and Management

Current TUSD practices regarding warehousing of assets, materials, and supplies and supply chain management (SCM) are primarily overseen by the Business Office of the Operations Division Central

[14] International Organization for Standardization (ISO) 55000 – asset management.

[15] National Research Council (NRC), 2004, Investments in Federal Facilities: Asset Management Strategies for the 21st Century, National Academies Press, Washington, D.C.

Receiving & Distribution Department. There are several warehouses managed by the TUSD Operations Division. These include:

- 1940 Winsett Road Warehouse
- 2050 Winsett Road Warehouse
- 2110 Winsett Road Warehouse
- 480 Campbell Road Warehouse

These warehouses receive, distribute, and manage furniture, textbooks/bulk paper, records, technology, and maintenance/repair/operations inventory. There are also a number of storage warehouses not managed by TUSD Operations that include: the Clothing Bank/Warehouse, District Office Storage (temporary administrative records, HR, payroll), and two Food Service Warehouses.

The Warehouse Delivery Operations Supervisor receives assets and materials in the central warehouses, inventories and barcodes furniture and other assets over $1,000 in value. The maintenance, repair, and operations (MRO) inventory is recorded in the district's computerized maintenance management system (CMMS) – MAPCON. MAPCON is used to preorder materials and supplies, track maximum/minimum levels of stock, manage inventory, and record use of materials to work orders. The warehouse staff conducts annual inventory counts and periodic cycle counts.

High volume and bulky materials such as filters for HVAC systems are ordered and delivered directly to the schools in accordance with a predetermined preventive maintenance (PM) schedule. There are warehouse delivery workers that deliver stock and inventory to sites as needed.

There were a number of issues identified and reported that have led to less than optimum warehouse operating performance in the past. The current CMMS has limitations that make it difficult to restock inventory. The reordering process is cumbersome and the quality of inventory data is lacking. There were reported issues with inconsistent parts naming conventions, creating duplicate stock, discrepancies in actual versus recorded inventory, and storage of materials. There is a need for new CMMS functionality and processes to improve the quality of the inventory system.

There have also been past process deficiencies that have led to underperforming warehouse functions. The purchase ordering process was reported to be very cumbersome and time consuming. The limited usefulness of inventory data in the past has made it difficult to preorder stock for maintenance activities. Stock refill was previously done on an annual basis for many items. Recent inventory clean-up efforts and tracking determined that over 20 percent of the inventory had not been issued in over two years. A large amount of the inventory was reported to be obsolete.

Recent initiatives have been undertaken within the last six months to improve overall warehouse inventory control and to improve service to building maintenance technicians. The TUSD Operations Business Office Coordinator has initiated a number of process improvements related to inventory data quality, monthly cycle counts, reducing underused inventory, standardizing naming conventions,

incorporating just-in-time delivery practices, managing lead times for critical parts, and tracking critical warehouse performance measures.

There are also pilot programs recently initiated to evaluate the use of truck stock for plumbers to reduce time travelling between schools, shops, and warehouses or vendors to obtain parts. One of the common themes uncovered during the on-site interviews was a need to reduce "windshield" (or traveling) time. A majority of this lost efficiency was due to technicians not having the materials and parts needed on hand to complete work orders.

Recommendation 5-3: Continue to implement warehouse process improvements and overhaul the facilities purchasing process.

The reported inefficiencies in the facilities warehousing and purchasing processes are having a significant impact on the overall productivity of the facilities staff. These inefficiencies are also adversely affecting the safety of facilities and customer satisfaction. Various facilities leaders and staff reported substantial delays caused by waiting for parts, supplies, materials, and tools needed to accomplish their work tasks. The inability to take advantage of just-in-time delivery of materials and supplies is also negatively affecting facilities worker productivity and morale.

Central warehouses that support MRO activities with the right parts/materials in the right place at the right time drive the facilities organization's operational efficiency. The main objectives of the MRO warehouse inventory management should be to reduce repair cycle times and minimize inventory. To achieve warehouse operational excellence, managers must be confident the inventory is accurate.

Credit should be given to the current review and process improvements that have been initiated. The continued development of consistent naming conventions and data quality should be emphasized.

TUSD should implement a new CMMS to support warehouse MRO activities. Without adequate CMMS materials management module functionality it will be very difficult to continue to improve process and measure churn rates (parts turnover or supply turns), cycle times, and inventory requirements. Additional details and recommendations regarding CMMS are presented in the following section.

The continued evaluation of truck stock and use of virtual warehouse functionality in the CMMS to help track the truck/shop stock inventory is also recommended. Expansion of the practices to electrical and HVAC shops has been proven in other school districts by monitoring work order histories, material use, and problem and repair codes in a CMMS. This approach has been successfully used across many school districts with large geographic areas to significantly reduce windshield time.

In addition to the process improvement initiatives underway, there are additional best practices and MRO warehouse key performance measures that should be considered. First and foremost is the need to create an accurate and consistent database of related maintainable equipment and parts inventories. A successful PM program relies on accurate equipment inventories with parts attributes details such as motor specifications, parts replacement inventories, filter counts and sizes, and belt type/sizes. With

this information the warehouse can automate reordering of materials and generate PM kits through "pick tickets" to have supplies ready prior to technicians arriving at the warehouse to gather the supplies. The use of mobile carts with multiple kitting bins (bins or crates to collect and temporarily store materials for use by technicians for PM or projects) is often used for this purpose.

Additional best practices for MRO warehouses include:

- Organizing the warehouse space and staff for efficiency
- Focus on inventory standards and accuracy
- Perform routine cycle counts
- Properly slot parts based on use rates
- Use barcodes and scanners with a CMMS
- Build PM kits using pick tickets
- Create and monitor warehouse key performance indicators (KPIs)

The central warehouse should be considered a service provider to the TUSD Operations Division and school system. As such, performance measures should be developed and monitored. The following KPIs, in addition to the current metrics, are recommended:

- Inventory Annual Turns – (total value of stores use / total inventory value)
- Inventory Churn – (number of parts used / minimum parts levels)
- Inventory Accuracy – (cycle count adjustment / total cycle count)
- Warehouse Service Level – (# orders filled on demand / total # orders filled)
- Percentage of Stockouts – (# stockouts / total parts used)
- Percent Inactive inventory – (# parts inactive in a year / total # of parts)
- Percent Work Orders Awaiting Materials – (# WO on hold awaiting materials / total # WOs)
- Plant Replacement Ratio – (parts inventory value / school plant replacement value)
- Parts to Labor Ratio – (parts inventory value / maintenance labor cost)
- Growth in Number of Parts and Vendors/Suppliers

The purchase order and acquisition process also needs to be streamlined. The process of requesting and receiving non-stock items was reported to be a tremendous administrative burden. It was reported that it could take 15 to 20 days to receive some stock deliveries due to the cumbersome PO process.

Fiscal Impact

The direct measurable impact on future expenditures of the warehouse process improvement and purchasing recommendation will be difficult to accurately track due to a lack of current baseline data. However, it will have a significant impact on the effectiveness and efficiency of maintenance staff and reduction in material/part order costs.

Facility Asset Management

The financial constraints driving the need for efficiency improvements in TUSD are well understood. The combination of wrapping up the previous $230 million bond program, reduction in capital funding sources, loss of building renewal state funds, and declining enrollments will continue to stress the ability to adequately fund school maintenance and repair requirements. In addition, the average age of TUSD schools is about 40 years. Many building systems are reportedly beyond their expected useful life, and others have been reported to require replacement prior to their expected life cycle due to inadequate preventive maintenance in the past. A well thought-out, objective, and credible asset management plan (capital renewal plan) will be imperative to justify additional funding, obtaining grant funding for school renewal, or making the best use of existing funds.

TUSD has initiated facilities asset management and capital planning and budgeting through the completion of internal parametric facility condition assessments (FCAs). The FCA methodology is in alignment with best practices and cost-effective approaches. However, there are opportunities to continue to improve the asset management program through enhanced commitment, improved standardization, repeatable application, the identification of rational backlogs of deferred maintenance, and preparation of more encompassing capital expenditure forecasts.

The FCA methodology captures generalized condition ratings by building a system to create an overall facility condition index (FCI) by school. This is helpful in determining overall ranking of school conditions, but does not provide much information on the costs of deferred maintenance or capital renewal requirements. The foundation of the approach is sound; and the use of internal staff to conduct the assessments is cost-effective.

Typical industry accepted practices for good facilities stewardship suggest budgeting 2 to 4 percent of facilities current replacement value on maintenance repair. This includes operational routine maintenance and capital renewal. Breaking out the capital components suggest a minimum of one percent of the CRV should be budgeted for capital renewal on an annual basis. This would correlate to about $16 million per year in school renewal investments to maintain current levels of deferred maintenance and current school conditions.

Most school systems are funding capital renewal closer to a rate of 0.7 to 0.8 percent of the CRV. This still equates to over $12 million per year for TUSD schools.

Recommendation 5-4: Enhance existing facility condition assessment process though the incorporation of best practice procedures.

The topic of facility investments and capital planning for school facilities remains at the forefront of the educational facilities executive's world. School organizations across the U.S. are facing the largest collection of aging buildings ever encountered. Deferred maintenance backlogs continue to grow at unprecedented rates, while the toll it has taken on facilities is reaching critical levels. A wealth of

research and data are available supporting the need for better facility capital investments and asset management.

The benefits of facility condition assessments include the following:

- Obtaining objective and credible data to make the rational and informed facilities investment decisions by prioritizing needs.
- Streamlining facilities management processes and reducing the total cost of ownership.
- Improving the condition of facilities.
- Extending the life of assets through proper maintenance and repair funding and decisions.
- Minimizing safety and security risks at facilities.
- Minimizing the disruption to customers (passengers) and tenants caused by facility system failures by maximizing critical system reliability.
- Enabling optimal use of facilities and infrastructure in support of the agency/organizational mission.
- Improving overall stewardship of facilities and maximizing return-on-investment for stakeholders.

The most important factor for success in assessing the condition of school facilities is to evaluate needs without bias. Most public and private school systems generally use some form of facility condition assessment or life-cycle analysis to determine backlogs of maintenance and repair and assess their facility needs. Findings and recommendations of best practices in facilities asset management (and facility condition assessments) have been researched and reported by the National Research Council independent of the specific approach. Key components to a facilities asset management program include the following:

- Standardized documented process that provides accurate, consistent, and repeatable results.
- Detailed ongoing evaluation of real property assets that is validated at predetermined intervals.
- Standardized cost data based on industry-accepted cost estimating systems (repair/replacement).
- User-friendly information management system that prioritizes deferred maintenance (DM) and Capital Renewal (CR).

The goal of a facilities asset management program is to conduct facility condition assessments and create a facility investment plan that is rational, repeatable, recognizable, and credible.

An opportunity exists for TUSD to continue to build upon the established facility asset management program. While there have been excellent efforts to collect and maintain important facilities data, there are areas of potential improvement. These include consistency in data collection, identification and prioritization of a backlog of deferred maintenance, calculation of relative school facility condition

indexes, standardization of building system classifications and inventory nomenclature, positioning of facilities condition needs, additional training of staff regarding the importance and impact of the asset management program, enhanced equipment histories to support decision making, and enhancement of the quality and repeatability of asset management information.

Fiscal Impact

Outside consultants could typically be procured for $.12/sf to conduct the facility condition assessments. Multiplying $.12/sf times the district's total square footage (8.2 million sf) equates to approximately $960,000. An alternative parametric approach to identifying deferred maintenance is called Backlog of Maintenance and Repair (BMAR) and is based on using parametric estimates to produce a macro-level of deferred maintenance. It can be accomplished using internal TUSD facilities staff at a fraction of the cost and still produce the desired results.

This approach requires a facility walk-through by personnel knowledgeable in evaluating building system condition. Generalized condition levels of major systems, from new (5) to not operational or unsafe (1), are determined and repair costs are developed based on a percentage of the CRV. Site systems and site utilities are typically evaluated as separate systems.

The total replacement value for the facility is divided into major systems as a percentage. The major system percentage of facility CRV is then multiplied by the repair cost (as a percentage of CRV) as designated by the generalized condition level. The BMAR method is useful only in gaining a global understanding of deferred maintenance backlog numbers. It does not provide any useful information, nor was it ever intended to, regarding long-term facility capital investment requirements or specific projects.

Details of the approach are presented in Appendix E.

Building Maintenance

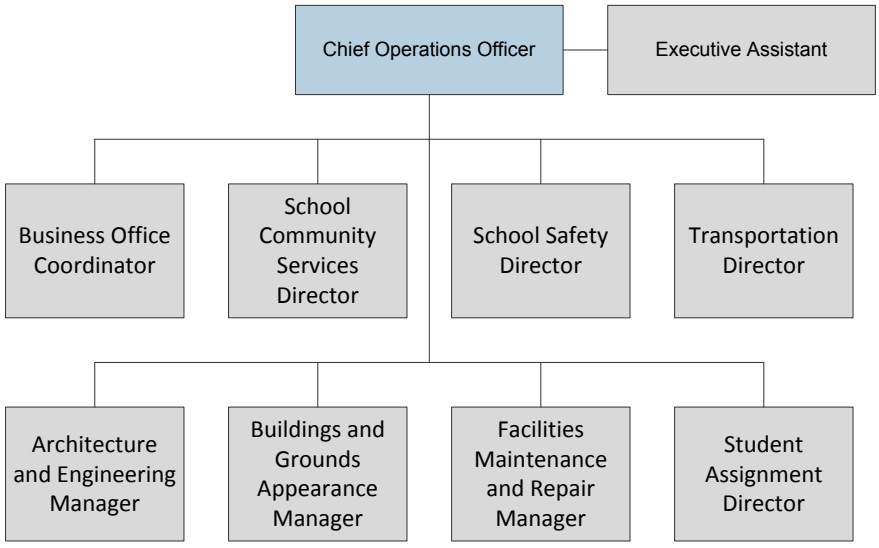
This section presents findings and recommendations for the improvement of building maintenance. Specific focus areas include facility organization and management (staffing levels and structure), policies and procedures, maintenance operations (including workflow processes, FM technologies, PM program, training, and maintenance performance measurement), grounds maintenance, energy management/sustainability, and school safety and security.

Organization and Management

The mission of the TUSD Operations Division is to provide facilities that are clean, safe, energy efficient, sustainable, comfortable, and conducive to efficient and effective educational and support activities, and to protect students, employees, grounds, and property. The division is organized by department to support the following functions and services: Architecture and Engineering, Student Assignment (facilities planning), Facilities Maintenance and Repair, Buildings and Grounds, School Safety, and the Business Office.

An organizational chart for TUSD Operations is shown in Figure 5.1.

Figure 5.1. Current Operations Organizational Structure



Source: TUSD 2013

The TUSD Architecture and Engineering (A/E) department is responsible for design and construction services for new school facilities; additions to existing schools; renewals (renovations) of existing school facilities; completion of capital improvement work orders; minor facility improvements; and the purchase, installation, and relocation of temporary classroom facilities. The A/E department provides project and construction management services and on-site inspection staff to guarantee quality assurance of TUSD projects.

This department also provides building evaluation and assessment services to coordinate the planning of construction projects for each successive school bond referendum to best support the educational needs of the students. The A/E department provides the necessary liaison between TUSD student assignment and master planning, and instructional programs, and the City of Tucson for all construction and development projects.

The Student Assignment department manages the processes and information necessary to ensure the efficient and effective accommodation of all students and educational programs. The Student Assignment department analyzes school enrollment projections by grade level and attendance area (school boundary) adjustment studies.

The Facilities Maintenance Department is responsible for routine preventive and corrective building maintenance services, facilities infrastructure repair and replacement, and energy conservation in the design and operation of TUSD facilities. The Facilities Maintenance Department is comprised of 51 employees and is responsible for operating and maintaining 87 schools totaling over 8 million square feet of area, plus other administrative and support buildings.

The Facilities Maintenance Department was recently reorganized to include centralized management and repair shops. The centralized shops include: facilities resource management, infrastructure and environmental management, planning and operations, energy management, and plant operations. Maintenance and repair of all mechanical, electrical, and structural equipment and systems is provided by technicians located at the maintenance facilities.

The Buildings and Grounds Department is responsible for exterior maintenance including landscaping, irrigation, pest control, site features, pavements, as well as custodial support to schools. The department has roofing technicians that conduct inspections and perform minor repairs. There are also carpenters, glaziers, and painters that perform maintenance and repairs of school exteriors and remove graffiti.

The Business Office provides three primary services for the Operations Division: financial (payroll and budgeting), warehouse management (central receiving, distribution, and mailroom services), and FM information technology (work order system and Functional Application Support Team – FAST). The Business Office also includes an energy manager that reviews utility bills and oversees energy conservation measure projects. Based on interviews, the Business Office Coordinator was also taking on initiatives to develop and implement process improvements impacting the entire Operations Division. These initiatives included, but not were limited to: FM IT upgrades, strategic plan development, policies and procedure documentation (i.e., Maintenance and Operations Plan – MOP), preventive maintenance, energy management, warehouse processes, staffing levels, facilities performance measures, asset management, and training.

A summary of staffing levels by department is shown in Table 5.3. The FTEs represent numbers reported at the time of this study and include funded and unfunded vacancies.

Table 5.3 Summary of Operations Division Staffing

Department	FTEs
Operations Division Managers	10
Business Office	28
Facilities Maintenance	51
Buildings and Grounds	75.5
Student Assignment	4
Architecture and Engineering	10
School Community Services	5
Total	**183.5**

Source: TUSD, 2013

A breakdown of the Operations Division staff by position is shown in Table 5.4. The table does not include the 79 FTEs in School Safety or the 397 FTEs in Transportation. These are largely officers, crossing guards, bus drivers, and bus monitors.

Table 5.4. Staff Levels by Work Category

Department	FTEs
Managers	11
Supervisors	12
Project Managers	6
Administrative	13
Foremen/Leads	5
Trades/Crafts	71
Custodians	17.5
Grounds	27
Inspectors/Planners	6
Warehouse/Workers	15
Total	**183.5**

Source: TUSD, 2013

The TUSD Operations Division has right-sized the facilities staffing levels by the introduction of more appropriate staffing models. With the inclusion of high-school-based site engineers, the overall TUSD maintenance staffing levels for front-line trades is approximately 109,000 sf/FTE. This is in line with best practices and representative maintenance staffing formulas.

The bond program is winding down and capital projects are being closed out. With this reduction in work, the A/E project managers will have more availability. There are a number of important initiatives to enhance the efficiency of the facilities organization that could use these project managers to lead these efforts.

During field visits and interviews widespread concern regarding the organizational structure and communication between Operations departments was found. There is a need to better integrate the departments under the Chief Operations Officer and increase the effectiveness of the facilities staff.

Two consistent and common themes arose out of interviews with managers and staff across the Operations Division:

1. There are organizational challenges. There is a need to better integrate workflow within and across departments. As an example, each department had a budget that was perceived to be controlled by the Business Office. The managers understood their responsibilities, but reported that they had little involvement with the development and control.
2. There also appears to be an opportunity to improve communication not only across the organization, but between levels of the division. Recent staff reductions have also placed stresses on overall morale and perceptions of a lack of control.

Recommendation 5-5: Utilize A/E project managers for contract management, quality assurance/quality control, FCI, support of technology projects, fire and life safety inspections.

The number of facility and process improvement projects required will be very difficult to successfully manage with existing resources in the Facilities Maintenance and Buildings and Grounds Departments. The potential for short- and long-term savings resulting from successful implementation are significant. Unfortunately, many such initiatives fail due to lack of internal resources to implement such projects.

The volume of work managed by the A/E project managers is diminishing with the closing of the final projects funded by the previous bond program. At the same time, recent staff reductions have left the Facilities Maintenance and Buildings and Grounds Departments with limited capacity to take on any additional work. The knowledge, skills, and abilities of the A/E project managers could be utilized for facilities contract management, management of technology projects, the EMCS integration project, implementation of FCA/asset management program, and quality assurance/quality control (QA/QC) and fire and life safety (FLS) inspections. It would be an effective use of skills to manage critical projects.

This realignment of project managers could also present a large boost to morale in providing help to overburdened managers and facilities staff.

Fiscal Impact

This recommendation does not result in annual savings. However, implementation of this recommendation would more fully utilize existing project managers and relieve facilities resources that are already stretched very thin.

Policies and Procedures

The TUSD Operations Division does have documented plans and policies across the various departments. The policies are generally well understood and followed. The division maintains a master plan, “Ed Specs”, design guidelines, financial, school capacity formulas, and staffing policies based on industry standard guidelines. The staffing guidelines have been recently evaluated and modified to be in closer alignment with industry standards. There have also been some recent efforts to document and improve work order processes.

While the policy and procedural documents reviewed were good, they were disparate and lacked coordination. The Business Office Coordinator also reported a need to develop a comprehensive facilities plan to help align and integrate the functions within the Operations Division. An initiative has been identified to create a Maintenance and Operations Plan (MOP), but has yet to begin.

Leaders of an educational FM organization must develop strategies and plans that are consistent, clear, and well thought out. Strategic goals, objectives, and tactical initiatives should be aligned to support the mission of the school system. These goals and objectives need to be well understood by department managers, supervisors and staff throughout the organization. The strategic plans must also be well-

documented, tracked, measured, and tied to improvement of facility management services for TUSD. Strategic plans for facilities should also be influenced by the district's overall strategic plan. TUSD does not currently have a strategic plan, and a recommendation to do so is presented in *Chapter 1 – District Organization and Management* of this report.

Recommendation 5-6: Develop TUSD Operations Division strategic facilities plan.

A TUSD School Master Plan has been developed to address overall financial, academic achievement, services, equity and diversity, and facilities plans (planning perspective). After TUSD develops a districtwide strategic plan, facilities management should develop a strategic facilities plan that addresses the optimization of performance of the existing schools and organization. The strategic facilities plan should document TUSD FM mission, vision, values, strategic objectives, and KPIs. A performance report aligning and integrating the strategic objectives and measures with the mission of TUSD should be created.

The strategic facilities plan should also describe how the TUSD Operations Division intends to create value to its stakeholders. The plan should also document how the organization will respond to both internal and external factors. External factors may include economic, political, and social concerns. Internal factors may include talent pool, organizational culture, and the availability of resources.

Day-to-day operational plans should be developed based on the strategic facilities plan using well-developed action items aligned with the objectives. Operational planning includes the plans necessary to define how the school facilities will be operated and maintained on a day-to-day basis to meet the needs of the TUSD. Examples of specific operational plans include: service requests, work control and management, workflow processes and standard operating procedures, inventory control, asset management, FCAs, planned maintenance, quality control inspections, energy management and sustainability operations, buildings and grounds operations, emergency preparedness and disaster recovery, safety and security procedures, regulatory and code compliance, hazardous communications, job safety, and communications processes.

Fiscal Impact

This recommendation can be implemented using existing resources.

Recommendation 5-7: Document facilities management policies, procedures, and workflow processes.

There is a need to more fully document and automate facilities management policies, practices, and processes. It is critical to have well-documented workflow processes prior to, or concurrent with, the implementation of a new CMMS.

One of the common themes heard during interviews at TUSD was a "need for better understanding what is expected" and more accountability. Desires to "better define work handoff and transitions" and

"a need to take away ambiguity and excuses" in the completion of maintenance activities were also noted.

A well-structured facilities organization coupled with efforts to improve processes will lead to the creation of generally effective and efficient operations and maintenance (O&M) processes. There is an opportunity to improve work coordination and transitions, as well as TUSD facilities staff's understanding of expectations. This is where the documentation of standard maintenance processes can really help. A number of efficiencies are typically gained through the training and communication of enhanced and documented processes. The benefits typically include:

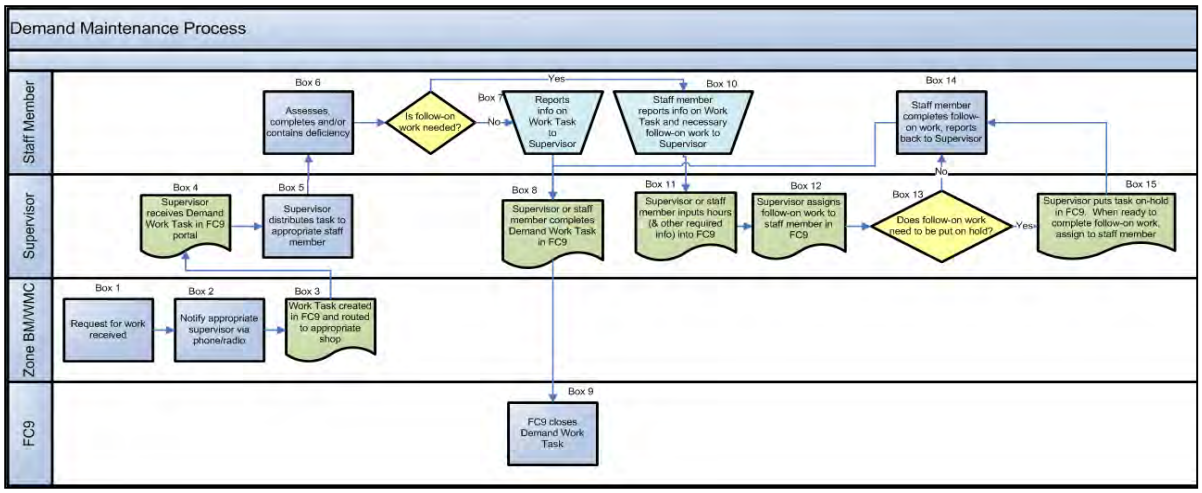
- Enhanced use of technology by identifying technology touch-points and requirements.
- Streamlined workflow – including automating processes.
- Understanding of better coordination and communication requirements between shops and between supervisors and staff.
- Better understanding of expectations and focus on achieving them.
- Ability to generate more accurate and meaningful performance measures by comparing apples to apples.
- Reduced training requirements due to reduction in the number of different ways things are done.
- Improved staff morale through fairer evaluations of performance.
- Creation of easier staff transition to other roles.

The need to improve documented processes appears to be due in part to the result of extensive experience and long tenures of many of the facilities supervisors and managers. The success of the informal processes that have served the Facilities Maintenance Department well in the past will be more and more difficult to achieve as experienced personnel retire. It is also important to take advantage of the current technologies available. The TUSD Operations Division should formalize and document facilities planning and maintenance procedures to ensure effective transfer of knowledge (and prevent the loss of institutional knowledge) of operation and maintenance of the facilities. TUSD should consider the development of process flowcharts for the following:

- Demand/corrective maintenance
- Service requests/reimbursable services
- Preventive maintenance
- Emergency response
- QC and life safety inspections
- Asset/equipment updates
- Materials management

A sample cross-functional process flowchart is shown in Figure 5.2.

Figure 5.2. Sample Workflow Chart



Source: Gibson Consulting Group, Inc.

Documented workflow processes increase the understanding of staff as to, "why" certain activities are performed. This understanding increases the consistency of processes and the accuracy of information resulting from the process. This in turn leads to confidence in the performance measures being used to evaluate overall performance.

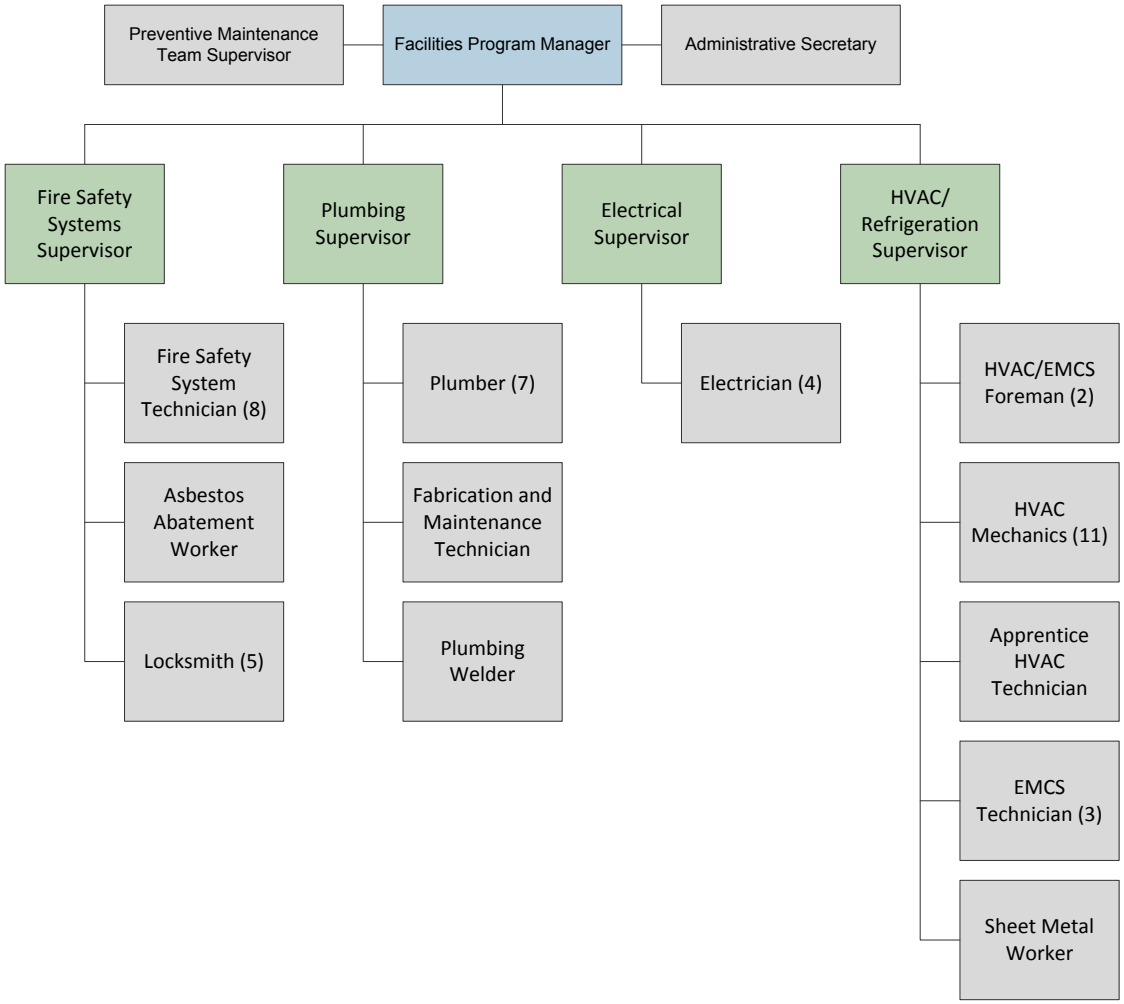
Fiscal Impact

The implementation of formal and documented processes for facilities management could result in significant cost avoidance and increased staff efficiencies coupled with the lean process improvements. This recommendation will require staff time and effort to document processes.

Maintenance Operations

The Facilities Maintenance Department is responsible for routine preventive and corrective maintenance, building and grounds services, facilities infrastructure repair and replacement, and energy conservation in the design, and operation of TUSD facilities. At the time of this study, the Facilities Maintenance Department was comprised of 51 employees spanning from the department manager/coordinator to the front-line trades/crafts. The Facilities Maintenance Department is responsible for operating and maintaining 87 schools totaling about 8 million square feet of area, plus other administrative and support buildings. An organization chart of Facilities Maintenance Department is presented in Figure 5.3.

Figure 5.3. Current Facilities Maintenance Department Organizational Structure



Source: TUSD 2013

The Facilities Maintenance Department is generally organized by trade shop and uses resources effectively. However, the building trades are distributed across both the Facilities Maintenance Department and the Buildings and Grounds department. Between the two departments there are 65 trades/crafts and six supervisors. There are also 10 building engineers at the high schools that report to the site-based school staff.

The overall staffing levels for building maintenance are about 109,000 sf/FTE. The trades/crafts to supervisor ratio is approximately 10:1, with a limited number of foremen and working leads. These values are in line with educational benchmarks but nearing the high end of the spectrum (i.e., limited resources and supervision).

There has been a significant reduction in the backlog of open work orders over the past year. At the start of 2012 there were over 4,700 open – emergency, Priority 1, and Priority 3 (corrective/demand) work orders. Currently, there are about 1,278 open work orders. This amounts to a 73 percent reduction

in backlog (94% reduction of emergency work orders, 91% of Priority 1 work orders, and 67% of Priority 3 work orders). The reduction should account for a noticeable improvement in response times.

While the Arizona Office of the Auditor General (AG) determines the overall costs of Plant Operations to be high on a cost per square foot (sf) basis, the review team's calculations indicate the current costs are consistent with school districts similar to TUSD. The AG report listed TUSD costs/sf at $6.52/sf; above the peer average of $5.91/sf. Based on a closer examination of the line item costs, these numbers appear to include some school-based costs for cafeteria security monitoring. Removal of these costs brings the cost per square foot for TUSD schools to about $5.42/sf, which is close to the national median of about $5.40/sf. In general, the custodial and grounds costs per square foot are appropriate, while the maintenance costs are below average and utility costs above average.

A review of the findings resulting from the evaluations of FM technologies, workflow processes, PM program, training, and performance measures are outlined in the following subsections.

FM Technologies (CMMS)

The current CMMS is insufficient to meet the needs of the facilities organization and is pervasively under-utilized. The current system (MAPCON) has limited functionality and reporting capabilities, is poorly configured, and lacks consistent and accurate data to provide credible facilities information to decision makers. There is also incomplete data regarding equipment inventories and maintenance histories. As an example, high school site operating engineers do not use the CMMS to track their time and materials. There is also a need to enhance and integrate technologies across the TUSD departments and within the Operations division.

The Business Office and Facilities Maintenance staff reported that they had to manually create business reports to review performance measures. The reports when generated were also reported to be questionable due to inconsistencies in the data and poor system configuration. There is also a substantial amount of reported lost time related to manual "double-entry" of data in the CMMS and the Lawson enterprise resource planning (ERP) system. One example is the need to manually re-enter parts data into each system. There are also separate stand-alone systems for key control, hazardous materials tracking and other maintenance functions. The use of several disparate spreadsheets with facilities data that could (and should) reside in the CMMS was observed.

Maintenance Workflow Processes

There were a number of facilities management process improvement opportunities identified. A substantial amount of non-productive time spent travelling to and from work sites based on ineffective processes was noted during the site visit. While there is no documentation recording excessive "windshield" time, the managers also believed this to be the case. Process improvement approaches could increase the efficiency of the facilities staff. This should begin with documenting processes, improving CMMS support and mobile technologies, fixing the equipment/asset inventories in the

CMMS, integration of shop and warehouse processes, and training of trades and supervisors on the streamlined processes.

Preventive Maintenance Program

Maintenance at the TUSD schools was reported to be primarily reactive. Overall, the amount of PM is reported to be around 11 percent of the total reported work efforts in 2012. TUSD Operations has recently implemented a limited PM program drawing on a rotation of shop trades staff from the Facilities Maintenance and Buildings and Grounds Department. The current PM program consists of manually generating general PM activities that are scheduled at each school on a quarterly basis. There is no link between equipment in the CMMS to PM procedures or histories.

There was also limited and incomplete documentation of procedures for testing and inspection of critical and life safety systems. The primary reasons for the low levels of proactive maintenance include a recent reduction of maintenance staff (eliminating the PM program) and the way the data are reported. There may actually be more proactive and planned maintenance being completed than actually reported.

Currently, there is no central PM group. In July 2013 the PM group of 15 FTEs was eliminated as part of an overall cost savings initiative. PM activities are now performed by rotating two-person teams drawn from the maintenance trade shops. Maintenance personnel rotate into the PM teams every three months. The specific PM tasks generally include HVAC filter changes, belt inspection and replacement, and inspection of exit lighting, emergency lighting, and backflow preventers (regulated assets). Contracted PM includes elevator and life safety system maintenance/testing/inspection, water treatment, pools, generators, boilers, chillers, and grease traps.

While the recent PM activities do provide critical and basic PM, they are far from a best practice PM program. Effective stewardship of the TUSD facilities requires implementation of a more proactive and comprehensive approach for school facilities.

Training

There is a need to enhance the existing training program. There was a consistent recognition of “bare minimum” training of building maintenance staff focused on regulatory and safety issues. There was also no readily available documentation regarding staff training histories and a lack of ownership of facilities professional development.

The aging facilities workforce requires consideration of a workforce succession plan. Adequate training is an important part of a long-term workforce strategy. There are many good training opportunities. It requires documentation to support career progression, gap analyses, prioritization and organization of the needs of TUSD Operations. Specific training needs include new equipment and new equipment technologies training for the technicians, safety and regulatory training, supervisor training, EMCS/BAS, workflow process training, and human resource training.

Performance Measures

There were limited facilities operations and maintenance KPIs being measured and tracked for the Operations Division. This was partially due to the lack of reliable CMMS data. The data and metrics reviewed generally came from multiple independent spreadsheets maintained by various managers throughout the Operations Division. As a result, it was difficult for the review team to reconcile data regarding the number, size, capacity, and cost of facilities in the various source documents.

Recommendations to achieve improved operations effectiveness and maintenance efficiencies are presented as follows.

Recommendation 5-8: Implement and integrate new CMMS to improve efficiencies and provide facilities data for better decision making.

TUSD lacks quality and organization of its facilities data as well as access to the information. The district does not make good use of the current facility management information technology (CMMS), making it difficult to track performance and obtain good data to make decisions on a school-by-school basis. The lack of use of the current CMMS to automate and manage work processes also limits the ability to track performance and obtain pertinent data to make informed decisions. The implementation of cost-effective CMMSs will help districts with the organization and tracking of critical data and support the improved effectiveness and efficiency of facility operations management.

CMMSs have become increasingly web-based, affordable, and easy to use. They also include more functionality to support space management, community use (central reservation systems), and contract and rental management. Their purpose is to automate and manage work requests as efficiently as possible and provide the basic information districts need to make informed and timely decisions. The benefits of automation continue to increase and include the following:

- Better data management
- Increased efficiency
- Better tracking of asset/equipment histories
- Organized FM data & information
- Expedited decision making
- Improved maintenance quality/labor tracking
- Improved communication
- Reduced operating costs
- Enhanced use of facility space

TUSD should implement a new CMMS to help organize, streamline, and document operations and maintenance efforts. Based on the review of the current CMMS, the quality of the data, and system configuration settings, it will be more cost effective to replace the older system with a new web-based CMMS. Such a system will help minimize redundant effects, better track assets and inventory, support maintenance decision-making, and provide data for facilities performance indicators.

The Business Office has already begun the process of evaluating needs of the Operations Division and available CMMS vendor applications that may best meet those needs. At the time of this review three potential CMMS solutions were being considered. Each of these CMMS applications is widely used in educational facilities. They are suitable for use within the TUSD Operations Division if properly implemented. Unfortunately, a majority of CMMS implementations fail to adequately meet the needs of end users.

The reasons for a lack of successful implementation are less related to the software than key process considerations. Many fail due primarily to:

- Inadequate implementation planning. Lack of careful thought about what the user wants to get out of the system.
- Lack of data standards and improper configuration to generate consistent/reliable reports.
- Poor understanding of processes the CMMS is to support.
- Lack of buy-in and training of staff to follow processes, correctly enter data, and maintain records.

TUSD should develop a prioritized and phased implementation plan that includes:

1. Identification of KPIs to be generated by CMMS data.
2. Development of clear data standards including: location, nomenclature, asset/equipment taxonomy, equipment attributes, building and equipment classifications, equipment granularity and grouping, etc.
3. Configuration of CMMS hierarchies and codes to properly generate metrics including: location hierarchies, shop codes, work type/category codes, priority codes, status codes, problem and repair codes, etc.
4. Enhancement and documentation of workflow process maps and standard operating procedures linked to the CMMS configuration codes.
5. Collection, scrubbing, and migration of asset and equipment data.
6. Incorporation of PM/Reliability Centered Maintenance program tasks linked to major maintainable equipment and systems.
7. Implementation and transition from MAPCON to new CMMS using development, testing, and production databases.
8. Training of users to include strategic considerations, workflow processes, software navigation/environment, data maintenance, and performance measurement.

Details of these CMMS and data standards recommendations are presented in Appendix F.

Consideration should also be given to hiring student interns from Arizona University or Arizona State University's FM program to support data collection and migration. Student interns can be a cost-effective approach to collecting valuable facilities data.

Fiscal Impact

State-of-the-art web-based CMMS systems for school districts are typically charged based on an annual usage fee related to student populations and desired modules. For a school district the size of TUSD, the fiscal impact would typically include an annual fee of $4,000 and a one-time implementation and training fee of $45,000 for both a web-based work order and preventive maintenance module.

Recommendation 5-8	One-Time Costs/ Savings	2014-15	2015-16	2016-17	2017-18	2018-19
Implement and integrate new CMMS.	($45,000)	($4,000)	($4,000)	($4,000)	($4,000)	($4,000)

Note: Costs are negative. Savings are positive.

Recommendation 5-9: Improve preventive maintenance program.

TUSD's maintenance program is insufficient to provide the long-term stewardship needed to preserve the district's facilities. It consists mainly of breakdown maintenance, corrective actions, responding to demand work requests, periodic HVAC inspections, and filter replacements. The Facility Maintenance Manager reported most of the department's work was in response to requests and corrective in nature. The Maintenance Department appears to operate generally in a reactive mode. There was very little evidence of completed preventive maintenance on any equipment beyond the packaged HVAC equipment. Continuing to neglect an investment in a formalized maintenance program will result in inordinate expenditures and a shortened useful life of building systems and schools. The Business Office Coordinator also reported a sense of too many premature equipment replacements due to a lack of PM.

With few exceptions, preventive maintenance has been considered the most effective way of maintaining building systems and extending the service life of equipment. Most PM programs are based on the assumption that there is a cause and effect relationship between scheduled maintenance and system reliability. The primary assumption is that mechanical parts wear out; thus, the reliability of the equipment must be in direct proportion to its operating age.

Research has indicated that operating age sometimes may have little or no effect on failure rates. There are many different equipment failure modes, only a small number of which are actually age or use-related. Reliability Centered Maintenance (RCM) was developed to include the optimal mix of reactive-based, time- or interval-based, and condition-based maintenance.

RCM is a maintenance process that identifies actions that will reduce the probability of unanticipated equipment failure and that are the most cost-effective. The principle is that the most critical facilities assets receive maintenance first, based on their criticality to the mission of the facility or organization

dependent on that asset. Maintainable facilities assets that are not critical to the mission are placed in a deferred or "run to failure" maintenance category and repaired or replaced only when time permits, or after problems are discovered or actual failure occurs.

One of the toughest challenges TUSD's maintenance staff face is effectively executing a proactive maintenance program to support the educational mission with very limited staffing resources. This task may also present the facilities organization with one of the best opportunities to enhance efficiency through the use of proven Predictive Testing and Inspection technologies. These technologies can be integrated into the existing program at a relatively low cost and level of effort to optimize the program. In some cases, PM levels of effort have been reduced by 15 percent to 20 percent by eliminating unnecessary tasks or reducing PM frequencies based on empirical condition data.

The district should implement a formal and documented comprehensive PM/RCM program. A comprehensive maintenance program includes the right mix of PM, predictive maintenance, and reactive maintenance (i.e., passive monitoring) components.

To develop a comprehensive PM/RCM program, TUSD facilities management staff should begin by identifying systems and components, prioritizing maintenance activities, developing job plans, and estimating job plan completion times. Each activity is further defined below:

Step 1: Identification of Systems and Components – Comprehensive maintenance programs begin with a facilities assessment to identify the various assets' systems and maintainable components. All pertinent information should be collected (i.e., manufacturer, serial #, model #, capacity, size, etc.), and a determination of the present condition made, to establish a baseline. Knowing the age and condition of equipment is a prerequisite for maintaining it properly. For more about facilities asset identification and assessments, see recommendation related to facility asset management planning.

Step 2: Prioritizing Maintenance Activities – Once the facilities data has been compiled, a logic tree can be applied to help determine to what level each piece of equipment should be maintained. Equipment to be included in the maintenance program should be selected based on the cost of performing advanced maintenance weighed against the cost impact of deferring the maintenance. This includes the performance of an impact analysis or failure modes and effects analysis.

Step 3: Developing Job Plans & Estimating Completion Times – Once the failure modes and effects analysis or impact analysis is complete and the appropriate maintenance methods are established for each type of equipment and by location, maintenance tasks for all equipment types should be compiled.

Maintenance tasks should be based on manufacturer's recommendations and/or job plans developed by industry standard publications such as R.S. Means, General Services Administration (GSA), or Whitestone, and adapted based on experience. Detailed tasks, performance times, and frequencies by equipment type should be developed. Care should be taken to format the tasks in a mean and method for future uploading into a CMMS.

In addition to specific tasks, standard performance times, and frequencies, the job plans should also describe a process for resolving maintenance problems and the specific tools and materials needed. Some problems will be simple and the appropriate corrective action can be included among the other information in the task list. Other problems may not have an obvious solution, and in these cases the responsibility and process for addressing the problem should be clear.

Once a comprehensive list of maintenance tasks is developed, it may be necessary to again look at the prioritization of items or adjust the frequency of tasks to fit staff availability. Because resources are finite, the Facility Maintenance Manager and the Business Office Coordinator will need to use some judgment about which tasks are most important. When setting these priorities, it is important to keep in mind the criticality rankings previously determined, so as to not overlook and reduce maintenance on mission critical systems.

Fiscal Impact

The fiscal impact of creating a comprehensive preventive maintenance program is limited to the internal allocation of resources to inventory and set up the job plans. Data collection should be able to be accomplished using internal staff and could be worked into the routine maintenance schedule to avoid a lot of extra effort, providing good internal training regarding the location and type of equipment that should be serviced.

Details of the implementation of an enhanced PM/RCM program are presented in Appendix G.

Recommendation 5-10: Enhance operations and maintenance training program.

TUSD has a limited maintenance trades training program and no specific line-item reported in the operations budget for training maintenance staff. Very little outside training appears to have been completed or documented, and historical training records could not be located.

The TUSD Facilities Department has used alternate resources for some regulatory and safety training for maintenance and custodial staff. The management firm for TUSD's Workers' Compensation provides the safety training.

Districts initiate comprehensive training programs by developing individual training and professional development plans to minimize possible on-the-job-accidents, staff inefficiencies, repeat work, and also to ensure that maintenance personnel are knowledgeable in current O&M procedures and techniques.

Best practices show that 4 to 6 percent of a facility department's overall operating budget should be spent on training and development. Although most organizations do not spend to this level, this best practice indicates the importance of training. Not investing in ongoing training can result in increased on-the-job accidents, inefficient staff, and required repeat work. Adequate and continuous training is a key step in the development of individual performers and also aids in retention of staff.

TUSD should develop a facilities workforce professional development plan that takes into consideration succession planning, on-boarding training, internships, and certifications and credentials.

Training typically refers to learning opportunities specifically designed to help an employee do his or her job better. "Professional development" has a broader meaning, which includes expanding a participant's knowledge and awareness to areas outside their specific job duties, yet still related to the overall well-being of the organization.

Training is the opportunity to educate employees in the most effective way to utilize the available resources and to ensure that people understand the environmental rules and regulations regarding facilities and grounds. Information can be shared not only about the facilities and spaces but also about the larger district environment and the industry in general.

Managers must think creatively about how to provide high-quality training opportunities in the face of time and budget constraints. *The Planning Guide for Maintaining School Facilities* makes the following suggestions:

- Share training costs with other organizations on a collaborative basis (e.g., training may be sponsored by several neighboring school districts or jointly by the school facilities department and the public works department in the same community).
- Hire expert staff or consultants to provide on-site supervision during which they actively help staff improve their skills while still on-the-job.
- Develop training facilities, such as training rooms in which equipment and techniques can be demonstrated and practiced.
- Offer tuition reimbursement programs that provide educational opportunities to staff who might not otherwise be motivated to improve their knowledge and skills.
- Build training into contracts so that vendors are obligated to provide training at either an on-site or off-site training center as a condition of the purchase of their products.

Additional suggestions include:

- Utilize current staff to perform training with respect to their expertise.
- Compound the effects of training by having employees who have attended training provide internal training to other staff who were unable to attend due to resource restrictions.

Figure 5.4 identifies the types of training typically included in a comprehensive training program, as well as indications of how such training is generally delivered and who should receive it.

Figure 5.4. Training Recommendations

	Director of M & O	Maintenance Supervisor/Lead	HVAC Mechanic	Electrician	Plumber	Carpenter	Maintenance Generalist	Painter	Ground Crew Leader	Grounds Worker	Clerk		Online	Video	Peer Delivered	Outside Provider
Asbestos Awareness	x	x	x	x	x	x	x	x				Regulatory	x			
Bloodborne Pathogens Safety	x	x	x	x	x	x	x	x	x	x	x		x	x	x	
Combustible & Flammable Liquids	x	x	x	x	x	x	x	x	x	x			x	x		
Confined-Space Entry	x	x	x	x	x		x						x	x		
Hazard Communications	x	x	x	x	x	x	x	x	x	x	x		x		x	
HAZ-MAT Spill Prevention & Contro	x	x	x	x	x	x	x	x	x	x			x			
Lock-Out/Tag-Out	x	x	x	x	x		x						x		x	
Materials Handling, Storage, Use &	x	x	x	x	x	x	x	x	x	x	x		x			
Alcohol-Free Workplace	x	x	x	x	x	x	x	x	x	x	x	General Training	x			
Back Injury Prevetion	x	x	x	x	x	x	x	x	x	x			x		x	
Building Evacuation & Emergencies	x	x	x	x	x	x	x	x	x	x	x				x	
Emergency Response	x	x	x	x	x	x	x	x	x	x	x				x	
CPR Academic	x	x	x	x	x	x	x	x	x	x			x		x	x
Disaster Preparedness	x	x	x	x	x	x	x	x	x	x	x		x		x	
Electrical Safety	x	x	x	x	x	x	x						x	x	x	
Eye Safety	x	x	x	x	x	x	x	x	x	x			x	x	x	
Fall Protection	x	x	x	x	x	x	x	x					x	x		
Fire Extinguisher Safety	x	x	x	x	x	x	x	x	x	x	x		x	x	x	
Fire Prevention Safety	x	x	x	x	x	x	x	x	x	x	x		x	x		
General Contruction Safety	x	x	x	x	x	x	x	x					x	x		
General First Aid	x	x	x	x	x	x	x	x	x	x	x		x		x	x
Golf Cart	x	x	x	x	x	x	x	x	x	x	x			x	x	
Forklift		x	x	x	x	x	x	x	x	x				x	x	
Bucket Truck		x	x	x	x	x								x	x	
Job Specific Equipment		x	x	x	x	x	x	x	x	x				x	x	
Hand & Power Tool Safety	x	x	x	x	x	x	x	x	x	x			x	x	x	
Hearing Conservation	x	x	x	x	x	x	x	x	x	x			x	x		
Ladder & Scaffolding Safety	x	x	x	x	x	x	x	x	x	x	x		x	x		
Office Safety	x	x	x	x	x	x	x	x	x	x	x		x	x	x	
Cultural Differences	x	x	x	x	x	x	x	x	x	x	x				x	x
Personal Protective Equipment	x	x	x	x	x	x	x	x	x	x			x	x		
Sexual Harassment	x	x	x	x	x	x	x	x	x	x	x					x
Slips, Trips, & Falls Prevention	x	x	x	x	x	x	x	x	x	x	x		x	x		
H.S. Diploma/GED	x	x	x	x	x				x		x	Certification/ Licenses				x
College Degree	x															x
Technical Degree		x	x	x	x											x
Electrical -Master/Journeyman				x												x
Plumbing -Master/Journeyman					x											x
HVAC Certificate			x													x
On-the-Job						x		x		x						x
Department Procedures	x	x	x	x	x	x	x	x	x	x	x	General Personnel Practices			x	
Work Practices - Time Management/Organization	x	x	x	x	x	x	x	x	x	x	x		x			x
Supervision	x	x							x							x
Employee Relations - Counseling, Performance Evaluation	x	x							x							x
Work Order System	x	x	x	x	x	x			x		x		x		x	x

Source: Facility Engineering Associates

This monitoring can serve multiple functions: first, to track the effectiveness of the training; second, to be able to lobby for more money to do more training when the results are good; and third, to help identify areas where further training may be required.

Clear documentation of training should be referred to and reviewed periodically to insure that consistent and updated training is provided and to measure safety improvement practices.

The facility management staff should document all safety-related training conducted and that these documents should be stored at a designated document center for easy access and reference for management and employees alike. When possible, any training provided to the facility organization should be recorded for future reference and training opportunities.

Finally, ongoing evaluation of training efforts, including all aspects of the experience, should be built into the program for educating employees about the facilities and grounds. Good training is timely, informative, and effective; and it keeps teachers, staff, students, and visitors healthy and safe.

Fiscal Impact

The fiscal impact resulting from this recommendation is based on providing training primarily for maintenance staff. For TUSD's 51 FTE maintenance staff, this would result in approximately $100,000 per year in training costs (51 FTEs x $40,000 salary + 30 percent benefits x 4 percent).

Recommendation 5-10	One-Time Costs/ Savings	2014-15	2015-16	2016-17	2017-18	2018-19
Enhance operations and maintenance training program.	$0	($100,000)	($100,000)	($100,000)	($100,000)	($100,000)

Note: Costs are negative. Savings are positive.

Recommendation 5-11: Formalize and improve operations and maintenance performance measurement.

TUSD has not developed adequate performance measures to effectively evaluate its facilities and maintenance operations. The district maintains limited data for the development of operations and maintenance performance measures. Thus, it is very difficult to show the successes of the Maintenance Department or "tell the FM story."

The development of data information standards and automating processes enhances facilities performance measurement and the accuracy of KPIs. The objectives of automating work processes are, after all, to enhance and measure facilities performance, and provide better information to make the best decisions regarding facilities.

The current performance measurement at TUSD is limited in scope and requires time-consuming manual data generation through the use of multiple spreadsheets. The performance measurement data provided to the review team included general budget information, school district target data, and some details regarding work order histories. The data also included benchmark information regarding operational costs and capital expenditures per square foot. However, there was a reported lack of

confidence in the data. TUSD has a great opportunity to improve facilities performance through the development of more specific KPIs aligned with the mission and vision of the district.

Measuring facilities operation's performance in today's environment is the route to credibility. The focus must be on prevention, not cure, and there must be recognizable goals and achievable prioritized objectives. Metrics provide essential links between strategy, execution, and ultimate value creation.

There are many ways of identifying and developing metrics and KPIs for use in school facilities management performance measurement. It is also easy to find samples of hundreds of potential facility maintenance metrics. However, it is not easy to identify and implement the right metrics to link facility operations and maintenance to strategy. The right KPIs should focus on those services that have the most prominent place in TUSD's strategic plans. The right mix of KPIs should consider all three aspects of facilities performance:

- **Inputs**: Indicators that measure the financial, staffing, portfolio condition, and operating impacts from limited budgets/resources, churn and construction and renovation activities.
- **Process**: Indicators that measure how efficiently the department is performing its key process.
- **Outcomes**: Indicators that provide a measure of how successfully the facilities function is performing at the enterprise level.

Educational organizations at the forefront of their industry have developed best practices by using a balanced scorecard approach to KPIs. The balanced scorecard is an approach that integrates financial and non-financial performance measures to show a clear linkage between the institution's goals and strategies. Most balanced scorecards consider four perspectives: customer perspective, process perspective, learning and growth perspective, and a financial perspective. The framework set by the balanced scorecard approach provides an excellent methodology to measure overall performance as facilities managers.

It is recommended that KPIs be developed a set at the time of (or prior to) the implementation of a new CMMS. A recommended listing of potential KPIs is presented in Table 5.5.

Table 5.5. K-12 School Key Performance Indicators

Type	KPIs
Input Measures	▪ FCI of building inventory (% DM/CRV) ▪ Maintenance staffing levels (# of FTEs) ▪ Operations funding ($/GSF) ▪ Baseline energy utilization index (EUI) /school ▪ Capital project funding ($)
Process Measures	▪ Work orders by type ▪ Top 10 work order problem codes ▪ Staff utilization (productivity) rates ▪ PM completion rate (%) ▪ Proactive maintenance (PrM) WOs generated ▪ PM / CM mix (%) ▪ Utility cost/GSF ($/GSF) ▪ Re-work percentage (%) ▪ School safety inspection findings ▪ Work order turn-around time (days) ▪ Annual building inspections completed (%)
Outcomes	▪ Cost of operations ($/GSF) ▪ Custodial inspection scores (#) ▪ Change in FCI (%) ▪ Trend in EUI per school ▪ Customer satisfaction (%) ▪ Budget performance (%)

Source: Facilities Engineering Associates

TUSD's Operations Business Office Coordinator should develop a limited number of key performance indicators to measure performance and show stakeholders areas of improvement and accomplishments. This task should be done in coordination with the Operations Director and other department coordinators to ensure alignment with the mission and strategic objectives of TUSD.

Fiscal Impact

This recommendation can be implemented with existing resources.

Grounds Maintenance

The grounds are maintained by a roving grounds crew, a central grounds crew, and site specific personnel. The roving grounds crew is responsible for landscaping at elementary schools and support sites. The central grounds crew is responsible for a broader spectrum of services including irrigation system maintenance, equipment repair, equipment operation, hardscape, pest management, moving, and pruning. Both the roving and central grounds crews report up through the Grounds Supervisor. There are additional site specific grounds maintenance staff at the high schools and middle schools, however they report directly to the school principals. These staff members perform such tasks as paper pick-up, lining the football fields, weed eating, tree trimming, and raking.

The current staff breakdown is summarized in Table 5.6.

Table 5.6. Grounds Maintenance Staff Breakdown

Grounds Maintenance Crew	Assigned Employees	Comments
Roving Grounds	1 Forman 12 Technicians + 1 Vacant	Landscaping at elementary schools and support sites
Central Grounds		
Irrigation	1 Forman 3 Technicians 1 (Vacant)	
Repair Mechanic	5	
Equipment operators	2	
Fence and equipment repair (includes playground equipment)	2	
Cement finishers (sidewalks, asphalt, stucco)	3	
Pest technicians (external pest control, tree pruning)	3	
Site Based		
Grounds maintenance, high schools	14.5	9 high schools, report to principals
Grounds maintenance, middle schools	6.5	18 middle schools, report to principals

Source: TUSD, 2013

The district has an estimated 1,400 acres of turf, 900 acres of which is irrigated. The high schools have 355 maintainable acres at the high schools and 319 maintainable acres at the middle schools. During mowing season (7-8 month duration), two equipment operators are assigned to mow the high schools and three equipment operators are assigned to mow the middle schools. Assuming 900 acres of irrigated turf, to provide maintenance at the lowest APPA service level for ground maintenance at 13.5 acres per person (Level 5), the district would require 67 personnel (APPA Grounds Maintenance 2011). Maintenance is assumed to include mowing, fertilizing, weeding, edging, shrubs, seeding, and aerating. With a total grounds maintenance crew of 55 personnel, the district appears to be operating below the lowest APPA benchmark level.

Recommendation 5-12: Repair/replace outdated equipment.

The roving and central grounds crews appear to operate well; however, their effectiveness is hampered on a daily basis by non-working equipment. Equipment such as dump trucks and brush trucks are 30-40 years old and in need of replacement. It is estimated that as much as a half hour is wasted each day in identifying and securing working equipment before crews can be dispatched on their assignments.

Additionally, irrigation technicians reportedly perform primarily emergency work with an estimated 80 percent reactive maintenance and 20 percent preventive.

Outdated, non-working equipment can cause delays and wastes time. The equipment should be repaired or replaced.

Fiscal Impact

The direct cost of this recommendation is difficult to determine and would require a review of specific equipment needs. The district should conduct an analysis to determine the equipment needs. Implementation of this recommendation will result in increased staff efficiency.

Custodial Services

The custodial services function is generally a source for cost savings in a school district. This is not the case at TUSD. TUSD has a very lean custodial function, too lean when compared to industry standards. Based on visits to TUSD schools during this project, the review team was impressed with the amount of cleaning coverage expected of the custodians, and most school administrators that were visited reported satisfactory levels of service – even after significant staff reductions.

The TUSD custodial services function is a $9 million operation, down from $12 million three years ago. After briefly considering outsourcing the function, TUSD decided instead to significantly reduce staff to achieve similar savings – far below what industry staffing standards would dictate. To place this staff reduction in its proper context, most school systems operate a custodial function with a productivity ratio of 19,000 to 22,000 square feet per custodian (including day and night shift). In 2013-14, TUSD's overall productivity ratio was 34,587 square feet per custodian.

To maintain its current cost levels, TUSD has relaxed its cleaning standards and lowered the related expectations of its customer base, namely the schools. The district has not made the appropriate investments in custodial cleaning equipment.

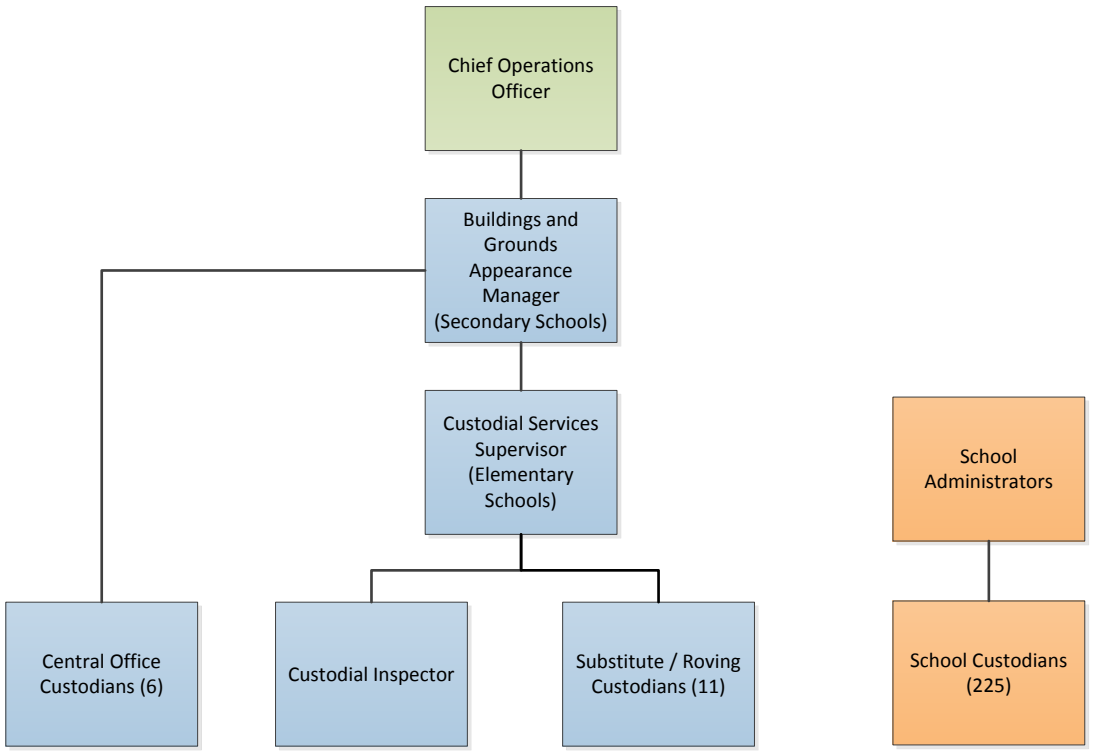
In order to provide a higher standard of cleaning at the current $9 million annual cost, TUSD should again consider outsourcing this function. Based on prior research conducted by TUSD, third party firms were found to have lower salaries and benefits, enough to offset the needed higher staff levels. However, if district leadership decides to maintain this function in-house, several investments will need to be made and a different management approach should be applied. The remainder of this section discusses these investment and management recommendations.

Recommendation 5-13: Implement more centralized management approach to custodial services.

Custodial services at TUSD operate under a hybrid organization structure whereby site custodians report directly to school administrators and a central office custodial function provides technical assistance and staff support. Figure 5.5 depicts the current organization structure for custodial services at TUSD. The

central office custodial function reports to the Chief Operations Officer through the Manager of Building and Grounds Appearance.

Figure 5.5. Current Custodial Services Organizational Structure



Source: TUSD Operations Area Org Chart 2013-14.pdf

The central office custodial function oversees central office custodians, a substitute pool of custodians who serve the entire district, and a custodial inspection position. The Building and Grounds Appearance Manager oversees custodial services, grounds support, irrigation, paint and glass maintenance, pesticide, the sign shop, and graffiti abatement. This position also serves as a custodial services advisor to the secondary schools, and supervises the central office custodial staff. A Custodial Services Supervisor position provides a similar advisory role over elementary schools, and oversees the substitute/roving custodians and the custodial inspector. In their advisory role, custodial services management in the central office provides input on staffing, cleaning frequencies and standards, equipment, supplies, and quality assurance. Custodial staffing, supplies, and equipment are included in the respective school operating budget.

The current decentralized approach to custodial management at TUSD has two primary shortcomings. First, it does not provide effective supervision over school cleaning activities. School administrators are not custodial specialists, and are not in the best position to provide technical oversight to this function. Second, custodial equipment is outdated at TUSD and inconsistent across schools. Because school administrators decide on equipment purchases as part of their school budgets, custodial equipment is often at the bottom of the priority list.

Some school systems have a dual reporting system. Under this approach the custodial supervisor reports administratively to the principal (attendance, discipline matters), while reporting functionally to a custodial leadership position in the central office. In other school systems, the principal serves as the customer of the custodial function, not the line supervisor, providing important customer feedback that influences the evaluation of the custodial function.

Custodial services should fall under the responsibility of TUSD Chief Operations Officer with a dual reporting role to the school principals for administrative purposes. A centralized approach would improve the consistency of cleaning processes and oversight, provide better support for supply management programs, and improve methods of cleaning and work assignments.

TUSD should create zone supervisor positions to oversee and be accountable for custodial services at the schools. All lead custodians (or designated head custodian) should report to a zone supervisor, who would conduct their annual performance evaluation. School administrators should provide input to the custodial zone supervisors on custodian performance and be surveyed throughout the year to evaluate ongoing work quality.

As part of this recommendation, the Chief Operations Officer should update the performance measures and targets for custodial services. The fiscal accountability for this function should also be changed. Custodial staff and related expenditures can be recorded in the accounting system as "school-based" but all costs should fall under the budget of the Chief Operations Officer.

Fiscal Impact

TUSD should create eight FTE zone supervisor positions beginning in 2014-15. With average pay of $35,850 (based on current custodial inspector salary) plus benefits of 30 percent, the annual staff costs would be $372,840. The current custodial inspector should be converted to a zone supervisor, resulting in nine total supervisors. Additional travel cost of $1,000 per zone supervisor, or $8,000 in total, is expected. The total annual cost is projected to be $380,840 starting in 2014-15.

Recommendation 5-13	One-Time Costs/ Savings	2014-15	2015-16	2016-17	2017-18	2018-19
Implement more centralized management approach to custodial services.	$0	($380,840)	($380,840)	($380,840)	($380,840)	($380,840)

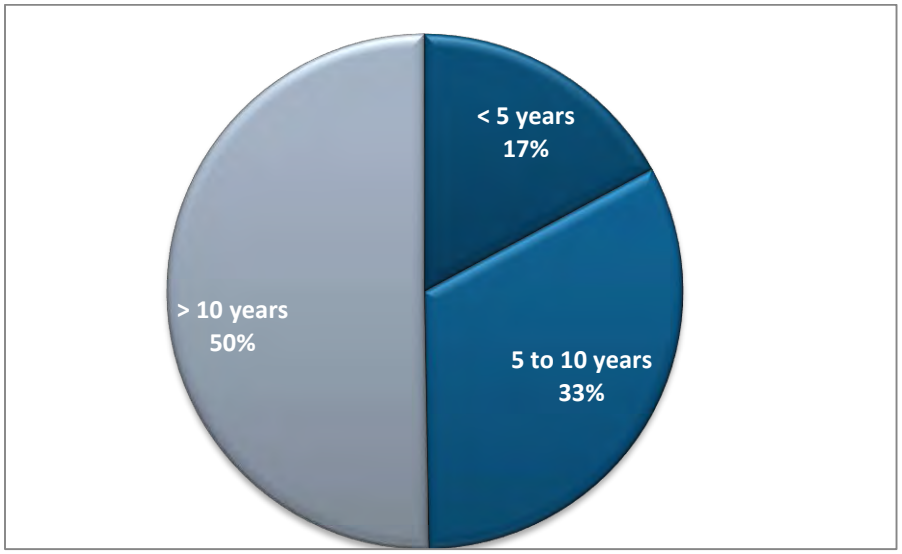
Note: Costs are negative. Savings are positive.

Recommendation 5-14: Invest in updated cleaning equipment to improve efficiency through reduced work demands.

TUSD maintains a centralized inventory of custodial equipment, but the decision to purchase equipment is made at the school level. This approach has led to the use of old, outdated equipment that limits the

ability of custodial staff to maximize their efficiency. Figure 5.6 shows the distribution of custodial equipment by age for the 181 pieces of equipment costing $1,000 or more. Approximately 50 percent of the equipment is more than 10 years old; less than 18 percent is less than five years old.

Figure 5.6. Age Distribution of TUSD Custodial Equipment



Source: TUSD EQUIPMENT Custodial Asset 20140115.xlsx

The TUSD custodial equipment inventory contains very few pieces of the newer, higher efficiency equipment such as auto-scrubbers (floor cleaning) and outdoor vacuum sweepers. The district has only five auto-scrubbers and no outdoor vacuum sweepers. Both of these tools support more efficient cleaning by custodial staff. Based on information obtained during school visits, one of the auto-scrubbers is used only during the summer deep cleaning procedures.

Fiscal Impact

If TUSD continues to operate its custodial services in-house, it will need to invest in equipment to maximize the efficiency of a highly lean custodial staff. The current cost basis of the district's custodial equipment (excluding vacuum cleaners) is approximately $650,000; however much of this equipment was purchased more than 10 years ago. The district should make an initial investment of 50 percent of this amount ($325,000), and continue to sustain a level of equipment replacement annually of 10 percent of the amount ($65,000).

Recommendation 5-14	One-Time Costs/ Savings	2014-15	2015-16	2016-17	2017-18	2018-19
Invest in current cleaning equipment.	($325,000)	($65,000)	($65,000)	($65,000)	($65,000)	($65,000)

Note: Costs are negative. Savings are positive.

Recommendation 5-15: Increase custodial staffing after management change and equipment investments.

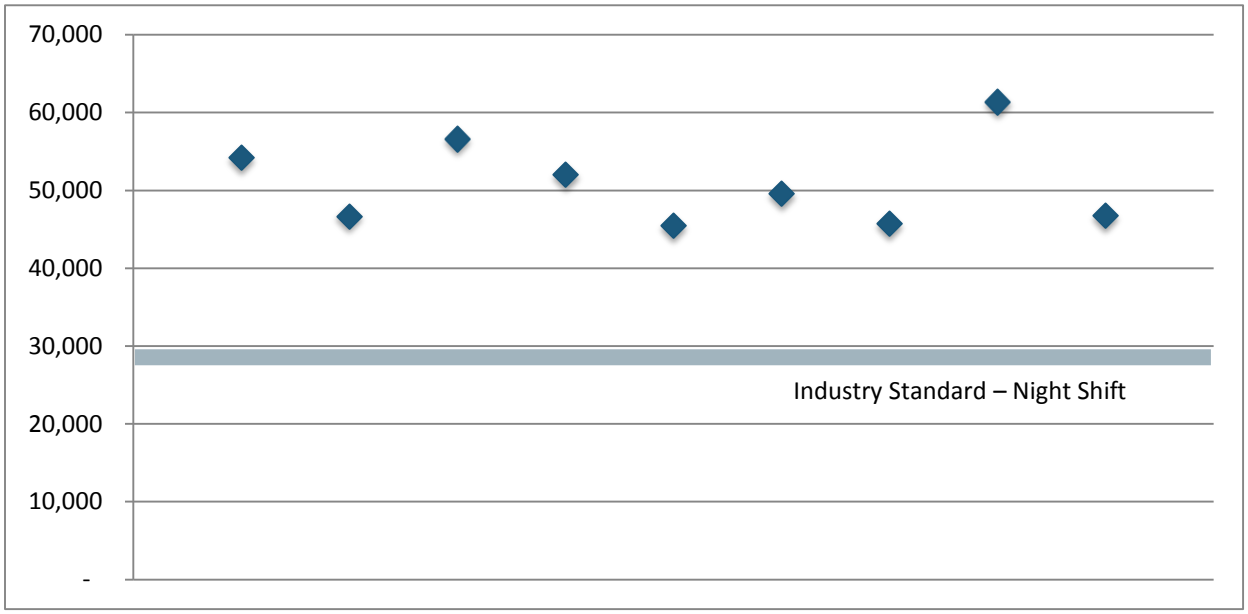
The Planning Guide for Maintaining School Facilities[16] contains recommended cleaning standards for school space. These standards relate to night shift productivity, where cleaning time is uninterrupted. Additional custodial staff resources are needed during the day for cleaning selected areas, inspection, lunch period cleaning, and special requests. Below are the various standards for school cleaning included in the planning guide. Most school facilities are subject to Level 3 cleaning.

- Level 2 cleaning is the uppermost standard for most school cleaning, and is generally reserved for restrooms, special education areas, kindergarten areas, or food service areas. A custodian can clean approximately 18,000 to 20,000 square feet in an eight-hour shift.
- Level 3 cleaning is the norm for most school facilities. It is acceptable to most stakeholders and does not pose any health issues. A custodian can clean approximately 28,000 to 31,000 square feet in eight hours.
- Level 4 cleaning is not normally acceptable in a school environment. Classrooms would be cleaned every other day, carpets would be vacuumed every third day, and dusting would occur once a month. At this level, a custodian can clean 45,000 to 50,000 square feet in eight hours.

TUSD's custodial productivity is far above these standards. Figure 5.7 shows a scatter diagram where each point on the graph represents the productivity measure (night shift gross square feet per FTE custodian) for each TUSD high school. All TUSD high schools far exceed the low end of the night shift cleaning productivity standard (28,000 gross square feet).

[16] Planning Guide for Maintaining School Facilities, School Facilities Maintenance Task Force, National Forum on Education Statistics and the Association of School Business Officials International, February 2003

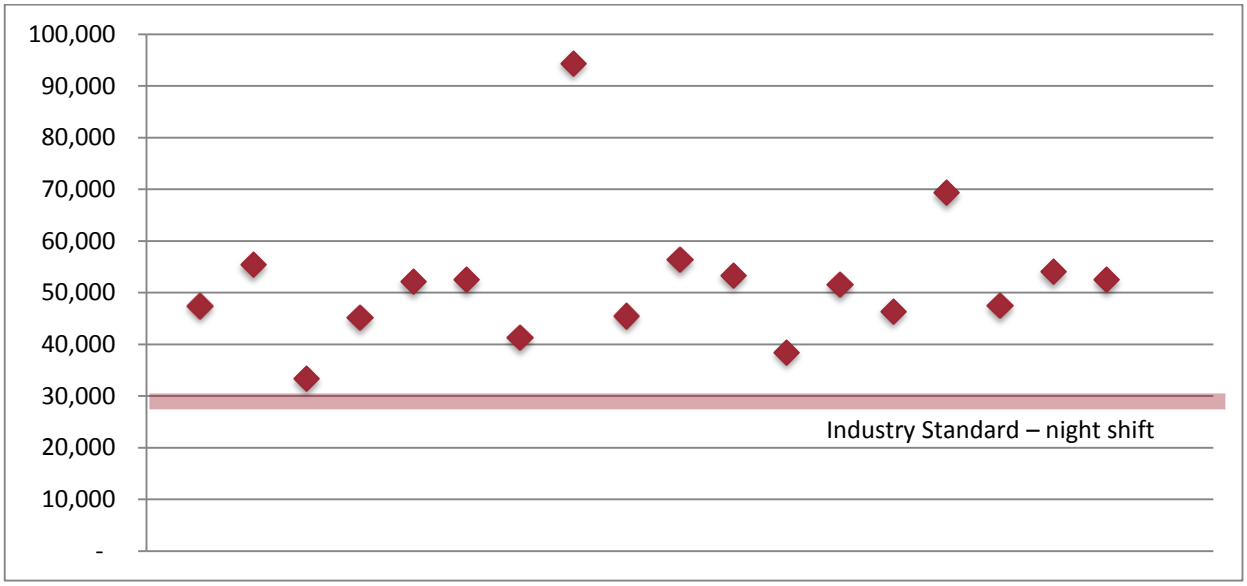
Figure 5.7. Gross Square Feet of Coverage per Custodian – Night Shift, TUSD High Schools, 2013-14



Source: TUSD Staffing 2013-2014 Shifts.xlsx

TUSD middle schools and K-8 schools show a similar relationship to the industry standard. Figure 5.8 shows each school's productivity measure against the industry standard for night shift productivity. Two schools showing unusually high productivity levels represent smaller middle schools that allocate more staff time to the day shift (so that no less than one FTE is at the school during the day).

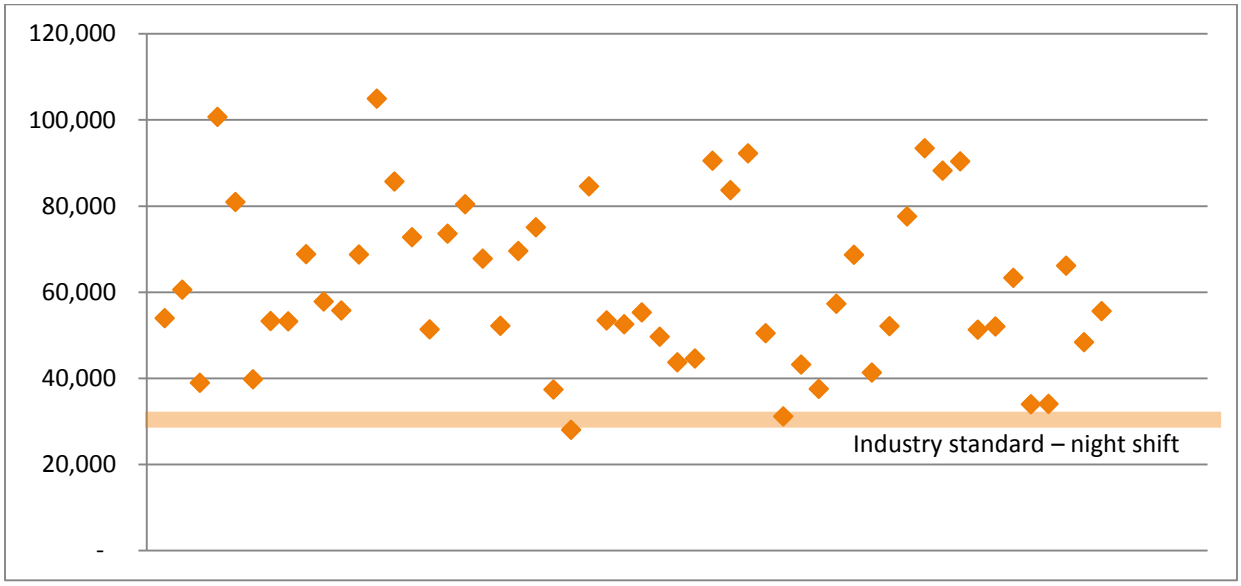
Figure 5.8. Gross Square Feet of Coverage per Custodian – Night Shift, TUSD Middle Schools and K-8 Schools, 2013-14



Source: TUSD Staffing 2013-2014 Shifts.xlsx

At the elementary schools, the impact of smaller schools is more pronounced. In order to have no less than one FTE at the elementary schools during school hours and sustain an overall productivity ratio, many of the schools have less than one FTE to support the night shift. This results in very high productivity for elementary school night shift custodians. Figure 5.9 shows night shift productivity of the elementary schools compared to the industry standard (28,000 gross square feet).

Figure 5.9. Gross Square Feet of Coverage per Custodian – Night Shift, TUSD Elementary Schools, 2013-14



Source: TUSD Staffing 2013-2014 Shifts.xlsx

TUSD applies some effective practices to maximize staffing efficiency. Less than one-third of the custodial staff works during the school day; two-thirds works the night shift when the students are not there and cleaning time is more productive. Further, the use of part-time positions helps achieve target staff productivity ratios at smaller schools.

The impact of the TUSD's low staffing levels is twofold. First, cleaning frequencies have been reduced to standards that more closely resemble a Level 4 cleaning standard whereby many items are cleaned every other day instead of every day. Second, this has led to lower expectations by school staff or in some cases resulted in the purchase of additional push brooms and other equipment for teachers to use/share in their classrooms. In essence, the current approach is asking schools to tolerate lower cleaning levels or to have school staff clean areas themselves.

TUSD should increase staff levels to achieve a higher standard of cleanliness and the commensurate expectations from students and staff at the schools. Before staffing "to the standards," TUSD should first evaluate the impact of the other two recommendations in this section – changing the management approach and investing in new equipment. The district may find that it can sustain an acceptable level of cleaning frequencies and cleaning quality above industry productivity standards.

Fiscal Impact

The fiscal impact of this recommendation assumes moving towards the night shift productivity standard of 28,000 square feet per custodian, and results in a need of an additional 40 FTE custodial positions. Based on the average starting pay for a Custodian 1 position of $21,255 and 30 percent benefits, the annual cost of this recommendation will be $1,105,260.

Recommendation 5-15	One-Time Costs/ Savings	2014-15	2015-16	2016-17	2017-18	2018-19
Increase custodial staffing.	$0	($1,105,260)	($1,105,260)	($1,105,260)	($1,105,260)	($1,105,260)

Note: Costs are negative. Savings are positive.

Energy Management

Facility managers and operators, as stewards of the built environment, are challenged to integrate the principles embraced by their organization to run their facilities efficiently. TUSD has actively pursued conservation efforts. The district has established an energy conservation policy whose goal is "to help reduce energy consumption and utility costs, to optimize capital investment for energy efficiency, and to reduce emissions and conserve natural resources." Additionally, TUSD monitors energy through the use of Utility Manager Pro which reviews utility bills, and tracks energy consumption and cost on a monthly basis. Energy use in the district consists primarily of electricity and natural gas use; data for over 140 electricity meters and nearly 130 natural gas meters is contained within the Utility Manager Pro system.

Over the last five years, the district has spent over $14 million annually on energy (refer to Table 5.7).

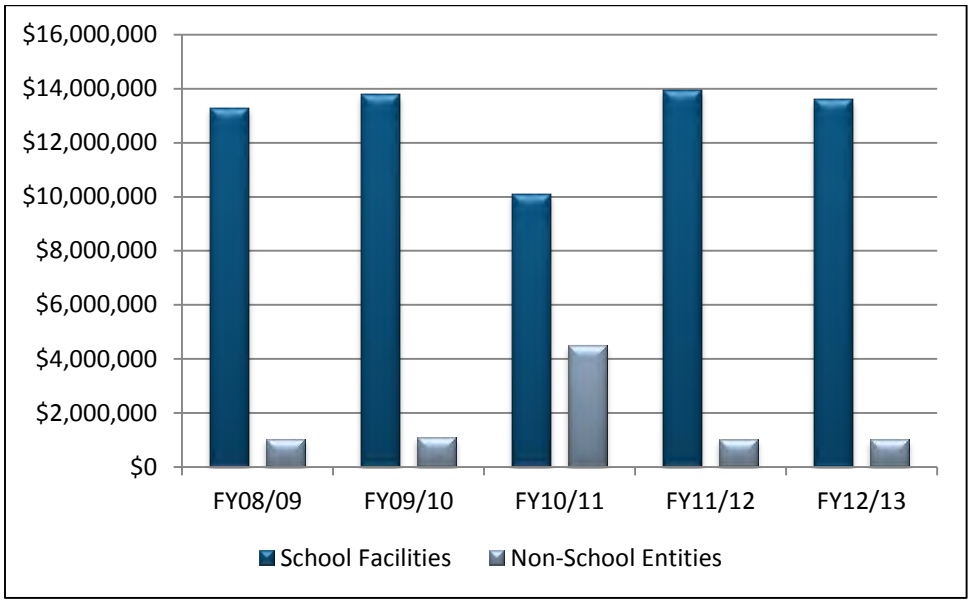
Table 5.7. Summary of Energy Expenditures by Fiscal Year (FY)

Fiscal Year	Energy Expenditures
FY 2009	$14,337,854
FY 2010	$14,874,687
FY 2011	$14,597,956
FY 2012	$14,965,948
FY 2013	$14,627,296

Source: TUSD, 2013

School facilities account for 84 percent of the gross square footage. According to meter data provided, these same facilities account for the majority (over 90 percent) of the energy expenditures in a given year with the exception of FY 2011. Given the steadiness of trend of the other four years, the FY 2011 expenditure split appears to be an anomaly.

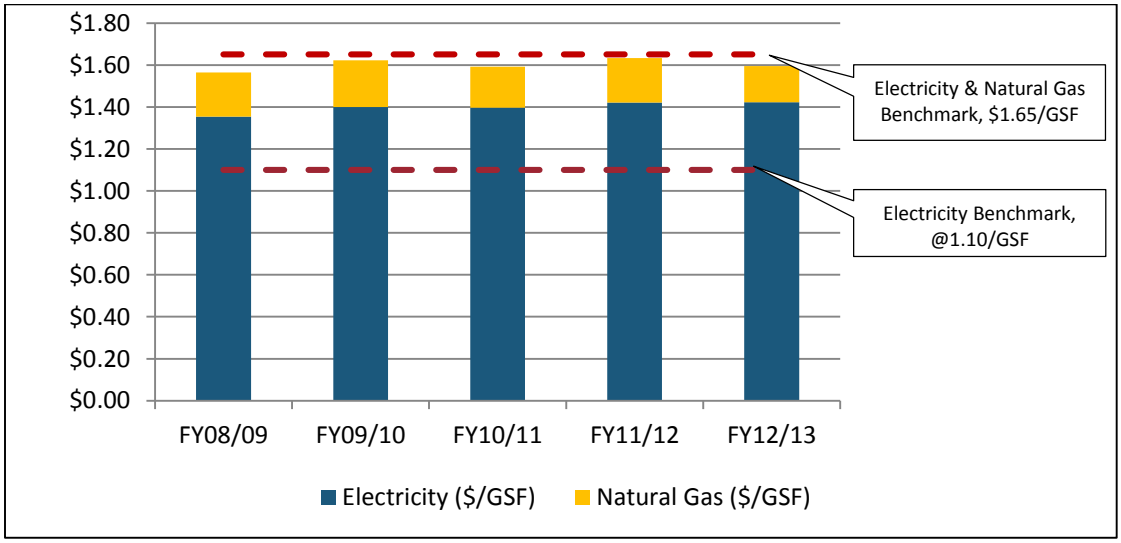
Figure 5.10. Energy Costs of School Facilities and Non-School Entities



Source: TUSD, 2013

Over the last five years, the district has spent an average of $1.56 to $1.63 per gross square foot (GSF) for energy utilities. The majority is for electricity which ranges from $1.35 to $1.42/GSF. The benchmark for education facilities is $1.65/GSF ($1.10/GSF for electricity, $0.55/GSF for natural gas) [17]. In reviewing the average costs for energy at the schools, total energy costs are very close to benchmark values; however, electricity costs are well above the benchmark. Figure 5.11 compares TUSD facilities costs to industry standards.

Figure 5.11. Education Facilities Benchmark Cost for Electricity and Natural Gas



Source: International Facility Management Association; TUSD 2013

[17] International Facility Management Association, *Research Report #32, Operations and Maintenance Benchmarks*, 2009.

While this comparison suggests district costs are in line with industry based on benchmarks, several facilities were noted to have much higher costs. It should be noted that approximately one-half of the facilities are demand-metered. In other words, the cost of electricity is based on both the amount consumed on a monthly basis as well as the peak demand reached in that month. This can be significant in an energy management program because demand charges can account for as much as 40 percent of the electricity cost. Table 5.8 summarizes the top 10 meter locations registering electricity costs on a per gross square foot basis.

Table 5.8. Top 10 Highest Energy Expenditures, Gross Square Foot Basis, Fiscal Year 2013

Meter Name/Location	Electricity	Natural Gas	Total
Finance	$ 9.46	$ 0.12	$ 9.59
Facilities-Property Control	$ 7.32	$ 4.98	$ 12.30
Booth/Fickett Magnet K-8	$ 5.44	$ 0.77	$ 6.22
Howenstine HS	$ 3.17	$ 0.47	$ 3.64
Transportation East	$ 2.85	$ 0.37	$ 3.22
TAPP MS/HS & STARR Center	$ 2.67	$ 0.14	$ 2.82
Davidson ES	$ 2.55	$ 0.29	$ 2.84
Food Service	$ 2.47	$ 0.30	$ 2.77
Gale ES	$ 2.42	$ 0.25	$ 2.67
Miller ES	$ 2.39	$ 0.27	$ 2.67

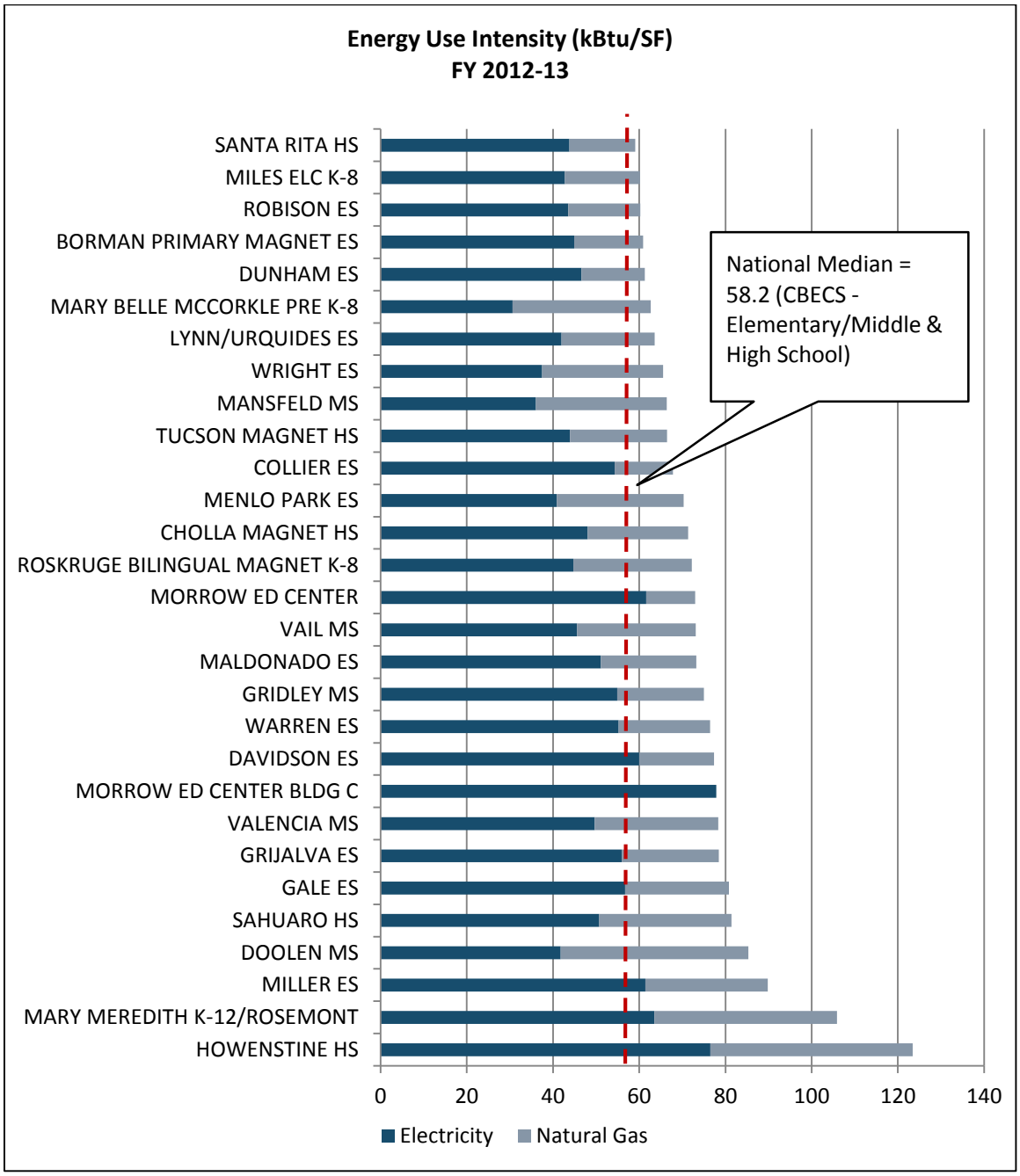
Source: TUSD 2013

Based on interviews with district personnel, the finance facility contains a server room which increases overall energy use for the building. Both the Facilities-Property Control and Transportation East facilities are reportedly relatively uninsulated, thermally inefficient buildings. The cause of the high cost per square foot for the remaining facilities is not readily apparent.

In order to obtain an understanding of a building's energy performance and to determine if a building is operating efficiently, it is important to compare a building's energy use to similar buildings. A good way to compare the energy use of similar buildings is calculation of the building's Energy Use Index (EUI). EUI is the average energy use per square foot over the course of a year for that building. The review team received monthly energy consumption and cost data spanning a five year period from FY 2009 through FY 2013 for over 140 electricity meters and nearly 130 natural gas meters. In reviewing the EUI of the school facilities, there are 29 schools that in FY 2013 exceeded the national median of 58.2 kBtu/GSF[18] (Figure 5.12).

[18] Commercial Building Energy Consumption Survey (CBECS) 2003 survey.

Figure 5.12. Schools with Energy Use Intensity Exceeding National Median



Source: Commercial Building Energy Consumption Survey; TUSD 2013

In 2012, the district performed an energy audit analysis which reported rising cost of utilities as well as decreases in overall energy use between FY07/08 and FY11/12. Specific recommendations were identified which included behavioral practices, maintenance practices, policies, and training needs.

A subsequent document, *Tucson Unified School District Energy, Water, and Waste Strategies,* summarized several initiatives which resulted in a reduction of energy expenditures, specifically $120,000 in electricity costs and $330,000 in natural gas costs. The reduction was attributed to the

performance of school energy audits, employee education and outreach, changes in behavior, and improvements in equipment/building controls.

In addition to the analysis and initiatives already identified, TUSD is implementing the following:

- Specifying master meters
- Implementation of a space temperature policy
- A Board policy for new construction to be LEED "Certified" level
- Annual goal to perform one energy audit per year
- Engaging students in performing energy audits
- Photo-voltaic array.[19]
- Energy Management Control Systems (EMCS) are present at several locations. Current efforts are underway to link these systems together with a common interface.

Recommendation 5-16: Implement energy management plan.

Based on the data provided, many of the sites have opportunities for energy savings. Approximately one third of the schools spend over $1.80/SF in energy costs. This represents approximately 5 percent of the total annual energy bill for TUSD. Table 5.9 shows the top 10 locations with the highest energy costs per square foot. While a few of these areas are support facilities, the majority are school facilities. Figure 5.12 shows 29 school facilities whose EUI is above the national average for education facilities. Energy audits are recommended to identify building-specific opportunities for energy savings. The locations noted in Table 5.9 and Figure 5.12 should be used to prioritize the order in which facilities are reviewed. The district has a goal to perform one energy audit per year. The procurement of the services of an energy savings company is also reportedly underway. Both will help advance energy management goals. However these efforts need to be tied together in a cohesive energy management plan.

The building blocks of an energy management plan include:

- Establishing baseline performance
- Benchmark performance and prioritize facilities
- Identify opportunities for improvement
- Set goals
- Program development and implementation
- Measure and report

Through energy conservation practices, it is well within reason to achieve a 5 to 15 percent savings. Recommended energy conservation and management practices include:

[19] The district will be implementing an 11MW photo-voltaic array which is estimated to meet approximately 80 percent of the energy needs at 40 sites. TUSD has negotiated a 20-year fixed electricity rate of $0.1382/kWh for the power provided by the array. This is comparable with Tucson Electric Power's currently published summer rates on a GS-10 rate schedule, and is anticipated to result in significant energy cost savings as standard utility electricity rates otherwise continue to rise.

- Continue to conduct energy audits in schools and perform energy audits in support facilities. Audits in the schools are reportedly conducted by students. Energy audits typically identify low cost/no cost energy conservation measures which result energy and cost savings.
- Continue to install Energy Management Control Systems (EMCS) in schools, particularly those with more complex mechanical systems and high overall utilization.
- Implement energy management guidelines which incorporate system schedules, setpoints, minimum efficiencies for HVAC equipment, purchasing guidelines for plug load equipment (computers, printers, monitors, copiers), and personnel practices.
- Perform retro-commissioning in schools and larger support facilities.
- Utilize controls system to setback systems during off hours.
- Upgrade/integrate building controls systems (this effort is reportedly in progress).
- Install occupancy sensors for lighting and single-room HVAC units.
- When mechanical equipment has reached the end of its useful life, replace with high efficiency models which meet ASHRAE Standard 90.1 minimum efficiency ratings.

Additionally, the following should be considered:

- *Outside air* – district personnel noted quantity of outside air is a concern. Outside air is expensive to condition and, depending on the system type, areas of the building may be under or over-served. When outside air is insufficient, this can lead to a perception of stuffiness, build-up of odors, and generally poor overall indoor air quality. However when too much outside air is provided, it can over-tax mechanical equipment, and increase energy costs. One of the most common failures in mechanical equipment is outside air damper actuators. The function of dampers should be checked ideally on a quarterly basis, at a minimum on an annual basis. The quantity of outside air provided is recommended to be checked every five years, upon change of space use, or upon completion of mechanical system reconfigurations/renovations. The initial functionality of equipment dampers and outside air quantity could be checked by the energy savings company contractor should TUSD proceed with that procurement and wish to incorporate it into the scope of work.

- *Installation of occupancy sensors* – occupancy sensors are recommended for areas of the building which have prolonged occurrences of non-use such as conference and meeting spaces, private offices, single restrooms, and storage areas.

- *Portable units* – portable units are more expensive to heat and cool. Eliminating units (refer to Recommendation 5-1) will decrease overall energy expenditures.

A variety of guidelines exists for energy management in public schools including the following:

- Technical Reference: ENERGY STAR Score for K-12 Schools in the United States
- ENERGY STAR Building Manual, Chapter 10: K-12 Schools

- Guide to Operating and Maintaining EnergySmart Schools, U.S. Department of Energy, Energy Efficiency & Renewable Energy

Fiscal Impact

TUSD should develop an energy management plan across the portfolio, either in-house or with a third party to identify the specific energy conservation measures, implementation costs, and potential energy savings needed to reach these potential cost savings. Estimating costs of energy measures' implementation is difficult until the entire portfolio has been assessed.

Based on the work that has already been completed and the results that have been achieved, there is additional potential for energy cost savings across the portfolio if investments in personnel and capital projects is made. Appendix H shows the average energy cost ($/sf) and average energy intensity (kBtu/SF), for the various schools in FY 2013. Those schools with low EUI ratings represent the best potential for energy improvements and energy cost reductions.

An analysis of the schools was performed and the review team looked at the potential energy savings available. Assuming a target EUI of 58.2 kBtu/GSF, the potential energy cost savings of all of the schools with an EUI exceeding 58.2 kBtu/GSF is $1,300,000 (based on average rates for electricity and natural gas). Using a more conservative estimate of 5 percent annual energy savings yields an estimated $750,000.

Energy conservation measures can be identified through a variety of methods. The district is currently in discussions with an energy services contractor (ESCO) in which case a third party firm will identify energy saving projects, develop an implementation plan, and provide financing for needed investments in energy conservation measures. In these types of contracts, project costs incurred by the ESCO are typically paid by the subsequent energy savings. Alternately, retro-commissioning may be performed in which either district or third party personnel test building energy consuming systems to ensure that the buildings and systems are operating in accordance with the district's operating requirements. Energy conservation measures are developed in response to identified deficiencies as well as identified opportunities for operational improvement.

Assuming a third party retro-commissioning model, it is estimated that the cost of performing retro-commissioning at all of the schools with an EUI greater than 58.2 kBtu/GSF is $540,000 using an estimated cost of $0.20/sf. Paybacks in retro-commissioning programs are typically less than two years. Using the previously identified 5 percent annual energy savings estimate and corresponding $750,000 annual savings, and a capital investment of $1,500,000 in the 2014-15 school year, savings may begin as early as the 2014-15 school year. In this scenario, by the 2017-18 school year, the payback will have been achieved and savings will continue.

Recommendation 5-16	One-Time Costs/ Savings	2014-15	2015-16	2016-17	2017-18	2018-19
Conduct re-commissioning and develop energy management plan.	($540,000)	$0	$0	$0	$750,000	$750,000

Note: Costs are negative. Savings are positive.

Chapter 6 – Transportation Management

Introduction

The Tucson Unified School District (TUSD) Transportation Department is responsible for transportation between home and school for general education students and special needs students attending public schools. The department also provides student transportation for pre-kindergarten, after school activities, summer programs, educational field trips, and extracurricular activity trips. The department is responsible for vehicle maintenance for the fleet of school buses and the district's general service vehicles. The core mission of the Transportation Department is to transport TUSD students to and from their centers of learning in a safe, timely, efficient, and academically supportive manner[20].

This chapter provides commendations and recommendations in the following areas of transportaton management: organization and management, routing and scheduling, fleet maintenance, and fleet replacement.

Eligibility for Student Transportation

According to Governing Board Policy for Student Transportation in School Buses (Policy EEA[21]), students who reside in TUSD's school district boundaries and meet one or more of the following criteria are eligible for student transportation between home and school:

- Students attending an elementary school or K-8 school who live 1.5 miles or more from school.
- Middle school students or sixth grade students who are assigned to a junior high school and who live at least 2.5 miles from school with no public bus service.
- Junior high school students who live at least 2.5 miles from school with no public bus service.
- Senior high school students who live at least 2.5 miles from school with no public bus service.
- Students who require specialized transportation in connection with any educational program, class or service as required by a student's individualized education program (IEP) based on special needs (Arizona Revised Statute §15-764). TUSD Transportation refers to these students as "exceptional education students."

The Transportation Department implements Governing Board Policy EEA using the following guidelines:

- High school students (other than exceptional education students) will utilize the City of Tucson Sun Tran public transit services and not receive yellow bus service if the student's home address

[20] Transportation 133 Routing Guidelines

[21] http://www.tusd1.org/contents/govboard/SectE/EEA.html

is within a walk to stop distance of 0.5 miles of a Sun Tran route and the route to school does not require more than one transfer.

- Students who "open enroll" as part of the Unitary Status Plan (USP) program and attend a school outside of the same geographical grouping as the geographical school of attendance (the "residence school") are eligible for transportation. Open enrollment includes students who attend a magnet school outside of the same geographical grouping of the student's residence school.
- If a student who is experiencing homelessness is temporarily residing beyond the established school attendance boundaries, the school district will provide that student with transportation to and from the school of origin (McKinney-Vento Act, 42 USC 11433, 2001).
- Students with temporary physical conditions can arrange to ride student transportation for short periods.

After-school routes provide students transportation from school to home following afternoon school-sponsored activities. The Transportation Department also transports general and exceptional students for summer programs, sporting events, extracurricular activities, and field trips.

Although TUSD's school enrollment is declining, the number of students eligible to use student transportation is increasing. TUSD's school enrollment decreased from 51,542 in 2012-13 to 49,872 in 2013-14, or a loss of 3.2 percent enrollment. At the same time, students eligible to use student transportation increased from 22,642 to 23,890, or an increase of almost 6 percent in one year. The Director of Transportation said the increase in eligibility is due to school closures. The district assigns students from schools that are closed to other schools located beyond the walk-to-school zone. Another reason that more students are eligible for student transportation is because the district is sponsoring more featured academic options as part of the USP program, thus encouraging open enrollment and attendance at schools of choice.

Table 6.1 documents the number of TUSD students eligible for transportation between home and school in 2012-13 and 2013-14.

Table 6.1. Students Eligible for Transportation

Category	2012-13	2013-14	Change
Student enrollment	**51,542**	**49,872**	**-1,670**
Students not eligible for student transportation	**27,863**	**25,962**	**-1,901**
Regular student riders eligible	20,784	22,100	1,316
Exceptional student riders eligible	1,858	1,790	-68
Students eligible for student transportation	**22,642**	**23,890**	**1,248**
Students eligible as percent of enrollment	45%	48%	
Eligible who decline student transportation	- 3,449	- 3,381	-68

Category	2012-13	2013-14	Change
Remaining students eligible for student transportation	19,193	20,509	1,316
Students eligible for transportation on school bus routes	**16,099**	**18,524**	**2,425**
Students eligible for buses as percent of enrollment	32%	37%	
Students eligible for Sun Tran passes	**3,094**	**1,985**	**-1,109**
Students provided Sun Tran passes as percent of enrollment	6%	4%	

Source: TUSD

Student Riders

Although 22,642 students were eligible for home-to-school transportation in 2012-13, TUSD reported 3,449 students or parents declined the service, leaving approximately 19,193 students eligible for transportation. Of the 19,193 students, 16,099 were scheduled to ride school bus routes, and 3,100 were eligible for Sun Tran passes. The Transportation Department reported transporting 9,062 daily student riders on school bus routes and providing passes for another 2,250 students to use Sun Tran public transit. A total of 11,312 students, or 59 percent of the 19,193 eligible students, used student transportation or Sun Tran in 2012-13. Table 6.2 presents students scheduled for school buses or Sun Tran compared to student riders.

Table 6.2. Students Scheduled for School Buses or Sun Tran Compared to Student Riders

Student Category	FY 2013
Students that are scheduled for school buses	**16,099**
Regular program student riders (less open enrollment)	5,491
Students transported for open enrollment	1,578
Exceptional education (special needs) student riders	1,390
Homeless student riders	603
Total student riders on school buses	**9,062**
Student riders as percent of students scheduled	56%
Students that are eligible for Sun Tran passes	**3,094**
Students issued Sun Tran passes	**2,250**
Sun Tran riders as percent of eligible	73%

Source: FY 2013 Arizona Department of Education and TUSD Transportation Department

The Transportation Department did not have data or anecdotal information to explain the difference between students eligible for transportation and the number of actual daily student riders on yellow buses or public transit. Table 6.2 documents the eligible students that are scheduled for school buses as compared to the actual student riders. The Transportation Department schedules all students who are eligible for school bus transportation (16,099 students) although 9,062 students (56 percent) actually ride the bus on the average school day.

One explanation for a lower percentage of student riders could be the length of routes. The school district is large in geographic area and number of schools, over 229.5 square miles and 87 schools. The department provides transportation for students who travel a significant distance to attend a school of choice rather than their neighborhood "residence" school, for students attending magnet schools throughout the district, for exceptional students with IEP approved specialized transportation requirements, for students eligible for transportation to a home school under McKinney-Vento, and for students attending alternative schools for behavior concerns. Routes are designed to provide capacity for all students who are eligible to ride the bus and who do not decline the service; however, on the average day, actual student riders are about 56 percent of students eligible for transportation on school bus routes. To schedule buses more efficiently, TUSD operates a transfer system for students attending schools of choice. Students transfer from bus routes serving a residence school to a different bus route that serves the destination school of choice. The impact of long distance travel for students participating in the district's many choice programs is discussed further below.

Transportation Facilities

The Transportation Department operates from three facilities that house transportation operations and vehicle maintenance throughout the district's geographical area. The Central transportation facility serves as the base for the 146 school buses. The Transportation Department uses Central as an administrative facility and as the location for the auto shop for general services vehicles. The newly constructed West facility opened in 2013 and is designed to maintain up to 250 buses. The current number of buses assigned to the West facility is 94 buses. The East facility is home to 92 buses. Each of the facilities is larger than required for the currently assigned bus parking and vehicle maintenance functions. This gives the Transportation Department some flexibility in assigning vehicles to distribute the workforce and reduce the non-productive miles from the bus parking facility to/from the end of each route ("deadhead" miles). However, the East facility is limited by the condition of equipment in the maintenance building; for example, vehicle lifts were not in working order in January 2014. Equipment that is not in working condition limits the type of tasks and the efficiency of work at that particular garage.

Use of Technology

The department also uses technology to help improve operating efficiency and to collect accurate data. For several years, the Transportation Department prepared bus routes and schedules using an automated routing and scheduling system. Use of an automated system should improve the efficiency and effectiveness of the routes. However, the department's software has been in service many years and relies on maps that are not the most current or most accurate. The department plans to solicit proposals for a new routing and scheduling software this year. Recently, the district purchased a geographical positioning system (GPS) for all school buses. GPS reports the exact position of the bus at all times. The department uses the GPS devices to monitor service and to verify that the most efficient route is traveled each time a driver operates a school bus.

Budget for Transportation

The 2012-13 expenditures for the Transportation Department were $23.7 million for operations, including all vehicle maintenance, and almost $1 million for capital purchases and debt repayment. Of the total expenditures for operations, 71 percent was for salaries, wages, and payroll-related expenses; 13 percent for fuel of all types; 10 percent for purchased services, parts, and supplies; and 6 percent for purchased transportation (Sun Tran bus passes and purchased Handicar transportation for exceptional education students). Table 6.3 shows the budget and actual expenditures for 2012-13 and the adopted budget for 2013-14.

Table 6.3. Budget, Expenses, and Project Savings for the TUSD Transportation Department

Budget Category	2012-13 Budget	2012-13 Actual	2013-14 Budget	Change 2012-13 Actual to 2013-14 Budget
Salaries and Wages	$9,657,072	$12,268,164	$8,207,632	-$4,060,532
Payroll Benefits	$4,626,701	$4,481,973	$2,481,595	-$2,000,378
Purchased Transportation	$1,244,097	$1,497,698	$1,318,000	-$179,698
Purchased Services	$573,544	$725,806	$860,100	$134,294
Parts and Supplies	$2,014,500	$1,743,905	$1,707,500	-$36,405
Fuel	$2,410,300	$2,986,957	$2,450,000	-$536,957
TOTAL Operations	**$20,526,214**	**$23,704,503**	**$17,024,827**	**-$6,679,676**
Capital		$992,845	$651,127	
TOTAL Operations and Capital	**$20,526,214**	**$24,697,348**	**$17,675,954**	

Source: TUSD Online Budgets; TUSD Operations Business Office

The increase in actual expenditures in 2012-13 over budget was in part due to an increase in management staff in the Transportation Department. The added positions are listed in the discussion of Organization and Management below. In 2012-13, the cost per student to use Sun Tran bus passes was less than the cost per student rider for TUSD school bus transportation.

The adopted budget for 2013-14 is $17 million for operations and $651,000 for capital outlay. The operations budget is $6.7 million below 2012-13 actual expenditures. The Director of Transportation and the office coordinator for the Operations Business Office provided a partial explanation for expected savings:

- The district leadership team negotiated changes in the Memorandum of Understanding for Blue Collar Employees (effective July 1, 2013 through June 30, 2015), and the changes are anticipated to reduce wages and related payroll benefits for bus drivers and monitors by $1,138,000 in 2013-14. The changes in the labor agreement include the following:
  - Vacation days were reduced to a range of 10-20 days depending on years of experience
  - Reduction in paid personal days from 14 to eight days effective July 1st, 2014

  - Eliminate December in-service day
  - Paid breaks only if the driver or monitor works a shift with a minimum number of hours
  - Fuel buses every other day (rather than every day)
  - Guarantee drivers six hours per day minimum for a morning/evening route assignment (the previous minimum was four hours)
  - Guarantee drivers eight hours per day if a midday run is added to the morning/evening route assignment
  - Discontinue the practice of paying drivers of pre-kindergarten routes on Wednesday because they do not attend school on Wednesdays

- In the budget assumptions for 2013-14, the implementation of GPS was expected to save $714,000 to $1,180,000 in wages and related payroll benefits for bus drivers and monitors based on route efficiencies and more accurate driver schedules. The estimate of savings assumed a reduction of the average paid hours for drivers by 5 to 10 percent and a reduction of the average paid hours for monitors by 5 to 10 percent.
- The new West facility is expected to reduce deadhead miles and save the district $500,000 in fuel expense.

These possible savings in 2013-14 are a maximum of $2.8 million (assuming 10 percent GPS savings) of the budgeted $6.7 million below 2012-13 actual expenditures. Neither the Director of Transportation nor the Office Coordinator for the Operations Business Office could confirm the budget assumptions that will provide an additional $3.9 million in savings. As of December 2013, approximately 57 percent of the budgeted operating dollars for 2013-14 were expended.

The GPS savings may not be realized due to the negotiated changes in the guaranteed minimum hours per day in the Memorandum of Understanding for Blue Collar Employees (effective July 1, 2013 through June 30, 2015). The estimate of savings for the West facility was based on an assumption that miles equal to the distance from the Central facility to the West facility would be saved for every route now operating at the West facility. In actual practice, some routes are closer to the beginning/end of each route and some routes may be a longer distance for either the beginning or the end of the route. The estimate of miles saved and therefore reduction in fuel costs may have been optimistic.

Sun Tran Bus Passes

The TUSD Transportation Department spent $1,323,712 during the 2012-13 school year to purchase Sun Tran bus passes for 2,250 students at an average annual cost per student of $588. This compares to TUSD variable operating costs $20,858,562 during the same school year to transport 9,062 student riders on school buses at an average annual cost per student of $2,302[22].

[22] Source: www.ade.az.gov 2012-13 TRAN 55-1 Reports

Peer Comparison

The purpose of a peer comparison is to understand the TUSD school transportation program as compared to another, similar school district. Mesa Public Schools (MPS) is a unified school district located in the Phoenix urban area. The MPS school district is 186 square miles in land area with an enrollment of about 60,000 students attending 85 schools. MPS provides school bus transportation between home and school for students attending neighborhood schools, students with special needs whose IEP dictates transportation is required, and homeless students who need transportation to their school of origin. The MPS walk zones for neighborhood schools are smaller than TUSD policy. The MPS walk zones are one mile for elementary schools (K-5) as compared to TUSD's one and a half miles; one and a half miles for junior high students as compared to TUSD's two and a half miles; and two miles for high school students as compared to TUSD's two and a half miles. MPS and TUSD both have an open enrollment policy; however, MPS does not provide transportation to students that choose to attend a school that is not the neighborhood school. Table 6.4 compares key characteristics for MPS and TUSD for 2012-13.

Table 6.4. Peer Comparison Mesa Public Schools and Tucson Unified School District

2012-13	MPS	TUSD
Total number of schools	85	89
Enrollment (approximate)	60,000	50,500
Land area (square miles)	186	230
Student density (enrollment/square mile)	**323**	**220**
Average enrollment per school (students per school)	**706 students**	**567 students**
Total school bus fleet	536	322
Annual route miles	6,042,000	5,105,000
Other miles (activity, extracurricular, summer)	420,000	145,000
Total miles	6,462,000	5,250,000
Annual miles per school bus (total fleet)	**12,100**	**16,300**
Daily route miles	34,000	28,000
Eligible students riding the bus daily	18,259	9,062
Daily route miles per student rider	**1.86**	**3.09**
Annual route miles per student rider	**335**	**556**

Source: www.ade.az.gov 2012-13 TRAN 55-1 Reports; MSP number of schools, enrollment and land area from http://www.mpsaz.org/

In fiscal year 2012-13, MPS expended about $24.1 million for student transportation, transported 18,000 daily student riders, and operated 34,000 daily route miles. MPS operated a school bus fleet of 536 vehicles. The primary fuel for the MPS school bus fleet is diesel (88 percent). MPS spent less than $25,000 for 261 students to use public transit.

In fiscal year 2012-13, TUSD expended about $23.7 million for student transportation, transported 9,100 daily riders, and operated about 28,000 daily route miles. TUSD operates a fleet of about 322 vehicles. The primary fuel for the TUSD school bus fleet is diesel (78 percent). TUSD expenses included $1.2 million for Sun Tran bus passes for 2,250 students.

The significant difference in the two districts is that MPS does not provide transportation for students that open enroll for a school that is not the assigned neighborhood school. TUSD operates more miles per bus and more route miles per student rider because of the policy to provide transportation for students that open enroll and attend a school outside of the same geographical grouping as the student's residence school. TUSD's miles per bus (total fleet) were 35 percent more than MSP, and TUSD route miles per student rider was 66 percent more than MSP for the 2012-13 school year.

Organization and Management

TUSD contracts with a private company, TransPar Group, to provide transportation management services. The Transportation Department struggled to provide reliable, on-time services during fall 2011. TUSD issued a request for proposals for transportation management services and selected TransPar Group for the assignment beginning January 2012.

TransPar Group provides the Director of Transportation support to assist in school start-up plans, route analysis, fleet replacement planning, negotiating the collective bargaining agreements, and other types of technical assistance.

The Director of Transportation is responsible for the TUSD staff of approximately 500, who work in four functional areas: bus operations, fleet maintenance, routing and scheduling, and communications.

The largest functional area is bus operations. Each of three managers is responsible for operations at one of the three TUSD transportation facilities. The manager at each facility oversees supervisors, dispatchers, drivers, and monitors. The supervisors are in the field during peak service periods to be on-hand to address in-service problems. The dispatchers are responsible for checking in drivers and monitors for duty, arranging for assignments to be filled by substitutes when required, and then managing operations at all times by radio communications. One supervisor is designated as the training supervisor, and is assigned to the Central facility. Three supervisors and four dispatchers are assigned to the Central facility; three supervisors and two dispatchers are assigned to the West facility; and two supervisors and two dispatchers are assigned to the East facility. On average, each supervisor is responsible for 38 drivers and 16 monitors. Supervisors and dispatchers cover all hours that route buses are in operation, from early morning until the last activity bus returns. The supervisors and dispatchers assigned to Central work at other facilities when required due to employee absences or vacancies. The number of drivers employed by TUSD was 306; however, 10 drivers are out for long-term leave and so 296 drivers were available to fill 271 peak bus assignments. Seventeen drivers are designated as stand-by to fill vacancies due to driver absences. Standby drivers are typically new drivers just completing training and waiting for a permanent route assignment. The Transportation Department recently began designating an additional group of eight experienced drivers as full-time "super subs" to fill in for absent

drivers. The experienced substitute drivers are better prepared to operate any route than new drivers with limited field experience. As of January 6, 2014, the number of monitors employed by TUSD was 130. Four monitors are out for long-term leave.

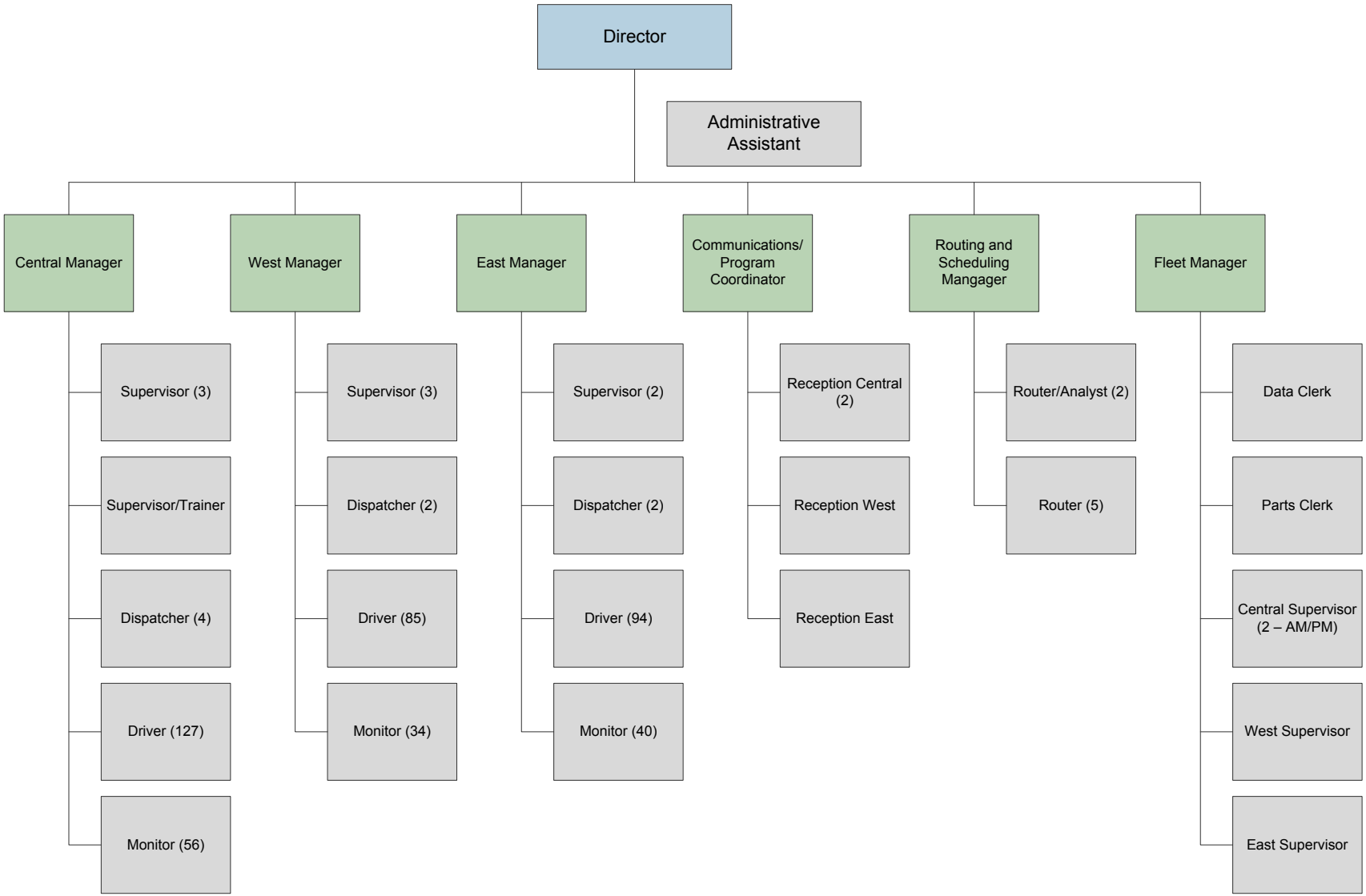
The second largest functional area is fleet management (sometimes referred to as the "auto shop"). The fleet manager is responsible for vehicle maintenance for school buses at each of the three TUSD transportation facilities and vehicle maintenance for the general services white fleet at the Central facility. The fleet manager assigns a supervisor to each facility and the supervisor oversees mechanics, lube technicians, and upholsterers. A second supervisor recently hired for the Central facility will oversee a second shift beginning in afternoon. The number of mechanics and technicians employed by TUSD was 15 of the 21 budgeted positions. The department was interviewing to fill the remaining vacant positions. A data clerk and two parts clerks also report to the fleet manager.

Staff in the routing/scheduling functional area manages the department's student data, bus routes, route tiering, and prepares changes to the routes weekly as requests dictate. The routing manager's expertise is information systems. The staff includes two router/analysts and five transportation routing technicians (routers). The router/analysts have skills using GIS and work with the automated routing and scheduling software to develop bus runs. Each router focuses on one type of service or geographic area of TUSD to maintain the databases and update routes. One router is responsible for exceptional education transportation.

A program coordinator leads the functional area for communications. Communications is responsible for answering telephone calls from parents, school administrators, and the department's employees. A receptionist is assigned to each facility (two receptionists at Central). Receptionists are part of the department's effort to improve customer service. Each receptionist sits in or near the dispatch area and fields phone calls during the busiest parts of the day. The receptionist logs requests for information or complaints into a database and refers the inquiry to the appropriate person to respond. The Transportation Department sets up a phone bank and employs temporary receptionists to receive phone calls and respond in a timely manner to requests for information during the first month of each school year.

Figure 6.1 is an illustration of the organizational structure and staffing levels for the Transportation Department.

Figure 6.1. Current Transportation Organizational Structure



Source: TUSD 2013

Based on the recommendations of the Director of Transportation and the TransPar Group, the district added 19 budgeted positions over the last two years to increase supervision and improve communications across the department. The 19 positions are included in the organization chart in Figure 6.1. The new positions include:

- 8 transportation supervisors
- 1 transportation supervisor/trainer
- 1 fleet manager
- 3 vehicle maintenance supervisors
- 1 manager routing and scheduling
- 2 router/analysts
- 1 program coordinator
- 2 receptionists (additional receptionists are part-time)

Commendation 6-1: Surveys show improved transportation performance.

Each semester, the Chief Operations Officer for TUSD conducts a transportation survey to measure customer satisfaction. All department leaders, principals, assistant principals, office managers, and attendance clerks are asked to complete the survey. The survey asks respondents to rate the Transportation Department on a scale from 1 to 10 (worst to best) in seven categories: buses on time, phone access to staff, follow-thru by staff, routing info availability, students routed timely, courtesy of drivers, and overall experience. The percent of very satisfied responses (8-10 out of 10) increased in each category from October 2011 to October 2012, with the greatest improvement in the ability to reach the Transportation Department by phone. The most recent survey results from October 2013 indicate the department is maintaining high customer satisfaction in all seven categories – with the highest rating for driver courtesy. Of all respondents to the survey, 67 percent rated the courtesy of drivers in the 8-10 range (very satisfied). The Director of Transportation recognizes there are still areas for improvement. The results of the November 2013 customer satisfaction survey show 50 percent of respondents were very satisfied (rating 8-10) with on-time performance for school buses.

Recommendation 6-1: Reduce the number of monitors for non-IEP routes.

The Transportation Department employs 130 monitors that are guaranteed six hours pay each day (four are currently on long-term leave). The monitors are assigned to routes that require a monitor based on the student's IEP, pre-kindergarten routes, and other routes to monitor student behavior or otherwise assist the driver. The ratio of monitors to drivers available for work is almost 1:2. The Director of Transportation did not know exactly how many monitors are required for the IEP of exceptional education students and pre-kindergarten routes. The department does not have criteria to determine which routes warrant a monitor based on student behavior or other reasons. The facility manager makes the assignments with input from transportation supervisors and dispatchers. Monitors are paid for a minimum of six hours per day. Including monitor wages and payroll benefits, the typical cost of a monitor per day is $108 ($13.82 per hour x 6 hours + 30 percent payroll benefit).

The Transportation Department should establish criteria for assignment of monitors to routes in other than those required by a student's IEP or for pre-kindergarten routes. The department should define performance measures to determine the benefit of additional personnel assigned to a school bus. A monitor should be assigned to a route only if data can show the second paid employee is warranted by measurable positive results (for example, reduced incidents of student discipline on the bus). The department should reduce the number of monitors by attrition to the minimum required.

Fiscal Impact

The Transportation Department employs 130 monitors. Assuming 80 monitors are required for student IEP and pre-kindergarten, approximately 50 monitors work as a second employee with the driver on regular route buses. The department should set a goal to reduce the number of monitors by at least five each year until the department employs not more than 105 monitors, the number required for IEP plus approximately 25 monitors that can be assigned to assist a regular route driver if required. The savings each year for each monitor is $19,440 ($13.82 per hour x 6 hours + 30 percent payroll benefit x 180 days). Savings each year for five monitors is $97,200 ($19,440 x 5).

The fiscal impact for this recommendation includes a savings in labor costs for the reduction of five monitors each year for five years, a total reduction of 25 monitors. Most of the reduction in staff is expected through attrition.

Recommendation 6-1	One-Time Costs/ Savings	2014-15	2015-16	2016-17	2017-18	2018-19
Reduce the number of monitors for non-IEP routes.	$0	$97,200	$97,200	$97,200	$97,200	$97,200

Note: Costs are negative. Savings are positive.

Recommendation 6-2: Eliminate position classification for router and increase the number of router/analysts.

The routing and scheduling functional area of the Transportation Department consists of a manager, two routers/analysts, and five transportation routing technicians (routers). The five router positions are blue-collar and filled by staff with experience as drivers or monitors. The router/analysts are skilled personnel that work with the manager to resolve complex routing problems, tier routes, run scenario tests, conduct bell time analysis, etc. Router/analysts are integral to the work of the Transportation Department to create and maintain efficient routes and route tiers.

The classification of transportation routing technician (router) no longer matches the needs of the department for more highly skilled personnel. TUSD should eliminate the job classification for transportation routing technician and reduce the staff in that position. The current personnel may qualify to return to positions as drivers or monitors, or may qualify to apply for open dispatcher or receptionist positions.

The demands of the routing and scheduling function require personnel with analytic skills and computer skills. The current two positions are not sufficient for the size of the district and the responsibilities for routing and scheduling complex bus runs and routes. It is recommended that TUSD hire an additional two router/analysts.

Fiscal Impact

The fiscal impact for this recommendation includes a savings in labor costs. The first part of the recommendation is to eliminate the transportation routing technician classification and terminate the five staff in that classification. Assuming an average router salary of $38,069 per year plus 30 percent payroll benefits, savings are $247,449 annually ($38,069 + 30 percent payroll benefits x 5 routers).

The fiscal impact also includes additional costs router/analysis positions. Assuming an average router/analysis salary of $39,187 per year plus 30% payroll benefits, increased costs are $101,886 annually ($39,187 + 30 percent payroll benefits x 2 analysts).

The net fiscal impact for this recommendation is a net annual savings of $145,563.

Recommendation 6-2	One-Time Costs/ Savings	2014-15	2015-16	2016-17	2017-18	2018-19
Eliminate classification for router.	$0	$247,449	$247,449	$247,449	$247,449	$247,449
Add 2 router/analysts.	$0	($101,886)	($101,886)	($101,886)	($101,886)	($101,886)
Net Fiscal Impact	**$0**	**$145,563**	**$145,563**	**$145,563**	**$145,563**	**$145,563**

Note: Costs are negative. Savings are positive.

Routing and Scheduling

The Transportation Department operates more than 1,200 bus runs to transport eligible students every school day. A bus run is the route pattern and time to pick-up students and to deliver them to the destination school. A bus route consists of one, two, or three bus runs tiered together each morning, afternoon, and each midday, if required. The router/analysts in the Transportation Department create a bus route for each driver/bus for the morning, afternoon, and in some cases for the mid-day (for pre-kindergarten and exceptional education students). Table 6.5 highlights how the district's 1,237 bus runs are combined into 586 bus routes requiring 271 buses at peak periods.

Table 6.5. Bus Route Summary by Facility

Category	West	Central	East	Total
Bus runs for all service	364	514	359	**1,237**
Bus routes (tiered sets of bus runs)	168	246	172	**586**
Average runs per route	2.17	2.09	2.09	**2.11**

Category	West	Central	East	Total
Buses required in peak service	78	113	80	**271**
Average routes per bus (morning, afternoon, midday)	2.15	2.12	2.10	**2.12**
Approximate daily route miles	5,161	6,610	4,739	**16,510**
Approximate daily miles	10,513	7,504	8,677	**26,694**
Average daily miles per peak bus	135	65	106	**98**

Source: Transportation Department, home to school transportation on January 7, 2014

In March 2012 the Transportation Department revised the "Transportation Routing Guidelines, Procedures, and Strategies". The stated objective of the guidelines are:

- Standardize the routing practice via adopting best practices.
- Define and communicate factors for satisfactory service.
- Fill up the buses without creating late or excessively long service.
- Minimize the number of short and "less-full" runs.
- Achieve the customer service objective of routing exceptional education students within four days of a request, homeless within three days, and regular students within five days.

The process to prepare for the beginning of a new school year begins when the Transportation Department works with TUSD administration to determine the impact of any policy or practice that will impact bus service the next academic year (for example, expanding open enrollment, opening a new magnet program, changes in bell times, or closing a school). The Director of Transportation said the Transportation Department could influence bell times for individual schools based on the impact on school bus routing efficiency. Once the department is aware of the planned changes, routing and scheduling staff begin preparing for the next school year. Students are asked to declare open enrollment choices by May for the following year. Students and parents are also asked to declare if an eligible student will not use student transportation. In 2013-14, almost 23,900 students were eligible for student transportation (either school bus or public transit) and about 3,400 decided in advance to opt out of student transportation. The TUSD policy is to schedule service and provide the capacity for every student who is eligible and did not opt out, to either ride a TUSD bus or receive a Sun Tran pass.

The Transportation Department drafts bus runs to provide the capacity for every student who is eligible to ride a school bus (16,099 in 2012-13 and 18,524 in 2013-14). The automated routing and scheduling software is capable of matching students to bus runs for approximately 90 percent of all students. The TUSD policy is to schedule every eligible student to a bus run. The remaining 10 percent are manually placed on bus runs by the routers and route/analysis. The next step, after developing bus runs, is to manually build driver assignments by tiering bus runs into routes of one, two, or three runs in the morning and again in the afternoon. The resulting driver assignments are posted for drivers to pick assignments based on seniority. The district mails letters to parents at least two weeks prior to the start of the school year. Routing and scheduling staff produce updates to a portion of the more than 1,200 bus runs each week. Typically, updates are implemented the Monday of each week. The Transportation

Department issues notifications for the updates to the affected students, parents, school administrators, drivers, and monitors.

The Transportation Department uses technology to improve operating efficiency and to collect accurate data. Several years ago, the district transitioned from an outdated routing and scheduling software to Trapeze Mapnet software. Mapnet allowed the Transportation Department to begin implementing efficiency changes to routes, bell times, and route tiers. In fall 2013, the district began installing GPS units on each school bus and the department is now working to integrate the new GPS capabilities into work processes. One of the primary purposes of the GPS implementation is to assist managers, supervisors, dispatchers, and routers to evaluate route compliance and actual time worked. These units will enable department staff to review route consistency with schedules, evaluate time when the vehicle is not carrying students ("slack time"), and conduct other analyses as needed.

The Transportation Department recently issued a request for interest (RFI) to software vendors for a new automated routing and driver scheduling system, which should result in additional efficiencies once the software is procured and implemented. The current software used by the district was a large improvement over the previous software; however, the current tools still do not allow routers/schedulers to run scenarios with route tiering or conduct other creative "what if" analyses for changes in bell times, for example.

The following sections summarize the Transportation Department's services based on routes as operated at the time of this review and the most recent actual ridership counts from November 2013. Table 6.6 includes information about the characteristics of bus runs by school level and route type. The types of bus routes generally match eligibility characteristics. "After School" runs serve students attending after school programs that need a ride home afterward. "Exceptional Education" routes primarily serve students with special needs and a related IEP "Explorers" is a specialized pre-kindergarten program organized for children with and without special needs. "Pre-kindergarten" are routes for pre-kindergarten students who do not have special needs. Regular routes serve students attending regular school programs at their residential area school. "Transfer" routes are bus routes operated to connect students attending educational programs a long distance away; students using transfer routes typically ride another bus route to the point of transfer. The "Combo" designation denotes the routes that serve students from many programs all traveling to similar destinations. The "Combo" routes and transfer routes are designed to serve several categories of students. Elementary schools require the most bus runs. Middle and high school bus runs report a lower ridership as compared to eligible students.

Overall, the average TUSD bus route has about 32 students assigned to each run and about 24 students actually ride the school bus. Table 6.6 demonstrates that the Transportation Department schedules service to meet the demand if every student who is eligible and does not opt out will ride the school bus. This results in capacity that exceeds the actual number of students who do ride the bus. Most buses have capacity significantly more than the number of student riders. On average, about 39 percent of school bus capacity is used.

Table 6.6. Bus Routes and Students by School and Route Type (2013-14)

School Level / Route Type	# Bus Runs	Avg Bus Capacity	Avg Assigned Students	Avg Actual Riders (Nov '13)	Diff Actual vs Assign	Bus Capacity Used
Elementary School	**540**	**59**	**27.4**	**21.2**	**-6.2**	**36%**
After School	11	82	NA	18.0	Na	22%
Exceptional Education	64	40	3.8	4.0	0.2	10%
Except Educ. Combo	213	58	24.2	21.3	-2.9	37%
Explorers	12	47	1.8	1.8	0.0	4%
Pre-Kindergarten	61	34	4.2	4.3	0.1	13%
Pre-Kindergarten Combo	18	73	34.7	27.9	-6.8	38%
Regular	99	78	49.2	35.0	-14.1	45%
Regular Combo	2	48	4.0	4.0	0.0	8%
Transfer	20	67	54.3	36.9	-17.4	55%
Transfer Combo	40	72	62.8	36.4	-26.4	51%
K-8 School	**82**	**55**	**17.4**	**13.8**	**-3.6**	**25%**
Exceptional Education	26	44	4.7	4.7	0.0	11%
Except Educ. Combo	22	52	22.3	19.3	-3.0	37%
Explorers	9	23	3.3	4.3	1.0	19%
Explorers Combo	3	82	8.7	6.7	-2.0	8%
Regular	22	79	34.5	24.0	-10.5	30%
Middle School	**378**	**68**	**41.5**	**30.7**	**-10.8**	**45%**
After School	22	75	NA	11.0	Na	15%
Exceptional Education	76	35	5.4	5.6	0.2	16%
Except Educ. Combo	45	69	38.5	29.6	-8.9	43%
Pre-Kindergarten	5	14	4.6	4.6	0.0	33%
Regular	122	81	55.3	44.2	-11.1	55%
Transfer	34	78	61.4	43.5	-17.9	56%
Transfer Combo	74	79	63.2	36.8	-26.4	47%
High School	**237**	**56**	**34.6**	**21.6**	**-13.0**	**39%**
After School	15	73	NA	13.0	Na	18%
Exceptional Education	97	29	6.3	6.3	0.0	22%
Except Educ. Combo	25	52	30.7	29.8	-0.9	57%
Regular	63	81	62.6	35.1	-27.5	43%
Transfer	5	81	58.8	31.2	-27.6	39%

School Level / Route Type	# Bus Runs	Avg Bus Capacity	Avg Assigned Students	Avg Actual Riders (Nov '13)	Diff Actual vs Assign	Bus Capacity Used
Transfer Combo	32	81	80.9	37.8	-43.1	47%
TUSD All Routes	**1,237**	**61**	**32.4**	**23.7**	**-8.7**	**39%**

Source: Transportation Department, home to school transportation on January 7, 2014

Table 6.7 documents cost based on mileage for routes. The cost per mile $3.28 is the variable cost per mile based on 2012-13 actual expenses. The variable costs exclude the expenses for bus monitors, Sun Tran passes, and white fleet maintenance and fuel. Monitors are excluded to maintain comparable costs between routes since not all buses have a monitor.

Table 6.7. Cost of TUSD Transportation per Each Rider Boarding a Bus by Type of Route (2013-14 Routes, 2012-13 Variable Cost per Mile Excluding Monitors)

	Route Miles	Total Daily Miles	Percent Route Miles*	Daily Cost	Cost per Each Rider Boarding (Nov '13)
Central Facility	**6,610**	**10,513**	**63%**	**$34,535**	**$11.26**
After school	531	32**	NA	$106	$8.25
Exceptional Education	1,472	1,940	76%	$6,371	$16.95
Except Educ Combo	1,712	3,637	47%	$11,948	$14.94
Explorers	140	286	49%	$941	$25.50
Explorers Combo	24	52	46%	$172	$12.47
Pre-kindergarten	232	395	59%	$1,297	$15.50
Pre-kindergarten combo	61	126	48%	$414	$2.08
Regular	1,063	2,167	49%	$7,120	$6.44
Regular combo	20	32	64%	$104	$12.03
Transfer	233	672	35%	$2,208	$2.71
Transfer combo	1,123	1,173	96%	$3,853	$4.51
East Facility	**4,739**	**7,504**	**63%**	**$24,652**	**$13.61**
After school	246	25**	NA	$82	$8.94
Exceptional Education	864	1,072	81%	$3,520	$18.00
Except Educ Combo	1,691	2,760	61%	$9,065	$16.61
Explorers	82	174	47%	$571	$40.10
Explorers Combo	46	NA	NA	NA	NA
Pre-kindergarten	221	461	48%	$1,515	$13.49
Pre-kindergarten combo	45	101	45%	$332	$5.93
Regular	864	2,017	43%	$6,624	$7.38

	Route Miles	Total Daily Miles	Percent Route Miles*	Daily Cost	Cost per Each Rider Boarding (Nov '13)
Transfer	108	324	33%	$1,065	$4.94
Transfer combo	572	571	100%	$1,876	$11.47
West Facility	**5,161**	**8,677**	**59%**	**$28,502**	**$11.79**
After school	349	NA**	NA	NA	NA
Exceptional Education	969	1,274	76%	$4,186	$22.49
Except Educ Combo	1,481	3,310	45%	$10,872	$17.47
Explorers	40	41	98%	$134	$29.31
Pre-kindergarten	266	481	55%	$1,580	$18.12
Pre-kindergarten combo	97	159	61%	$523	$5.12
Regular	1,356	2,469	55%	$8,111	$3.70
Transfer	38	172	22%	$567	$16.82
Transfer combo	564	770	73%	$2,529	$3.48
TUSD Total	**16,510**	**26,694**	**62%**	**$87,689**	**$12.09**

Source: Transportation Department, home to school transportation on January 7, 2014

*Percent Route Miles is percent of total daily miles used for actual bus route operation, meaning the margin between the percent and 100 represents deadhead miles and miles driven to connect tiered bus routes

**Total Daily Miles for After School may not be available and/or reflect actual service as routes are dynamic depending on which students choose to use the after school program that day

Table 6.7 illustrates the reasons TUSD student transportation is a costly operation. Routes are designed to serve a very complex system of eligibility for numerous types of academic programs. This complexity makes it difficult to design the most efficient routes (the most efficient route is home to neighborhood school). Routes are designed to provide transportation to all students who are eligible to ride and do not opt out. This policy is to ensure a bus will be available "if" a student who elects to ride requires more resources in miles, drivers/buses, and route time. A significant percent of bus miles are required to deadhead and/or to drive between routes in order to position the bus for the next run. About 38 percent of all bus miles are non-route miles. Distance is time, and so this analysis indicates how much of a driver's or monitor's schedule is also required for non-route travel.

The Transportation Department works with TUSD administration to adjust school bell times to accommodate for tiering of routes. The goal is to have as many routes as possible with three runs. Tiering three routes together is not always possible due to bell times and the travel distance of some routes. Table 6.8 summarizes how routes are tiered by operations facility.

Table 6.8. Route Tiering by Facility (2013-14)

Facility	Bus Runs from Facility	Tiered Routes from Facility	Average Tiers per Route	Peak Buses Required (AM)
Central	514	246	2.089	113
East	359	172	2.087	80
West	364	168	2.167	78
TUSD Total	**1,237**	**586**	**2.111**	**271**

Source: Transportation Department, home to school transportation on January 7, 2014

The typical driver operates a route consisting of two tiered runs during both morning and afternoon times. Additional tiering is a challenge because of the complexity of the district's eligibility requirements and the length of the runs (distance and time required) for open enrollment, magnet schools, and some exceptional education runs. The Director of Transportation said the challenges to adjust bell times further or to change district policy for eligibility may be more difficult than the benefits in cost efficiency.

Analysis of actual bus routes and driver assignments revealed the Transportation Department is paying for about 8 percent more hours of labor due to the guaranteed six hour minimum workday for drivers. The November 2013 TransPar Group RouteYield report documents that about 270 vehicles are required (271 at the time of the site visit) in maximum service due to a large middle tier of routes, but if all routes were tiered to three runs then only 182 vehicles would be required for service[23]. The district currently uses older, less robust automated software. Changing to a state of art software could result in tiered runs and routes that are more efficient. The difference between the current 271 peak vehicles and 182 hypothetical is about 30 percent fewer vehicles. The district has adjusted bell times each year of the previous two years to facilitate tiered routes. The Transportation Department staff feel that some additional gains may be possible, but the additional efficiency gains may be modest. New software capable of scenario testing could demonstrate how changes in bell times could allow more efficient routing and fewer required buses in peak service.

Recommendation 6-3: Continue with planned efforts to implement state of the art routing and scheduling software to optimize routing efficiency, and schedule transportation for students who "intend" to ride the school bus.

The Transportation Department uses Trapeze Mapnet software, with other related custom software components, to route students. A RFI to provide routing and scheduling software is currently in circulation. The department issued the RFI because the present software solutions do not have all of the capabilities desired by the routing/scheduling staff. State of the art software will have optimization capabilities that allow the district to test "what if" scenarios and then examine the costs. Efficient route planning reduces the miles operated and the driver/monitor time for a route.

[23] Transportation 132 FY 14 Bound Report

Additional efficiencies can reduce the number of runs/routes and save not only driver time, but also reduce the maximum number of buses required to operate service. TUSD currently designs bus routes capable of carrying all eligible students. TUSD should evaluate changing the district policy to schedule transportation only if the student or parent registers an intent to ride the school bus or should identify students actually riding the bus during the start of each school year and revise routes accordingly. The new software will make it possible to test scenarios for the impact of the change in policy. The ability to quickly develop multiple scenarios and compare operating costs will be more feasible with state-of-the-art software tools.

The combination of new routing software and GPS implementation means the Transportation Department will have opportunities to evaluate services to identify efficiencies, service improvements, and cost savings.

Fiscal Impact

A conservative improvement using new routing and scheduling software is 5 percent of variable operating costs. Variable operating costs (excluding monitors, white fleet, and public transit) in 2012-13 were $18.3 million. Therefore, annual fiscal savings of 5 percent beginning in 2015-16 will result in an estimated $915,000 annual savings due to routing software implementation. The district should assume savings in the first year at 50 percent of the first full year of implementation. New software will require an investment (currently listed at $300,000 in the 2013-14 budget) and a continuing annual maintenance expense ($150,000 per year estimate).

Additional savings could be achieved if TUSD does not require the Transportation Department to schedule service for every student who is eligible. Either the Transportation Department could reduce service in October, after patterns for ridership are established, or, preferably, TUSD Administration could change the policy to provide transportation only if the student or parent registers an intent to ride the school bus (rather than opting out which is now the policy). The new software will make it possible to test scenarios for the impact of the change in policy. For this analysis, a conservative estimate of the impact of a change in policy to schedule routes for students who choose to ride the bus could save at least 5 percent of daily miles, or about $788,000 per year (26,694 daily miles x 5 percent fewer miles = 1,334.7 daily miles x 180 days x $3.28 variable operating costs per mile in 2012-13).

Recommendation 6-3	One-Time Costs / Savings	2014-15	2015-16	2016-17	2017-18	2018-19
Implement state of the art routing and scheduling software.	($300,000)	$450,000	$915,000	$915,000	$915,000	$915,000
Annual software maintenance.	$0	$0	($150,000)	($150,000)	($150,000)	($150,000)
Net (Cost) Savings	**($300,000)**	**$450,000**	**$765,000**	**$765,000**	**$765,000**	**$765,000**

Recommendation 6-3	One-Time Costs / Savings	2014-15	2015-16	2016-17	2017-18	2018-19
Schedule transportation for students who intend to ride the school bus.	$0	$0	$788,000	$788,000	$788,000	$788,000
Net Fiscal Impact	**($300,000)**	**$450,000**	**$1,553,000**	**$1,553,000**	**$1,553,000**	**$1,553,000**

Note: Costs are negative. Savings are positive.

Recommendation 6-4: Renegotiate labor agreement to pay drivers and monitors for actual time worked.

The single largest cost driver for student transportation services is driver and monitor labor. The current Memorandum of Understanding for Blue Collar Employees (effective July 1, 2013 through June 30, 2015) guarantees drivers a minimum six hours pay per day. Bus monitors are guaranteed a minimum six hours per day. TUSD should negotiate a change in the Memorandum of Understanding for Blue Collar Employees to pay drivers actual time worked (effective July 1, 2015).

Table 6.9 summarizes analysis of driver shifts in 2012-13 and 2013-14. Based on the current labor agreement, the department's goal is to have as many drivers as possible working assignments that have them on duty and productive for six to eight hours. As compared to 2012-13, a lower percentage of drivers are working six to eight hours in 2013-14, and a higher percentage of drivers work less than six hours or more than eight hours.

Table 6.9. Driver Assignments, 2012-13 vs 2013-14

Driver Assignment	2012-13		2013-14	
Average Assignment	**6.26**	**Hours**	**6.17**	**Hours**
Shortest Assignment	1.88	Hours	1.77	Hours
Standard Deviation	1.37	Hours	1.73	Hours
Total Drivers	**262**	**Percentage**	**243**	**Percentage**
# Drivers under 6 hours	98	37%	123	51%
# Drivers 6 to 8 hours	148	56%	100	41%
# Drivers over 8 hours	16	6%	20	8%

Source: TUSD Transportation Department route schedules Spring 2012-13 and Fall 2013-14

Note: Analysis based on best available route data for a sample of route schedules with driver field populated, may not include all drivers.

At the time of this review, the Transportation Department assigned 127 drivers less than the minimum six hours per day, or a total of 122 hours per day paid time not worked. Analysis of 2013-14 data determined the department is paying for approximately 22,000 annual hours for time drivers work less than the guaranteed six hours per day. Approximately 270,000 hours are required annually to operate

student transportation services. Therefore, the district is paying for about 8 percent more hours of labor than hours worked.[24]

Monitors are required on buses if at least one child has an IEP that prescribes a monitor. TUSD employs 130 bus monitors. Route data do not specify which runs include monitors. With the information available, there is not enough detail to determine the minimum number of monitors required for IEP assignments or the savings that might occur if monitors are paid only for actual time worked rather than a minimum of six hours per day.

Drivers and monitors report time on an exception basis. Each driver's work schedule and pay time ("assignment") is established by the Routing and Scheduling group (see discussion below). Drivers pick assignments based on seniority four times per year (August before start of school, October to adjust routes after start of school, December for next semester beginning in January, and May for summer school). Each driver is paid based on the assignment that the driver picked most recently. If the driver is on duty any day longer than the assignment calls for, the driver files an exception report with the dispatcher. The dispatcher verifies the exception and forwards the documentation to payroll to adjust pay, if warranted per the Memorandum of Understanding for Blue Collar Employees. Route schedules may be updated week to week, based on requirements for student changes (especially exceptional education and homeless students); however, the driver is paid according to the assignment that the driver picked.

Fiscal Impact

As previously noted, there are 127 driver assignments less than the minimum six hours per day, for a total of 122 hours per day paid time not worked. Assuming an average driver pay of $17.13 per hour plus 30 percent payroll benefits, savings are $489,600 annually ($17.15 per hour x 122 hours x 180 days + 30 percent payroll benefits).

A previous recommendation assumes a reduction in the number of monitors who are not required for exceptional education, with corresponding savings. Additional savings may be realized if monitors are paid for actual time worked. However, data are not available to determine the actual monitor assignments that are less than seven hours per day.

[24] These values are approximate calculations based on the best data available for January 7, 2014 routes and driver assignments annualized assuming 180 school days.

The existing Memorandum of Understanding for Blue Collar Employees will expire June 30, 2015.

Recommendation 6-4	One-Time Costs/ Savings	2014-15	2015-16	2016-17	2017-18	2018-19
Renegotiate labor agreement to pay drivers and monitors actual time worked.	$0	$0	$489,600	$489,600	$489,600	$489,600

Note: Costs are negative. Savings are positive.

Fleet Maintenance

A quality fleet maintenance program helps to ensure that services can be delivered reliably and that vehicles in the fleet will operate efficiently throughout their expected economic life (service life). A good fleet maintenance program thus protects service availability and the value of the capital asset. The Transportation Department is responsible for vehicle maintenance for the school bus fleet and the general services fleet.

The Transportation Department has a fleet of 322 school buses ("yellow fleet"). The fleet is comprised of 218 large buses over 69-passenger capacity (68 percent), 60 buses with wheelchair accessibility (19 percent), 19 buses 45- to 48-passenger capacity (6 percent), and 25 vehicles with 12- to 16-passenger capacity (7 percent). The district recently purchased 10 medium-sized buses with 30-passenger capacity, to replace an equal number of the oldest, large buses. The smaller buses will be assigned to routes that do not require the capacity of large school buses. Historically, the school district purchases replacement vehicles on an irregular schedule, depending on when funds are available for capital purchases. The Transportation Department also provides vehicle maintenance for 315 cars, trucks, and vans used to support general administrative functions ("white fleet").

The school bus fleet uses three types of fuel. Seventy-eight percent of all school buses operate on diesel, 14 percent operate on compressed natural gas, and 8 percent operate using unleaded gasoline. New, smaller buses are gasoline-powered and will replace diesel buses. The fuel for most of the general service white fleet is gasoline.

In January 2014, TUSD added 10 medium-size (30-passenger), gasoline-powered buses to the fleet. The new buses are not included in this analysis. The 30-passenger buses will eventually replace 10 of the largest buses with over 20 years of service. The purchase of smaller buses is part of an initiative to "right-size" the fleet. The reference to right-size is a reflection of the excess capacity when larger buses are assigned to routes with lower ridership (see Table 6.6).

Table 6.10 shows the school bus fleet by years of service (age) and fuel type. The average age of the fleet is 10.2 years. Seventy-eight percent of the fleet is diesel powered, 14 percent runs on compressed natural gas (CNG), and 8 percent of the fleet uses gasoline. The buses that use gasoline are all smaller, 12-to 16-passenger vehicles.

Table 6.10. School Bus Fleet by Years of Service and Type of Fuel

Years of Service	Number of Buses by Age and Type of Fuel				
	Diesel	CNG	Gas	Total	% of Fleet
Over 20 Years	18	0	0	**18**	6%
16-20 Years	34	0	0	**34**	11%
11-15 Years	80	12	0	**92**	29%
6-10 Years	77	33	0	**110**	34%
5 Years or Less	43	0	25	**68**	21%
Total All Buses	**252**	**45**	**25**	**322**	**100%**
% of Fleet	78%	14%	8%	**100%**	
Average Age in Years	11.6	7.9	1.0	10.2	

Source: TUSD Transportation fleet inventory

Table 6.11 shows the school bus fleet by years of service and the seating capacity of the bus. Buses with wheelchair capacity are identified separately. Sixty-eight percent of the fleet are larger school buses with capacity of over 69-passengers; most of the buses have 81-passenger capacity (92 buses) or 84-passenger capacity (94 buses). Nineteen percent of buses are equipped with wheelchair lifts, and 6 percent of the fleet is 45- to 48-passenger buses. Seven percent of the school buses are 12- to 16-passenger vehicles. The addition of 10 new 30-passenger buses that replace larger buses will alter the fleet mix to 64 percent larger buses and 11 percent 30-passenger buses or smaller. Buses with wheelchair lifts will still be 19 percent of the fleet mix and 45- to 48-passenger buses will still be 6 percent of the fleet.

Table 6.11. School Bus Fleet by Years of Service and Seating Capacity

Years of Service	Number of Buses by Age Seating Capacity						
	>69	W/C*	45 to 48	16	12	Total	% of Fleet
Over 20 Years	18	0	0	0	0	**18**	6%
16-20 Years	27	7	0	0	0	**34**	11%
11-15 Years	73	12	7	0	0	**92**	29%
6-10 Years	73	29	8	0	0	**110**	34%
5 Years or Less	27	12	4	11	14	**68**	21%
Total	**218**	**60**	**19**	**11**	**14**	**322**	**100%**
% of Fleet	68%	19%	6%	3%	4%	**100%**	
Average Age in Years	11.7	9.2	7.9	1	1	10.2	

Source: TUSD Transportation fleet inventory
*Vehicles with wheelchair access

The school bus fleet is 322 buses and the peak bus requirement in January 2014 was 271 buses, leaving a spares ratio of 51 buses, or 19 percent of the peak fleet. However, not every bus is interchangeable for

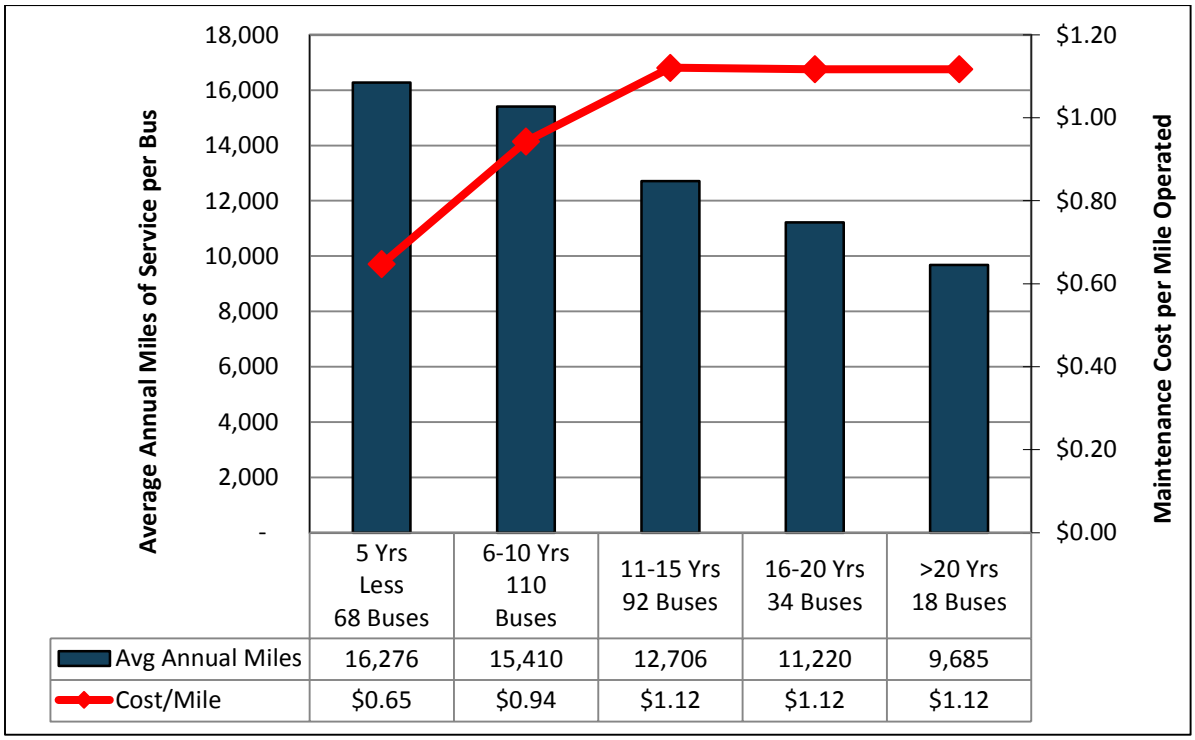
every other bus. For example, only wheelchair-lift equipped buses can be assigned to a route where a student who uses a wheelchair will ride the bus. The spares ratio is also reduced by buses that are "hard down," meaning the buses are out of service for several days due to mechanical repair or accident repair and not available for service. For example, during the week of the site visit, a total of 30 buses were "hard down" (in major repair, not available for service), leaving less than 10 percent of the fleet available as spares. The fleet manager stated the limited number of spare buses makes it difficult to schedule buses for preventive maintenance inspections.

The Transportation Department also provides vehicle maintenance for 315 general services vehicle to support general administrative functions. The white fleet includes 234 trucks, 60 vans, and 21 cars.

The Transportation Department uses a vehicle maintenance information system (VMIS) to record all data on the cost of maintaining the school bus fleet and the white fleet. The VMIS system captures data for all labor hours reported on work orders, parts and supplies, outside vendor services, fuel and lubricants, and miles of service. This comprehensive data makes it possible for the fleet manager to monitor the cost of vehicle maintenance by vehicle and by vehicle characteristic (age, fuel, size).

Figure 6.2 illustrates the average vehicle maintenance cost per mile and average annual miles of service for the school bus fleet by age of the buses. The data show that buses over 10 years in service operate fewer annual miles at a higher cost per mile.

Figure 6.2. Vehicle Maintenance Cost per Mile and Average Annual Miles by Age of Fleet



Source: TUSD Transportation vehicle maintenance information system, July 1 – December 31, 2013

Table 6.12 documents the average vehicle maintenance cost per mile and average annual miles of service by fuel type. The data show that buses using gasoline operate at a low cost per mile. A major factor that must be taken into account is that gasoline-powered vehicles are new, still under warranty, and small 12- to 16-passenger vehicles. The data also show vehicle maintenance cost per mile (includes maintenance and fuel) is lower for buses using CNG than buses using diesel.

Table 6.12. Cost per Mile and Average Annual Miles for School Bus Fleet by Fuel Type

Fleet by Fuel Type	Buses	Percent of Fleet	Average Annual Miles	VM Cost per Mile
Diesel	252	78%	13,959	$1.01
Compressed natural gas	45	14%	13,721	$0.90
Gasoline	25	8%	16,213	$0.38
Fleet Total	**322**	**100%**	**14,058**	**$0.94**

Source: TUSD Transportation vehicle maintenance information system, July 1 – December 31, 2013

Table 6.13 documents the average vehicle maintenance cost per mile and annual miles of service for the school bus fleet by bus capacity and for vehicles with wheelchair lifts. The data show that smaller buses operate at a low cost per mile. A major factor that must be taken into account is that smaller buses are new and still under warranty. The data also show vehicle maintenance cost per mile is lower for buses with wheelchair lifts than other full-size buses (wheelchair accessible buses also report lower annual miles).

Table 6.13. Cost per Mile and Average Annual Miles for School Bus Fleet by Bus Capacity

Capacity	Buses	Percent of Fleet	Average Annual Miles	VM Cost per Mile
>69 passenger	218	68%	14,246	$1.01
Buses w/wheelchair lift	60	19%	12,390	$0.89
45-48 passenger capacity	19	6%	14,329	$1.05
16-passenger	11	3%	17,445	$0.40
12-passenger	14	4%	15,245	$0.37
Fleet Total	**322**	**100%**	**14,058**	**$0.94**

Source: TUSD Transportation vehicle maintenance information system, July 1 – December 31, 2013

Table 6.14 documents the average annual miles of service and the vehicle maintenance cost per mile for the white fleet. Not all vehicles are in service. During the period July through December 2013, about 11 percent of the white fleet (25 trucks and 9 vans) recorded less than 100 miles in service. The Transportation Department is responsible for providing maintenance and fuel; however, the department is not responsible for the assignment of the white fleet or decisions about white fleet management. Those responsibilities are left up to the department to which the vehicle is assigned.

Table 6.14. School Bus Fleet by Years of Service and Annual Miles, Cost per Mile

Vehicle Type	Number	Percent of Fleet	Average Annual Miles	VM Cost per Mile
Cars	21	7%	8,808	$0.39
Trucks	234	74%	4,340	$0.53
Vans	60	19%	4,396	$0.43
Fleet Total	**315**	**100%**	**4,648**	**$0.50**

Source: TUSD Transportation vehicle maintenance information system, July 1 – December 31, 2013

Two factors that influence appropriate maintenance staffing ratios are the age of the fleet and the preventive maintenance program adopted by the district. The TUSD practice is to schedule a preventive maintenance inspection for each bus every 8,000 miles of service. The average annual miles per school bus is 14,000 (July 1 through December 31 actual miles, annualized), and so each school bus is scheduled for a preventive maintenance inspection less than two times per year. VMIS documents on average 26 work orders per bus per year (including inspections) and 66.6 maintenance labor hours per year. Preventive maintenance and annual inspections require 6.6 annual hours, or 10 percent of the total maintenance hours. This means that 90 percent of maintenance hours are committed to unscheduled repairs. Table 6.15 documents the calculations to determine vehicle maintenance labor hours per bus for inspection and repairs.

Table 6.15. Vehicle Maintenance Labor Hours per Bus for Inspections and Repairs

Maintenance Activity	Hours to Complete	Number Per Year	Total Annual Hours	Percent of Hours
8,000 mile inspection	2	1.8	3.5	
16,000 mile inspection	2	0.9	1.8	
Annual inspection	1.3	1.0	1.3	
Total scheduled inspection hours	5.3	3.6	6.6	10%
Unscheduled repairs	60		60.0	90%
Total labor hours per bus			**66.6**	

Source: TUSD Transportation vehicle maintenance information system, July 1 – December 31, 2013

The actual hours of labor recorded in VMIS for the white fleet from July 1 through December 31, 2013 (six months) was 1,741 hours for 281 vehicles with more than 100 miles reported. These data indicate the mechanics work on average 12.4 hours per vehicle in the general services fleet. This does not include time for preventive maintenance inspections. The district contracts inspections for the white fleet to local vendors.

Each Transportation Department vehicle mechanic is scheduled to work full-time, 12 months per year, or approximately 260 days and 2,080 hours. However, not all paid time is available to actually work on vehicles. Each employee is provided benefits in paid time off. Since many of the mechanics have several years of experience working for TUSD, the benefits for paid leave are significant. The fleet manager

estimated the average TUSD vehicle mechanic is on holiday or paid leave 42.9 days per year, or 343.2 paid hours (16.5 percent of paid time) based on the following:

- Holidays 14.0 days for every full-time employee
- Vacation Days 19.3 days average actual per mechanic
- Sick Leave 4.3 days average actual per mechanic
- Personal Leave 5.3 days average actual per mechanic
- Total 42.9 days paid time off

In addition, mechanics are paid 1.5 hours per day for breaks and other duties. Assuming 260 days per year less 43 days paid leave, each mechanic spends about 326 paid hours per year (260-43 = 217 days x 1.5 hours per day) on breaks or duties other than work on vehicles. The estimated actual time spent on vehicle maintenance per mechanic is about 1,410 hours (68 percent of paid time).

Table 6.16 documents how many mechanics are required given the current fleet of 322 school buses, 315 general administration vehicles, and assuming each mechanic will spend about 1,410 hours per year performing maintenance activities.

Table 6.16. Staff Requirements for Mechanics

	No. Vehicles	Annual Hours Maintenance per Vehicle	Totals
School buses	322	x 66.6 =	21,436
White fleet	315	x 12.4 =	3,906
Total annual hours required based on hours per vehicle			25,342
Add 5% contingency for maintenance campaigns (special projects)			1,267
Total annual hours maintenance required			**26,609**
Divide by average productive hours per mechanic			1,410
Mechanics required			**19**
Positions budgeted			21
Positions filled			16

Source: TUSD Transportation vehicle maintenance information system, July 1 – December 31, 2013

Recommendation 6-5: Reduce budgeted staff for mechanics from 21 to 19.

Nineteen mechanics represent an allocation of time equivalent to three mechanics for the white fleet and 16 mechanics for school buses. Sixteen mechanics for the school bus fleet is one mechanic for every 20 school buses. This level of staffing is within the range of national school district experience based on peer research. Peer examples range from 15 to 30 buses per mechanic for school districts serving a large geographic area with a similar size bus fleet.

The current staffing level for 16 mechanics is below the 19 mechanics required to provide a minimum number of maintenance hours for the school bus fleet and the white fleet (as outlined in Table 6.16). The budget for 21 mechanics is more than the minimum required. The budgeted positions can be reduced by two mechanics.

The fleet manager will still need to fill three vacant mechanic positions to be fully staffed.

Fiscal Impact

The fiscal impact for this recommendation includes a savings in labor costs. The savings each year for each mechanic is $55,270 ($20.44 per hour x 8 hours x 260 days + 30 percent payroll benefit). Savings each year for two mechanics is $110,540 ($55,270 x 2).

Recommendation 6-5	One-Time Costs/ Savings	2014-15	2015-16	2016-17	2017-18	2018-19
Reduce budgeted mechanics by 2 positions.	$0	$110,540	$110,540	$110,540	$110,540	$110,540

Note: Costs are negative. Savings are positive.

Recommendation 6-6: Adopt a policy to perform a preventive maintenance inspection for every school bus every 4,000 miles or not less than once every 90 days.

The policy to inspect a school bus every 8,000 miles, or about twice per year, is less frequent than the industry standard. For example, in the state of Florida, the standard is a preventive maintenance inspection every month.

A change in policy to conduct inspections every 4,000 miles or no less than every 90 days will double the hours invested in preventive maintenance and reduce the hours for unscheduled repairs an equal number of hours. Over time, the school district can expect a reduction in total maintenance hours required per bus. The immediate return on investment will be improved reliability of the fleet. By increasing the frequency of inspections, the hours for inspections will increase to 20 percent of the total maintenance hours, and the hours for unscheduled repairs will be not more than 80 percent of maintenance hours.

Fiscal Impact

No fiscal impact is projected. The goal should be to move maintenance hours from repair and unscheduled maintenance to scheduled, preventive maintenance.

Recommendation 6-7: Conduct preventive maintenance inspections on a second shift at the Central facility.

The fleet manager stated that it is difficult to schedule buses for preventive maintenance inspections because the spares ratio is not sufficient to hold buses out of service for inspection. A second shift at the

Central facility will resolve this problem. The Transportation Department recently hired a fourth supervisor who can be assigned to manage the second shift. Mechanic assignments can be distributed to two shifts without adding additional personnel. Buses due for preventive maintenance can be scheduled for inspection as the driver returns at the end of a route.

Fiscal Impact

No fiscal impact is projected. The goal should be to move maintenance assignments to a second shift to conduct scheduled, preventive maintenance inspections and other appropriate maintenance work to ensure buses are ready and available for service the next day.

Fleet Replacement

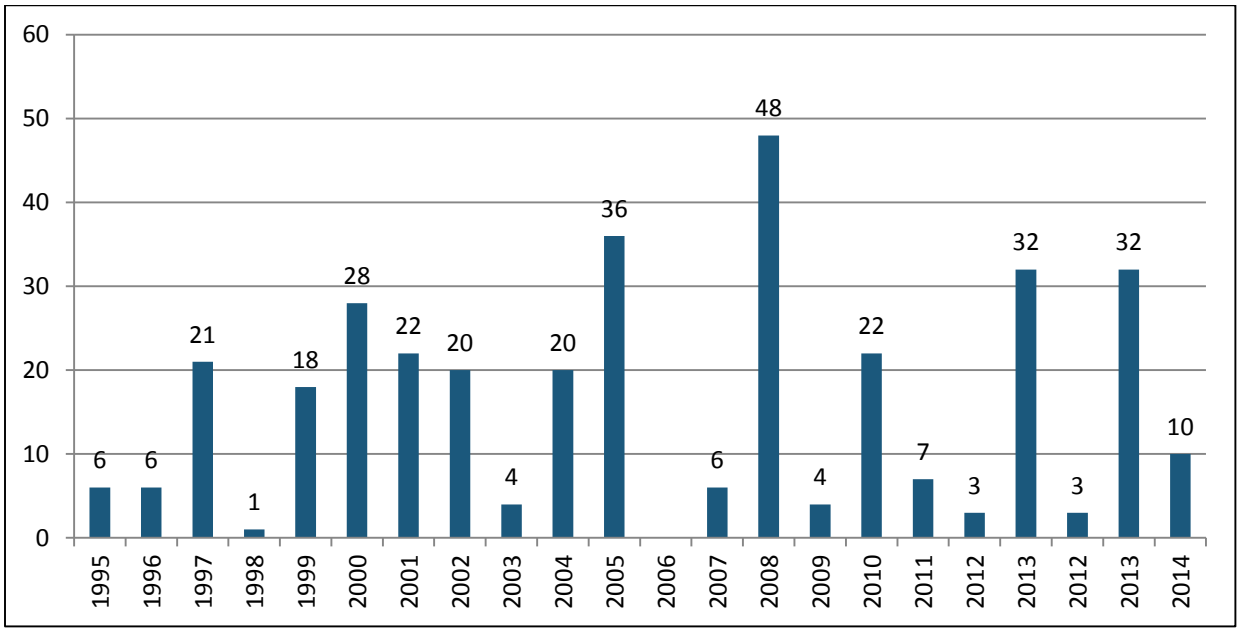
School buses represent a large capital investment for school districts. Many districts adopt replacement plans to regularly introduce new buses in fleets. TUSD does not have a formal fleet replacement program primarily because there has not been a dedicated or predictable capital funding source. In general terms, fleet replacement is based on: large diesel buses 20-year life, compressed natural gas buses 15-year life (due to the life of the CNG tanks), and medium to small buses 10-year life. Over the last two years, equipment replacement has been based on funds available and the need to "right size" the fleet to recognize the large number of routes with low ridership.

The average age of the white fleet is 14.7 years. There is no formal fleet replacement program. With the exception of school safety vehicles, vehicles are not replaced until they are no longer serviceable. Decisions about replacement are the responsibility of the department that is assigned the white vehicle.

As shown in Table 6.10, eighteen diesel buses exceed the recommended 20-year service life and 10 CNG buses will reach the 15-year service life in 2016. Ten of the large diesel buses will be replaced this year with the addition of 10 new medium-size buses. When the CNG buses reach 15 years, the buses must either be retired or the CNG tanks must be replaced. The fleet manager said he has not yet completed a cost-benefit analysis on replacing the CNG tanks to extend the useful life of the buses.

Figure 6.3 illustrates the number of buses purchased by TUSD each year since 1995. Over the past 20 years (1995 through 2014) the school district purchased an average of 16 buses per year. In the last 10 years (2005 through 2014) the school district purchased an average of 17 buses per year. In the last five years since 2010 TUSD purchased an average of 15 buses per year. However, the number of buses per year varies from zero to a high of 48 buses in 2008. If the district plans to purchase 15 buses per year, the average bus in the current fleet will be in service 22 years. Older vehicles mean higher costs per mile for maintenance (including fuel) and lower average annual miles per bus. The purchase of smaller buses means some buses will have to be replaced after 10 years' service. Smaller buses will have to be replaced twice as frequently as full-size school buses.

Figure 6.3. TUSD Purchase of School Buses per Year 1995 - 2014



Source: TUSD Transportation 125 Fleet Summary by Year

Decisions about the right fleet mix by size of vehicle should consider bus capacity, service life, and life cycle operating cost. Because the smaller vehicles are all the newest buses in the fleet, the Transportation Department records are not sufficient to estimate life-cycle costs.

Table 6.6 documents the number of students riding buses on average by route type and considering all runs. Based upon these data, approximately 647 of 1,237 runs (52 percent) require a large bus to accommodate actual average student riders. About 355 of 1,237 runs (29 percent) could be accommodated on a 30-passenger bus. The remaining 235 runs could be accommodated using small 12- to 16-passenger vehicles. The school district should maintain sufficient large vehicles for other types of transportation service such as field trips and extracurricular activities. A conservative mix might be 60 percent large buses (190 buses given the current fleet), 25 percent medium-size buses (90 buses), and 15 percent small buses (40 buses). The mix of wheelchair-accessible buses must also be considered in fleet planning. About 20 percent of all buses (of any size) should be equipped with a wheelchair lift and sufficient spaces for students who use wheelchairs.

Recommendation 6-8: Budget funds to replace school buses each year and continue to buy medium-duty buses to replace larger buses.

Regular purchase of buses prevents the purchase of large numbers of buses in any one year. A replacement plan enables these districts to maintain the necessary fleet size and avoid large one-time expenses. Further, it tends to "smooth" annual operating costs related to vehicle maintenance by maintaining a consistent average fleet age. TUSD should budget funds each year to replace school buses. TUSD should also continue the policy to buy medium-size buses to replace larger buses (up to a planned maximum). Table 6.17 provides an example replacement schedule.

Table 6.17. Example Fleet Replacement Schedule

Buses Replaced			Year to Replace/ Purchase New						
Year of Purchase	Fuel	Capacity	2014	2015	2016	2017	2018	2019	Total
Schedule to Replace Buses End of Service Life									
>20 Years	Diesel	84	-10	-8					-18
1995	Diesel	84		-6					-6
1996	Diesel	84		-3					-3
1996	Diesel	W/C		-3					-3
1997	Diesel	84				-17			-17
1997	Diesel	W/C			-4				-4
1998	Diesel	84			-1				-1
1999	Diesel	84					-12		-12
1999	Diesel	48					-1		-1
1999	Diesel	W/C					-5		-5
2000	Diesel	84				-6	-3	-18	-21
2000	Diesel	W/C						-1	-1
2001	CNG	81			-10				-10
TOTAL buses replaced			**-10**	**-20**	**-15**	**-23**	**-21**	**-19**	**-108**
Schedule to Purchase New Buses									
Large (Fuel TBD)*					10				10
Medium-size			10	17	5	23	16	18	89
Wheelchair				3			5	1	9
TOTAL buses purchased			**10**	**20**	**15**	**23**	**21**	**19**	**108**
Cost to Purchase New Buses (Estimate)									
Price Est.	**Annual Cost**		**Complet**	**$1,890,00**	**$1,950,00**	**$2,070,00**	**$2,040,00**	**$1,740,00**	**$9,690,00**
$150,000	Large				$1,500,000				
$90,000	Medium-size		$900,000	$1,530,000	$450,000	$2,070,000	$1,440,00	$1,620,00	
$120,000	Wheelchair			$360,000			$600,000	$120,000	

Source: Gibson Consulting Group, Inc.

The example replacement plan builds a fleet of almost 90 medium-size buses. The mix of wheelchair-accessible buses is 10 percent of the fleet purchased. The Transportation Department should evaluate the fleet mix to see if this will meet requirements for students who use wheelchairs.

This analysis cannot address all fleet decisions, such as the decision to replace CNG buses or install new tanks and extend the life of the existing fleet. However, adopting a fleet replacement plan will put into motion the other decisions that will be required to execute the plan.

Future fleet purchases require careful consideration of the economics of fuel. The district is currently purchasing gasoline powered small- and medium-size buses. The current large school bus fleet operates on diesel. These two fuel types are subject to volatile increases in price for reasons TUSD cannot control. Data shows CNG vehicles operate at a lower cost per mile than diesel. CNG fuel price is more predictable. Before 2016, the district will need to decide on whether to replace CNG tanks in 10 buses or

replace the buses entirely (and what fuel to specify). The district will need to conduct a cost analysis to see if the investment in new tanks can be recovered in the lower operating cost for the remaining life of the vehicles.

Fiscal Impact

The recommended fleet replacement plan above calls for replacing 15 to 23 vehicles per year. The fleet mix differs from year to year, but annual purchases in the next five years emphasize medium-size buses to replace larger capacity buses.

Assumptions for purchase of buses are included in Table 6.17. The price for a large (conventional fuel) bus is $150,000; the price for a medium-size bus is $90,000; and the price for a wheelchair accessible bus is assumed to be $120,000. Revenues for sale of retired buses as surplus are estimated at $5,000 per bus.

Recommendation 6-8	One-Time Costs/ Savings	2014-15	2015-16	2016-17	2017-18	2018-19
Budget funds to replace school buses each year and continue to buy medium-duty buses to replace larger buses.	$0	($1,890,000)	($1,950,000)	($2,070,000)	($2,040,000)	($1,740,000)
Sale of retired buses for surplus.	$0	$100,000	$75,000	$115,000	$105,000	$95,000
Net Fiscal Impact	**$0**	**($1,790,000)**	**($1,875,000)**	**($1,955,000)**	**($1,935,000)**	**($1,645,000)**

Note: Costs are negative. Savings are positive.

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Chapter 7 – Food Services

This chapter provides commendations and recommendations regarding the Tucson Unified School District (TUSD) food services program. The primary mission of a school district's food service program is to provide an appealing and nutritionally-sound breakfast and lunch to students while operating on a cost-recovery basis. In addition, these meals should be provided to the students in a safe, clean, and accessible environment. Several success factors can be used to measure the efficiency and evaluate the effectiveness of a school district's food service operation. These factors include a high ratio of meals per labor hour, minimizing food costs and waste, maximizing student participation in breakfast and lunch programs, providing a variety of meal choices that meet or exceed nutritional standards, reducing the length of time students must wait in line for service, and operating a financially self-sufficient program.

Efficient food service program management and cost controls can allow a district to operate its food services program on a break-even basis, thereby preventing the need to take dollars away from classroom instruction. Successfully managed school food service programs provide customer satisfaction and contain costs while complying with applicable federal, state, and local board regulations and policies.

The TUSD food services program operates 90 full-service cafeterias. The food services program serves over 8,500 breakfasts and 30,000 lunches daily. All services must comply with national meal standards set forth by the United States Department of Agriculture (USDA), as well as policies and procedures established locally at TUSD.

The food services program derives its revenues from reimbursements (on a per-meal basis) from the federal government, for meals provided to students who qualify for economic assistance, and cash sales from all other students. For the most recent fiscal year, food services earned $19.3 million in total revenues and incurred $18.6 million in expenditures for a net surplus of approximately $735,000. Profitability has not been stable however. Table 7.1 shows the financial performance of the food services program over the past three years.

Table 7.1. TUSD Food Services Program Financial Performance, Fiscal Years (FY) 2007-2010

	FY 2011	FY 2012	FY 2013
Food sales	$2,438,926	$2,122,437	$2,200,959
Federal/state reimbursements	$16,031,047	$16,391,997	$17,107,992
Other revenues	$13,213	$6,659	$2,667
Total Revenues	**$18,483,186**	**$18,521,093**	**$19,311,618**
Personnel expenditures	$8,751,763	$8,882,832	$8,853,797
Food costs	$7,579,900	$7,793,408	$7,501,362
Materials and supplies	$527,893	$735,529	$684,091
Capital outlays	$56,389	$79,818	$83,380
Other expenditures	$1,346,968	$1,495,987	$1,453,444
Total expenditures	**$18,262,913**	**$18,987,574**	**$18,576,074**
Net surplus or (deficit)	**$220,273**	**($466,481)**	**$735,544**

Source: TUSD Food Service Profit and Loss Statements

In FY 2012, the most recent year where comparable data are available, TUSD's cost per meal equivalent (includes breakfast, lunch and a la carte sales) was $2.79, 13.4 percent above its Arizona peer district average of $2.46.[25] One factor likely contributing to a higher cost per meal is the larger number of schools in TUSD relative to the student population.

A common measure of the productivity and efficiency of school cafeteria operations is meals per labor hour (MPLH). This measure is an average of the number of meal equivalents served by the cafeteria over a given period of time, typically one month, divided by the total number of hours worked by cafeteria staff. The fewer the hours required to prepare and serve a given number of meals, the more efficient the cafeteria. Industry standards usually assume that more hours are required to prepare a meal in a full, conventional kitchen – where meals are prepared from scratch – than in a satellite convenience kitchen, where meals are prepared and packaged off-site and reheated and served at the school's cafeteria.

Additionally, as the number of meal equivalents served increases, the standard MPLH increases as larger cafeterias are expected to benefit from economies of scale. Table 7.2 shows the industry standard recommended MPLH for each range of meal equivalents served for both conventional and convenience systems. Virtually all TUSD schools have conventional kitchens.

[25] Source: Arizona School District Spending, Fiscal Year 2012, Office of the Auditor General

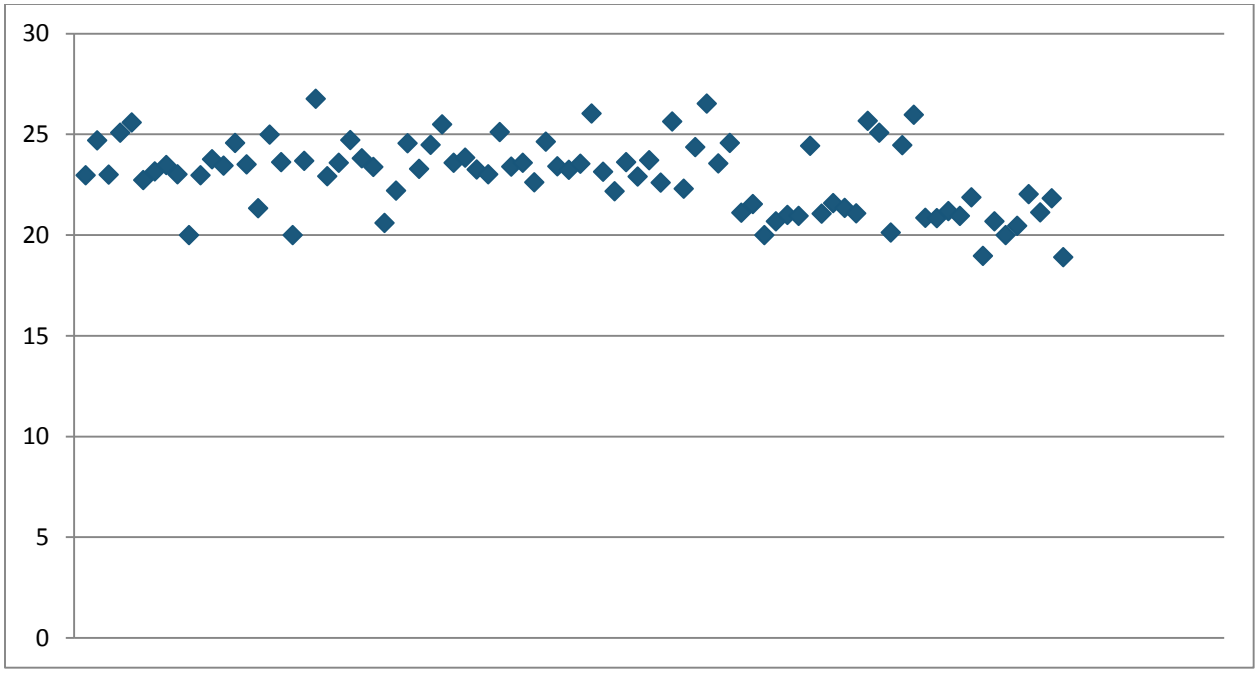
Table 7.2. Industry Standard Recommended Meals per Labor Hour

Number of Meal Equivalents	Meals Per Labor Hour (MPLH)			
	Conventional System		Convenience System	
	Low Productivity	High Productivity	Low Productivity	High Productivity
Up to 100	8	10	10	12
101 – 150	9	11	11	13
151 – 200	10-11	12	12	14
202 – 250	12	14	14	15
251 – 300	13	15	15	16
301 – 400	14	16	16	18
401 – 500	14	17	18	19
501 – 600	15	17	18	19
601 – 700	16	18	19	20
701 – 800	17	19	20	22
801 – 900	18	20	21	23
901 up	19	21	22	23

Source: School Foodservice Management for the 21st Century, 5th edition

TUSD applies a general guideline of 20 MPLH for staffing purposes; however, its actual MPLH is higher, reflecting a higher degree of productivity. District wide, the average MPLH is 24.6, and only two schools showed a MPLH less than 20. Figure 7.1 presents a scatter diagram of TUSD's MPLH for each school.

Figure 7.1. TUSD Meals per Labor Hour by School, October 2013



Source: TUSD MPLH Analysis, October 2013

This remainder of this chapter contains recommendations to lower costs and increase revenues in the food service operation, and to allocate additional allocable costs from the Maintenance and Operations (M&O) Fund to the Food Service Fund.

Recommendation 7-1: Allocate additional indirect costs of the food services operations to the food services fund.

Federal guidelines permit the allocation of certain costs to the Food Service Fund, such as those expenditures that are necessary and reasonable for proper and efficient administration of the food program – including utilities, trash removal, and janitorial services. Currently, TUSD allocates almost $500,000 per year in indirect costs to the food service operation.

The review team estimates that approximately $1 million of additional M&O Fund expenditures relate to the operation of kitchens and cafeterias at TUSD schools. The following is a discussion of each major category of expenditures that should be considered for allocation.

- **Janitorial/custodial services** – TUSD does not allocate any costs to the Food Service Fund for custodial services. The time spent by custodians policing the cafeteria area during breakfast and lunch periods and the time spent cleaning the cafeterias after lunch can be charged from the M&O Fund to the Food Services Fund. In a typical school system, at least two to three hours each day for one day shift custodian is spent at each elementary school and two to three hours for two custodians is spent at each secondary school. This includes time incurred during and after the lunch period. For TUSD, a conservative estimate of the custodial hours spent cleaning the cafeterias would be three hours each day per school, or $988,800 annually (based on average hourly pay rate of $20 per hour – plus 30 percent benefits – for 183 school days).

- **Waste Disposal** – Approximately one-third of the trash collected daily in a school relates to the kitchen and cafeteria operations. Additional analysis is necessary to confirm the actual proportion of trash collected by TUSD food services. Budgeted expenditures for refuse services districtwide are $358,600 in FY 2014. Assuming 33 percent of this relates to food services, the allocable amount is $119,533.

- **Utilities** – TUSD allocated $468,130 in utility costs to the food services operation in FY 2013. Utility costs for electricity, natural gas and water/sewage can be estimated based on the cafeteria's proportionate share of the overall square footage of each school, and the mix of uses for the cafeteria facility for food services or other functions during the school year. In detailed studies of other school systems, the review team has found that cafeteria/kitchen space typically accounts for 5 percent of the floor space of secondary schools and 5 to 7 percent for elementary schools. Use of the cafeteria for breakfast and lunch, including preparation, serving, and clean-up time generally accounts for 50 percent of the total use of the cafeteria. TUSD's budget for electricity, natural gas, and water/sewage for FY 2014 is $20,942,216. A full allocation of utilities costs to the food service operation would be approximately $523,555 (one-half of 5 percent of total expenditures) or $55,425 more than the current allocation.

The total amount of additional allocable costs to the Food Service Fund is $833,758 per year. Current profitability levels in the Food Service Fund are not sufficient to cover this allocation. The remaining recommendations in this chapter will help increase the profitability to cover the allocation and have a reserve for capital equipment replacement. Whether or not the recommended savings are achieved, however, all allocable costs should be transferred to the Food Service Fund so that the true cost and profitability of the operation can be presented.

Fiscal Impact

Allocation of direct costs would yield M&O Fund savings of approximately $833,758 annually (beginning in 2014-15). The $658,800 related to custodial services could be used to support the recommended investments in this area. These investments are presented in *Chapter 5 – Facilities Use and Management* of this report.

The fiscal impact shown below represents savings to the general fund and costs to the Food Service Fund Based on the net surpluses generated in the past two years, food services cannot fully absorb these direct costs without improving financial performance. The remainder of this section suggests methods for boosting surpluses by increasing revenues through increased student meal participation.

Recommendation 7-1	One-Time Costs / Savings	2014-15	2015-16	2016-17	2017-18	2018-19
Allocate additional indirect costs to the Food Service Fund.	$0	$1,163,758	$1,163,758	$1,163,758	$1,163,758	$1,163,758

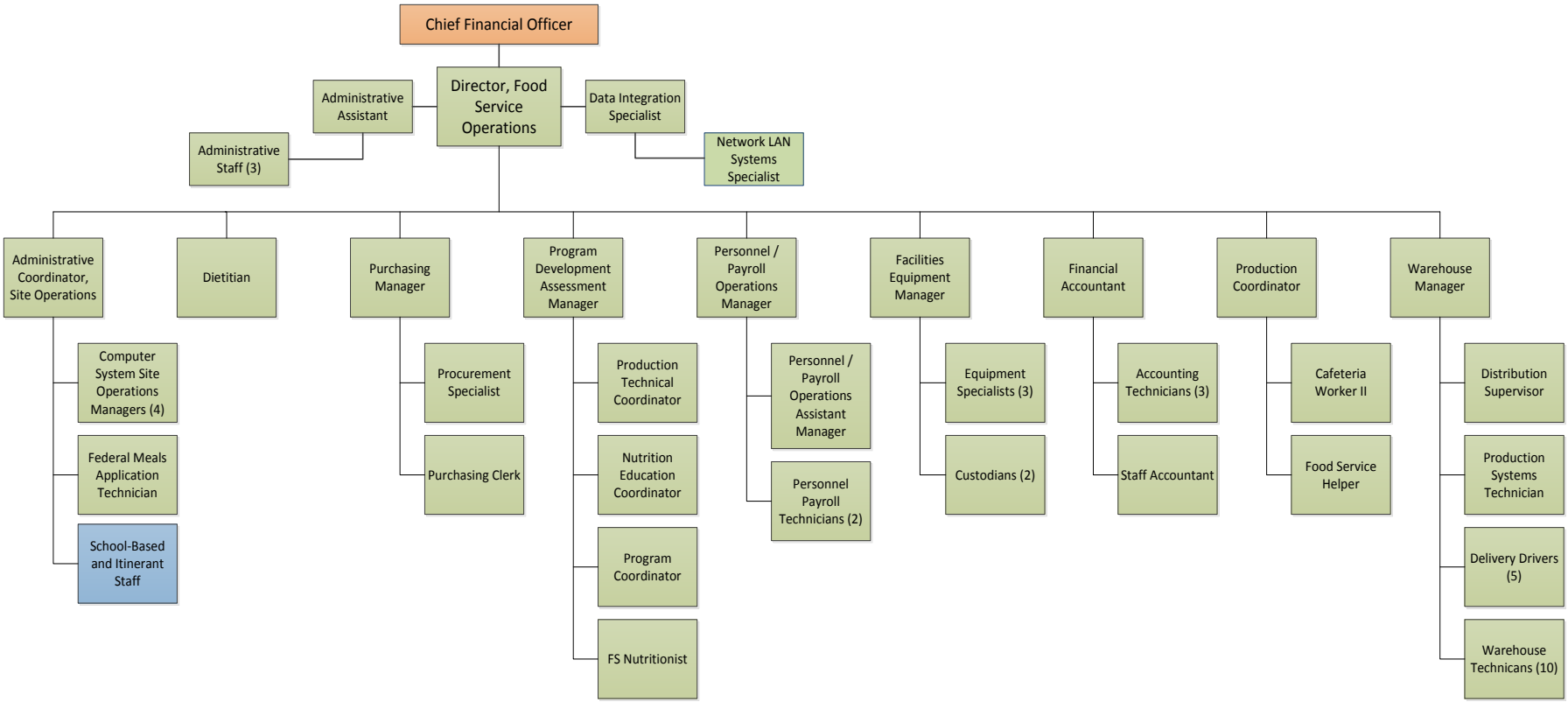
*Table indicates savings to the Maintenance and Operations Fund.

Note: Costs are negative. Savings are positive.

Recommendation 7-2: Eliminate vacant positions in the food service central office.

Figure 7.2 shows the TUSD food services organization structure. The Director of Food Service reports to the Chief Financial Officer. Fifty-seven other full-time or part-time positions comprise the department, excluding school-based staff and itinerant staff shared by the schools. The current Director has been in the position since July 2013.

Figure 7.2. Current Food Services Organizational Chart



Source: TUSD Food Services Department Organization Chart, FY 2013-14

Of the 57 central office positions shown in Figure 7.2, 20 were vacant at the time of this review, 15 of which have been vacant for more than one year. One position, the financial accountant, has been vacant since 2003. Table 7.3 presents a listing of the vacant positions in the Food Services Department as of January 2014. All of these positions are included in the 2013-14 budget.

Table 7.3. TUSD Food Services Vacant Positions as of February 2014

Position	Vacant Since
Financial Accountant	2003
Production Technical Coordinator	2005
Dietician	2007
Federal Meals Tech	2010
Financial Accountant Temp	2010
Supervisor Intern	2010
Float / Cafeteria Worker II	2010
Personnel/Payroll Asst. Manager	2011
Float / Cafeteria Worker II	2011
Federal Meals Tech	2012
Clerk Typist	2012
Program Development & Assessment Coordinator	2012
Project Specialist	2012
Personnel/Payroll Technician	2012
Distribution Supervisor	2013
Delivery Driver	2013
Warehouse Technician	2013
Project Technical Specialist	2014
Inventory Technician	2014

Source: TUSD Food Services

The positions listed in Table 7.3 represent close to $1 million of the Food Services budget, and reflect an unnecessary and misleading padding of the budget. The Food Services Department has been operating without most of these positions for more than a year, indicating that they are not needed. During the 2014-15 budget cycle, all food service positions that have been vacant for more than one year should be eliminated. If it is determined that any of these positions are needed, they should be resubmitted as new requests for approval.

Fiscal Impact

There is no fiscal impact of this recommendation since actual expenditures are not affected. However, the Food Service Department's operating budget will more closely represent expected expenditures in future years.

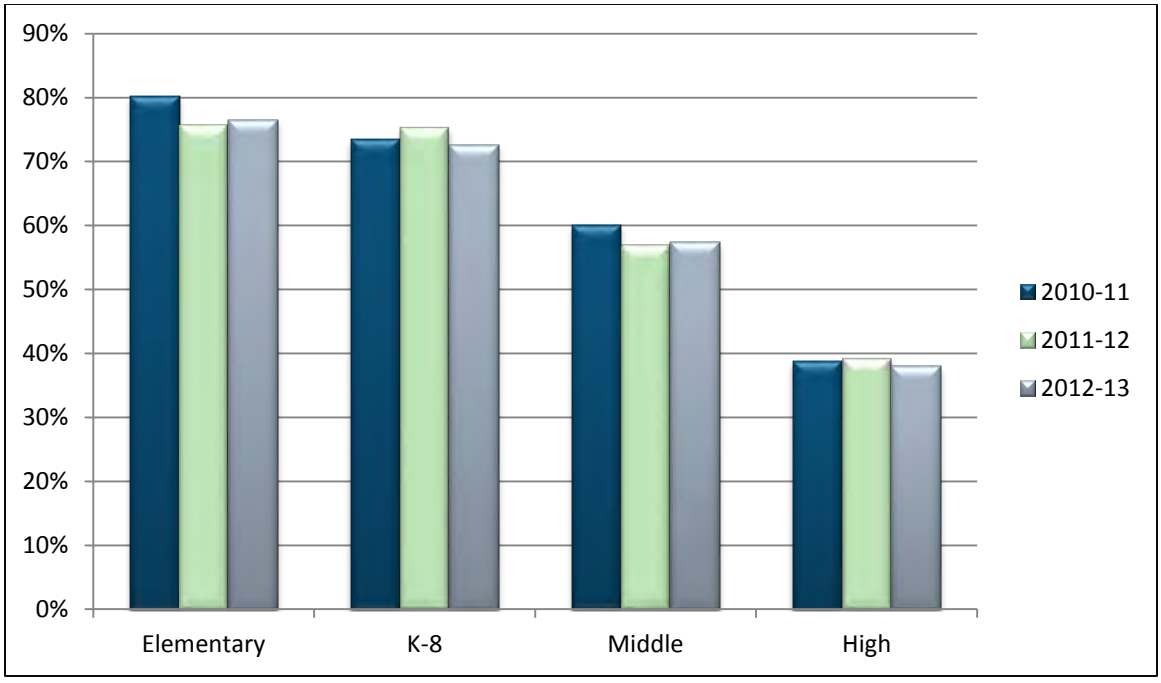
Recommendation 7-3: Implement steps to increase meal participation at schools.

Meal participation rates reflect the percentage of the students at a school that eat a meal prepared by the school. There are separate participation rates for breakfast and lunch, and there are also rates by type of payment – free meal, reduced price meal, paid meal, and a la carte sales. Free and reduced price meals are provided through the National School Lunch Program for which TUSD submits reimbursement claims for eligible students that participate. Participation rates are calculated by dividing the number of meal equivalents served by the total enrollment at the school.

Higher participation rates are good for students in that more students eat a healthy meal and are also good economically, as federal reimbursements revenues from paid meals increase. Higher participation allows schools to realize economies of scale and lower the overall cost per student.

Figure 7.3 presents total lunch participation rates (inclusive of free, reduced, paid, and a la carte) by school type for the past three years. Each school type has shown a net decline in student meal participation during that period, with elementary schools and middle schools showing slightly larger percentage point declines (-3%).

Figure 7.3. TUSD Total Lunch Participation Rates by School Type, 2010-11 to 2012-13

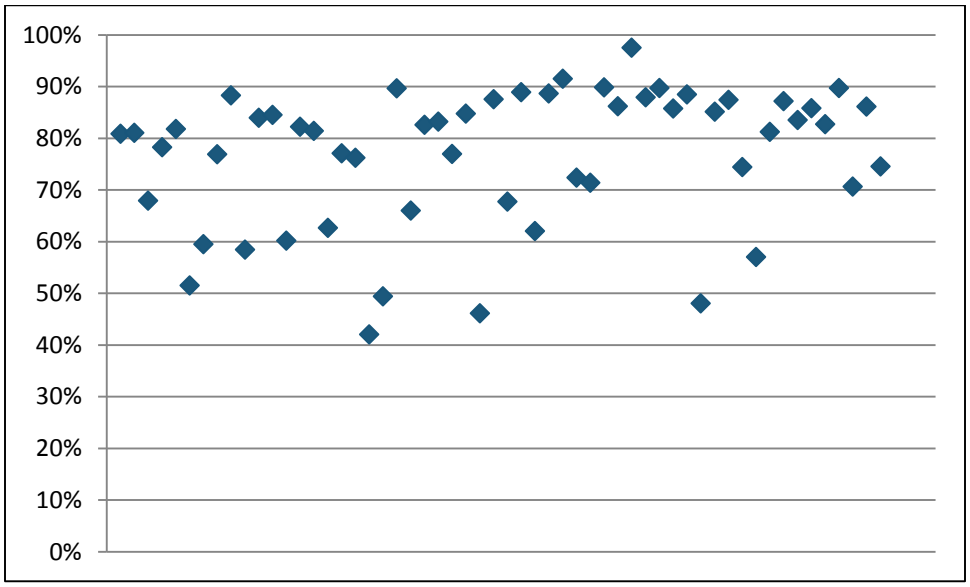


Source: TUSD Average Daily Participation with Meal Equivalents

Nationally, the overall lunch participation rate for K-12 schools is approximately 61.5 percent.[26] TUSD's 2012-13 districtwide lunch participation rate is 58.2 percent, 3.3 percentage points lower than the national average.

At the school level, there is wide variation in lunch participation rates. Figure 7.4 presents lunch participation rates (as a percentage of school enrollment) for TUSD elementary schools as of October 2013. Each point on the scatter diagram represents the lunch participation rate for an elementary school. Lunch participation at elementary schools ranges from 42.1 percent 97.6 percent.

Figure 7.4. TUSD Lunch Participation Rates, Elementary schools, October 2013

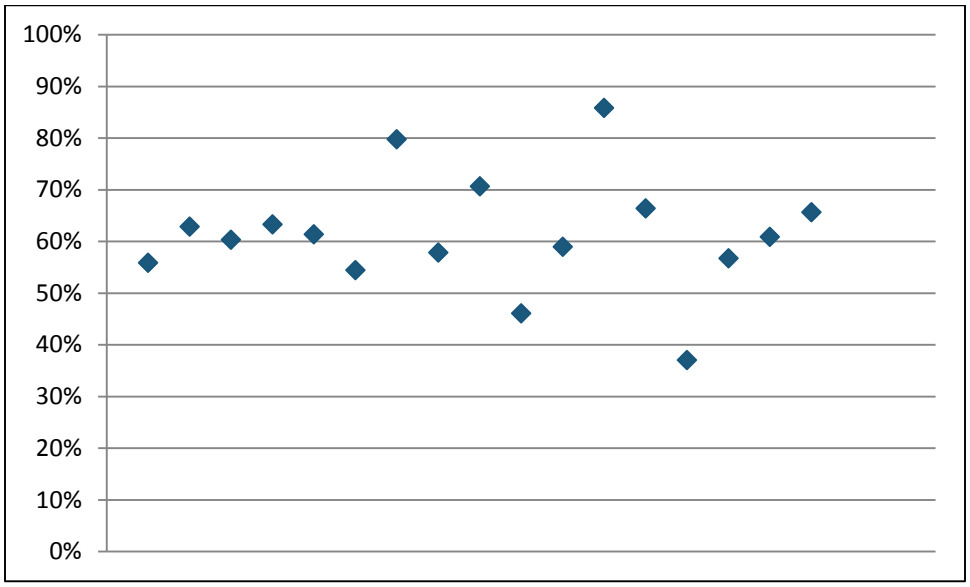


Source: TUSD participation rate calculations, October 2013

Figures 7.5 and 7.6 present the same participation data for middle schools, K-8, and high schools. The range of participation rates are not as wide as elementary schools, but still significant. K-8 and middle school participation rates range from 37 percent to 85.8 percent; high school participation ranges from 15.1 percent to 65 percent.

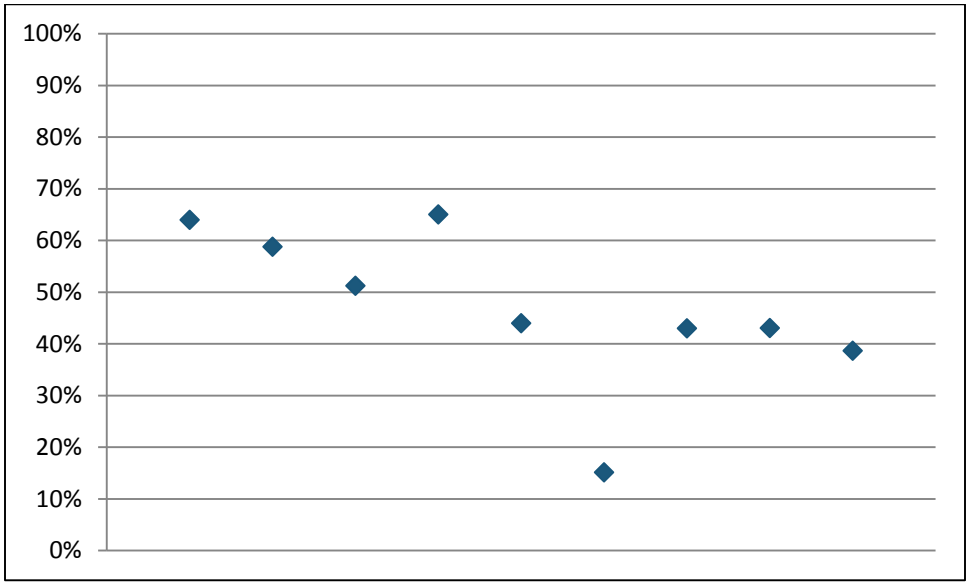
[26] School Nutrition Association: National School Lunch Program Participation Tracker, 2012-13, http://www.schoolnutrition.org/uploadedFiles/School_Nutrition/102_ResourceCenter/Researching_SN_Industry/ParticipationTrackerforNSLPandSBP.pdf; Digest of Education Statistics, Table 36, http://nces.ed.gov/programs/digest/d12/tables/dt12_036.asp

Figure 7.5. TUSD Lunch Participation Rates, K-8 and Middle Schools, October 2013



Source: TUSD participation rate calculations, October 2013

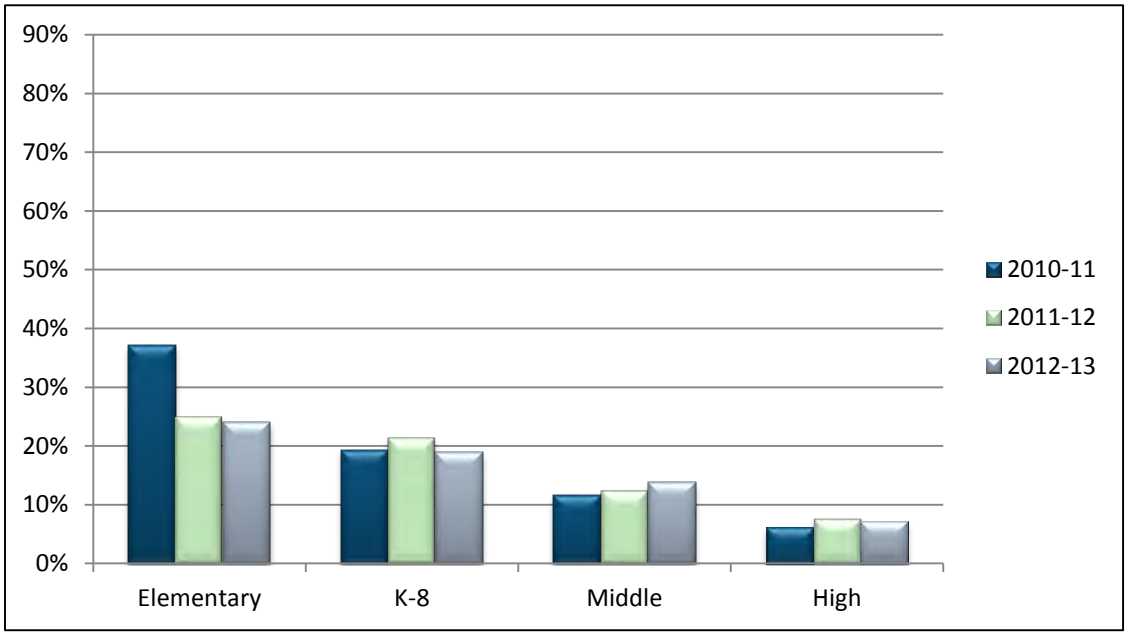
Figure 7.6 TUSD Lunch Participation Rates, High Schools, October 2013



Source: TUSD participation rate calculations, October 2013

TUSD, like most school systems, has lower breakfast participation rates, as many students will eat before they arrive at school. Figure 7.7 presents breakfast participation rates by school type for 2010-11 to 2012-13. While middle and high schools saw an increase in participation over this time period (18 percentage points and 16 percentage points respectively) elementary schools showed a significant decline – 35 percentage points. Middle schools saw a slight decline in participation during this time period (3 percentage points).

Figure 7.7. TUSD Total Breakfast Participation Rates by School Type, 2010-11 to 2012-13



Source: TUSD average daily participation with meal equivalents

Each percentage point of participation generates approximately $327,000 of revenue for TUSD, based on average daily revenue of $3.50 ($19.3 million revenue / (30,000 students participating per day x 183 days) per student for 183 days, applied to 1 percent of the TUSD student population, or approximately 510 students.

The TUSD Food Service Department has a program development and assessment manager position, but it is currently vacant. This position is responsible for food program design, program marketing, service design, and assessment of product usage. Each of these functions are important elements in maximizing student participation.

Other factors outside the control of the Food Service Department affect participation rates, including the enforcement of closed campuses and accessibility to nearby competing restaurants. All schools at TUSD are closed campuses, meaning that students are not allowed to leave during the school day for lunch. However, according to Food Service Department staff, this is not consistently enforced. Some students leave school to eat elsewhere and parents also bring food to students at school. Both instances undermine the ability of TUSD to maximize meal participation.

TUSD should reinstate the program development and assessment manager position, make additional investments in food program design and marketing, and establish a goal of increasing meal participation by 6 percentage points over the next three years, or 2 percentage points per year. The district should also evaluate the enforcement of closed campuses. Schools with lower participation rates should be targeted first, as they will have greater opportunities for improvement.

Fiscal Impact

The fiscal impact is based on the expected additional revenue of $1,962,000 from increased participation (6 percentage points of participation x $327,000 per percentage point) less the additional cost (50 percent) associated with those revenues, or $981,000 annually. Food costs represent 40 percent of total costs and some additional labor hours may be incurred to provide these additional meals at the schools. However, the average TUSD school cafeteria would be adding only 34 meals per day spread over multiple lunch periods. It is also assumed that increased participation will occur at 2 percentage points per year, although earlier achievement could be possible. After full implementation, $981,000 per year of net revenue will be realized.

There is no cost of filling the program development and assessment manager position, as it is currently in the Food Service Department budget. An additional up-front investment of $50,000 is recommended for outside expertise in marketing and program design.

Recommendation 7-3	One-Time Costs / Savings	2014-15	2015-16	2016-17	2017-18	2018-19
Implement steps to increase meal participation at schools.	($50,000)	$327,000	$654,000	$981,000	$981,000	$981,000

*Amounts relate to the Food Services Fund.

Note: Costs are negative. Savings are positive.

Recommendation 7-4: Develop performance report for Food Services.

The TUSD Food Service Department does not report basic efficiency and profitability measures needed to effectively manage the program. Profitability by school, MPLH by school, and other measures should be tracked, analyzed and reported to ensure that each school is operating efficiently and is self-sustaining. The data are available to support the calculation of measures, but a standard performance report is not generated.

Table 7.4 presents a sample of performance measures that should be tracked and reported by TUSD food services management on an annual basis, and some measures (e.g., participation rates, profitability) should be tracked on a monthly basis. Graphical representations (e.g., charts and graphs) of these data should be used to report district and school level measures over a 5-year period for annual reports.

Table 7.4. Recommended Performance Measures for TUSD Food Service Department

Performance Measure	Level
Meals per labor hour (MPLH), by school	School
Participation Rates (breakfast/lunch), by school:	School
Free (percentage participating)	School
Reduced price (percentage participating)	School
Paid (number of paid meals per year)	School
Net profit (loss) of food services operation	District
Net profit (loss), by school	School
Indirect costs allocated to food service (amount and type) - (from M&O Fund only)	District
Cash in lieu of commodities	District
Food cost as a percent of total cost	Both

Source: Gibson Consulting Group, Inc.

Fiscal Impact

This recommendation can be accomplished with existing resources.

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Chapter 8 – Other Recommendations

Recommendations made in this chapter comment on two areas of the study not included in other chapters of this report: school clerical staff, and safety and security.

School Clerical Staff

Recommendation 8-1: Re-engineer school processes to reduce clerical staff work demands.

School clerical staff are the originators of many of the district's transactions involving purchasing, payroll, student information, substitutes, student activity funds, and other functions. They also are the first people you see when you go into a school and the first person you talk to when you call. School clerical staff are stationed at the front desk of the school's office, and are responsible for greeting and taking care of parents, students and school visitors.

Tucson Unified School District (TUSD) assigns staff to schools based on staffing formulas approved by the board. Each school is assigned an office manager position that is primarily responsible for processing most school transactions. The high schools have additional positions because of their larger size and more complex work demands. These positions include a finance manager, a registrar, and attendance clerks. Additional clerical positions are allocated for schools with larger enrollment. In 2013-14, the following formulas applied to clerical staffing at the schools.

Table 8.1. TUSD Clerical Staffing Formulas

Efficiency Measure	Elementary	K-8	Middle	High
Office Manager	1	1	1	1
Finance Manager				1
Registrar				1
Attendance (> 1,000 students)				1
Attendance for each additional 500 students				1
Additional clerical staff	.5 (351-499 students) 1 (500 or more students)	1 (451-599 students) 1.5 (600-749 students) 2 (750 – 1,049 students 3 (1,050 or greater)	.75 (if less than 450 students) 1 (451 or greater students)	

Source: TUSD FY 2014 School Funding Formulas.pdf

Four school site visits were conducted to validate the clerical staff and better understand their responsibilities and work demands. Each of the four schools were found to have clerical staff levels that matched the prescribed formula except Booth Fickett K-8, which had 0.25 of a full-time equivalent (FTE) lower than the formula amount.

In comparison to most school systems and industry standards, these staff levels are very lean. Most school systems are above industry standards; with the exception of elementary schools, TUSD schools clerical staffing levels are below what standards would prescribe. TUSD's elementary staffing formula provides 1.5 FTEs up to 499 students. Industry standards provide 1 FTE up to 499 students and 1.5 FTEs up to 749 students.

The review team has not observed any other school system over the past 20 years that has clerical staff levels below industry standards. Table 8.2 presents the four schools formula and actual enrollment, and the suggested industry standard for each school.

Table 8.2. TUSD Formula, Actual and Industry Standard Enrollment, Selected Schools

School	Enrollment	Formula Staffing	Actual Staffing	Industry Standard
Vesey Elementary	611	2	2	1.5
Booth-Fickett K-8	1,282	3.75	4	5.5
Doolen MS	791	2	2	4.5
Tucson Magnet HS	3,209	8	8	12

Sources: Calculated from TUSD FY 2014 School Funding Formulas.pdf; TUSD Student enrollment; prior staffing guidelines of the Southern Association of Colleges and Schools (SACS).

Note: SACS no longer maintains these standards, and no other organization currently maintains clerical staffing standards for schools.

The industry standards are based on optimum efficiency in school operations. This is not the case at TUSD schools. Many school business and student information processes are highly manual and paper-intensive. In some schools software tools exist but are not used as intended, causing increased demands on school clerical staff. Following are examples of inefficient processes at one or more of the schools visited:

- Personnel Action Forms (PAF) are completed using hard copy forms.
- Schools have access to an automated substitute management system, but it is not used by teachers. Teachers call school clerical staff that enter the request into the substitute system. In most school districts, teachers have direct access to these systems.
- Timesheets for hourly employees are prepared manually and processed manually by school clerical staff. Absence forms for teachers are prepared manually.
- School clerical staff enter student attendance from forms submitted by substitute teachers since substitutes do not have access to the district's student information systems.

- Separate spreadsheets are maintained to monitor the school's budget status because of the perceived unreliability of the district's financial information systems. Every purchase transaction is entered into the spreadsheet and again into the district's financial systems.
- Phone calls from parents are manually entered onto a log and also into a computer system.
- Different schools use different auto-dialer systems to contact parents in case of a student absence or other school matter. For some systems it takes several hours to get the calls out.
- All student files are maintained in hard copy form.
- Schools experience difficulties in attaching scanned documents to the district's financial information systems.

There are also examples of efficient processes and systems. TUSD schools enter maintenance requests into an online system and can monitor the status of work orders. A similar online system exists for technology work orders. TUSD teachers enter grades and attendance directly into the district's student information system, eliminating the need for clerical staff to perform this function.

In 2013, TUSD completed an exercise that re-engineered and streamlined many school and central office processes. However, as of the date of the review team's site work in early January 2014, these new processes were not implemented. Some processes cannot be changed until the district decides whether to change its information systems for student, finance and human resources management. Other processes, such as those related to the substitute management system and auto-dialer systems, can be re-engineered immediately.

Fiscal Impact

The district should seek outside assistance in implementing streamlined procedures at the schools. Based on similar initiatives at other large school systems, approximately $150,000 should be invested to ensure that school staff are trained and supported for up to 18 months after the procedures are updated. Additional streamlining is expected to occur after the district makes its decision on its student, finance and human resource information systems. The cost of any outside assistance needed should be added to those cost estimates.

No expected savings are anticipated because the staff levels are already lean. After implementation of the streamlined procedures, TUSD should re-evaluate its clerical staffing standards, particularly for the middle schools and high schools with larger enrollments.

Recommendation 8-1	One-Time Costs/ Savings	2014-15	2015-16	2016-17	2017-18	2017-18
Re-engineer school clerical processes to reduce work demands.	($150,000)	$0	$0	$0	$0	$0

Note: Costs are negative. Savings are positive.

Safety and Security

School districts are expected to provide a safe and secure environment for their students, staff, and visitors. While districts are largely insulated from violent crime, it is incidents of violence at schools that draw national attention. School districts must take proactive measures in safety and security, even in incident-free schools. Students, teachers, and other district employees deserve a safe school environment in which to learn and work.

The School Safety Department includes the positions shown in Figure 8.1. The investigator position is new as of November 2012 and focuses on various types of investigations, including allegations of use of force by staff members, thefts, and embezzlements. The investigator handled 80 cases in 2012-13, some of which led to employee terminations. The School Safety and Security Manager oversees a 24/7 operation to provide school safety and security. The Safety and Training Manager oversees the Field Safety Supervisor who are primarily focused on bus driver training and transportation-related incidents and accidents. The crossing guard positions are all part-time.

The district no longer has School Resource Officers (SROs). These positions were previously grant-funded and were eliminated approximately five years ago when grant funding ended. The Tucson Police Department used to have school liaison officers to work in schools, but those positions were eliminated due to budget cuts.

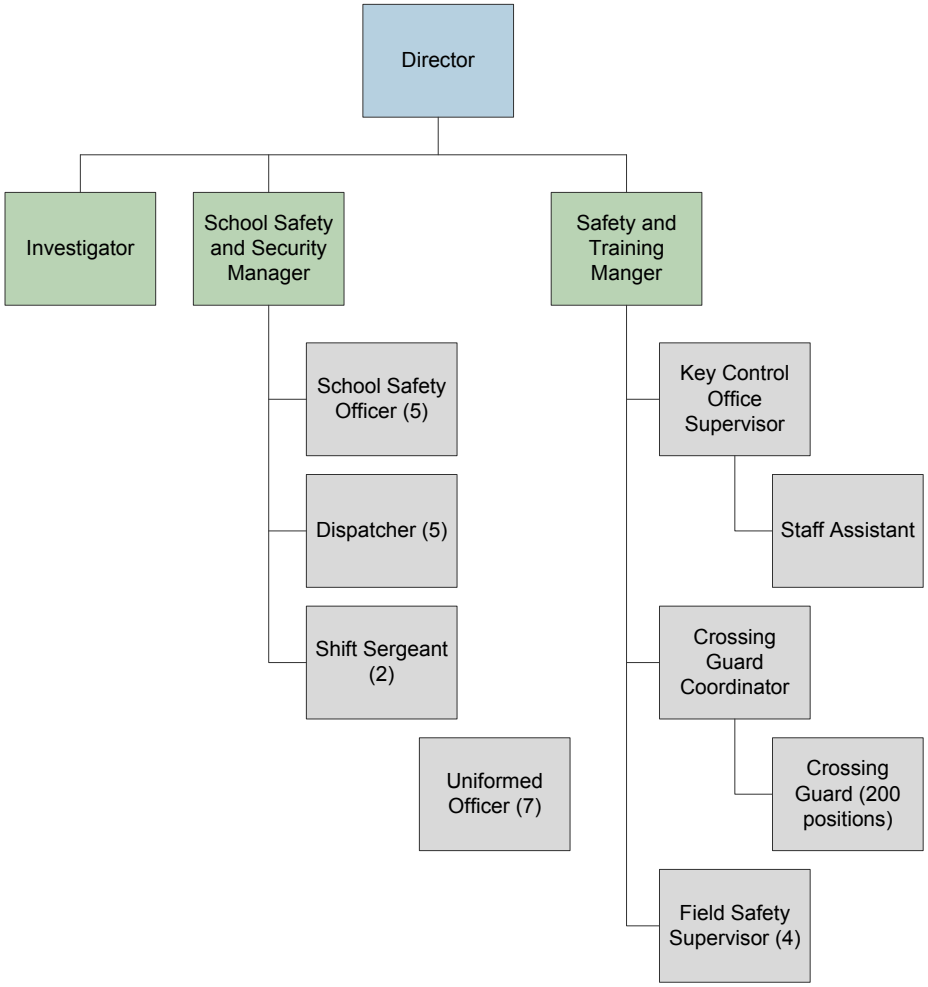
There are three other district groups/positions responsible for some aspect of school safety:

- School Monitors – There are 54 positions (some part-time, some full-time), plus one lead. These positions report to principals. Elementary principals determine how many school monitors they employ, based on an allocation of budget dollars determined through their school enrollment. Middle school principals are allocated up to two positions. High school principals are allocated 4.0 FTE positions. All school monitors report to their respective principals.

- Site Security Agents – There are 11 positions (all full-time). These positions are primarily at the high schools and are generally responsible for physical security matters.

- Parents on Patrol – This is volunteer group that works to support a specific TUSD school. The School Safety Director oversees the group of about 30 parents, which is active in six elementary/K-8 schools.

Figure 8.1. Current School Safety Department Organizational Structure



Source: TUSD, November 2013

Recommendation 8-2: Move badging to the School Safety Department.

Employee badging is currently done in the HR Department, using an old system (Allison Systems "Badge Pro 2000" version V9.2.16) that is not tied to other systems, such as the PeopleSoft system that is used to manage employee data. The Badge Pro system prints the employee identification number on the badge. This employee identification number is used for several applications in TUSD. Although the badge includes an employee's photo, that photo is not transferred to the employee database, which reduces the value of the employee database and which could be exploited by someone using a stolen badge. The district currently uses for its employee identification badges.

The district is implementing an access control system, whereby the employee badge will control building access. Thus far 25 schools have been completed on the outside doors, so that the employee badge is coded to grant access (or not). Individual interior and classroom doors have not yet been converted and still require keys.

Currently, once a badge has been created in the Human Resources Department it is routed to a staff member in the fire safety area who encodes the building access onto it. From there, the badge is routed to the School Safety Department for issuance to the employee along with any needed keys. This process could be improved by using the badging capabilities available in PeopleSoft and assigning responsibility for all steps to the School Safety Department.

Fiscal Impact

The district will likely need to replace its existing badge camera in the near future, according to HR staff. The camera system should be selected to easily interface with PeopleSoft. This one-time cost is estimated to be up to $7,000.

Recommendation 8-2	One-Time Costs/ Savings	2014-15	2015-16	2016-17	2017-18	2018-19
Move badging to the School Safety Department.	($7,000)	$0	$0	$0	$0	$0

Note: Costs are negative. Savings are positive.

Recommendation 8-3: Transition to electronic fingerprinting and relocate all fingerprinting to the School Safety Department.

The district currently has fingerprinting capabilities in both the Human Resources and School Safety Departments. The School Safety Department fingerprints all bus drivers while the Human Resources Department fingerprints all other employees and non-parent volunteers. Both departments have only the outdated ink roll systems, which are more time-consuming and prone to error than newer all-electronic systems.

The efficiency of obtaining fingerprints for criminal history background checks is greatly reduced by the rolled ink impressions onto fingerprint cards. The time the fingerprint clerk in human resources and support staff in the School Safety Department spend in collecting the print, processing and mailing the card and the requisite forms, the cost of supplies, and the inability to move the fingerprint station to different locations as needed are all reasons that this operation should move to live scan, electronic devices which submits fingerprint images electronically. More than one of these portable devices can be purchased to increase the number of employees who can be fingerprinted at the same time and location.

The School Safety Department is aleady responsible for fingerprinting of some employees. Such a function is more closely aligned with the other functions of this department than it is aligned with human resource functions. The School Safety Department already coordinates with the Human Resources Department for the issuance of keys and badges for employees and is directly responsible for issuing keys to employees.

Fiscal Impact

A top of the line, digitizing fingerprint scan will cost approximately $4,000 per unit. The district should purchase two and both should be portable.

Recommendation 8-3	One-Time Costs/ Savings	2014-15	2015-16	2016-17	2017-18	2018-19
Transition to electronic fingerprinting.	($4,000)	$0	$0	$0	$0	$0

Note: Costs are negative. Savings are positive.

Recommendation 8-4: Require all school monitors and site security guards to complete annual training with the School Safety Department.

Although the School Safety Department's "mission and goal is to assist our district administrators in maintaining a safe, secure environment conducive to teaching and learning by enforcing board policies, regulations and state statues when applicable" it is not currently responsible for providing any training to the school monitors of site security agents. Staff in both of these position types report directly to their principals. The lack of required safety/security training for school staff members charged with providing a safe and secure learning environment raises some potential liability issues for the district in addition to concerns over whether staff in these positions are optimally effective in their duties.

At the elementary level, schools are given a dollar figure in their budgets for school monitors that ranges from $10,000 to $21,000, depending on enrollment. There are few controls over how this money is spent and no oversight over how effectively it is used for school safety functions.

The School Safety Department should provide annual training of at least eight hours for the school monitors and site security agents. This could be provided through in-person and online means.

Fiscal Impact

The review team estimates this will require approximately $25,000 per year in staff wages and materials, and this investment should improve the knowledge and capabilities of the school-level safety staff outside the School Safety Department. Some common areas of school safety/security training could be provided online, such as requiring all school monitors and site safety agents to complete.

In addition to TUSD-specific training, there are several free internet training resources available from FEMA and the U. S. Department of Education concerning emergency management. Courses offered by FEMA and recommended for all public entity leaders are:

- ICS-100: An Introduction to Incident Command System (ICS)
- ICS-700.a NIMS: An Introduction to the National Incident Management System

Both courses are available and can be completed online for free. Advanced online training resources for district emergency response staff can be found at the Readiness and Emergency Management for Schools Technical Assistance Center.[27]

Recommendation 8-4	One-Time Costs/ Savings	2014-15	2015-16	2016-17	2017-18	2018-19
Require all school monitors and site security guards to complete annual training.	$0	($25,000)	($25,000)	($25,000)	($25,000)	($25,000)

Note: Costs are negative. Savings are positive.

[27] (2013) *Readiness and Emergency Management for Schools.* Retrieved from http://rems.ed.gov/display.aspx?page=trainings_emergency_management

Appendices

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Appendix A – Summary of Recommendations and Fiscal Impacts

Table A.1 lists all recommendations made as a result of the review, by operational area, priority level for implementing each recommendation, as well as estimated savings, investments, and net fiscal impacts.

Table A.1. Summary of Fiscal Impacts (five-year)

Recommendation	One-Time Cost/ Savings	2014-15	2015-16	2016-17	2017-18	2018-19	Total Fiscal Impact
Chapter 1 – District Organization and Management							
1-1. Develop a long-range strategic plan and related performance measures.	$0	$0	$0	$0	$0	$0	**$0**
1-2. Implement an internal audit function at TUSD that reports directly to the governing board.	($75,000)	($250,000)	($250,000)	($250,000)	($250,000)	($250,000)	**($1,325,000)**
1-3. Maximize the use of available technologies to streamline board meeting management.	$0	$65,390	$148,044	$148,044	$148,044	$148,044	**$657,566**
1-4. Reorganize instructional and student support services by function.	Not Determined	Not Determined	Not Determined	Not Determined	Not Determined	Not Determined	Not Determined
1-5. Develop a decision-making framework for instructional and school administrators.	($50,000)	$0	$0	$0	$0	$0	**($50,000)**
Net Fiscal Impact – Chapter 1	**($125,000)**	**($184,610)**	**($101,956)**	**($101,956)**	**($101,956)**	**($101,956)**	**($717,434)**
Chapter 2 – Financial Management							
2-1. Reduce Finance Office staffing after new information systems and re-engineered processes are implemented.	$0	$0	$260,000	$520,000	$832,000	$832,000	**$2,444,000**
2-2. Improve financial reporting to the board and ensure accessibility of financial reporting to department and school leaders.	$0	$0	$0	$0	$0	$0	**$0**
2-3. Implement the feature in Lawson that checks for available funds for requisitions and budget transfers.	$0	$0	$0	$0	$0	$0	**$0**

Recommendation	One-Time Cost/ Savings	2014-15	2015-16	2016-17	2017-18	2018-19	Total Fiscal Impact
2-4. Reduce the volume of Personnel Action Forms by eliminating multiple codes for substitutes.	$0	$0	$0	$0	$0	$0	**$0**
2-5. Consolidate district payroll functions under the Chief Financial Officer/Payroll Manager.	$0	$0	$0	$0	$0	$0	**$0**
2-6. Implement bar codes and scanners to more efficiently track fixed assets.	($50,000)	$0	$0	$0	$0	$0	**($50,000)**
2-7. Develop procedures and controls for the district's procurement card program.	$0	$0	$0	$0	$0	$0	**$0**
2-8. Expand "Punch-Out" purchasing programs with high volume merchants.	$0	$0	$0	$0	$0	$0	**$0**
2-9. Implement performance measures for the Purchasing Department.	$0	$0	$0	$0	$0	$0	**$0**
Net Fiscal Impact – Chapter 2	**($50,000)**	**$0**	**$260,000**	**$520,000**	**$832,000**	**$832,000**	**$2,394,000**
Chapter 3 – Human Resources							
3-1. Reorganize the HR Department, creating a development team that will have no daily routine responsibilities but will instead be focused on the myriad of systems and procedural improvements that are needed in the department.	$0	$84,243	$84,243	$0	$0	$0	**$168,486**
3-2. Improve the hiring process in several areas.	($70,000)	($50,000)	($50,000)	($50,000)	($50,000)	($50,000)	**($320,000)**
3-3. Conduct dependent eligibility audit.	($72,000)	$171,000	$171,000	$171,000	$171,000	$171,000	**$783,000**
3-4. Implement needed changes in leave policies and procedures.	$0	$0	$0	$0	$0	$0	**$0**
3-5. Require all schools to use SubFinder in order to better control use of leave.	$0	$0	$0	$0	$0	$0	**$0**
3-6. Develop strategies to reduce employee absences on Mondays and Fridays.	$0	$0	$0	$0	$0	$0	**$0**

Recommendation	One-Time Cost/ Savings	2014-15	2015-16	2016-17	2017-18	2018-19	Total Fiscal Impact
3-7. Publish an online employee handbook, as well as detailed HR screens on the district's website to handle the top 10 most frequent calls to the HR Department.	$0	$0	$0	$0	$0	$0	**$0**
3-8. Discontinue printing hard copies of the TUSD benefits handbook.	$0	$6,566	$6,566	$6,566	$6,566	$6,566	**$32,830**
3-9. Improve records processing and maintenance.	($15,000)	$10,000	$10,000	$10,000	$10,000	$10,000	**$35,000**
Net Fiscal Impact – Chapter 3	**($157,000)**	**$221,809**	**$221,809**	**$137,566**	**$137,566**	**$137,566**	**$699,316**
Chapter 4 – Technology Management							
4-1. The district should use a requirements-based application selection process for identifying and selecting an ERP system and student information system.	$0	$0	$0	$0	$0	$0	**$0**
4-2. Bring all technology-related staff and resources that are located in other departments into the Technology Services Department.	$0	$0	$0	$0	$0	$0	**$0**
4-3. Use staffing formulas and service level metrics to determine the number of staff necessary to maintain TUSD's computers and devices.	$0	$0	$0	$0	$0	$0	**$0**
4-4. Develop a project management methodology using industry standards and implement it throughout the department.	$0	$0	$0	$0	$0	$0	**$0**
4-5. Update the Technology Services Department job descriptions according to current departmental needs.	$0	$0	$0	$0	$0	$0	**$0**
4-6. Conduct a feasibility analysis to identify ways to have a data center that is on par with industry standards.	$0	$0	$0	$0	$0	$0	**$0**
4-7. Implement the recommendations from the Dell, Inc. IT Simplification Assessment.	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
Net Fiscal Impact – Chapter 4	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

Recommendation	One-Time Cost/ Savings	2014-15	2015-16	2016-17	2017-18	2018-19	Total Fiscal Impact
Chapter 5 – Facilities Management							
5-1. Reduce number of portable classrooms.	$0	$500,000	$500,000	$500,000	$500,000	$500,000	**$2,500,000**
5-2. Continue to evaluate school capacities and consider further school consolidation.	$0	$0	$7,500,000	$7,500,000	$7,500,000	$7,500,000	**$30,000,000**
5-3. Continue to implement warehouse process improvements and overhaul the facilities purchasing process.	Not Determined	Not Determined	Not Determined	Not Determined	Not Determined	Not Determined	Not Determined
5-4. Enhance existing facility condition assessment process though the incorporation of best practice procedures.	$0	$0	$0	$0	$0	$0	**$0**
5-5. Utilize A/E project managers for contract management, quality assurance/quality control, FCI, support of technology projects, fire and life safety inspections.	$0	$0	$0	$0	$0	$0	**$0**
5-6. Develop TUSD Operations Division strategic facilities plan.	$0	$0	$0	$0	$0	$0	**$0**
5-7. Document facilities management policies, procedures and workflow processes.	$0	$0	$0	$0	$0	$0	**$0**
5-8. Implement and integrate new CMMS to improve efficiencies and provide facilities data for better decision making.	($45,000)	($4,000)	($4,000)	($4,000)	($4,000)	($4,000)	**($65,000)**
5-9. Improve preventive maintenance program.	($45,000)	$0	$0	$0	$0	$0	**($45,000)**
5-10. Enhance operations and maintenance training program.	$0	($100,000)	($100,000)	($100,000)	($100,000)	($100,000)	**($500,000)**
5-11. Formalize and improve operations and maintenance performance measurement.	$0	$0	$0	$0	$0	$0	**$0**
5-12. Repair/replace outdated equipment.	Not Determined	Not Determined	Not Determined	Not Determined	Not Determined	Not Determined	Not Determined
5-13. Implement more centralized management approach to custodial services.	$0	($380,840)	($380,840)	($380,840)	($380,840)	($380,840)	**($1,904,200)**

Recommendation	One-Time Cost/ Savings	2014-15	2015-16	2016-17	2017-18	2018-19	Total Fiscal Impact
5-14. Invest in updated cleaning equipment to improve efficiency through reduced work demands	($325,000)	($65,000)	($65,000)	($65,000)	($65,000)	($65,000)	**($650,000)**
5-15. Increase custodial staffing after management change and equipment investments.	$0	($1,105,260)	($1,105,260)	($1,105,260)	($1,105,260)	($1,105,260)	**($5,526,300)**
5-16. Implement energy management plan.	($540,000)	$0	$0	$0	$750,000	$750,000	**$960,000**
Net Fiscal Impact – Chapter 5	**($955,000)**	**($1,155,100)**	**$6,344,900**	**$6,344,900**	**$7,094,900**	**$7,094,900**	**$24,769,500**
Chapter 6 – Transportation Management							
6-1. Reduce the number of monitors for non-IEP routes.	$0	$97,200	$97,200	$97,200	$97,200	$97,200	**$486,000**
6-2. Eliminate position classification for router and increase the number of router/analysts.	$0	$145,563	$145,563	$145,563	$145,563	$145,563	**$727,815**
6-3. Implement state of the art routing and scheduling software to optimize routing efficiency. Schedule transportation for students who intend to ride the school bus.	($300,000)	$450,000	$1,553,000	$1,553,000	$1,553,000	$1,553,000	**$6,362,000**
6-4. Renegotiate labor agreement to pay drivers and monitors for actual time worked.	$0	$0	$489,600	$489,600	$489,600	$489,600	**$1,958,400**
6-5. Reduce budgeted staff for mechanics from 21 to 19.	$0	$110,540	$110,540	$110,540	$110,540	$110,540	**$552,700**
6-6. Adopt a policy to perform a preventive maintenance inspection for every school bus every 4,000 miles or not less than once every 90 days.	$0	$0	$0	$0	$0	$0	**$0**
6-7. Conduct preventive maintenance inspections on a second shift at the Central facility.	$0	$0	$0	$0	$0	$0	**$0**
6-8. Budget funds replace school buses each year and continue to buy medium-duty buses to replace larger buses.	$0	($1,790,000)	($1,875,000)	($1,955,000)	($1,935,000)	($1,645,000)	**($9,200,000)**
Net Fiscal Impact – Chapter 6	**($300,000)**	**($986,697)**	**$520,903**	**$440,903**	**$460,903**	**$750,903**	**$886,915**

Recommendation	One-Time Cost/ Savings	2014-15	2015-16	2016-17	2017-18	2018-19	Total Fiscal Impact
Chapter 7 – Food Services							
7-1. Allocate additional indirect costs of the food services operations to the food services fund.	$0	$1,163,758	$1,163,758	$1,163,758	$1,163,758	$1,163,758	**$5,818,790**
7-2. Eliminate vacant positions in the Food Service central office.	$0	$0	$0	$0	$0	$0	**$0**
7-3. Implement steps to increase meal participation at schools.	($50,000)	$327,000	$654,000	$981,000	$981,000	$981,000	**$3,874,000**
7-4. Develop performance report for Food Services.	$0	$0	$0	$0	$0	$0	**$0**
Net Fiscal Impact – Chapter 7	**($50,000)**	**$1,490,758**	**$1,817,758**	**$2,144,758**	**$2,144,758**	**$2,144,758**	**$9,692,790**
Chapter 8 – Other							
8-1. Re-engineer school processes to reduce clerical staff work demands.	($150,000)	$0	$0	$0	$0	$0	**($150,000)**
8-2. Move badging to the School Safety Department.	($7,000)	$0	$0	$0	$0	$0	**($7,000)**
8-3. Transition to electronic fingerprinting and relocate all fingerprinting to the School Safety Department.	($4,000)	$0	$0	$0	$0	$0	**($4,000)**
8-4. Require all campus monitors and site security guards to complete annual training with the School Safety Department.	$0	($25,000)	($25,000)	($25,000)	($25,000)	($25,000)	**($125,000)**
Net Fiscal Impact – Chapter 8	**($161,000)**	**($25,000)**	**($25,000)**	**($25,000)**	**($25,000)**	**($25,000)**	**($286,000)**
Total Net Fiscal Impact	**($1,798,000)**	**($638,840)**	**$9,038,414**	**$9,461,171**	**$10,543,171**	**$10,833,171**	**$37,439,087**

Appendix B – Sample Operational Performance Measures

Performance Measure	Level
General District Management	
Ratio of students (enrollment) to full-time-equivalent (FTE) employees	District
Ratio of students (enrollment) to non-teaching FTE employees	District
Central administration and instructional leadership expenditures (general fund) per pupil	District
Central administration and instructional leadership expenditures (general fund), as a percentage of total expenditures	District
General fund balance as a percent of target fund balance	District
Percentage of students economically disadvantaged, mapped against the percentage of total revenue supported by federal funds	District
School Management	
Pupil-teacher ratio, by school	Campus
Pupil-aide ratio, by school	Campus
Special education student population as a percent of total enrollment	District
Percentage of schools meeting staffing standards for principals, assistant principals, counselors, library/media specialists	Campus
Average teacher class load per term by secondary schools	Campus
Number of secondary class periods with < 5 students enrolled by school	Secondary Campus
Number of secondary class periods with < 10 students enrolled by school	Secondary Campus
Finance	
Number of total employees per finance department employee	District
Number of invoices and direct payments made per accounts payable personnel (FTE)	District
Number of AP checks processed per AP department FTE	District
Average age of accounts payable	District

Performance Measure	Level
Number of accounts payable check voids and reissues	District
Number of purchase orders processed per purchasing FTE	District
Average dollar value of purchase orders processed	District
Number of payroll checks processed per number of payroll FTE	District
Number of payroll check/advice voids and reissues	District
Human Resources and Benefits	
Number of district employees per FTE human resources employee	District
Number of employment applications processed	District
Average days from position vacancy to recommendation by hiring manager	District
Average days from recommendation by hiring manager to start date	District
Non-certified teachers as a percentage of total teachers	District
Total overtime cost	District
Turnover rate for teachers	District
New teacher turnover rate (one year or less)	District
Turnover rate for non-teachers	District
Low income/high minority campuses compared to teachers experience	Campus
Percentage of teachers by ethnicity, compared to percentage of students by ethnicity	Campus
Teacher absentee days per year, by campus	Campus
Substitute costs per year, by campus	Campus
Benefits cost as a percentage of total salaries and wages	District
Technology	
Students (enrollment) per instructional computer (in classrooms and labs, plus laptops)	District
Average age of PCs	District
Average age of Apple computers	District
Number of computers per maintenance, repair, installation FTEs	District

Performance Measure	Level
Ratio of total students to total technology staff	District
Ratio of total students to total instructional technology staff (including campus liaisons)	District
Ratio of total employees to total technology staff	District
Ratio of total employees to technical support staff	District
Ratio of total computers to technical support staff	District
Ratio of instructional computers to instructional technology staff	District
Average turnaround time for computer work orders (days)	District
Facilities	
Average annual salary of skilled trades/maintenance FTE	District
Maintenance expenditures per gross square foot (Including portables)	District
Maintenance expenditures as a percent of total expenditures	District
Total maintenance expenditures per student	District
Gross square feet per maintenance FTE	District
Average turnaround time (days) for maintenance work orders to be closed	District
Percentage of work orders that were preventative	District
Average salary of all building and grounds FTE	District
Average annual salary of custodial FTE	District
Custodial salaries per gross square foot (Including portables)	District
Gross square feet per FTE custodian	District
Acres per grounds FTE	District
Facility capacity (permanent only) versus occupancy by school (TEA standards for capacity, room size)	Campus
Facility capacity (including portables) versus occupancy by school (TEA standards for capacity, room size)	Campus
Percentage of square footage that is portable classrooms	Campus
Percentage of district portable classrooms by school	Campus

Performance Measure	Level
Electricity cost (kwh) per square foot	Campus
Water cost (kgal) per square foot	Campus
Natural gas cost (ccf) per square foot	Campus
Nutrition	
Meals per labor hour (MPLH), by school	Campus
Participation Rates (breakfast/lunch), by school:	Campus
Free (percentage participating)	Campus
Reduced price (percentage participating)	Campus
Paid (number of paid meals per year)	Campus
Net profit (loss) of food services operation	District
Net profit (loss), by school	Campus
Indirect costs allocated to food service (amount and type) - (from gen. fund only)	District
Cash in lieu of commodities	District
Food cost as a percent of total cost	Both
Transportation	
Total cost per mile driven	District
Total cost per average daily rider	District
Average fuel cost per gallon (gasoline and diesel)	District
Annual transportation cost per student rider	District
Annual maintenance cost per bus	District
Accidents every 100,000 miles of service	District
Student incidents every 1,000 students transported	District
Maximum length of student time on school bus (minute)	District
Annual turnover rate for bus drivers	District
Annual turnover rate for bus monitors	District

Appendix C – Sample Governing Board Policy

POLICY TITLE: Leaves of Absence

POLICY CODE: xxx

The Tucson United School District (TUSD) recognizes that employees may experience extenuating medical or personal family circumstances which require them to be absent from work.

Definition: A leave of absence is consecutive absences of days greater than 10 working days.

Employees are required to request a leave of absence through their supervisors at their work sites and the Human Resources Department, and to provide all required documentation deemed appropriate.

Employees must use all sick and personal accrued balances during leaves of absence, but may reserve up to five days of accruals. Employees may use accrued vacation if they wish.

Employees shall not accrue leave time while on leave of absences.

Employees are not permitted to use one leave type after another consecutively unless permitted by law. (For example, military call orders received after an FML for non-military use).

Types of Leave: Eligibility and Benefits

Family Medical Leave (FML)

Description: Serious illness of the employee or spouse or child or parent; leave has to be approved by HR

Eligibility:

- Employee has at least 12 months of cumulative service and has worked at least 1,250 hours for TUSD during the 12 month period preceding the date their FML is to begin; and
- Have a qualifying reason for taking FML; and/or
- Have a remaining balance of FML.

Qualifying Reasons:

- The birth of the employee's child and the care of such newborn child; the placement of a child with the employee for adoption or foster care;
- The care of the employee's spouse, child, or parent who has a serious health condition;
- The employee's own serious health condition that prevents him/her from performing the essential functions of his/her position; or
- Military leave.

Benefits:

- Employees on approve FML of absence retain existing insurance benefits coverage. Employees will be billed for missed employee premiums and the district will continue to pay its portion of the premium as it applies for medical. If employees do not pay premiums during FML, they will be deducted from the employees' paycheck(s) upon the employees return to work.

Personal Leave

Description: Discretionary leave that must be approved by the responsible administrator

Eligibility:

- Employee has at least six months of continuous employment (excluding substitute or temporary hourly status
- Has not taken a personal leave in the preceding 12 months
- Has exhausted all accrued personal, sick, and vacation prior to the commencement of the planned personal leave of absence
- Assurance made that requested leave time will not be used in employment or work outside the district
- Approval of request by the responsible administrator

Benefits:

- Employees on approved personal leave who wish to retain existing insurance benefits coverage shall make arrangements with HR Benefits Office prior to commencement of the leave to pay both the employee's and district's premiums for such coverage. Failure to pay both the required premiums on a monthly basis will result in termination of coverage, and the employee will be offered COBRA. Vacation, personal, and sick leave shall not accrue during the period of personal leave of absence.

Governing Board Leave

Description: Discretionary leave that must be approved by the TUSD Governing Board one month prior to commencement of the leave. Approval of this leave will depend largely on the circumstances, specialization, or critical nature of the employee's position, as well as the practicality of replacing the employee for a temporary period. This leave shall not exceed one year, subject to the combination of all prior leave in that 12-month period. Employees on this leave shall resign from TUSD position upon approval of long term disability with the Arizona State Retirement System when it is foreseeable that the disability will extend beyond one year.

Eligibility:

- Employee has to have at least two years of continuous employment, excluding substitute or temporary hourly status.
- Has exhausted all accrued personal, sick, and vacation prior to the commencement of the planned leave of absence
- Assurance that the requested leave time will not be used for employment or work outside the district
- Approval through channels by the Governing Board

Reasons:

- Health of employee (submit physician's certification on TUSD form)
- Health of immediate family (submit physician's certification to verify illness or disability and to give project date of return to work)
- New infant or childcare (birth certificate or doctor's statement required)
- Course of study, education, or training, as approved by TUSD (enrollment or registration

documentation required)

- Military service (military orders required)
- Political campaign or to serve in public office
- Bargaining unit business

Benefits:

- Active benefits will terminate at the end of the month in which the approved leave begins. Employees on this leave shall have the opportunity to elect COBRA in order to continue applicable health benefits. Vacation, personal, and sick time shall not accrue during the period of this leave.

Military Leave:

- Employees shall receive pay for all days during which they are employed in training duty under orders with any branch of the armed forces for a period not to exceed 30 days in any two consecutive years. For purposes of this article only the term *year* means the fiscal year of the U.S. Government.

Expiration of or Return from Governing Board Leave:

- Employees must notify TUSD in writing of their return date by February 1 or 30 days prior to the leave's expiration date, whichever is earlier. Upon expiration of the leave, the employee is guaranteed return to a comparable (same grade, same step) position if one is available, and if the employee is recommended for the position by the hiring supervisor as a result of a selection process. If no comparable position is available, or if the employee is not selected, the employee will be assigned to the next vacancy that is in a classification below that of the position held at the time of the leave, and for which the employee meets the minimum requirements. Such employee will be placed on the step closest to their previous annual salary which does not result in an increase. Employees on this leave of absence are subject to the provisions of reduction in force in the applicable employee union agreement. Employees may request in writing that their leave be rescinded prior to the scheduled expiration of the leave.

Disciplinary Action

Employees who do not request a leave of absence in a timely manner, including extensions, shall constitute a breach of contract and therefore, may result in the initiation of dismissal procedures, loss of salary or such disciplinary action as may be deemed appropriate.

Source: TUSD benefits manager, January 2014.

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Appendix D – Sample Table of Contents for Online Employee Handbook

FOREWORD

DIVERSITY

- Equal Employment Opportunity Statement
- Anti-harassment Policy and Complaint Procedure
- Americans with Disabilities Act (ADA) & Amendments Act (ADAAA)

EMPLOYMENT

- Employee Classification Categories
- Background and Reference Checks
- Internal Transfers/Promotions
- Nepotism, Employment of Relatives and Personal Relationships
- Progressive Discipline
- Separation of Employment

WORKPLACE SAFETY

- Drug-Free Workplace
- Workplace Bullying
- Violence in the Workplace
- Safety
- Smoke-Free Workplace

WORKPLACE EXPECTATIONS

- Confidentiality
- Conflicts of Interest
- Outside Employment
- Attendance and Punctuality
- Attire and Grooming
- Electronic Communication and Internet Use
- Social Media—Acceptable Use
- Solicitations, Distributions and Posting of Materials
- Employee Personnel Files

COMPENSATION

- Performance and Salary Reviews
- Payment of Wages
- Time Reporting
- Meal/Rest Periods
- Overtime Pay
- On-Call Pay
- Employee Travel and Reimbursement

TIME OFF/LEAVES OF ABSENCE

- Holiday Pay
- Vacation
- Sick Leave

- Family and Medical Leave (FMLA)
- Personal Leave of Absence
- Bereavement Leave
- Jury Duty
- Voting Leave
- Military Leave of Absence
- Lactation/Breastfeeding

BENEFITS

- Medical and Dental Insurance
- Domestic Partners
- Flexible Spending Account
- Group Life Insurance
- Short-Term Disability Benefits
- Long-Term Disability Benefits
- 401(k) Plan
- Workers' Compensation Benefits
- Tuition Assistance
- Employee Assistance Program (EAP)

Source: Society for Human Resource Management (SHRM), February, 2014. www.SHRM.org

Appendix E – Asset Management Plans: Implementation of BMAR Approach

The TUSD Operations Division has developed a facility condition assessment (FCA) approach to cost-effectively evaluate school conditions and generate facility condition indexes (FCIs) for each school. The approach is well thought-out and reliable. It is based on rational and procedures common to an industry best practice FCA approach called the Backlog of Maintenance and Repair (BMAR) methodology. We do not recommend changing the approach, but we do recommend enhancing it with BMAR standards to provide more valuable and credible asset management plans.

The BMAR method was selected as a basis to overcome the challenges of cost-effectively, consistently, and accurately assessing the conditions of school systems, government agencies, and institutions across the U.S. Simply applying the method as implemented in the past without modification was viable. However, Facility Engineering Associates (FEA) has made a number of key improvements making it more accurate and credible for the specific application of public school evaluations. These improvements are presented in the following performance plan and methodology discussion.

Performance Plan and Methodology

Several process development meetings were conducted with representatives of School Facilities Commissions and FEA to develop a performance plan detailing how to effectively, efficiently, accurately, and consistently accomplish FCAs using the BMAR approach. The meetings identified previous assessment shortcomings and the requirements for new facility condition assessment methodologies. Goals and objectives and desired outcomes were clearly defined. In the end, a consensus-based plan utilizing the BMAR approach to conduct FCAs and develop asset management plans as a basis was developed.

The plan included the following key components:

1) Enhancement of the BMAR Approach
2) Development of Project Standards
3) Development of Generalized System Condition Levels
4) Creation of Automated Assessment Tools and Technology
5) BMAR Assessment Methodology and Assessor Training
6) Facility Assessment Pilot Study and Calibration
7) Facility Interviews and Data Review
8) Field Quality Control and Assurance Program
9) Documentation and Completing the Program

Enhancement of the BMAR Approach

The BMAR condition assessment approach implemented by NASA, Smithsonian Institution, and other DoD facilities typically begins with a rapid visual inspection of the different building systems at each facility. The assessors conducting the visual inspections rate each of the building systems, based on ASTM Uniformat II Classification for Building Elements, from ***five*** (Excellent condition – Only routine maintenance required) to ***one*** (Failure/Crisis – Systems not operational, or unsafe) for specific building types. The building types are defined in the PACES categorization of similar facility types for DoD facilities.

This categorization allows consistent extrapolation of system condition for each building system as a percentage of the current replacement value (CRV) of the facility. When the assessments are complete, the ratings are entered into a database where the parametric model converts the assessed condition ratings to a set of key metrics. The key metrics include: Deferred Maintenance (DM) costs, System Condition Index (SCI), and the Facility Condition Index (FCI).

The following figure demonstrates the simple assessment algorithm. The cost of replacing each major system in a building is a percentage of the current replacement value (CRV) of the building. The major system replacement percentage (MS%) is based on R.S. Means Square Foot Assembly Cost Data categorized by Uniformat classification. Repair cost percentages (RC%) were estimated based on experience and historical data for repairing and replacing systems based on condition. The BMAR deferred maintenance cost estimate is equal to the product of the MS%, the RC%, and the CRV for each building.

Figure E-1: Calculation of BMAR Deferred Maintenance Costs

MS%

Based on Uniformat and R.S. Means Data. Modified based on actual conditions.

System	MS%	System	MS%
A Substructure	11%	E Equipment	5%
B Structure and Shell	18%	F Specialty Construction	5%
C Interiors	26%	G Site Work	N/A
D Services	35%	H Accessibility Issues	N/A

RC%

Based on Generalized Condition Level

Rating	Condition	Repair Cost
5	Excellent	2% of CRV
4	Good	10% of CRV
3	Fair	33% of CRV
2	Poor	75% of CRV
1	Failure/Crisis	100% of CRV

BMAR = [Sum (MS%)*(RC%)] CRV

- MS% = major system percentage of CRV
- RC% = repair cost percentage of CRV
- CRV = current replacement value of the building

As an example, assuming a building is 100,000 s.f. in area with an estimated replacement cost of $200 per s.f.; the CRV would be equal to $20,000,000. Based on an example condition rating of 3 – Fair for Interiors, thus a RC% of 33% (or 0.33), the BMAR deferred maintenance cost for the interiors is equal to $1,716,000 (0.26 x 0.33 x $20,000,000).

The primary assumptions dictating the accuracy of the DM cost estimates include the actual costs of the building systems (or MS% times CRV), the estimate of repair cost percentages (RC%), and the consistency in which the generalized condition ratings are determined for each building. Previous BMAR methods for the DoD and NASA have based RC% on practical experience with objective life-cycle analyses and system degradation curves for use in engineered management systems. The values for MS% have typically been based on the PACES system for 42 types of facilities. This is a reasonable approach when evaluating hundreds of buildings of various types. However, it does assume that all buildings in each type category are identical.

The final assumption, and probably the most important, is that each assessor consistently rates the condition of systems in all buildings. This becomes more of a variable with multiple assessors and requires careful training and calibration.

The enhanced BMAR approach developed for this project takes the primary assumptions into consideration and allows for flexibility to increase the accuracy and consistency of the results. Instead of relying on PACES classifications to generate a single MS% value for all school buildings, the project team created a variable approach to model a multitude of system variations in elementary, junior high school, and high school buildings. Automated data collection and condition rating forms were created to simply and quickly identify system types and allow modifications of the MS% to accurately reflect conditions

encountered at each school. Details are presented later in this section (Creation of Automated Assessment Tools and Technology).

Increased consistency of the enhanced BMAR approach was achieved through the development of detailed Building Systems Condition Rating Field Guide for use by the field assessors. The Field Guide was generated based on decades of experience in performing facility condition assessments for multiple building facilities. It was calibrated to the RC% and DM costs based on comparison with comprehensive facility condition assessment and life cycle analysis data. To further increase the accuracy and consistency, interview forms were developed to gain further relevant condition data that visual observations might not identify.

Development of Project Standards for Schools

The project team discussed and selected a number of standards during the development meetings for use on the project. The selected project standards included:

- CSI Uniformat II - Building System Classification System
- RS Means - Assembly Cost Data
- DoD - Bldg. System Life-Cycle Curves
- APPA's Facility Condition Index (FCI)
- GAO FASAB Standard No 6 - Deferred Maintenance

The group brainstormed about the different methods and procedures for categorizing and completing the assessment. During the discussions, three different formats were discussed which included the Construction Specification Institute (CSI) Masterformat, CSI Masterformat 2004, and the ASTM/ANSI/CSI Uniformat II. Comments included:

- The 16 Division CSI Masterformat works well for design and construction but is difficult to use when attempting to describe in place building systems (i.e., steel frame with composite concrete deck, elements include roofing, building sealants, building insulation, etc.). CSI Masterformat 2004 includes several more divisions specifically related to facilities management, but still fall a little short in matching how systems are maintained.

- The Uniformat II classification system divides the information into eight categories which generally match the methodology used to collect assessment data. Additionally, Contractors in the future can be forced to submit their bids to accommodate the standard format.

The group decided that the Uniformat II format was the appropriate method for categorizing the condition assessment data. The subcategories could also be utilized in future years when additional information is captured during the assessments.

Uniformat was developed in the 1970s for use by U.S. Federal agencies, R.S. Means, and others in response to the growing need to classify building systems in a consistent, expandable, organized manner. It provided a means of comparing and evaluating alternative construction concepts in terms of a facility's functional parts, especially during the design phase of the project. In 1993, ASTM published

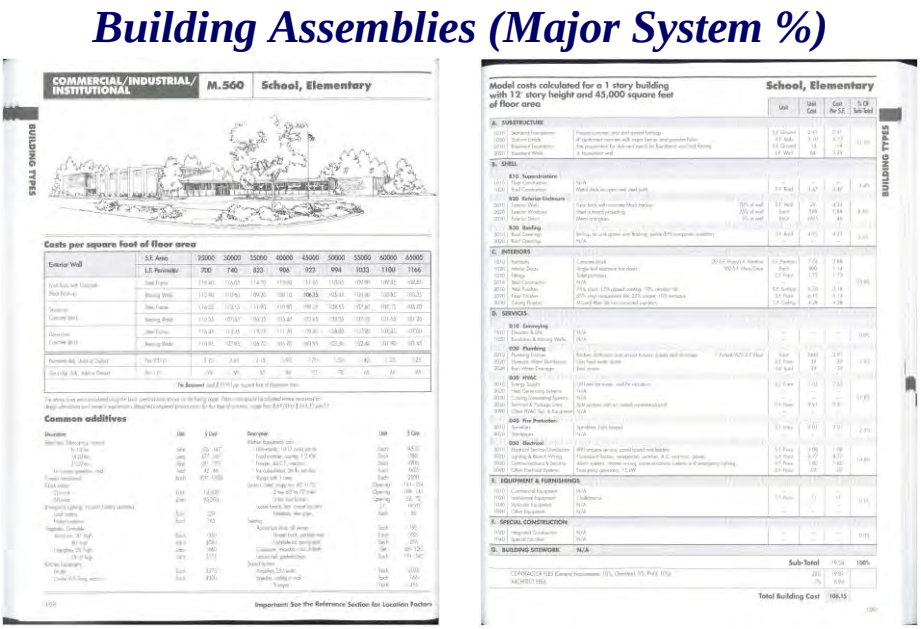
Uniformat II in conjunction with a team of experts from ANSI and CSI. Uniformat II expanded the classification system to include all types of construction, not just buildings.

The general Uniformat II categories utilized for this project include:

- A – Substructure
- B – Shell
- C – Interiors
- D – Services
- E – Equipment/Furnishings
- F – Special Construction
- G – Building Sitework
- H – ADA Compliance[28]

As previously stated, the selection of widely used published cost standards (i.e., R.S. Means) was made as an alternative to PACES data for the calculation of system unit costs and MS% values. A sample of the assembly cost data for a typical elementary school is shown in Figure E-2 (RS Means, 2006).

Figure E-2: RS Means Elementary School Assembly Example Costs



RS Means 2006 Square Foot Cost Manual (Basis - Uniformat II)

One of the most widely used and accepted benchmarks that can be produced from the collected data is the Facility Condition Index (FCI). The FCI was developed by the National Association of College and University Business Officers (NACUBO) and is a parametric tool used to relatively compare building

[28] The ADA category was created to include accessibility evaluations for the schools and is not part of the Uniformat II classification system.

conditions. FCI is calculated by dividing the Current Replacement Value of the building and its associated systems by the total cost of remedying maintenance deficiencies of those same systems. The FCI is a ratio and thus the higher the FCI the worse the buildings condition. A new building with no deficiencies and 100% replacement value would have an FCI of 0.

$$\mathbf{FCI} = \frac{\text{Cost of Deficiencies (DM)}}{\text{Current Replacement Value (CRV)}}$$

Excellent	**FCI < 0.05**
Good	**0.05 < FCI < 0.15**
Average	**0.15 < FCI < 0.30**
Poor	**0.30 < FCI < 0.50**
Crisis	**FCI > 0.50**

The FCI rating classifications of Excellent through Crisis are based on level of service performance measures recommended by APPA (APPA, 2002).

Development of Generalized System Condition Ratings

The following general system condition ratings were developed for this project. Details of condition ratings by system type are presented in the following section.

5. Excellent; only normal preventive maintenance required.
4. Good; Some repairs needed; overall system generally functional.
1. Fair; Many repairs needed; limited functionality and availability.
2. Poor; May be functional but obsolete or does not meet codes.

1. Crisis/Failure; Not operational; unsafe.

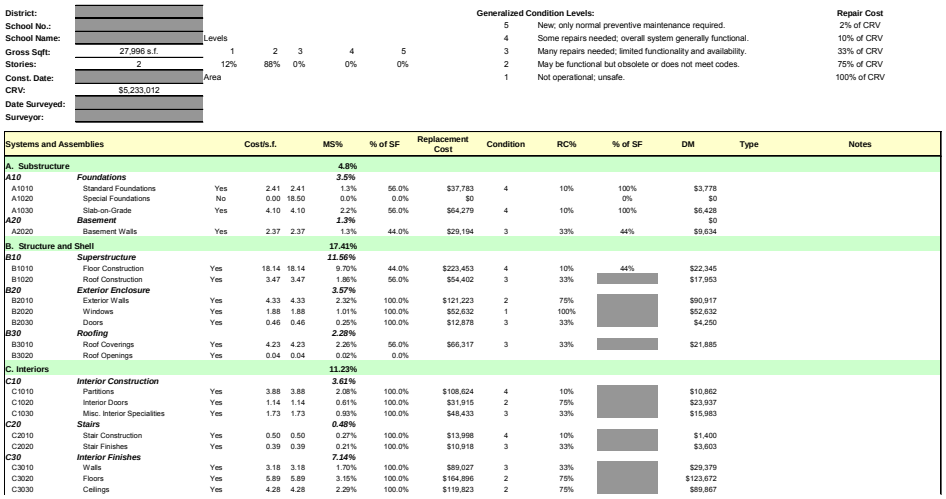
Creation of Automated Assessment Tools and Technology

The project team created an automated data collection process to enhance the efficiency, accuracy, and consistency of the condition assessments. The automated collection process allowed for the accounting of variations in building configuration and systems. Where previous methods relied solely on the building area, the enhanced approach captures variations in building cost due to number of floors, types of systems, and inclusion of other features and amenities. As an example, a single-story high school supported by shallow spread footings with a multipurpose room and boiler for heating only should not be expected to cost the same as a two-story school built on a special deep foundation system with elevators, stairs, gymnasium, pool, and central heating and air-condition with automated controls of the same size.

The automated process allows the field assessors to select the specific systems actually observed or reported, as well as determine the additional estimated costs for basement walls, stair construction,

elevated floor construction, etc. The automated forms calculate revised MS% and CRV based on the systems and subsystems selected. This maintains consistency in the relative evaluations while increasing the accuracy of the DM cost calculations and overall FCI.

Figure E-3: Example Automated FCA Data Collection Form



District:
School No.:
School Name:
Gross Sqft: 27,996 s.f.
Stories: 2
Const. Date:
CRV: $5,233,012
Date Surveyed:
Surveyor:

Levels 1 2 3 4 5
12% 88% 0% 0% 0%
Area

Generalized Condition Levels:

		Repair Cost
5	New; only normal preventive maintenance required.	2% of CRV
4	Some repairs needed; overall system generally functional.	10% of CRV
3	Many repairs needed; limited functionality and availability.	33% of CRV
2	May be functional but obsolete or does not meet codes.	75% of CRV
1	Not operational; unsafe.	100% of CRV

Systems and Assemblies			Cost/s.f.		MS%	% of SF	Replacement Cost	Condition	RC%	% of SF	DM	Type	Notes
A. Substructure					**4.8%**								
A10	***Foundations***				***3.5%***								
A1010	Standard Foundations	Yes	2.41	2.41	1.3%	56.0%	$37,783	4	10%	100%	$3,778		
A1020	Special Foundations	No	0.00	18.50	0.0%	0.0%	$0			0%	$0		
A1030	Slab-on-Grade	Yes	4.10	4.10	2.2%	56.0%	$64,279	4	10%	100%	$6,428		
A20	***Basement***				***1.3%***						$0		
A2020	Basement Walls	Yes	2.37	2.37	1.3%	44.0%	$29,194	3	33%	44%	$9,634		
B. Structure and Shell					**17.41%**								
B10	***Superstructure***				***11.56%***								
B1010	Floor Construction	Yes	18.14	18.14	9.70%	44.0%	$223,453	4	10%	44%	$22,345		
B1020	Roof Construction	Yes	3.47	3.47	1.86%	56.0%	$54,402	3	33%		$17,953		
B20	***Exterior Enclosure***				***3.57%***								
B2010	Exterior Walls	Yes	4.33	4.33	2.32%	100.0%	$121,223	2	75%		$90,917		
B2020	Windows	Yes	1.88	1.88	1.01%	100.0%	$52,632	1	100%		$52,632		
B2030	Doors	Yes	0.46	0.46	0.25%	100.0%	$12,878	3	33%		$4,250		
B30	***Roofing***				***2.28%***								
B3010	Roof Coverings	Yes	4.23	4.23	2.26%	56.0%	$66,317	3	33%		$21,885		
B3020	Roof Openings	Yes	0.04	0.04	0.02%	0.0%							
C. Interiors					**11.23%**								
C10	***Interior Construction***				***3.61%***								
C1010	Partitions	Yes	3.88	3.88	2.08%	100.0%	$108,624	4	10%		$10,862		
C1020	Interior Doors	Yes	1.14	1.14	0.61%	100.0%	$31,915	2	75%		$23,937		
C1030	Misc. Interior Specialities	Yes	1.73	1.73	0.93%	100.0%	$48,433	3	33%		$15,983		
C20	***Stairs***				***0.48%***								
C2010	Stair Construction	Yes	0.50	0.50	0.27%	100.0%	$13,998	4	10%		$1,400		
C2020	Stair Finishes	Yes	0.39	0.39	0.21%	100.0%	$10,918	3	33%		$3,603		
C30	***Interior Finishes***				***7.14%***								
C3010	Walls	Yes	3.18	3.18	1.70%	100.0%	$89,027	3	33%		$29,379		
C3020	Floors	Yes	5.89	5.89	3.15%	100.0%	$164,896	2	75%		$123,672		
C3030	Ceilings	Yes	4.28	4.28	2.29%	100.0%	$119,823	2	75%		$89,867		

The field assessors simply record the number of floors in the building and whether a specific system is present and the condition rating. The data is then entered directly into the database for calculation of the cost of deferred maintenance and the FCI for each building. The database may be used for long term storage of the data, as well as follow-up evaluations.

BUILDING SYSTEM CONDITION RATINGS FIELD GUIDE

Past condition assessments performed for WFSC resulted in inconsistent ratings. The condition assessment generated a "number" but the number was not tied to industry standards. Concerns about the ability to use and reliability recreate the assessment, led to the necessity to develop a detailed Building Systems Condition Rating Field Guide for use by the field assessors. The intent was to lend consistency to field assessors and to allow field assessors to rate conditions and age accurately.

The Field Guide was generated based on decades of experience in performing facility condition assessments for multiple building facilities following industry standards and best practices. It correlates this experience with actual repair and maintenance costs along with expected useful lives of individual building elements.

The assessors conducting the visual inspections rate each of the building systems, based on ASTM Uniformat II Classification for Building Elements, from ***five*** (Excellent condition – Only routine maintenance required) to ***one*** (Failure/Crisis – Systems not operational, or unsafe) for specific building types. The building systems are first categorized according to Uniformat II, as shown as follows.

- A – Substructure

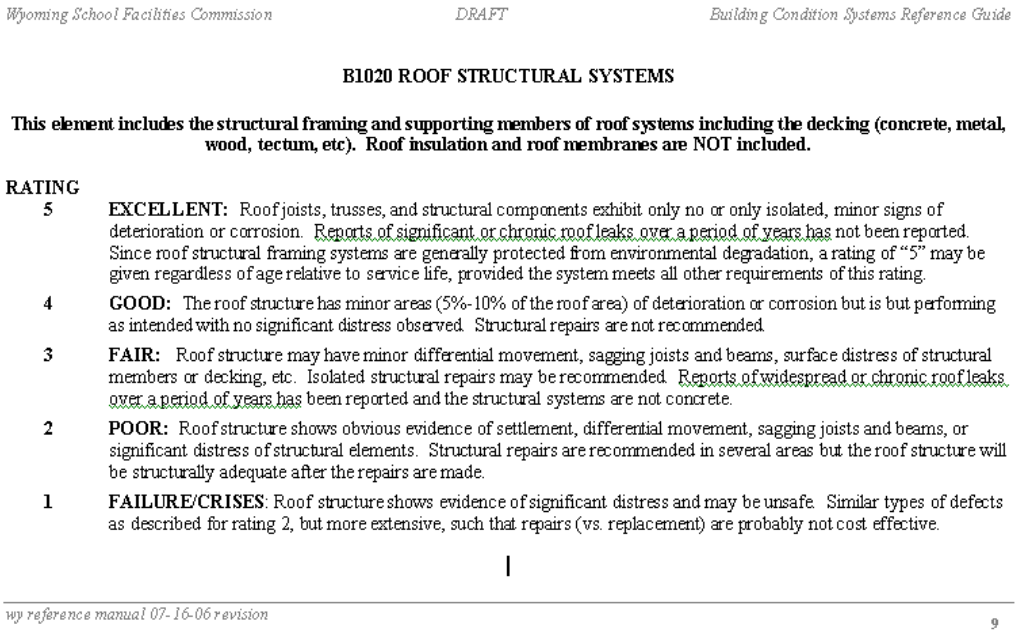
- B – Shell
- C – Interiors
- D – Services
- E – Equipment/Furnishings
- F – Special Construction
- G – Building Sitework
- H – ADA Compliance
- Modular Buildings

They are then broken down into specific building elements, as shown below.

- D30 HVAC
  - D3010 Energy Supply
  - D3020 Heating
  - D3030 Cooling
  - D3050 Self-Contained / Package Units
  - D3060 Controls

This categorization allows consistent extrapolation of system condition for each building system as a percentage of the current replacement value (CRV) of the facility. Each system evaluated and rated was included in the Field Guide (FEA, 2006). Examples of Building System Condition Ratings are shown in Figures E-4, E-5, and E-6.

Figure E-4: Roofing System Rating Guide



Wyoming School Facilities Commission *DRAFT* *Building Condition Systems Reference Guide*

B1020 ROOF STRUCTURAL SYSTEMS

This element includes the structural framing and supporting members of roof systems including the decking (concrete, metal, wood, tectum, etc). Roof insulation and roof membranes are NOT included.

RATING

5 **EXCELLENT:** Roof joists, trusses, and structural components exhibit only no or only isolated, minor signs of deterioration or corrosion. Reports of significant or chronic roof leaks over a period of years has not been reported. Since roof structural framing systems are generally protected from environmental degradation, a rating of "5" may be given regardless of age relative to service life, provided the system meets all other requirements of this rating.

4 **GOOD:** The roof structure has minor areas (5%-10% of the roof area) of deterioration or corrosion but is but performing as intended with no significant distress observed. Structural repairs are not recommended.

3 **FAIR:** Roof structure may have minor differential movement, sagging joists and beams, surface distress of structural members or decking, etc. Isolated structural repairs may be recommended. Reports of widespread or chronic roof leaks over a period of years has been reported and the structural systems are not concrete.

2 **POOR:** Roof structure shows obvious evidence of settlement, differential movement, sagging joists and beams, or significant distress of structural elements. Structural repairs are recommended in several areas but the roof structure will be structurally adequate after the repairs are made.

1 **FAILURE/CRISES**: Roof structure shows evidence of significant distress and may be unsafe. Similar types of defects as described for rating 2, but more extensive, such that repairs (vs. replacement) are probably not cost effective.

wy reference manual 07-16-06 revision 9

Figure E-5: Heating System Rating Guide

D3020 HEATING
Includes Boilers/ Water Heaters used for Heating Systems. Domestic boilers/water heaters are NOT included.

RATING

5 **EXCELLENT:** Less than 5% defects, none of which represent major deficiencies affecting proper operation of the equipment. No reported or observed rusting or corrosion; relief valves reportedly function properly. Water treatment provided for boilers (space heating only) over life of equipment. Equipment is in first 1/3 of service life. Only routine maintenance is required.

4 **GOOD:** Less than 10% defects, none of which represent major deficiencies affecting proper operation of the equipment. No corrosion or leaks observed or reported. Equipment in first or second 1/3 useful service life.

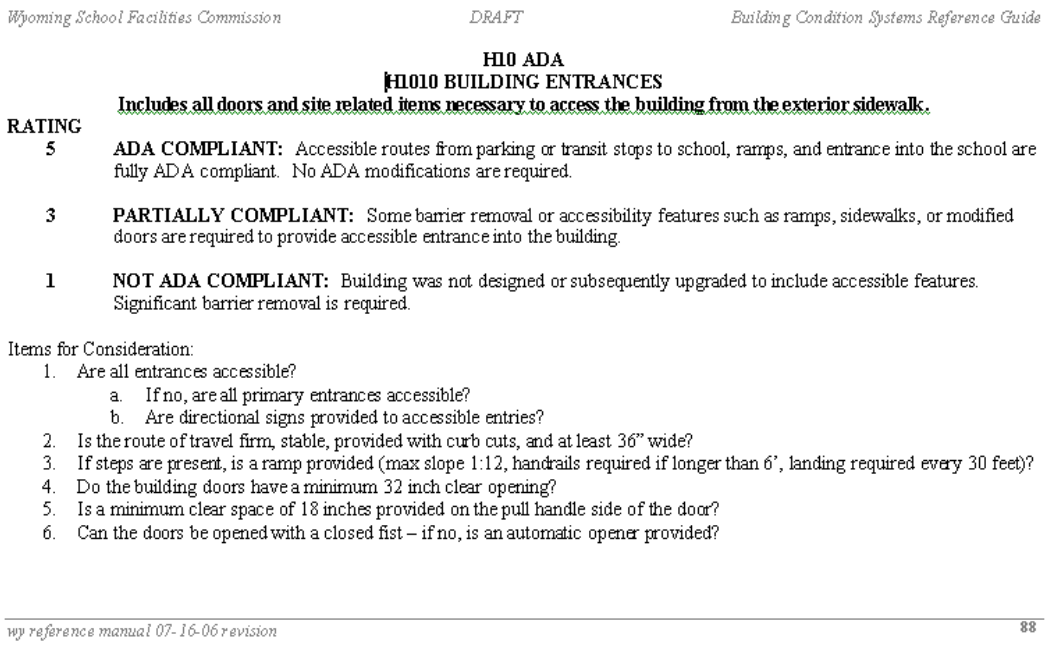
3 **FAIR:** Minor corrosion or vibration and some repairs needed. Equipment typically in second or last 1/3 average useful service life. Rusting or corrosion on boiler surface and fittings observed, possibly with minor leaks. Minimal or no preventative maintenance reportedly performed on unit including an automatic water treatment program. Equipment such as unit relief valve(s) not tested regularly as required by code. Boiler tubes reportedly never inspected or boiler seldom tuned up.

2 **POOR:** Significant corrosion or vibration with evidence of water leaks. Units shut down periodically requiring repairs. Final 1/3 of service life. Tubes or refractory in poor condition.

1 **FAILURE/CRISIS:** Does not work reliably and is generally not considered repairable. Severe rusting and corrosion on boiler surface and fittings observed. No preventative maintenance reportedly performed on unit. Water treatment program not in place for a majority of service life. Major corrosion and leaks are present.

CONDITION RATING	5	4	3	2	1
TYPE OF SYSTEM	AVERAGE EFFECTIVE REMAINING LIFE, YEARS				
BOILERS	40		14		0
WATER HEATERS	15		5		0

Figure E-6: Building Entrances ADA Rating Guide



Wyoming School Facilities Commission *DRAFT* *Building Condition Systems Reference Guide*

H10 ADA

H1010 BUILDING ENTRANCES

Includes all doors and site related items necessary to access the building from the exterior sidewalk.

RATING

5 **ADA COMPLIANT:** Accessible routes from parking or transit stops to school, ramps, and entrance into the school are fully ADA compliant. No ADA modifications are required.

3 **PARTIALLY COMPLIANT:** Some barrier removal or accessibility features such as ramps, sidewalks, or modified doors are required to provide accessible entrance into the building.

1 **NOT ADA COMPLIANT:** Building was not designed or subsequently upgraded to include accessible features. Significant barrier removal is required.

Items for Consideration:

1. Are all entrances accessible?
   a. If no, are all primary entrances accessible?
   b. Are directional signs provided to accessible entries?
2. Is the route of travel firm, stable, provided with curb cuts, and at least 36" wide?
3. If steps are present, is a ramp provided (max slope 1:12, handrails required if longer than 6', landing required every 30 feet)?
4. Do the building doors have a minimum 32 inch clear opening?
5. Is a minimum clear space of 18 inches provided on the pull handle side of the door?
6. Can the doors be opened with a closed fist – if no, is an automatic opener provided?

wy reference manual 07-16-06 revision 88

BMAR APPROACH APPLIED TO SCHOOL FACILITIES

Upon completion of the project development meetings and development of the project performance plan, the WSFC/FEA team held training sessions and performed calibration testing to verify suitability for application to the Wyoming school facilities. This section includes a discussion of the following key components:

- BMAR Assessment Methodology Assessor Training
- Facility Assessment Pilot Study and Calibration
- Facility Assessments, Interviews, and Data Review
- Field Quality Control and Assurance Program
- Documentation and Completing the Program

Assessor Training

FEA provided technical training and approach calibration for assessor teams. The training was led by Jim Whittaker, P.E., Les ZumBrunnen, P.E., and Paul Swanson, P.E. of FEA. Project Managers from the various school districts included on the project were present for the training. Documentation of the training program is provided in the WSFC project Condition Assessment Training Manual, dated July10-14, 2006 (FEA, 2006).

The training generally included the following topics:

- ***Introduction*** – Review and understanding of the facility condition assessment project goals and objectives, project scope, and desired outcomes.
- ***Asset Management Theory*** – Presentation of historical asset management practices, establishment of common terminology, regulatory issues, and other best practices.
- ***Assessment Methodologies*** – Review of important aspects of conducting effective and accurate condition assessments, life-cycle analyses, and extrapolating techniques for parametric evaluations.
- ***Application of the BMAR Approach*** – Training on the application of project standards, building systems, condition ratings, data collection and interview techniques, and data entry.
- ***Building System Condition Ratings*** – Focus on use of the Building Systems Condition Rating Field Guide and accurately and consistently rating the conditions of the building systems.

A majority of the training effort was directed at the evaluation and rating of building systems expected to be encountered in the school facilities. Photographic examples, case studies, and experience in conducting facility condition assessments were used in conjunction with the generalized condition ratings to obtain consensus for rating building systems. An interactive and iterative process was also utilized to refine the generalized condition ratings and Field Guide prior to deployment.

FEA modified the training program from the scope proposed to provide better calibration of the assessors. To accomplish this, the scope was modified to increase the number of schools evaluated in a pilot study to a total of 10 schools during the two week training period.

Pilot Study and Calibration

The project pilot study was developed to objectively evaluate the accuracy and consistency of the assessors in performing the assessments following the BMAR methodology. Ten schools in the Cheyenne area of varying in size, age, and complexity, as well as grade range, were selected for the pilot study. The basis of the pilot study was to have each assessor independently evaluate each of the ten schools selected. FEA trainers also independently evaluated the schools for the calibration process.

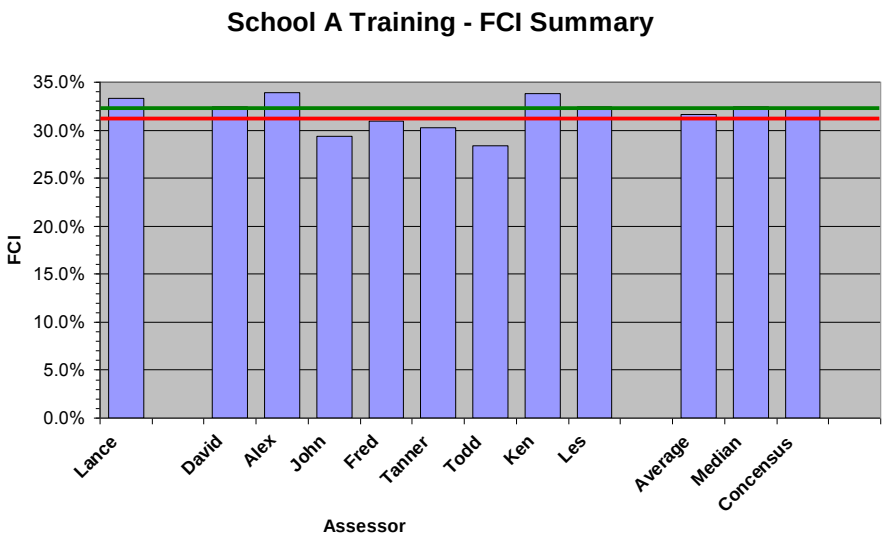
The data from each assessor was collected on a daily basis and analyzed by FEA. The next day the trainers and assessors reviewed the results from the previous day and obtained consensus on system condition ratings. Variances (identified by high standard deviations) were discussed to modify assessment approaches and increase the consistency of the ratings. Detailed spreadsheets summarizing all assessor condition ratings on a system by system basis were generated (Refer to Figure E-7). Average and median scores, as well as standard deviations, were calculated to evaluate consistency of the condition ratings and trending improvement of the overall training program.

Figure E-7: Sample Pilot Study Calibration Spreadsheet

Systems and Assemblies		JE	Lance	TN	AS	FH	TW	KB	DL	LZ	Group				Ave.	Median	S.D.
A. Substructure																	
A10	***Foundations***																
A1010	Standard Foundations	4	4	4	4	4	4	4	4	4	4				***4.00***	***4***	***0.00***
A1020	Special Foundations	0	0	0	0	0	0	0	0	0	0				***0.00***		
A1030	Slab-on-Grade	4	4	4	4	4	4	4	4	4	4				***4.00***	***4***	***0.00***
A20	***Basement***																
A2020	Basement Walls	3	4	4	4	4	4	4	4	4	4				***3.90***	***4***	***0.32***
B. Structure and Shell																	
B10	***Superstructure***																
B1010	Floor Construction	4	4	5	4	4	4	4	4	4	4				***4.10***	***4***	***0.32***
B1020	Roof Construction	4	3	3	3	3	3	3	3	3	3				***3.10***	***3***	***0.32***
B20	***Exterior Enclosure***																
B2010	Exterior Walls	2	2	2	1	2	2	2	2	2	2				***1.90***	***2***	***0.32***
B2020	Windows	1	2	2	2	2	2	2	2	2	2				***1.90***	***2***	***0.32***
B2030	Doors	3	3	3	3	2	3	3	3	2	3				***2.80***	***3***	***0.42***
B30	***Roofing***																
B3010	Roof Coverings	3	3	3	3	3	3	3	3	3	3				***3.00***	***3***	***0.00***

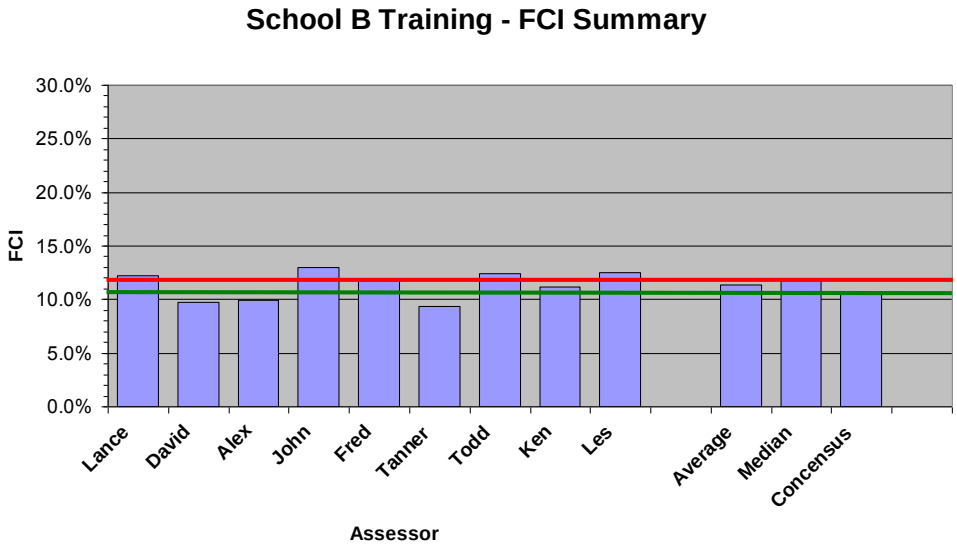
The deferred maintenance costs and overall facility condition index for each school were calculated in addition to the system condition ratings. The results were tabulated and graphed to evaluate the suitability of the approach. The results also provided validation that consensus-level impressions of school condition matched the objective FCI ratings. As an example, the results of FCI values generated by assessors for a school deemed to be in fair to poor condition (School A) are shown in Figure E-8.

Figure E-8: Summary of FCI Values for School in Poor Condition



The results of FCI values generated by assessors for a school generally deemed to be in good condition (School B) are shown in Figure E-9. Average and median values are represented by the green and red lines, respectively. The graphs present data verifying both the accuracy of the approach and the consistency of its application. Consensus values were also plotted to identify trends in assessments that could be corrected to further enhance consistency.

Figure E-9: Summary of FCI Values for School in Good Condition



At the completion of the two week training and calibration program, the results were summarized and reviewed to evaluate the success of the program. Using the system condition rating data, the overall average standard deviations for each system rating were calculated for each school. The results of the first of the ten schools evaluated to the last trended from about 0.7 to a value of about 0.2 (Refer to Figure E-10). Again indicating increased consistency of the data over the two-week training and calibration pilot study.

Figure E-10: Trend in Standard Deviation Over Time

Facility Assessments, Interviews, and Data Review

Interview forms have been developed to support the data collection and validate field observations. A copy of the interview forms are attached at the end of this section.

Interviews of school facility representatives were conducted to gain a better understanding of the maintenance history and current issues at each school. A copy of the interview forms used is attached at the end of this section.

Field Quality Control and Assurance Program

FEA performed quality assurance (QA) reviews of the WSFC assessor's evaluation methods for selected schools in each of the regions. During the project the assessors have 619 buildings to evaluate. Based on 6 to 7 assessors evaluating generally an equivalent number, each assessor will evaluate 90 to 100 buildings from August through October. The QA reviews were conducted at roughly 25% completion and again at about 50% completion points of the overall evaluations. A brief final review of the methods will be conducted near the completion of the evaluations.

Appendix F – CMMS Implementation and Data Standards

Many CMMS software packages offer bells and whistles that are not needed for accomplishing the primary mission of implementation. In fact, they often complicate the systems configuration and interface, rendering it laborious to use and maintain. The *Planning Guide for Maintaining School Facilities* published in 2003 by the U.S. Department of Education offers helpful guidelines for evaluating the ever-growing number of CMMS software packages on the market.

Guidelines include the following:

- The CMMS should be web-based, be compatible with standard operating systems, have add-on modules, and be able to track assets and key systems. Source codes must be accessible so that authorized district staff members are able to customize the system to fit their needs as necessary. In terms of utility, a good CMMS program will include the following:
  - acknowledge the receipt of a work order;
  - allow the Maintenance Department to establish work priorities;
  - allow the requesting party to track work order progress through completion;
  - allow the requesting party to provide feedback on the quality and timeliness of work;
  - allow preventive maintenance work orders to be included; and
  - allow labor and parts costs to be captures on a per-building basis.
- At a minimum, work order systems should account for the following:
  - the date the request was received;
  - the date the request was approved;
  - a job tracking number;
  - job status (received, assigned, ongoing, or completed);
  - job priority (emergency, routine, or preventive);
  - job location (where, specifically, is the work to be performed);
  - entry user (the person requesting the work);
  - supervisor and craftsperson assigned to the job;
  - supply and labor costs for the job; and
  - job completion date/time.

Implementation of an automated work order system requires careful forethought and development of data standards to ensure long-term usability of the system. Many CMMS and computer-aided facility management (CAFM) systems fail because the data is not standardized and maintainable. Proper implementation and the use of data standards will lead to valuable and effective information and work management systems. Because there are currently no CMMS/CAFM systems in use at TUSD, there is an opportunity to do it right the first time.

Any automated system should be implemented as a tool to support business processes. Thus, it is imperative to document work processes prior to implementing technology. Then, a specific set of data standards can be established to provide the framework for data management. Most often, the Construction Specification Institute (CSI) Uniformat/Masterformat or Omniclass standards, or Omniclass table standards are used for creating building information models. These standards provide guidance on defining naming conventions and parameters such as buildings, building systems, equipment, components, work processes, and attributes. CSI Masterformat classification standards are the industry standard in the United States for classifying building elements during design, specification and construction of facilities. OmniClass standards utilize CSI Uniformat and Masterformat building construction elements and work products as a basis for their table structure. Use and enforcement of these standards increases the quality of the data, optimizes the system performance, and enables better reporting.

Developing a facility management information technology plan will provide the long-term focus needed to successfully select and implement a system and ensure that it supports facility business processes. The most successful CMMS implementations are those where the facility manager had a sound strategic facility management information technology plan, automated broadly, emphasized training, did not try to over-populate the system, had good internal electronic communication in place, had a dedicated automation manager, had buy-in from top to bottom of the organization, understood all costs, and maintained good administrative procedures.

The critical success factors in creating a strategic facility management information technology plan include answers to the following questions:

- Who needs to participate on the planning team?
- Who needs to commit to the objectives of the plan?
- What are the roles of vendors and consultants in preparing a plan?
- What are the predictable dos and don’ts?
- What should be included in the plan?
- Have we set up implementation expectations in the plan?

Typical facility management (FM) technology projects incur problems, such as too much reliance on vendor claims or a sense of urgency that shortcuts methodical implementation. The following lists common steps to be sure to take and to be sure to avoid so that a district gets the desired benefits from FM technology while maintaining cost control:

- Go through the discipline of identifying detailed functionality from FM technology that would benefit both the Maintenance Department’s clients and staff;
- Emphasize training;
- Understand all costs;
- Ask simple questions about how things are done;
- Test applications yourself; don’t just watch demos;
- Try prototypes and get feedback from users;
- Start by fixing small problems to win support;

- Structure big projects so there are payoffs along the way;
- Select your best employees for implementation;
- Settle for 80 percent solutions; and
- Agree on realistic goals.

Common pitfalls include the following:

- Over-populating the database;
- Trying to use a large project to cover costs;
- Setting vague objectives such as “improve productivity”;
- Structuring the implementation to avoid conflict;
- Selecting a technical implementation leader unskilled in negotiation;
- Assuming that interviewing users reveals exactly what they need; and
- Emphasizing incremental improvement if what you really need is fundamental change.

Metrics and processes have been developed as part of the first two phases of our scope of work and presented in this report. There are several more critical steps in the overall process. We have presented recommendations for some of these in this report as they are directly related to the process maps and SOPs that we developed. Our recommendations are to proceed with the following steps, incorporating our recommendations where appropriate.

Next steps:

1. Develop data standards
2. Complete asset/equipment inventory
3. Develop PM/PdM procedures
4. Implement and configure the CMMS
5. Prepare and implement socialization/training program
6. Pilot the CMMS and processes
7. Measure performance
8. Conduct GAP analysis
9. Optimize program
10. Go live with full deployment

The initiation and implementation of the steps may overlap, but in general should flow in this order.

Facility Management Data Standards

One of the top five reasons IT projects fail is the lack of appropriate data standards. In a computerized maintenance management system (CMMS), computer-aided facility management (CAFM) system, or an integrated workplace management system (IWMS), there are many things to consider that will require standardization so that the data is consistent and usable. These include, but are not limited to, naming conventions, asset nomenclature, and maintenance standards. There is a need for—and current lack of—consistent data standards and equipment naming conventions across the TUSD.

The TUSD needs consistent naming conventions and supporting policies and practices to realize the data quality and holistic view of building systems and equipment inventories achievable with a well-implemented CMMS. The TUSD facilities leaders understand the benefits a standardized nomenclature brings when mining facility data at the school and building levels. Effective work, cost, project, asset, and data management require appropriate and consistently applied standards. To accomplish this will require the development or selection of appropriate nomenclature standards for building systems, and consistent implementation of the standards to define assets, components, and equipment attributes.

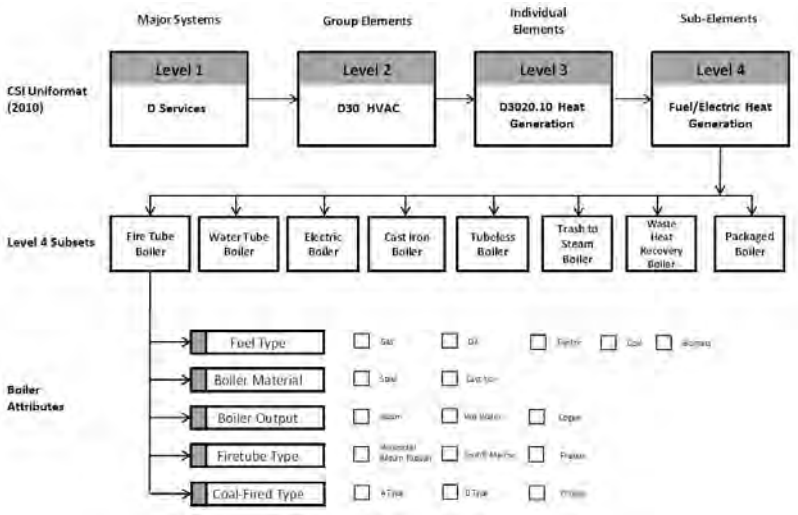
There are several building classification schema available. It is important to select a standard that best answers the call to "collect data once …for use by many". It is best to be able to leverage data so multiple stakeholders/users within the TSDU can benefit from the shared data and select a nomenclature standard that will most effectively structure IWMS data to support operations and maintenance processes. A summary of the classification systems and high-level summaries are listed below:

- **CSI Uniformat (2010)** – Similar to UNIFORMAT II, the Construction Specifications Institute (CSI) publishes versions for use in cost estimating and management of building systems data. The latest published version at the time of this report is the 2010 version. Our recommendation is to use CSI Uniformat (2010) as the foundational building classification system within the CMMS.
- **ASTM UNIFORMAT II (ASTM E1557)** – Provides three levels of elements with a proposed level four. Effective for use in CMMS and IWMS for O&M work management and asset management.
- **OmniClass Table 21** –Uses Uniformat (System Based) as a foundation, but only gets to four levels. Example; level 1 – Services, level 2 – HVAC, level 3 – Heating Systems, and level 4 – Heat Generation. Due to the Uniformat foundation the opportunity to map to an augmented Uniformat exists. The threat to this is the continuing evolution of OmniClass tables.
- **OmniClass Table 23** – Uses MasterFormat (Product Based) as a foundation for the tables. Table 23 has four levels of products and gets to a reasonable level of detail, but again not ideal in the system layout from a maintenance perspective (Boiler example; level 1 – HVAC specific products and equipment, level 2 – Commercial boilers, level 3 – boiler controls, condensing boilers, fire tube boilers, cast-iron boilers, watertube boilers, flexible tube boilers, electric boilers, and boiler components. Level 4 – defines pressure, temperature, burners, filters, draft fans, heat recovery devices, blowers, and nozzles). Due to the MasterFormat foundation the opportunity to map to an augmented Uniformat that has a one-to-one relationship to MasterFormat exists.
- **CSI MasterFormat** – Based on products and not defined by systems and elements. Very difficult to use in an O&M environment. Maintenance and repair is not done by material type (product).

Based on the evaluation of industry building classification standards, we recommend the use of the CSI Uniformat (2010) standard for the CMMS implementation at the TUSD. This system best supports the total cost of ownership models, APPA benchmarking, and specific TUSD needs. The CSI Uniformat (2010) standard creates CMMS nomenclature that utilizes industry standards, is compatible with typical PM job

plans and schedules, and can be utilized by various "other" management systems within the TUSD. A depiction of the CSI Uniformat (2010) levels and attribute examples is shown in Figure F-1.

Figure F-1: Sample of CSI Uniformat (2010) Levels for a Boiler



To determine the level of granularity needed for your data, you'll need to first establish what equipment or assets will be maintained, and what level of information is needed to determine a replacement-in-kind or preventative maintenance needs. Table F-1 below shows the level of granularity for four major industry nomenclature standards.

Table F-1: Level of Granularity of the 4 Major Industry Standard Nomenclatures

Nomenclature Standard	UniFormat (merged)*	MasterFormat	OmniClass 21	OmniClass 23
Level	**Minimum PM Level**			
8 Attributes/Energy/Gas	Energy/Gas			
7 Attributes/Type/Steel	Type/Steel			
6 Attributes/Temp/Medium	Temp/Medium			
5 Type/Hot Water	Hot Water			
4 Components /Boiler	Boiler		Components/ Boiler	Pressure,
3 System/ Heating	Heating	Energy/Gas	System/Heating	Boiler Controls
2 D30 HVAC	HVAC	Type/Steel	HVAC	Commercial Boilers
1 Services	Services	Boiler	Services	HVAC Specific Product

*This merged version takes CSI UniFormat (2010), ASTM UniFormat II, and the GSA augmented UniFormat.

CSI Uniformat (2010) was developed through an industry/government consensus process and has been widely accepted as a building classification standard. Once the building system and nomenclature standards have been developed, the equipment should be inventoried in accordance with the standards.

Asset/Equipment Inventory

In this section we discuss what is needed to build an equipment data set and how it is to be treated in maintenance scheduling; such that these guidelines can be applied to an equipment database to be uploaded into the CMMS. To determine the appropriate inventory level or groups of equipment, the following elements should be considered:

1. Maintenance requirements
2. Portable vs. fixed building systems
3. Financial cost of the asset
4. Criticality (impact to mission if it fails)
5. Preventative maintenance labor required
6. Life safety/regulatory requirements with record-keeping and inspection
7. Commonality of preventative maintenance tasks
8. Similar schedules of preventative maintenance

In order to answer if a piece of equipment should be captured in the CMMS as an individual piece of equipment, as part of a group, or aggregated to a parent piece of equipment, we have reviewed buildings maintenance industry standards. The purpose was to capture how the PM guidelines addressed frequency of maintenance, maintenance expertise required, whether or not PM tasks were common to all asset components, and were these tasks occurring on the same schedule. It is important to first define what is meant by grouping or aggregation of assets.

- **Grouping** relates to taking the same type of assets that would require the same type and frequency of PM and listing them as one record. The amount of assets within that record would be listed in a quantity field or on the comment field. A typical asset that would fit this description would be fire extinguishers.

- **Aggregation** relates to assets that are “children” or “components” of a larger piece of equipment (the “parent”). Based on typical PM frequencies of these assets and the need to access the parent equipment, it would be more effective to bundle this equipment with the parent equipment and perform PMs at the same time. A typical asset that would fit this description would be the hoist in an elevator, or the valves associated with a fire alarm system.

When considering if equipment should be captured as an individual record or grouped for entry into the CMMS, you must consider the following questions:

1. Who performs maintenance? A technician or a mechanic?
2. Is the equipment portable?
3. What is the financial cost of an asset? Is it generally an operational cost or a capital cost?

4. How critical is this piece of equipment to the operation of this building?
5. What is the frequency of maintenance?
6. Are there any life safety or regulatory requirements?
7. Are there PM tasks common to all asset components in a group?
8. Are the PM tasks on the same schedule for all components?

Not all of the questions above can be answered from the PM standards, especially items such as financial cost and criticality. Criticality is very dependent on each building's function and organizational mission. That is, the back-up emergency generator of a data center facility will have a higher criticality than one in a warehouse facility. However, whenever possible, we answered some of these questions based on our experience with buildings in general and our experience with the TUSD school buildings.

One major observation from our experience with the different asset inventories is that not all assets are included in the CMMS. For example, not all components of a plumbing system (i.e. toilets, pipes, lavatories, etc.) are listed as an asset. This means that the value of that asset is missing from the overall building value, which impacts capital planning. A possible solution is to capture the plumbing system as an asset, but since there is no recurring maintenance associated with it (as a whole), is the CMMS the best place to keep that information? Or does it ultimately belong in a Building Information Modeling (BIM) system that is integrated with the CMMS?

Another question to ask is; how does grouping or aggregating affect accounting for asset value? Grouping or aggregating could lend itself to double-counting of asset value if the system is not set-up correctly.

Our recommendations to either keep the equipment as an individual record, group the asset with other assets of the same type, or to aggregate assets with their parent asset are presented in the Building System and Aggregation & Grouping Rules table. Below we summarize some of our recommendations.

1. **Valves**: Different types of valves need to be grouped as an equipment record. For example, fire suppression system valves would be grouped together, while plumbing type valves would be a separate group/record because their PM frequencies are different.
2. **Steam Traps**: Much like valves, they would be grouped by type.
3. **Fire suppression system**: Different components of the system would be grouped into one record. Therefore, all sprinkler heads would be one record, hose connections would be grouped into another record. The same would apply to the valves and the standpipes, where the record would include the quantity of that type of equipment.
4. **Fire alarm system**: Different components of the system would be grouped into one record. Annunciators would be all grouped into one record, so would pull stations. Similarly, you would group controllers, heat detectors, and receivers as one record. In each case, you would establish a quantity within each record.
5. **Fire extinguishers**: Because of the inspections required by code, maintenance of fire extinguishers must occur at the same time. It is therefore more efficient to generate a task

order to service/inspect all the fire extinguishers in the same cycle. This particular asset is also one that is not static. More often than not, they get swapped for new ones during their annual inspections, making inventory and tagging of this particular asset difficult to maintain.

6. **Children**: Typically these are recommended to be aggregated with their parent equipment, which is reinforced by many of the PM guidelines that recommend PM of the children when maintenance of the parent equipment is scheduled. Assets that are typically recommended for aggregation include: motors, filters, valves, disconnects, burners, traps, and controls.
7. **Records**: Anything that is individual/grouped is a record within the CMMS. Assets that are aggregated are part of a parent record.

Ultimately the question of aggregation comes down to how much data your system can handle, how much you can maintain. Based on our current understanding of the data in TUSD's inventory, the challenges to maintain the inventory and to keep it consistent across the district's schools, it is recommended that you ***start at a high level***. The key is to select a system that will allow you to collect assets at the parent level. You would then attach the PM for the children to the parent. This way work orders are generated for the asset, along with any associated children that are scheduled for maintenance at the same time.

In some cases, the PM to the main asset already includes "checkpoints" for some of its children. For example, the PM for the Fire Alarm System, which references NFPA 72, includes checking the fire alarm system printer as part of the overall PM. There are CMMS that also allow you to expand your data collection capabilities by adding the child as a "sub-record" to the parent. This capability may allow you to keep track of separate components, their replacement schedules, and specific PMs.

In our experience, the most useful information that maintenance technicians and facility managers often need are simplified diagrams showing locations of critical components. This can most effectively be achieved through consolidated line diagrams, such as valve charts, critical shut-off diagrams, and as-built drawings linked to a grouped equipment record. A single aggregated valve record for a building, with a valve chart linked to it, can save substantial time in locating necessary information. Similarly, single-line sprinkler system diagrams identifying sprinkler head locations are much more valuable than hundreds of independent sprinkler head records in the CMMS.

<u>Industry Maintenance Standards</u>

Multiple maintenance standards in various forms and levels of detail exist within the industry. Some of the most common standards include:

- GSA Public Building Service Preventive Maintenance Guides
- RS Means – Facilities Maintenance and Cost Repair Data
- ANSI/ASHRAE Standard 180-2012: Standard Practice for Inspection and Maintenance of Commercial Building HVAC Systems

The GSA guide has been used since 1970s and was revised in 2012. Although developed initially for the U.S. General Services Administration (GSA), FEA has found that other organizations have adopted this standard.

RS Means Facilities Maintenance and Cost Repair Data book contains lists of preventive maintenance tasks for a many types of building components and systems, including HVAC, electrical and plumbing. This information includes frequencies as well as cost data. It should be noted that although this book can be used to create maintenance checklists, the primary purpose of the book is to determine the cost of maintenance.

ASHRAE Standard 180 is the newest of the standards listed here, but is the most concise. It provides preventive maintenance practices for common HVAC equipment structured as tables that list the task and frequency which the task should be performed. First published in 2008, the standard was updated in 2012 based on requests made which would allow the Standard to be adopted into the building code.

In addition to following an industry standard, it is also recommended that parent child relationships be used for larger maintenance tasks, especially for equipment that requires work to be completed by more than one trade.

Communication with Customers

As the new work order system is rolled out to customers, it is recommended that any changes that may be experienced by the customer be clearly communicated. During this time, it is also recommended to communicate any new practices or information that may help to provide consistent service to all customers and to help manage customer expectations. Common information to communicate with customers includes:

- When to submit a service request and proper protocols for what work can be submitted as a service request
- What information to provide when entering a service request
- What is defined as an emergency, using examples when relevant
- Response times

Customer Satisfaction Surveys

The current best practice for customer satisfaction surveys is to conduct periodic surveys, instead of a survey attached to an email stating the work order is complete. To develop a periodic customer satisfaction survey, a few things to keep in mind include:

- The survey should be between six to ten questions. When surveys are too long, the response rate generally decreases.
- Many on-line survey tools, such as SurveyMonkey and Zoomerang, will allow short surveys to be created and distributed free of charge. As the terms and conditions of free services can change, be sure to review the details carefully.

- It is also important to determine how the results of the surveys will be used, such as to improve customer satisfaction, verify if service level agreement (SLAs) targets are being met, provide data to help evaluate staffing levels and quality of service and to support staff evaluations.
- When writing the survey questions, try to capture topics that reflect how the survey results will be used. For example, if verifying if SLA targets have been met is important, a possible question may include a short list of the SLAs and targets to help the respondent provide an accurate response.
- Using feedback from customers within staff evaluations can help to validate supervisor's expectations and feedback. If customers are requesting changes to the facility, having the requests quantified and documented within a survey can help to increase buy in from financial decision makers, as consistent complaints can often motivate change.

Appendix G – PM/RCM Program

Reliability-Centered Maintenance (RCM)

With few exceptions, preventive maintenance has been considered the most effective way of maintaining building systems and extending the service life of equipment. Most PM programs are based on the assumption that there is a cause and effect relationship between scheduled maintenance and system reliability. The primary assumption is that mechanical parts wear out, thus the reliability of the equipment must be in direct proportion to its operating age. Research has indicated that operating age sometimes may have little or no effect on failure rates. There are many different equipment failure modes, only a small number of which are actually age or use-related. Reliability-Centered Maintenance (RCM) was developed to include the optimal mix of reactive-, time- or interval-based, and condition-based maintenance.

RCM is a maintenance process that identifies actions that will reduce the probability of unanticipated equipment failure that are the most cost-effective. The principle is that the most critical facilities assets receive maintenance first, based on their criticality to the mission of the facility or organization dependent on that asset. Maintainable facilities assets that are not critical to the mission are placed in a deferred or "run to failure" maintenance category, and repaired or replaced only when time permits or after problems are discovered or actual failure occurs.

A streamlined RCM maintenance process allows organizations to use their scarce personnel and funding resources to support the most critical assets that have the highest probability of failure to the organization's mission. Streamlined RCM programs have several clear benefits:

1. Managers, not equipment, plan shop technicians' activities and time.
2. Planning of work allows labor, parts, materials and tools to be available when needed.
3. Equipment part replacements are minimized. The probability that bearings need only lubrication and not replacement is maximized. PM also minimizes the potential need to not only replace bearings, but the shaft, rotating parts, bearing housings, casings, and possibly motors.
4. Managers/schedulers have time to evaluate what other work could be done at the same time and location as the planned PM, optimizing shop productivity.
5. Engineers can study equipment maintenance histories to implement changes that could improve equipment performance or energy efficiency.

The following sections further define the various aspects of a streamlined RCM program that could enhance the TUSD facilities organization's current PM processes. An effective streamlined RCM program incorporates the optimal mix of PM, PT&I, scheduled inspections, and reactive (corrective) maintenance to maximize the reliability and performance of building systems. Proper documentation of work histories will aid in performing root-cause analyses and the ability to engineer problems out of the systems.

In its purest form, RCM is about optimizing maintenance. The primary focus of RCM is on maximizing the reliability of building systems with cost-effective and efficient processes in performing maintenance. There are both short-term considerations and long-term cost saving implications. In our experience, the added costs of talented maintenance staff and tools to implement the RCM program are more than offset by the short-term efficiencies and long-term life extension of building systems. A summary of some of the benefits of RCM are:

- Increased Equipment Uptime / Reliability
- Greater Safety and Environmental Integrity
- Improved Operating Performance
- Improved Energy Performance
- Cost-effective Maintenance
- Extended Useful Life of Assets
- Comprehensive Maintenance Database
- Improved Motivation
- Better Teamwork and Scheduling

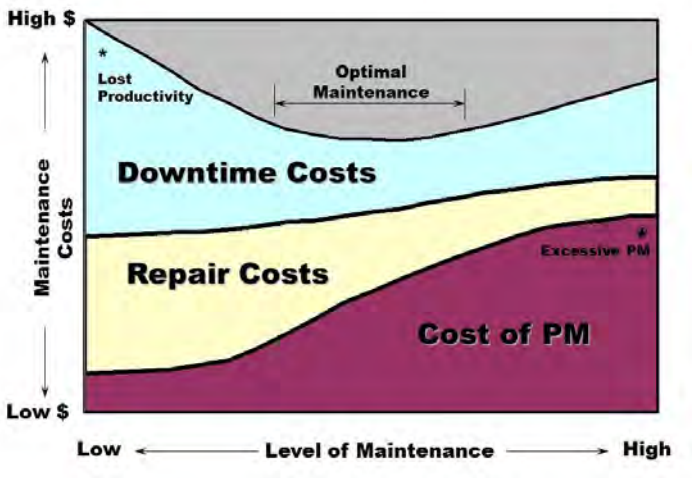
As a simple example, consider the situation of an air-handling unit failing. The cost of the actual maintenance and repair is fairly low compared to the costs associated with disruption of productivity in the areas being served by the unit. Due to the limitations on facilities staffing levels, this condition is all too common in public school environments. Data and benchmarks show that facilities organizations continue to be too reactive in nature.

The key for any facilities organization is to find the optimal level of maintenance to provide the desired level of service with the available resources at hand. This includes maximizing the return-on-investment for contracted maintenance services. While many organizations strive to be more proactive, it is often done by diving in full force without regard to the cost of implementing comprehensive PM programs. There are even some valuable industry publications that have published tables indicating metric targets of 100 percent PM to achieve a level of service of showpiece facilities[29].

[29] APPA (2002). *Maintenance Staffing Guidelines for Educational Facilities*. APPA. Alexandria, VA.

Consider the following figure.

Figure G-1. Graphical Representation of RCM



Many school facilities organizations still struggle with a majority of their work being reactive. It is not uncommon to find O&M organizations showing work order data that indicates PM to corrective maintenance (CM) ratios in the 10 to 20 percent range. This condition is representative of the left-hand side of Figure F-1, where the cost of PM labor is low and the costs of reactive labor and repair costs are relatively high. In addition, the downtime costs associated with lost productivity and loss of maintenance productivity are at the highest levels. The result is that the overall maintenance and repair costs (including loss of equipment life and value) are highest.

At the other end of the spectrum, to the right-hand side of Figure G-1, there are substantial PM costs. It requires skilled, trained, and enough competent staff to maintain equipment at a comprehensive level. In fact, there is a point of diminishing returns. We have had experience with some facilities organizations that have taken it too far in their effort to establish best practice maintenance programs. Excessive PM costs money and can introduce inefficiencies and even equipment failures. While good PM programs do minimize repair costs, there are still associated downtime costs to pull equipment and systems offline to accomplish traditional PM procedures.

The goal is to dial into the ‘sweet-spot’ where reliability of the plant equipment and building systems is maximized at the lowest overall cost of maintenance. To accomplish this requires the introduction of experience-based maintenance practices and predictive testing and inspection techniques. R.S. Means, GSA, and others have developed and published preventive maintenance practices (maintenance plans) to optimize PM. To further dial into the optimized zone requires the introduction of PT&I processes to maximize the return on labor investments.

The optimal maintenance zone shown in the chart also considers run-to-failure approaches for non-critical and less expensive assets that may cost more to maintain than replace should they fail. Consider the example of small fractional horsepower in-line circulation pumps that are in non-critical systems.

The long-term costs of performing standard scheduled maintenance will most likely exceed the cost to replace the pump should it fail. This practice is typically referred to as “run-to-failure”.

This optimization helps to minimize maintenance cost while also minimizing the potential and/or reality of equipment downtime which carries a significantly higher cost potential. Best-in-class maintenance processes can be determined by an “optimal maintenance” analysis as part of a reliability-centered maintenance (RCM) program. While it may be difficult to determine the precise RCM optimization, or location on the RCM graph shown in Figure G-1, measuring system reliability, equipment performance, and maintenance staff productivity can help show enhanced performance.

The implementation of RCM has been successfully completed at several large educational and municipal facilities. It is a complex endeavor that requires a lot of elements to come together to work effectively. The overall process of implementing streamlined RCM can be summarized as follows:

1. ID Systems and Equipment to Maintain
2. Determine Criticality and Performance
3. Evaluate Probability of Failure
4. Determine Failure Modes and Effects
5. Select Best Maintenance Plans
6. Implement Maintenance
7. Optimize Program

Step 1 – Identify Systems and Equipment

The first step of the process is to develop a comprehensive listing of building systems. The building systems should been classified in accordance with a standard building classification system (e.g., the ASTM Standard E-1557 UNIFORMAT II, CSI Uniformat, or OmniClass). Specific maintainable equipment lists can be compiled using a combination of industry standard resources and O&M experience. Some of the resources used to identify maintainable equipment included: ANSI/ASHRAE Standard 180 Standard Practice for Inspection and Maintenance of Commercial Building HVAC Systems (ASHRAE, 2008), NASA Standardized Facilities Preventive Maintenance Work Task Guide (NASA. 2001), R.S. Means Facility Maintenance and Repair Cost Manual (R.S. Means, 2012), and the GSA Public Buildings Maintenance Standards (PM Guidelines, 2013).

The equipment inventory should be established to provide a basis for maintenance, as well as capital renewal and asset management. An accurate inventory is required to create the scope of work for either internal maintenance service provision or O&M contracting. An accurate equipment inventory creates better alignment of estimates and O&M contractor bids, reduces turnaround times for O&M contractor bids, and produces more accurate and complete O&M contractor bids.

Step 2 – Determine Criticality and Performance Standards

The second step of the process includes a criticality assessment of the TUSD school building systems to provide a means for quantifying the importance of systems and equipment to the mission of the

schools. This also includes a review of the performance standards and function of the building systems.

The criticality assessment should be conducted in phases due to the relevance of building-specific parameters that impact the analysis. An initial identification of criticality/severity categories has been completed for various types of equipment at this stage. However, not all equipment of a category (or type) has the same level of importance in a specific building. The criticality of each system and piece of equipment are dependent on the importance of the areas served and the relevance to the TUSD mission.

Take for example two air-handling units in a school building. An air-handling unit serving a classrooms will most likely have a higher level of impact (criticality rating) than a unit serving storage or support areas with respect to a failure occurring. Thus, the criticality or severity category ranking would be different for the same equipment types.

In addition to the areas served, criticality of the equipment is also impacted by the design of the systems and the inherent redundancy of equipment within the system. Systems with redundant equipment and excess capacity may be less critical than systems with no or limited redundancy. Final determination of the criticality codes for each piece of maintainable equipment in the inventory must be reviewed and revised as appropriate based on the specific building conditions.

Criticality assessments provide the means for quantifying how important a system function is relative to the identified facility mission. Table G-1 provides a method for ranking system criticality[30]. This system, adapted from the automotive industry, provides ten categories of Criticality/Severity. While it is not the only method available, it has been widely adopted due to its intuitiveness. The categories can be expanded or contracted to produce a site-specific listing.

These general criticality categories were employed in the development of the RCM program at NASA, Smithsonian, and other educational facilities. The criticality codes should be associated with every asset within the CMMS. These should also be developed by personnel familiar with the TUSD school buildings and mission. These criticality factors need continual review based on the function of the building systems at each school.

[30] Reliability, Maintainability, and Supportability Guidebook. Society of Automotive Engineers (1995)

Table G-1. Recommended Criticality/Severity Codes

Score	Effect	Criticality Comment
1	None	No reason to expect failure to have any effect on safety, health, environment, or mission.
2	Very Low	Minor disruption to facility function. Repair to failure can be accomplished during trouble call.
3	Low	Minor disruption to facility function. Repair to failure may be longer than trouble call but does not delay mission.
4	Low to Moderate	Moderate disruption to facility function. Some portion of mission may need to be reworked or process delayed.
5	Moderate	Moderate disruption to facility function. 100% of mission may need to be reworked or process delayed.
6	Moderate to High	Moderate disruption to facility function. Some portion of mission is lost. Moderate delay in restoring function.
7	High	High disruption to facility function. Some portion of mission is lost. Significant delay in restoring function.
8	Very High	High disruption to facility function. All of mission is lost. Significant delay in restoring function.
9	Hazard	Potential safety, health, or environmental issue. Failure will occur with warning.
10	Hazard	Potential safety, health, or environmental issue. Failure will occur without warning.

Step 3 – Evaluate Probability of Failure

The probability of failure (or probability of occurrence of failure) is based on initial work in the automotive industry and adapted to facilities. Historical building system and equipment data has been compiled and reviewed by NASA, DoD, DOE and the Society for Maintenance and Reliability Professionals (SMRP). This data provided a baseline for determination of probability of failure codes and rankings used in previous facilities and are recommended for TUSD.

This probability of failure analysis also requires an iterative approach. As more experience for the specific building systems, equipment, environmental, and local factors is documented, the probabilities may be adjusted.

'Failure' is defined as the inability of equipment to do what its users want it to do. This definition treats failure as it applies to a building system as a whole. In practice, this definition is vague because it does not distinguish clearly between the failed state and the events that caused the failed state (failure modes). It is also does not take into account the fact that each piece of equipment may have more than one function, and each function often has more than one desired standard of performance[31].

As an example, the function of the chilled water pump may be to pump water at a specific temperature from a chiller to a number of air-handling units at not less than 500-gpm. If the chilled water pump delivers water from the chiller to the air-handling units at less than 500-gpm then the pump has failed.

Step 4 – Determine Failure Modes and Effects

The previous two steps to determine the equipment criticality and probability of failure are used to conduct the failure modes and effects analysis (FMEA). We recommend that the criticality codes be used in conjunction with the predetermined probability of failure codes for each type of equipment to calculate a maintenance action code (MAC). The MAC can simply be a product of the two parameters. These MACs can then be entered into a CMMS as a performance criterion and identified on work orders

[31] Moubray (1997).

generated for proactive maintenance to aid in the prioritization and scheduling of work activities.

The desired outcome of the FMEA process is to enable prioritization of maintenance activities to enhance performance and maximize reliability. This can effectively be accomplished via the introduction of maintenance action codes associated with planned work activities. To do this, the criticality codes are used in conjunction with predetermined probability of failure codes developed for each type of equipment to calculate a maintenance action code (MAC). These MACs will be identified on work tasks generated for proactive maintenance.

MAC = (Probability of Failure) x (Criticality)

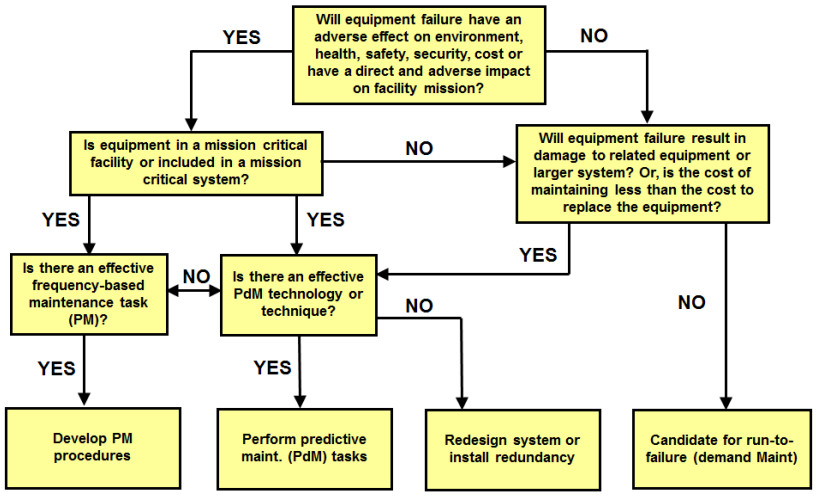
MAC data also requires constant attention and review to ensure that the right systems are being maintained based on criticality of the systems to support the mission.

Step 5 – Develop Best Maintenance Plans

Once the equipment inventory has been completed and FMEA has been conducted, the selection of the best maintenance job plans can be made. The recommended approach is to follow previous RCM implementations that use a RCM logic tree, or matrix, to develop the details of the program. An RCM logic tree carefully considers and answers the following questions:

- What does the system or equipment do; what is its function?
- What functional failures are likely to occur?
- What are the likely consequences of these functional failures?
- What can be done to reduce the probability of the failure, identify the onset of failure, or reduce the consequences of failure?

Figure G-2. RCM Logic Tree (NASA, 2000)



Answers to these four questions help guide RCM program designers through the logic tree to determine the optimal maintenance approach for the equipment or system. Note that there are only four possible outcomes as depicted in the logic tree:

- Develop PM procedures
- Perform predictive maintenance (PdM tasks)
- Redesign system or install redundancy
- Candidate for run-to-failure (demand maintenance)

The R.S. Means PM Standards include significant revisions and updates to PM standards. The Standards also include the incorporation of some PdM procedures; primarily infrared thermography for electrical equipment.

Step 6 – Implement Maintenance Program

There are several parameters that require discussion, review and agreement upon before you can fully integrate RCM requirements into a CMMS and enable the implementation of the RCM program at the TUSD. A key element to successful RCM/CMMS integration and implementation is in properly engaging TUSD facilities staff. The objectives are to enhance the building system performance and extend the life of the equipment at an optimal cost.

There may be a limited number of O&M contractors who would be able to successfully implement the Predictive Testing & Inspection (PT&I) requirements (e.g., oil analysis, ultrasonic testing, IR thermography, etc.) recommended for TUSD facilities. In similar cases, PT&I has been effectively incorporated via Regional or National contracting vehicles by contractors who specialize in these processes. Careful oversight and coordination is required in these cases to ensure cost savings and avoid duplication in efforts due to coordinating contractors.

In previous RCM projects we have calculated a potential savings of 15 to 20 percent in labor costs by optimizing maintenance through RCM processes. Using more predictive testing and inspection (PT&I) methods can clearly save on labor requirements.

There are several additional overall considerations to optimize maintenance whether or not the RCM services are contracted or performed using in-house personnel. Recommended RCM considerations during operations include:

- **Keep eyes and ears open** to the overall environment. Some of the best PT&I methods are by looking, listening, and smelling. Maintain a proactive preventive maintenance mindset.
- **Be proactive.** Don't just walk by something that is broken and not report it or fix it. Don't assume someone else will see it and fix it. The best maintenance service is provided by identifying things and fixing them before visitors or managers notice them. And they will!
- **Conduct hazard analyses prior to maintenance activities.** Understand confined entry issues, hazmat requirements, and electrical shock or arc-flash hazards. Consider not only safety to

yourself but others that may be around the work area.

- **Follow lock-out/tag-out procedures.** Safety is always the first concern.
- **Safety first.** Follow safety procedures. Just because you have done it right a thousand times means you will do it right every time. Accidents happen – be mindful.

These concepts should be communicated and good practices incentivized whenever possible. The next steps in the process are to take responsibility, working with others, and holding each other accountable. Best RCM practices that should be communicated to maintenance technicians include:

- **Follow RCM procedures** – Remember, it is not only the use of specific PT&I tools like accelerometers, ultrasonic probes, IRT cameras, laser alignment devices, etc. It is also about using your senses to determine if there are impending problems. Don't just walk by deficient or under-performing equipment thinking that someone else will fix it. Similarly, don't just do the same PM procedure on equipment that you don't think needs it. Talk to your supervisor and make recommendations for revising and improving the RCM program.
- **Maintain data in the CMMS** – Data requirements for the RCM program include both information in a CMMS and PT&I results. Both of these data sets help supervisors and managers make the right decisions about maintaining, repairing or replacing equipment. The data on assets, PM and MACs also need to be maintained to make sure maintenance technicians are *doing the right maintenance on the right equipment at the right time*.
- **Seek opportunities to advance technical skills** – While PM is absolutely critical, the introduction of more PT&I tasks will reduce some of the tedious preventive maintenance tasks. There are many (and will be more) opportunities to learn how to use cutting-edge technologies in support of the PT&I work tasks. Seek out opportunities to learn and use these technologies and advance technical skills.

Implementing effective and consistent RCM practices will help lead to the desired results.

Step 7 – Measure Performance and Optimize the Program

Remember the outcome of an optimized RCM program, and holding each other accountable to implement the RCM philosophy will result in:

- **Increased reliability of equipment and systems** – Few facilities organizations can claim maintenance programs as robust and effective as fully-implemented and streamlined RCM programs. Maximizing the reliability of building systems that support the overall institution's mission is key.
- **Data for informed decisions** – In addition, the implementation of RCM processes includes the recording and maintaining of important data. This data generates valuable information and knowledge to make informed decisions about TUSD school facilities.

- **"World-Class" services and high-performance facilities** – The ultimate goal that will be achieved through the implementation of RCM for the TUSD is the operation and maintenance of high-performance facilities. It starts with facilities personnel implementing the RCM program. Everyone plays a vital role in implementing this maintenance philosophy. High-performance facilities require a high-performance facilities organization and successful integration of RCM with the CMMS.

Root Cause Failure Analysis (RCFA)

To reduce failures we must understand as much as we can about why systems have failed historically (RCFA) and how systems may fail and the effects those failures may have on the mission or operation, for failure mode and effects analysis (FMEA's). The intent of conducting RCFAs is NOT to find fault and blame someone. There is often a reluctance to perform RCFAs because of this perception. We must take the people factor out. RCFA conclusions at SI are general in nature. They do not lay blame. RCFAs are conducted to learn from failures and help avoiding similar problems. We know failures are going to occur – it is important to conduct RCFAs to learn how to do things better!

RCFA, initially is a reactive method of problem detection and solving. This means that the analysis is done after an event has occurred. By gaining expertise in RCFA it becomes a pro-active method. This means that RCFA is able to forecast the possibility of an event even before it could occur.

The recommended process for conducting RCFAs is as follows:

1. Identify the function of equipment
2. Note environmental conditions
3. Interview mechanics familiar with maintenance
4. Research maintenance history through CMMS
5. Gather evidence / data
6. Identify effective solutions that prevent recurrence
7. Implement the recommendations

Linking equipment to specific work orders for tracking history of maintenance would allow further analysis of performance, repairs and costs, and planning for replacements. When maintenance staffing levels are limited it is often difficult to move beyond a reactive mode of responding to equipment problems and failures. On most TUSD schools, with aging buildings, increasing backlogs of deferred maintenance and an expanding footprint, this challenge is even more pressing. However, it may also present another good opportunity to take advantage of a pool of talented staff/contractors and a proven approach of systematic RCFA.

The premise of RCFA is to reduce failures by understanding as much as we can about why systems have failed historically. RCFA also considers how systems may fail and the effects those failures may have on the mission or operation. The intent of conducting RCFAs is not to find fault and blame someone. There is often a reluctance to perform RCFAs because of this perception. RCFAs are conducted to learn from failures and help avoiding similar problems.

We recommend that a formal RCFA process be developed and implemented at the TUSD. Recommended steps to implement RCFA processes would include:

1. Establish ownership. Our experience has shown that the most successful approaches develop a culture where everyone in the maintenance organization is responsible to understand the process and conduct RCFAs. Shop supervisors should be responsible for overseeing and documenting RCFAs with support from the WCC.

2. Provide training. Most maintenance staff conduct some level of informal failure analysis almost on a daily basis. The problem is that the information and knowledge is generally not transferred to the larger organization and most often lost. Training can be simple. It should focus on documentation and following the process bulleted above.

3. Use the tools available. For RCFA to work effectively, everyone must capture relevant data regarding equipment maintenance in the CMMS. Supervisors, with support from a senior or systems engineer, can then gather the evidence and identify solutions. The PT&I technologies discussed earlier often provide critical data in validating the underlying issues. There is a growing database of success stories regarding the ability of ultrasonic and infrared testing and vibration screening tools to help diagnose the root cause of failures.

The investment to establish a formal root cause failure analysis program is limited to internal staff time once the PT&I tools are in place and the CMMS implementation and training are completed. Ongoing investment requires staff training and small investments of time to conduct each analysis. In our experience, the payback period is almost always less than a year where facilities fully implement a formal RCFA process. All it takes is the identification, communication and elimination of the root cause of one or two systematic failure patterns to generate a positive return on investment.

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Appendix H – Summary of School Energy Utilization Index and Energy Cost

School	FY 2012/2013 EUI (kBtu/GSF)	FY 2012/2013 Energy Cost/GSF
BANKS ES	54	$1.53
BLENMAN ES	47	$1.47
BLOOM ES	42	$1.92
BONILLAS BASIC CURRICULUM ES	55	$6.22
BOOTH/FICKETT MAGNET K-8	44	$2.04
BORMAN PRIMARY MAGNET ES	61	$1.47
BORTON PRIMARY MAGNET ES	58	$1.44
BRICHTA ES	40	$0.05
BROADWAY ALTERNATIVE BRIDGE	0	$0.08
CARRILLO INTERMEDIATE MAGNET ES	41	$1.57
CARSON MS	52	$1.32
CATALINA MAGNET HS	57	$1.66
CAVETT ES	46	$0.62
CHOLLA MAGNET HS	71	$2.26
COLLIER ES	68	$1.55
CORBETT ES	46	$1.34
CRAGIN ES	38	$2.84
DAVIDSON ES	77	$1.84
DAVIS BILINGUAL MAGNET ES	47	$1.35
DODGE MAGNET MS	57	$2.05
DOWNTOWN ALTERNATIVE HS	0	$1.56
DRACHMAN K-6 MONTESSORI MAGNET	43	$1.30
DRAKE ALTERNATIVE MS	29	$0.92
DUNHAM ES	61	$1.47
FORD ES	47	$0.00
FORT LOWELL ES	0	$1.59
FRUCHTHENDLER ES	52	$1.90
FT LOWELL/TOWNSEND K-8	56	$2.67
GRIDLEY MS	75	$2.55
GRIJALVA ES	78	$1.64
HENRY ES	43	$1.06
HOHOKAM MS	36	$1.83
HOLLADAY INTERMED MAGNET ES	55	$1.96
HOLLINGER K-8	57	$1.85
HOWELL ES	52	$3.64

School	FY 2012/2013 EUI (kBtu/GSF)	FY 2012/2013 Energy Cost/GSF
HOWENSTINE HS	123	$1.73
HUDLOW ES	48	$1.90
HUGHES ES	46	$0.00
JOHNSON PRIMARY MAGNET ES	36	$0.00
KEEN ES	0	$1.62
KELLOND ES	46	$1.40
LAWRENCE 3-8	41	$2.23
LINEWEAVER ES	57	$1.87
LYNN/URQUIDES ES	64	$1.89
LYONS ES	53	$1.32
MAGEE MS	48	$1.98
MALDONADO ES	73	$1.45
MANSFELD MS	66	$1.84
MANZO ES	46	$1.35
MARSHALL ES	36	$1.57
MARY BELLE MCCORKLE PRE K-8	63	$2.29
MARY MEREDITH K-12/ROSEMONT	106	$1.58
MAXWELL K-8	58	$2.09
MENLO PARK ES	70	$2.18
MILES ELC K-8	60	$2.67
MILLER ES	90	$1.65
MISSION VIEW ES	54	$2.23
MORROW ED CENTER	73	$2.19
MORROW ED CENTER BLDG C	78	$1.52
MYERS-GANOUNG ES	46	$1.80
OCHOA ES	46	$1.81
OYAMA ES	51	$0.00
PACE ALTERNATIVE HS	0	$1.32
PALO VERDE MAGNET HS	55	$0.81
PASS ALTERNATIVE HS	16	$1.45
PISTOR MS	56	$1.41
PUEBLO GARDENS K-8	55	$1.27
PUEBLO MAGNET HS	43	$0.22
REYNOLDS ES	4	$0.24
RINCON/UNIVERSITY HS	44	$0.00
ROBERTS ES	0	$1.40
ROBINS K-8	37	$2.09
ROBISON ES	60	$0.28
ROGERS ES	6	$1.53

School	FY 2012/2013 EUI (kBtu/GSF)	FY 2012/2013 Energy Cost/GSF
ROSE K-8	52	$2.13
ROSKRUGE BILINGUAL MAGNET K-8	72	$1.18
SABINO HS	50	$1.67
SAFFORD K-8	57	$1.74
SAHUARO HS	81	$1.50
SCHUMAKER ES	52	$2.09
SECRIST MS	57	$1.63
SOUTHWEST ALTERNATIVE MS/HS	0	$1.59
STEELE ES	49	$2.82
TOLSON ES	46	$3.22
TUCSON MAGNET HS	66	$1.71
UTTERBACK MAGNET MS	50	$2.01
VAIL MS	73	$2.25
VALENCIA MS	78	$1.49
VAN BUSKIRK ES	44	$0.15
VAN HORNE ES	3	$1.65
VESEY ES	48	$1.46
WAKEFIELD MS	47	$2.45
WHEELER ES	48	$1.71
WHITMORE ES	32	$1.91
WRIGHT ES	66	$0.18
WRIGHTSTOWN ES	3	

EXHIBIT 9C

BOARD PRESENTATION

Tucson Unified School District
Operational Efficiency Audit

GIBSON CONSULTING GROUP

May 13, 2014

Introduction

Acknowledgements

- Tucson Unified School District

Gibson Consulting Group, Inc.

- Our experience with efficiency programs
- Our project team

Project Objectives

- Identify opportunities to improve efficiency and achieve cost savings.
- Make recommendations to improve management practices in the district.

Overview of Our Approach

Major Tasks:

- Data Collection and Review
  - 1000+ Existing District Data Documents
  - Peer District Data – National and State
- Site Visit
  - Interviews and Focus Group Sessions
  - School Visits
- Analysis
- Recommendations and Report

Project began November 2013, completed April 2014

Overview of Our Approach

- Work Focused On:
  - Operating Expenditures – not capital outlay or debt service
  - General Fund – primary funding sources for TUSD
  - Major opportunities to reduce costs and improve management effectiveness

Areas Reviewed

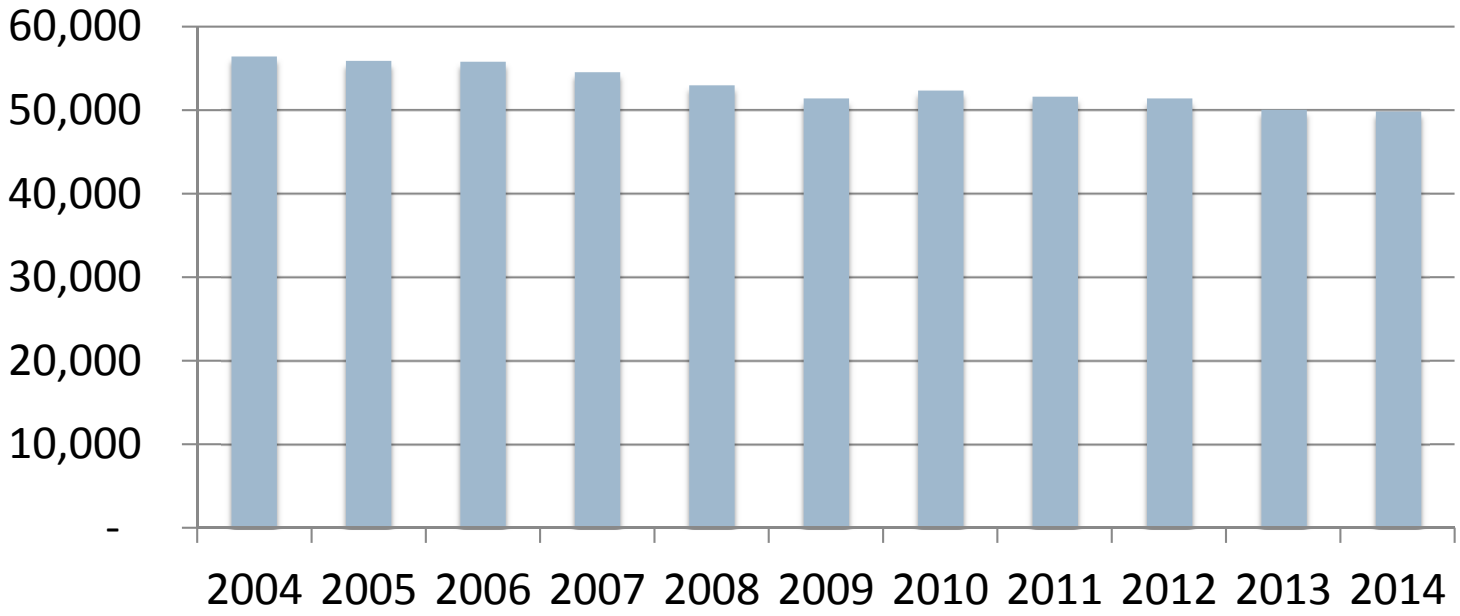
- District Organization and Management
- Financial Management
- Human Resources
- Technology Management
- Facilities Management
- Transportation Management
- Food Services
- Safety and Security

What We Found

- Lower State Spending
  - Arizona spends $7,496 per student compared to $11,068 nationally
- Declining State Spending
  - Since 2008, Arizona saw the a decrease in spending per student of 21.8% - highest percentage decrease nationally
- Desegregation Lawsuit
  - TUSD currently funds a $64 million desegregation plan
  - Separate local tax does not cover all associated costs

What We Found

- Declining Enrollment
  - Decrease of 12 percent in the past 10 years and continuing to decline. Has resulted in $50 million decrease in funding.



What We Found

- TUSD spending has declined by 5 percent over past five years.
- TUSD spending per student is $8,421, higher than both peer district ($7,185) and state averages ($7,496).

Key Messages

- TUSD does not have a long-range strategic plan.
  - District has moved forward with the decision to develop one this year.
- Many district process are inefficient, manual, and paper-intensive.
  - District has engaged with an outside firm to assist in streamlining.
- TUSD has issues with pay compression, a pay inequity of the salary structure.
  - District has taken steps to remedy the situation.

Key Messages

- Negotiations with labor unions have resulted in streamlined approaches to employee leave and helped TUSD save money.
- Staff have found ways to achieve class sizes closer to district targets resulting in savings.
- Surveys show improved transportation performance.
- TUSD has a culture of continuous self-improvement increasing the chance for success in implementing project recommendations.

Major Recommendations

- Implement performance measures and targets to improve accountability and transparency.
- Implement an internal audit function that reports directly to the governing board.
- Reorganize the Student Equity and Intervention Department to be more functionally aligned.
- Document a decision-making framework.
- Reduce finance office staffing to levels commensurate with similar-sized school systems.

Major Recommendations

- Improve financial reporting at the board and department/school level.
- Reorganize the Human Resources Department to focus resources on operational improvements.
- Improve and streamline the hiring process.
- Use a requirements-based application selection process for identifying and selecting ERP and SIS systems.
- Develop a technology project management methodology using industry standards.

Major Recommendations

- Bring all technology-related positions under the Technology Services Department.
- Continue to evaluate school capacities and consider further school reductions.
- Implement a new Computerized Maintenance Management System to support more efficient processes.
- Enhance the district's preventive maintenance program to lengthen the life of facilities.
- Implement additional energy conservation measures to reduce utility expenditures.

Major Recommendations

- Centralize management of custodial services.
- Implement new bus routing and scheduling software to optimize routing efficiency.
- Renegotiate labor agreements to pay bus drivers and monitors for actual hours worked.
- Implement a more effective bus replacement program.
- Allocate additional Maintenance and Operating Fund costs to the Food Services Fund.

Fiscal Impact

Chapter	One-Time	2014-15	2015-16	2016-17	2017-18	2018-19	Net Fiscal Impact
Organization and Management	($125,000)	($184,640)	($101,956)	($101,956)	($101,956)	($101,956)	**($717,434)**
Financial Management	($50,000)	$0	$260,000	$520,000	$832,000	$832,000	**$2,394,000**
Human Resources	($157,000)	$221,809	$221,809	$137,566	$137,566	$137,566	**$699,316**
Technology Management	$0	$0	$0	$0	$0	$0	**$0**
Facilities Management	($955,000)	($1,155,100)	$6,344,900	$6,344,900	$7,094,900	$7,094,900	**$24,769,500**
Transportation Management	($300,000)	($986,697)	$520,903	$440,903	$460,903	$750,903	**$886,915**
Food Services	($50,000)	$1,490,758	$1,817,758	$2,144,758	$2,144,758	$2,144,758	**$9,692,790**
Other	($161,000)	($25,000)	($25,000)	($25,000)	($25,000)	($25,000)	**($286,000)**
Net Fiscal Impact	**($1,798,000)**	**($638,840)**	**$9,038,414**	**$9,461,171**	**$10,543,171**	**$10,833,171**	**$37,439,087**

Thank You...

- For your willingness to do this audit.
- For the effort your staff dedicated to this project.

EXHIBIT 10

DLR Group

ftp.dlrprojects.com - / BC Rules and Process

Logged in: (TUSD-BC)

Parent Directory | Thumbnails | FTP Voyager JV | Enable Web Client Pro | Logout

Name	Size	Time
14.01.07_JC-R.pdf	23.93 KB	4/4/2014, 1:21:19 PM
Boundary Committee Rules.pdf	12.85 KB	4/4/2014, 12:53:27 PM
Boundary Review Process - Revision 3 21 14.pdf	68.39 KB	4/4/2014, 12:49:45 PM
TUSD_Process Diagram.pdf	315.96 KB	4/4/2014, 12:58:05 PM

EXHIBIT 10A

TUSD Tucson, Arizona **GOVERNING BOARD POLICY**	POLICY TITLE: School Attendance Boundaries
	POLICY CODE: JC-R
	LEAD DEPARTMENT: Planning and Student Assignment

Purpose: To provide guidelines for boundary changes that address the demographic, facility and educational aspects of the District for the next 5 to 10 years. The process for these changes shall include the notification and involvement of stakeholders to help improve decisions and create support for the boundary changes.

Review of Attendance Boundaries: The Superintendent shall direct a review of attendance boundaries when the District:

a. opens a new school;
b. closes, repurposes, or consolidates a school;
c. alters the capacity of a school;
d. designates a school without an attendance boundary;
e. identifies oversubscribed schools; or,
f. in other situations where a boundary change is indicated to, among other things, balance enrollment with capacity, allow a change in academic programs, meet fiscal objectives or desegregate schools.

Criteria for Drawing Attendance Boundaries: When the District creates and evaluates attendance boundaries, it shall consider the following:

a. demographics (i.e., race, ethnicity, current and projected enrollment, current and project development patterns, socioeconomic status)
b. targeted operating capacities
c. current and planned instructional programs
d. compactness of the attendance area and distance to schools
e. physical barriers and subdivision/neighborhood boundaries
f. effects on school desegregation
g. student transportation
h. feeder patterns
i. previous, recent boundary changes affecting the area
j. fiscal impacts

In applying these criteria, the District shall propose and evaluate various options in an effort to desegregate schools.

Superintendent's Committee: The Superintendent will establish two committees:

1. an advisory committee of staff and external professionals to guide the boundary committee by conducting a preliminary evaluation of potentially affected areas, establishing a framework for the project, and developing a range of options based on the criteria for drawing attendance boundaries set forth above; and

2. a boundary committee of staff and community members to review options and make recommendations to the Superintendent for attendance boundary changes.

Criteria for Selecting Boundary Committee Members

Committee members should meet one or more of the following criteria:

a. Be a TUSD parent
b. Represent a reasonable mix of the diversity and ethnicity of the affected communities
c. Be a staff member of one of the schools in the potentially affected areas
d. Be an interested member of the community

Roles and Responsibilities of the Boundary Committee Members

Committee members shall:

a. Attend all committee meetings and public meetings hosted by the committee
b. Be familiar with the framework, including:
    i. scope and objectives of the project
    ii. roles and responsibilities of the committee
    iii. schedule for boundary committee and public meetings
    iv. community notification means and requirements
    v. criteria for evaluating boundary changes
c. Review background data relative to the criteria (see above) for drawing attendance boundaries, such as demographics, attendance patterns, etc.
d. Become familiar with the affected areas/communities through self-directed tours and study
e. Create recommendations that equitably address enrollment growth and adequately consider the criteria set forth above.
f. Prepare for and hold public meetings; help to facilitate public input
g. Review public meeting results and refine boundary recommendations
h. Prepare a report of recommendations for the Superintendent

The District shall take notes at all Boundary Committee meetings; these with any supporting documents and any committee reports will be available for public review.

Public Meetings

The Boundary Committee will hold at least one public meeting in each potentially affected area/region at which they will discuss attendance boundary changes and engage the public in an evaluation of options

Notification
These meetings will be announced at least one week prior to the date of the meeting by press releases, notices posted at schools within the potentially affected areas, and the TUSD website. These notices shall include a referral to the TUSD website and to another district location, both of which will include the proposed boundary maps.

Conduct
At the public meeting(s), the boundary committee will present its findings and the public will have an opportunity to evaluate the options through small-group processes or surveys. The public will also be asked to submit comment cards to be included, with the results of small-group sessions or surveys, in the committee's report to the Superintendent.

Unitary Status Plan Review Requirements

The District will prepare Desegregation Impact Analyses for any options to be presented to the Governing Board. After Governing Board approval of boundary changes, the District shall prepare a Notice and Request for Approval per Section X.C of the USP.

Following Board Action

Boundary Committee Notification
Following Board action, the District will notify the Boundary Committee members of the Board's decision and disband the committee.

Public Notification
Following Board action, when all necessary approvals have been granted, parents and guardians of students residing in the areas affected by boundary changes will be informed of the decision by means of the minutes, bulk mail to addresses in student records and other school and District communications. Landowners in the affected boundaries will also be notified by bulk mail and a notice will be placed on the District's web site.

Boundary Maps and Other Notification
Within ninety (90) days of the adoption of a boundary change by the Governing Board, and when all necessary approvals have been granted, attendance boundaries will be updated, made available to the public and placed on a District website. A direct link to the School District's attendance boundaries will be sent to the Department of Real Estate and the Tucson Association of Realtors. Digital maps will be provided to the Pima County GIS Department, TUSD Transportation Department and to the GIS server

accessed by Mojave programmers. A direct link or hard copy maps will be provided to School Community Services, Leadership Offices and affected school principals.

If the boundary changes adopted by the Governing Board affect any school built on land donated to the District within the past five (5) years, the entity which donated the land will be informed of the Board's decision.

Reviewed: January 6, 2014
Revision: February 7, 2014 (Friday Report)

LEGAL REF.: A.R.S. §15-341, 20 U.S.C. 9532 No Child Left Behind; 42 U.S.C. 11301, McKinney-Vento Homeless Assistance Act of 2001

EXHIBIT 10B

Boundary Committee Rules:

1. Attend all committee meetings and public meetings hosted by the committee.
    a. Attendance will be kept including late arrivals and early departures.
    b. Boundary Committee members (including Alternates) are expected to attend all meetings and will not be able to participate if they miss more than two meetings.
    c. Boundary Committee members are expected to attend at least one public meeting.
2. Be familiar with the frameworks established by the Boundary Review Process document and TUSD Policy JC-R, including:
    a. Scope and objectives of the project
    b. Roles and responsibilities of the committee
    c. Schedule for boundary committee and public meetings
    d. Community notification means and requirements
    e. Criteria for evaluating boundary changes
3. Review background data relative to the criteria for drawing attendance boundaries, such as demographics, attendance patterns, etc.
4. Become familiar with the affected areas/ communities through self-directed tours and study.
5. Create recommendations that equitably address enrollment growth and adequately consider the criteria set forth below.
6. Options should be evaluated based on the criteria presented at the first meeting and included in all evaluation sheets, but participants should also determine whether those criteria make sense to them as they go through the various options. If they determine that other criteria should be employed, they should state them and the reason(s) they are thought to be important, all on the record.
7. Only Boundary Committee members may vote on the preferred options or the order of preference of the options.
8. Attendees who are neither boundary committee members nor alternates may listen but may not participate. They are encouraged to participate at the public meetings. (Magnet Committee members and other with specialized knowledge may share that knowledge and suggest options, but are not responsible for developing or evaluating options).
9. Prepare for and hold public meetings; help to facilitate public input.
10. Review public meeting results and refine boundary recommendations
11. Prepare a report of recommendations for the Superintendent

Criteria for Drawing Attendance Boundaries:

- Demographics (i.e. race, ethnicity, exceptional ed., current and projected enrollment, current and projected development patterns, socioeconomic status, GATE and other)
- Targeted operating capacities
- Current and planned instructional programs
- Compactness of the attendance area and distance to schools
- Physical barriers and subdivision/neighborhood boundaries

- Effects on school desegregation
- Student transportation
- Feeder patterns
- Previous, recent boundary changes affecting the area
- Fiscal impacts

EXHIBIT 10C

TUSD

Tucson Unified School District

Boundary Review Process

I. USP LANGUAGE

II. STUDENT ASSIGNMENT

D. Attendance Boundaries, Feeder Patterns, and Pairing and Clustering

1. All schools in the District shall have an attendance boundary unless the District has specifically designated a school to have no attendance boundary.

2. The District shall review and/or redraw its attendance boundaries when it opens a new school; closes, repurposes or consolidates a school; alters the capacity of a school; or designates a school without an attendance boundary. The Parties anticipate that such changes may result in the redrawing of some attendance boundaries. When the District draws attendance boundaries, it shall consider the following criteria: (i) current and projected enrollment; (ii) capacity; (iii) compactness of the attendance area; (iv) physical barriers; (v) demographics (i.e., race, ethnicity, growth projections, socioeconomic status); and (vi) effects on school integration. In applying these criteria, the District shall propose and evaluate various scenarios with, at minimum, the Plaintiffs and the Special Master in an effort to increase the integration of its schools.

3. By April 1, 2013, [PLV1]*the District shall review its current attendance boundaries and feeder patterns and, as appropriate, amend such boundaries and patterns and/or provide for the pairing and/or clustering of schools to promote integration of the affected schools.*

E. Magnet Programs

3. Magnet School Plan. …the District shall develop…a Magnet School Plan...ensuring that this Plan aligns with [the District's] other student assignment strategies…The District shall at a minimum: (i) consider how, whether, and where to add new sites to replicate successful programs and/or add new magnet themes and additional dual language programs, focusing on which geographic area(s) of the District are best suited for new programs to assist the District in meeting its desegregation obligations…(iv) determine if each magnet school or school with a magnet program shall have an attendance boundary…

…the Magnet School Plan shall, at a minimum, set forth a process and schedule to: (vii) make changes to the theme(s), programs, boundaries, and admissions criteria for existing magnet schools and programs

II. POLICIES THAT APPLY

To implement this project in compliance with the USP, revisions to Policy JC, School Attendance Boundaries, were approved by the Governing Board on February 11, 2014. Revisions to Policy JFB, Enrollment and School Choice, are in process to align with the Admissions Process for Oversubscribed Schools approved by the Governing Board on December 10, 2013.

III. ROLES AND RESPONSIBILITIES

The Director of Planning and Student Assignment will manage the project with the help of two third-party firms: DLR Group, a K-12 educational planning firm with experience in districts under desegregation orders, and Applied Economics, the firm that prepared a demographic study for the District (together the Project Team). Funding has been allocated to this project.

The Project Team will be responsible to develop a public outreach program that provides multiple venues for public consultation with means to give voice to those who may not be engaged.

Boundary options (including potential changes to magnet boundaries, feeder patterns, and pairing and/or clustering of schools) will be generated by the Project Team and then presented to boundary committees, the Plaintiffs and Special Master and the public for review, comment and refinement. An advisory team of staff and outside professionals will be responsible for assuring the effectiveness and feasibility of all options.

At key points the Project Team will update District leadership, the Governing Board and the Plaintiffs and Special Master. All submittals to the Plaintiffs and Special Master will be submitted through the Director of Desegregation and legal counsel; they will provide the Project Team with any responses on same, from same.

The Project Team will collect all responses, make any necessary revisions and draft the final product and all sub-products.

In accordance with Policy JC, the Director of Planning and Student Assignment will be responsible for notifying parents/guardians of TUSD students, landowners and other affected persons/groups after the final approval of any boundary changes.

Annually, the Director of Planning and Student Assignment will review the District's Annual Report (USP section G.2) to determine if any schools are oversubscribed and will review boundaries to determine if any changes should be made to promote desegregation, especially regarding magnet schools and programs.

IV. INPUT OF THE PLAINTIFFS AND SPECIAL MASTER

Before the District amends boundaries, the District must first "propose and evaluate various scenarios with…the Plaintiffs and the Special Master in an effort to increase the integration of its schools." This process includes multiple opportunities for the Plaintiffs and Special Master to receive and comment on information as the District develops scenarios (rather than waiting to involve them after scenarios have already been developed) and to be involved in the evaluation of options before recommendations are presented to the Board. Once the District makes recommendations, it will be available to the Board, the public, and to the Plaintiffs and Special Master. Once the Board approves a set of recommendations, the parties will have additional time for review and resolution of remaining conflicts. If conflicts cannot be resolved, the Special Master shall submit recommendations to the Court in a report.

Throughout the process, the District is committed to providing background information (like the demographic study) at key consultation points. Party input into the boundary review process is as follows **(See Exhibit A)**:

1. **Inform/Consult/Involve**
   The Plaintiffs and Special Master will participate in a number of ways such as consultation meetings (by phone, in person, or a combination of both), focus groups, and consultation through the submittal and review of draft options and plans.

2. **Notices of Board Action**
   The District will notify the Plaintiffs and Special Master at key points in the process immediately after the Board makes key decisions.

The general timeline for Plaintiff and Special Master involvement is as follows:

March 2014:

- Submit the revised proposed Boundary Review Process to the Plaintiffs and Special Master.
- Consult with the Plaintiffs and Special Master within the Boundary Review Process.
- Conduct a focus group to propose and evaluate various scenarios with the Plaintiffs and the Special Master in an effort to promote the continuing desegregation of its schools.

April 2014:

- Provide potential options to the Plaintiffs and the Special Master for a two-week review and comment period.
- Conduct conference calls, as needed, to clarify options or to respond to requests for information. These will take place primarily during the two-week review and comment period to ensure the parties fully understand the potential options and are able to provide definitive responses.

- The District reviews the comments from the public and from the Parties/Special Master to develop draft options.

May 2014:

- Provide draft options (including a Desegregation Impact Analysis) to the Plaintiffs and the Special Master for a two-week review and comment period.
- Conduct conference calls, as needed, to clarify the draft options or to respond to requests for information. These will take place primarily during the two-week review and comment period to ensure the parties fully understand the draft options and are able to provide definitive responses.
- The District reviews the comments from the Parties/Special Master to develop a draft Boundary Review Plan.

June 2014:

- Provide draft plan (including a Desegregation Impact Analysis) to the Plaintiffs and the Special Master for a two-week review and comment period.
- Conduct conference calls, as needed, to clarify the draft Boundary Plan or to respond to requests for information. These will take place primarily during the two-week review and comment period to ensure the parties fully understand the draft plan and are able to provide definitive responses.
- Resolve any remaining issues and/or objections.
- The District reviews the comments from the Parties/Special Master to develop a final Boundary Plan that is supported by the Parties/Special Master.

V. UNDERSTANDING OF ISSUES AND OBJECTIVES

Early in the project, the Project Team will identify issues, objectives and evaluation approaches and then, through the Director of Desegregation, will work with the Special Master and Plaintiffs to further define the project. This will include defining any perceived ambiguities in the USP.

VI. GENERAL TIMELINE (2014)

January	Update Policy JC and JC-R (Student Attendance Boundaries) Complete Demographic Study Submit initial plan proposal and timelines to Board
February	Inform Plaintiffs and Special Master of the process and timeline for feedback. Hire service providers Form and meet with Advisory Team to specify goals, develop objectives, evaluate potential options and issues, create the initial plan proposal and timelines, and draft evaluation criteria. Develop the Communication Plan including participation of the Parties. Initiate public information and consultation
March	Conduct a focus group for the Plaintiffs and Special Master Advisory Team begins scenario development Form Boundary Committee and hold informational meetings Refine scenarios and select a wide range of feasible options
April	Provide potential options for Plaintiff/Special Master review and comment Boundary Committee continues to meet to develop options; they host public meetings in impacted regions; they refine options based on public feedback
May	Provide draft options for Plaintiff/Special Master for review and comment Advisory Team and Boundary Committee evaluate and prioritize options Develop a preliminary Desegregation Impact Analysis (DIA) and Notice and Request for Approval (NARA) Draft boundary recommendations prepared and submitted to leadership Presentation of Draft Plan with DIA to Governing Board
June	Provide draft Boundary Plan for Plaintiff/Special Master review and comment Draft School Master Plan Implementation Plan including recommendations for the next phase Compilation of Boundary Review with the Magnet Plan and other elements of the District Strategic Plan Final Board Approval
July	Complete and submit Implementation Plan to Board
September	Notification of parents and landowners

EXHIBIT 10D

TUSD

BOUNDARY REVIEW PLAN - PROCESS

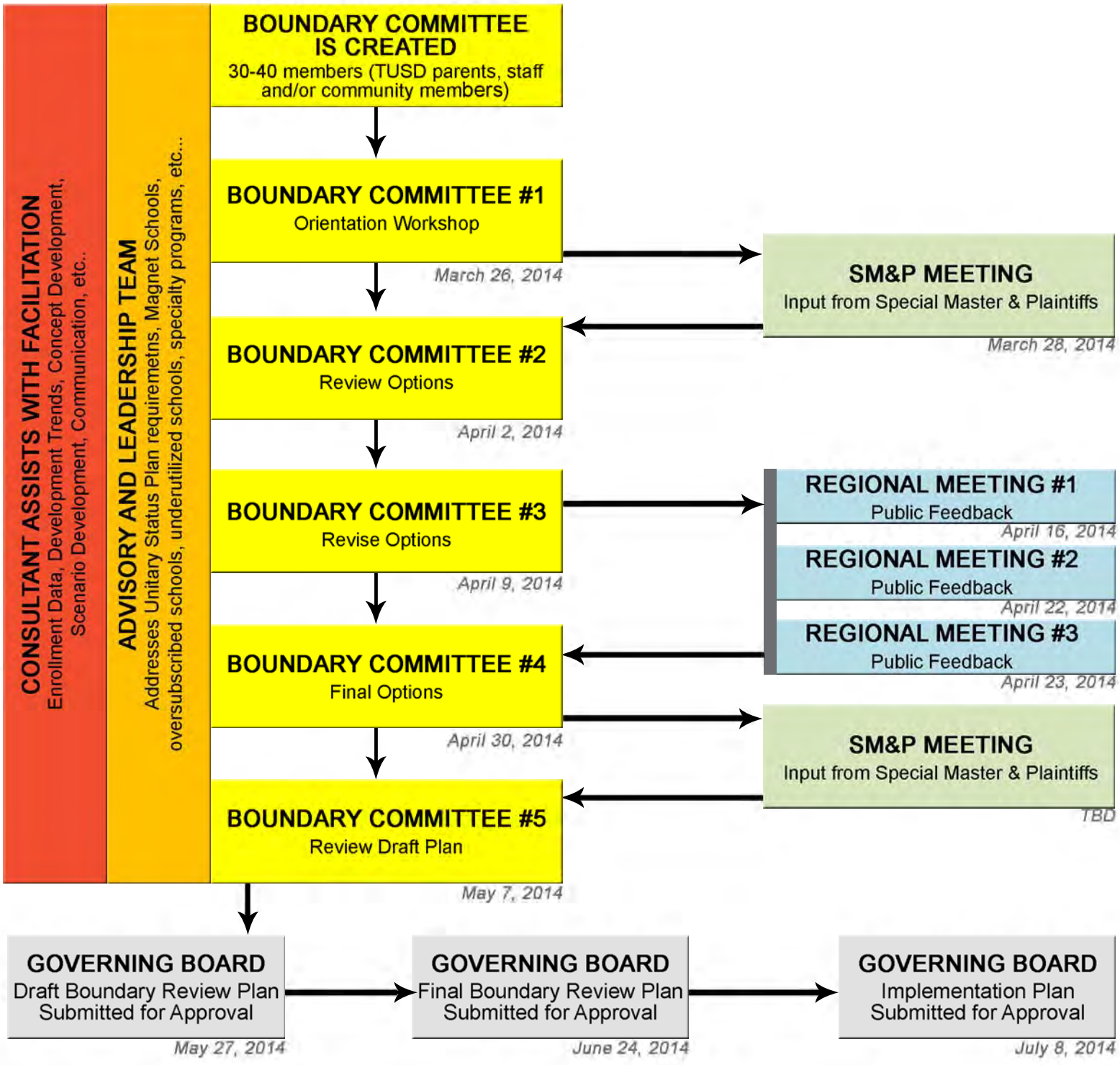


EXHIBIT 11

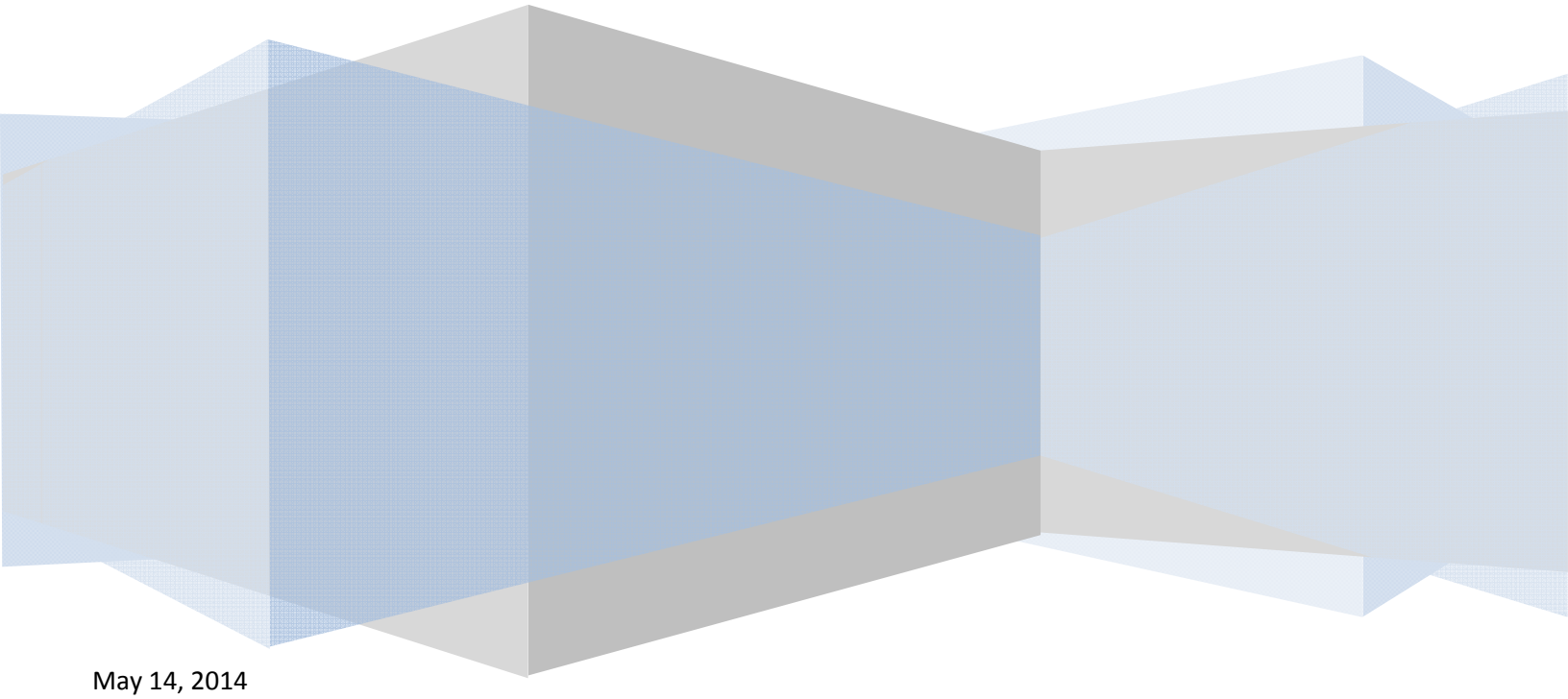
Name	Size	Time
2014-05-14_CMP.pdf	3 MB	5/20/2014, 9:51:58 AM
CMP Comments.docx	35.44 KB	5/22/2014, 11:48:04 AM
Comprehensive Magnet Plan.FINAL 5.13.14.docx	328.72 KB	5/23/2014, 11:46:11 AM

EXHIBIT 11A

TUSD

Tucson Unified School District

Comprehensive Magnet Plan



May 14, 2014

Table of Contents

Attachments

Attachment	Title
A.	Summary of 2011 Magnet Study Findings
B.	Job Descriptions
C.	Magnet Review
D.	Theme Immersion Matrix
E.	Magnet Plan Improvement Template
F.	Monthly Magnet Report
G.	Magnet Programs Annual Evaluation Flow Chart
H.	Magnet Standards Evaluation
I.	Preliminary Magnet Evaluation Findings

I. Background

On June 5, 1978, a federal district court approved a settlement agreement between Tucson Unified School District (TUSD) and parents of African American and Hispanic students who had filed a claim against TUSD for failing to eliminate the vestiges of the previously-segregated dual school system. The agreement included provisions for the desegregation of nine schools in the district in a three-phase program, including the introduction of magnet schools to TUSD.

In May 1979, the District Court approved a three-phase magnet school plan. Phases I and II included busing, race-based admissions priorities, additional funding to sites to refurbish facilities and to provide new instructional equipment, and additional programming such as afterschool care. These incentives attracted Anglo students to the primarily Latino communities that comprise the Westside schools, but minority students in Westside neighborhoods had less incentives to leave their neighborhood schools to attend the primarily White Eastside schools. Phase III included the creation of additional magnets – all on the Westside.

In the ensuing years, TUSD added more schools to its magnet program – including the addition of programs in response to the Office of Civil Rights complaints about the lack of equal educational opportunities at TUSD high schools. This resulted in a dual-purpose magnet system in TUSD. Starting in the mid-1980s, TUSD magnet programs were used as a mechanism to attract non-neighborhood, non-minority students to Westside schools, and to provide equal educational opportunities to minority neighborhood students attending Westside schools. In the late 1980s and early 1990s, magnet programs were added which included more centralized and traditionally desegregated schools. Beginning in 2000, TUSD developed some magnet programs that were successful in improving he racial/ethnic balances in some schools' student populations, although other magnets were less successful, yet were successful at providing specialized educational opportunities for their concentrated minority populations. From the early 1980s through 2011, the demographics of the TUSD changed.

Findings of the 2011 Magnet Study

This Comprehensive Magnet Plan takes into account the findings of the 2011 Magnet Study [USP Section (II)(E)(3) and Attachment A: Summary of 2011 Magnet Study Findings]. In 2011, Tucson Unified School District (TUSD) contracted with Education Consulting Services to conduct a Comprehensive Magnet Review. The review assessed TUSD's magnet programs to determine the extent in which magnets supported student integration and positively affected student achievement. The processes and schedules in Magnet Operations are

designed to mitigate the findings of the Comprehensive Magnet Review. The 2011 study found TUSD's magnet programs were lacking in several areas including:

- Misunderstandings and inadequate implementation of magnet programs and magnet enrollment processes.
- Lack of central and site coordination, including lack of adequate central support.
- Undefined focus/strategy regarding diversity, outreach, marketing, and recruitment.
- Inadequate monitoring and reporting.
- Inadequate professional development and curriculum development/alignment.
- Disjointed transportation, funding activities, and strategies.
- Inadequate community and parent outreach, marketing, and recruitment.

The Comprehensive Magnet Plan outlines processes and schedules to address the findings of the 2011 Study. New enrollment processes have been implemented and are included in the Comprehensive Magnet Plan. Also included in the plan is an operational plan that describes both central and site support. A system has been defined to monitor programs and provide support and a professional development program is identified. The budget process has been aligned to reflect programmatic implementation. The Comprehensive Magnet Plan includes outreach, marketing, and recruitment.

II. Executive Summary

Tucson Unified School District's Comprehensive Magnet Plan outlines an ongoing process in which the District will assess and analyze the needs and systemic challenges of magnet schools. This plan will give direction for the District to create a magnet system that will provide students with the opportunity to attend an integrated school as well as to implement strategies to improve current magnet schools. The Comprehensive Magnet Plan has two sections. The first section, *Magnet Operations*, is a comprehensive framework which the District will use as a decision making model. This is an enduring document in which the processes described will be used to provide consistency and sustainability regardless of the District's unitary status. The second section, *Plan of Action*, is the implementation of the decision making model and addresses the needs and action plans for specific schools on an annual basis.

The Comprehensive Magnet Plan:

- Addresses the findings of the 2011 Magnet School Study;
- Aligns the magnet strategies with the other three student assignment strategies (attendance boundaries, pairing and clustering, and open enrollment), and with other family engagement and student recruitment efforts;
- Includes a process to add new sites to replicate successful programs and/or add new magnet themes and additional dual language programs, focusing on which geographic area(s) of the District are best suited for new programs to assist the District in meeting its desegregation obligations;
- Includes a process to continually evaluate magnet schools/programs that are not promoting integration and/or educational quality and determine an appropriate plan for improvement or withdrawal of magnet status;
- Includes the process by which each magnet school or school with a magnet program shall have an attendance boundary;
- Includes the implementation of the Admission Process For Oversubscribed Schools;
- Ensures that administrators and certificated staff in magnet schools and programs have the expertise and training necessary to ensure successful implementation of the magnet;

- Ensure that, in the event that a magnet program or school is eliminated or relocated, TUSD students currently enrolled in the magnet school or program will be permitted to remain in that school until they complete the highest grade offered by that school or be given automatic admission to a school or program that offers a like theme or pedagogy. The determining factors of admittance to a like program or pedagogy are the same as those detailed in the Admissions Process for Oversubscribed Schools;

- Makes changes to the theme(s), programs, boundaries, and admissions criteria for existing magnet schools and programs in conformity with the 2011 Magnet Study and the USP including developing a process and criteria for significantly changing, withdrawing magnet status, or closing magnet schools or programs that are not promoting integration or educational quality within the District, including increasing the number of dual language programs;

- Include strategies to specifically engage African American and Latino families, including the families of English language learner ("ELL") students; and

- Identifies goals to further the integration of each magnet school which will be used to assess the effectiveness of efforts to enhance integration at the school;

- Puts for a process to improve access to quality educational programs for all students.

III. Magnet Operations

A. Definition: What is a Magnet Program?

- Magnet programs focus on a magnet theme, such as a specific academic area, a particular career or a specialized learning environment;
- Magnet programs attracts students of diverse racial and ethnic backgrounds; and ;
- Magnet programs encourage students to choose a school other than their attendance boundary school to participate in the magnet theme offered at that program or school [USP Section (II)(E)(1).

Magnet programs provide families with ways to meet the individual learning styles and interests of their children. Using theme or pedagogical pipelines, students receive an integrated, rigorous, congruent, and contiguous curriculum which will lead to post secondary education and productive employment opportunities. Magnet programs are identified by the USP as one of four essential strategies of TUSD's efforts to support integration through student assignment [USP(II)(A)(1)]. As well, magnet programs seek to increase academic achievement, increase graduation rates, increase school attendance, and increase parent engagement.

B. Goals of the Comprehensive Magnet Plan

The primary goal of TUSD's Comprehensive Magnet Plan is to ensure that all magnet schools are making progress towards achieving the USP definition of an integrated school, and to enhance the educational quality of its magnet schools and programs. Specific goals are as follows

1. **Ensure that all magnet schools and programs show measureable progress toward achieving the definition of an integrated school as set forth in the USP** [USP Section (II)(B)(2)].

GOAL: TUSD magnet schools will achieve the definition of integration to the extent possible as set forth in the USP through an admissions process.

2. **Recruit and retain a racially and ethnically diverse student body in TUSD magnet schools and programs** [USP Section (II)(E)(2)].

GOAL: By implementing the Marketing, Outreach and Recruitment Plan, the District will track the number of students entering magnet programs at the lowest entry grade in order determine if the plan is attracting a racially and ethnically diverse student body.

3. **Enhance the educational quality and social capitol of TUSD magnet schools and programs.**

GOAL: By implementing rigorous programs and quality instruction, students attending a magnet school will score at least the district average for that grade configuration (K-5, K-8, 6-8, 9-12).

GOAL: For each year, magnet students participating in Advanced Learning Experiences will increase.

C. Magnet Organizational Structure

Organizational structures are formal systems that allow programs to be developed and monitored while facilitating working relationships. The Comprehensive Magnet Plan focuses on communication, shared decision-making, and accountability.

1. **District Level Organization**: Tucson Unified School District will support magnet schools through cross-departmental collaboration. The District will support magnet school development and improvement by constructing interrelated connections in five key areas: leadership, decision making and structure, people, and work processes and systems. Through the implementation of the District Strategic Plan, the District will set a clear vision and priorities through the work of a cohesive leadership team which will include a Magnet Director. The District organizational structure will support the goals and objectives of the Comprehensive Magnet Plan.

2. **District Community Organization:** The community will be given opportunities through District sponsored public forums to provide innovative ideas, feedback, and suggestions for improvement. Public forums will be held regionally.

3. **Site Level Organization:** School sites will also use public forums to engage the community in discussions about the magnet program at that site. Magnet sites will designate an individual or individuals to execute the processes and programmatic work involved in a magnet school.

IV. Magnet Schools: Strategies and Processes for Integration

A. Magnet School Strategies for Integration

The District will continue to implement magnet schools and programs as a strategy for assigning students to schools and providing students with the opportunity to attend an integrated school. When reviewing student assignment to magnet programs, the District will consider boundaries, total school magnets, and magnet schools with preference zones.

1. Boundaries

Attendance boundaries will be reviewed to determine how the District can utilize boundaries to promote integration [USP Section (II)(D)(1-5)]. The boundary review process includes all stakeholders: parents, community, teachers, administration, magnet programs, and ultimately the Governing Board. Considering recommendations from the cross-departmental team, the Boundary Review Committee determines which schools are: total school magnet without a preference area; total school magnet with a preference area; magnet program without a preference area; magnet program with a preference area, and the integrative impact of pairing or clustering [USP Section (II)(E)(3)(iv)]. At present, all students participating in the magnet outside the neighborhood boundary must apply for and be accepted in the program through the lottery process. Students living in the attendance boundary are guaranteed a seat in the magnet program.

2. Total School Magnet

A total school magnet is a school that implements a magnet theme, themes or instructional pedagogy across all grades and does not have a defined attendance boundary, but may have a preference area. All students who wish to attend the school must apply for and be accepted in the school through the magnet lottery process. All students enrolled in the school must participate in the magnet programs offered by that school. The District shall determine whether a total school magnet should have a preference area or whether it should have no preference area, and will incorporate this decision into the review of boundaries required by the USP.

3. Total School Magnet and Magnet Programs with a Preference Area

After careful review of attendance, mobility, and application data, the Boundary Committee will recommend to district administration and the district administration will determine if a total school magnet should have a preference area. The Boundary Committee will recommend to the district administration who will designate a geographic area as a preference area. The size of the preference area will depend on a range of factors, including the capacity of the school, the density of students living in the geographic area around the school and the demographics of the students in the geographic area . If a total school magnet has a

preference area, those students living within the preference area will be automatically enrolled if seats are available. If the school should become oversubscribed, no more than 50% of the available seats will be allocated to students from the preference area.

B. Magnet Applications and Processes

The student assignment goal for all magnet schools and programs is to achieve the definition of integration to the extent possible by using an application and selection process [USP Section (II)(G)(2)]. As mandated in the USP, the District will utilize the Student Admissions Process for Oversubscribed Schools.[USP Section (II)(E)(3)(v)]. The same admissions process will be used for each program except when a school is oversubscribed. If a school is oversubscribed, then the admission process for magnet programs will be weighted to increase the opportunity for integration at each individual school. The process for oversubscribed schools will be implemented in accordance with the TUSD Admission Policy.

C. Alignment with Other Recruitment Efforts

1. Title I and Student Equity

The Magnet Department will work in collaboration with the Curriculum and Instruction department, Human Resources, Student Equity and Title I to provide high quality professional development for teachers and administrators, outreach to families, provide services for struggling students, provide extended day opportunities and extra curricular activities [USP (II)(E3)]. The Magnet Department will participate in all District initiatives to support student achievement.

2. Family Engagement Centers

Family engagement in magnet programs is paramount to the success of the schools. TUSD defines family engagement as a well thought-out process involving the entire school community, and not just a series of events. The Comprehensive Magnet Plan includes strategies to involve families. The District, through its Family Centers, will implement strategies to recruit a racially and ethnically diverse student body to its magnet schools and programs to ensure that the schools are integrated to the greatest extent practical [USP Section (II)(E)(2)]. The Comprehensive Magnet Plan aligns the strategies in the Family Engagement Plan and extends those strategies to magnet schools. All magnet schools will include Family Engagement in the site Magnet Plan, and will address specific strategies to target Latino, African American and English Language Learner families and students who are struggling, disengaged, or at risk of dropping out [USP Section (VII)(C)(1)(a)]. The Magnet Department will work with other family engagement functions within the district to assist the sites in developing a Family Engagement

component of each site's Magnet Improvement Plan. The site Magnet Improvement Plan will detail day to day practices, attitudes, beliefs and interactions that support learning at home as well as at school. The site Magnet Improvement Plan will describe the process and schedule to address the following components and measureable strategies:

a. Welcome all families into the school community

Measureable strategies for developing a welcoming atmosphere within a magnet program include, but are not limited to:

(1) Acknowledge, greet and assist all visitors

(2) Provide customer service training

(3) Create a welcoming appearance by attractive parking, signs, student work

(4) Offer a variety of opportunities to volunteer

(5) Create a place parents can call their own and check out materials

(6) Continuous celebration of families that is relevant to their culture

b. Communicate with all stakeholders

Measurable strategies for communication include, but are not limited to:

(1) Provide training to broaden knowledge and awareness of the diversity in the schools

(2) Conduct activities and events to honor all cultures

(3) Utilize interpreters for meetings and events

(4) Provide printed material in languages of the schools

(5) Know how to spell and pronounce families' names correctly

(6) Utilize mentor parents to support other parents

(7) Use multiple methods to communicate, such as phone, e-mail, notes, flyers, newsletters, bulletin boards, web-site, suggestion box, e-blast, Tweet, Twitter, Facebook

c. Develop a magnet school community

Measurable strategies to develop a school community include, but are not limited to:

(1) Share Magnet Plan with the entire school

(2) Recognize and support all forms of parent involvement

(3) Create an Action Team for sustaining and growing partnerships

(4) Develop a Family Handbook

(5) Implement professional development opportunities to create awareness

d. Develop student advocacy

Measureable Strategies for developing student advocacy include but are not limited to:

(1) Provide information, tools and ideas to families in order to support the child at home

(2) Implement a school compact

(3) Provide parents with the homework policy

(4) Provide parents college/career planning information

e. Collaborating with the community

Measureable Strategies for community collaboration include but are not limited to:

(1) Survey the community's assets

(2) Partner with local businesses to host meetings and events

(3) Invite local community member to serve on teams

(4) Reach out to senior citizens and church groups to volunteer

(5) Host a community event honoring local business and civic leaders

3. District-Wide Marketing and Recruitment

The District has developed an extensive Marketing and Recruitment Plan that will provide support to school sites. Magnet programs placed in the IMPROVEMENT or FALLS FAR BELOW categories on the annual Magnet Program Review, will receive intensive recruitment and marketing resources. The Magnet Department will maintain all data generated by the recruitment and marketing efforts, and this data will be included in the

annual report. This campaign includes the implementation and documentation of specific strategies that support the requirements of the USP, such as:

- English and Spanish language TV ads to air in mainstream and Spanish language media.
- Radio ads highlighting opportunities for students in English and Spanish language media.
- Television ads and print ads featuring actual TUSD students, parents and teachers, with including segments that a focus on racial and ethnic diversity so all audiences see themselves represented in the TUSD brand.
- Direct mail campaign to highlight learning opportunities to African-American families; strategically targeted to known addresses.
- Direct mail campaign for magnet schools; strategically targeted to certain zip codes to maximize integrative effects.
- Internet outreach, including space on popular banners and social media outreach
- Event marketing – leveraging community events with high attendance to reach a large number of families.

4. Magnet Department Marketing and Recruitment:

The Magnet Department will continue to work through TUSD Communications to align marketing and recruitment practices to that of the District.

The Magnet Department will coordinate all recruitment efforts in collaboration with to ensure that all families are reached and that some populations are not over-targeted. Recruitment will be year round. However, the window from September to February will be considered the priority window for marketing, outreach, and recruitment. The Media and Communications Department will be responsible for organization and operation of all community-based marketing and recruitment efforts for magnet programs. The Media and Communications Department will support magnet schools in educating prospective families and community partners about specific magnet programs. The District strategy for marketing and recruitment includes reviewing and evaluating the results of the previous year's campaigns. Details of magnet events will be captured and publicized at both the district and site level. Results of efforts will be reported monthly and analyzed in an annual report.

Each site will work with the Media and Communications Department to create a recognized and respected brand then help promote that brand. In addition each site will educate prospective families and community partners about specific magnet programs available at their site and the other sites within their magnet pipeline. The site level strategy for recruitment includes reviewing and evaluating the results of the previous year's campaigns conducted by the site. This data is used to document plans for the coming year in site based Magnet Improvement Plans. The results of the efforts outlined in the plan are documented in monthly reports.

Magnet Department marketing may include, but not be limited to:

a. **Media**: The Magnet Department may work through the Media and Communications Department to television, radio and internet advertising and outreach as deemed appropriate and cost effective.

b. **Print**: The Magnet Department may work through the Media and Communications Department to print media as necessary and if cost effective. Print materials include but are not limited to, newspaper and magazine ads and articles, billboards, bus shelters, mailers, flyers, and brochures.

c. **Community events**: The Magnet Department may work through the Media and Communications Department coordinate attendance at community events providing a central point of contact for the community event planners and the involved magnet schools. These events may include but not be limited to Beyond 2015, Celebrate Schools, 4th Avenue Street Fair, Festival of Books, and the Pima County Fair.

d. **Magnet celebrations**: The Magnet Department may plan and execute district level magnet events to include Magnet Mania, magnet open houses, magnet student recognition, and an Magnet Alumni Gala.

e. **Magnet informational opportunities:** The Magnet Department will pursue all available resources for promoting informational opportunities including magnet conferences and workshops for community and staff, magnet showcases, and magnet parent nights.

f. **Communication:** At least two Magnet Department newsletters per year will be provided to all magnet school families, district administration, and local business partners. In addition presentations to civic organizations and parent groups will be provided by department personnel. Press releases, the Magnet Event Calendar, and district and site internet will be used to document department and site events and successes.

A. **Site Level Recruitment Support**

The Media and Communications Department and Magnet Department will support all magnet schools to take full advantage of recruitment opportunities. Department-level support may include, but not limited to research-based presentations and work-time based around: theme visibility, developing tour guides, developing phone scripts, developing media presentations, web-site support, logo development, brochures, posters, flyers, displays, signage, banners, mission statements development, vision statement development, and support in developing newsletters. Data will be gathered to determine which recruitment efforts are most effective. This data will be documented in the monthly site report.

V. Processes and Schedules to Make Changes to Magnet Programs

A. Strategies and Schedules to Evaluate Magnet Programs

The District will continue to implement magnet schools and programs as a student assignment strategy and to provide students with the opportunity to attend a racially and ethnically diverse school with quality programs. The District has conducted four studies: 1. Demographic Study, 2. Curriculum Audit, 3. Efficiency Audit, and 4. Magnet School Evaluation (see Attachment C: Magnet School Review) as well as a series of Community Forums. Each contributes to the processes and schedules in considering changes to magnet schools. The Demographic Study provides ongoing information on the current and projected demographics of the district and surrounding districts. This information will be part of the annual review to evaluate possible changes in magnet programs and changes in boundaries. The Curriculum Audit provides information on magnet theme, curriculum, assessment, and instructional delivery.

B. Magnet Program Evaluation Cycle

The Magnet Department will evaluate magnet programs at the district level every three years using the Comprehensive Magnet Review and the Magnet Standards Evaluation Rubric. Individual programs will be assessed annually using the Magnet Standards Evaluation Rubric. Magnet schools, with support from the Magnet Department, will complete either a 3 Year Sustainability Plan or an annual Magnet Improvement Plan using the rubric indicators and the Theme Immersion Matrix to determine specific goals. Each school will submit Monthly Magnet Reports documenting steps taken toward reaching annual goals. Each document is

described below. Magnet program evaluations are a collaborative effort between the Magnet Department, school sites and the Superintendent's Leadership Team.

The Magnet Evaluation Cycle [USP Section (II)(E)(3)(ii)] will afford magnet schools the opportunity to analyze data, set goals, plan, implement, and evaluate program effectiveness [USP Section (II)(C)(2)].

C. Cross-Departmental Evaluation

The District will create cross-departmental teams that will evaluate magnet programs on an annual basis, at the end of each school year (May or June depending on state assessments). The teams will use the Magnet Standards Evaluation Rubric and projected enrollment and application data as a tool for evaluating schools. To determine progress toward integration, the District will use data from enrollment projections using applications accepted from January through March for the next year, and compare by ethnicity the 40th day student count for the current year. Once cut scores are determined for the annual evaluation, this data will be used as a value added measure. Schools will be identified as EXCELLING, MEETS, IMPROVEMENT, or FALLS FAR BELOW the District Magnet Standards.

1. **EXCELLING**: A school is integrated and exceeded the district average in student achievement in all racial categories, and scored 90% or higher on the annual evaluation will be identified as EXCELLING and will be eligible for additional funds. They will become a Model Magnet School, and will be considered an exemplar for the district and a resource for other magnet schools.

2. **MEETS:** A school that is integrated or is integrated in the entry grade, met the basic academic criteria compared to the district average for student achievement, and scored 75% to 89% on the annual evaluation will be labeled MEETS.

3. **IMPROVEMENT**: A school is not integrated in the incoming grade, and/or scored below the district average in at least one ethnic category (for a subset to be at least 1% of the school) for student achievement, and/or scored 60% to 74% on the annual evaluation will be identified as needs IMPROVEMENT. IMPROVEMENT schools have two enrollment cycles to move to MEETS.

4. **FALLS FAR BELOW**: A school that is not integrated and is not integrated at the entry level will be identified as FALLS FAR BELOW if the program initially scores below 60% on the annual review or has been in IMPROVEMENT for two enrollment cycles. FALLS FAR BELOW schools will have one enrollment cycle to move to IMPROVEMENT. If after one enrollment cycle after being labeled FALLS FAR BELOW, the school makes progress toward integration and shows gains in at least two other areas on the Magnet Evaluation Rubric, they will move to IMPROVEMENT. If the school does

not make progress toward integration or the annual evaluation, the school will be considered for withdrawal of magnet status. A school can only fall into the FALLS FAR BELOW once in a three year cycle. If the school does not attain "MEETS" within that three year cycle, it will be considered for withdrawal of magnet status.

C. Strategies to Improve Magnet Programs

The District will use the results from the Magnet Standards Evaluation to determine what areas of the magnet program need to be improved. All schools must continuously evaluate their programs by providing professional development in the given theme and implement a comprehensive recruitment, sustainability, and marketing plan in conjunction with TUSDs Outreach Marketing and Recruitment Plan that was developed pursuant to the USP. Schools in MEETS, IMPROVEMENT or FALLS FAR BELOW categories will create a Magnet Improvement Plan that addresses the areas of deficiency; including measureable goals, action steps and time-lines. [USP Section (II)(3)(ii)] For schools labeled IMPROVEMENT and FALLS FAR BELOW, the District will work with the school to create an Improvement Plan that includes cross-departmental support. The Magnet Department will support the school by providing professional development opportunities to strengthen the magnet program, support in structuring the program to offer academic interventions, increase marketing and recruitment opportunities, and work with the school site to analyze data and make programmatic changes.

D. Instruments Used in the Magnet Review Cycle

1. Comprehensive Magnet Review

The Comprehensive Magnet Review is an instrument that gathers data in six component areas: integration, curriculum, staff retention, leadership, organizational management, and marketing/recruitment. The comprehensive review allows the district to identify trends, highlights programs that need the most support. Results will drive the ongoing magnet improvement process. A comprehensive review of magnet programs will occur every three years. Data will be analyzed and a written a report will be provided to the Leadership Team. Should any recommendations come from the three year review, the Superintendent will bring those recommendations to the Governing Board.

2. Magnet Standards Evaluation Rubric

The District and programs will use the Magnet Standards Evaluation Rubric to assess magnet programs annually. The Magnet Department in conjunction with the school site will conduct site-based professional development on the process and rubric. This instrument is aligned with Magnet Schools of America National Standards and was vetted through the Magnet Committee, magnet schools, and

District leadership. (See Attachment H: Magnet Standards Evaluation Rubric) The rubric addresses five pillars:

PILLAR 1: DIVERSITY

PILLAR 2: INNOVATIVE CURRICULUM

PILLAR 3: ACADEMIC EXCELLENCE

PILLAR 4: HIGHLY QUALIFIED INSTRUCTIONAL SYSTEMS

PILLAR 5: FAMILY AND COMMUNITY PARTNERSHIPS

Each of the PILLARS is supported by standards and indicators for success. Each standard is rated on a scale from five (highest) to zero (lowest). (See Attachment H: Magnet Standards Evaluation Rubric) This District will use data gathered from the Annual Review and Comprehensive Magnet Reviews to document magnet school's progress toward integration, ability to deliver unique and engaging curriculum, increase student achievement, and engaging families and the community.

3. The Theme Immersion Matrix

The District will support schools in analyzing the Theme Immersion Matrix to determine the level of program implementation and theme fidelity. (See Attachment D: Theme Immersion Matrix) Information from the Theme Immersion Matrix and the annual review will be used to create a Magnet Improvement Plan that bridges the discrepancies between where schools should be and where they are currently. (See Attachment E: Magnet Improvement Plan Template)

4. The Magnet Sustainability Plan

Excelling magnet schools must work with the Magnet Department to create a Sustainability Plan in lieu of a Magnet Improvement Plan and Monthly Reports. The school must engage the school community in the development of the Sustainability Plan. Recruiting a team devoted to sustaining the magnet programs will provide the necessary capacity and focus over time. The team will include site leadership and representatives from key stakeholder groups and utilize a shared decision making model. The Sustainability Plan will include the following components:

a) Primary reasons for sustaining the program

b) Include team member roles and responsibilities

c) Clear priorities

d) Reasonable and measurable goals and objectives

e) Specific timeline and actions.

Once the plan is developed, individual and collective training will be provided to help staff effectively communicate the magnet program's mission and theme to the community. The Magnet Department will ensure that staff and members and key supporters have materials, such as brochures, event flyers, and newsletters that will help communicate the program's message and successes. The school community will meet regularly to discuss the status of activities and potential challenges in achieving the sustainability goals. The information shared in the meetings can be used to adjust plans as needed to sustain the program's continued success. Sustaining a magnet program requires time and efforts by a number of dedicated individuals and organizations; therefore it is important to reward their efforts by observing milestones.

5. Magnet Improvement Plan

Schools that score MEETS, IMPROVEMENT or FALLS FAR BELOW will complete an annual Magnet Improvement Plan in collaboration with the Site Magnet Team.

A school that MEETS will continue to complete and implement an annual Magnet Improvement Plan in an effort to become an excelling program. Magnet Improvement Plans will be revised as needed. Monthly reports will be used to evaluate programs and make adjustments in order to improve the quality of services provided to students. These schools will be expected to continuously reflect and adjust their programs by providing professional development in the given theme and implement a comprehensive recruitment, sustainability, and marketing plan in conjunction with TUSD's marketing and recruitment plan. The plan must include key partnerships and how these partnerships will be garnered.

IMPROVEMENT schools will create and implement a revised Magnet Improvement Plan using the prior years' monthly reports to evaluate programs and make adjustments in order to improve the quality of services provided to students. The District will provide additional support including: Data reviews, increased marketing and recruitment opportunities, monitoring of interventions, and support in meeting the Magnet Standards. [USP(II)(E)(3)(iii)]

FALLS FAR BELOW schools will create and implement a revised Magnet Improvement Plan using the prior years' monthly reports to evaluate programs and make adjustments in order to improve the quality

of services provided to students. The District will provide additional support including: Data reviews, increased marketing and recruitment opportunities, monitoring of interventions, and support in meeting the Magnet Standards. [USP (II)(E)(3)(iii)] Schools in FALLS FAR BELOW will have priority in specialized marketing events, training and professional development, and additional support from the Magnet Department. The Magnet Department will work with the school community through public forums to garner support, increase public understanding of the magnet evaluation process, and to build community support of the improvement process.

6. Monthly Magnet Site Reports

A monthly report template was created to report on progress in meeting the goals of the Magnet Improvement Plan, (See Attachment F: Monthly Magnet Report) thus creating a process by which magnet schools can track month to month progress. (See Attachment G: Magnet Program Annual Evaluation Flow Chart). These monthly reports are submitted to the Magnet Department each month and reviewed. The data from these reports will be used to create a cumulative annual report that evaluates each magnet program.

The Magnet Department has created a multi-tiered assessment system to:

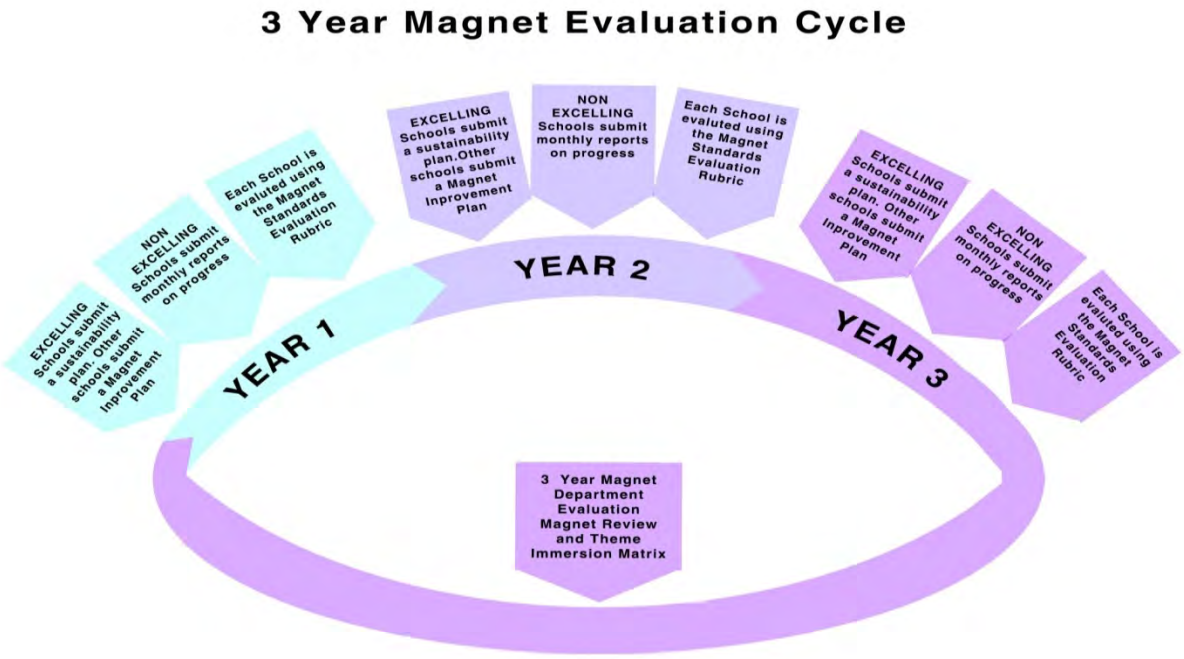
A. Inform the District and schools on progress toward increasing the number of TUSD students attending integrated magnet schools.

B. Inform the District and schools on progress toward all magnet schools meeting the definition of integration as set forth in the USP.

C. Inform the District and schools on the effectiveness of curriculum and instruction in closing the achievement gaps and providing all students with relevant and rigorous learning experiences.

D. Inform the District and schools as to the impact that outreach to families, particularly African American and Latino families, has had on the school and the students.

Below is a diagram representing the continuous evaluation cycle:



VI. Strategies and Schedules for Adding, Relocating, or Replicating Magnets

TUSD will consider how, whether, and where to add new sites, to revise themes, to replicate successful programs, and/or add new magnet themes including additional dual language programs. In consultation with magnet experts, the District has drafted a general strategy for changing magnet programs. [USP Section (II)(C)(2)] By strategically placing magnet schools in central locations (generally, most magnets fit within an 10 mile radius of the center of the District), integration is more likely to occur because students will not have to cross perceived social/economical boundaries and because travel time will be minimized for students on the outer boundaries of the District. If the District were to be divided into thirds, north to south as it was in the Post Unitary Status Plan, there are clear delineations of ethnic/racial populations with the west side being predominately Latino, the center being moderately integrated or neutral, and the east side being predominately White.

By dividing the District into quadrants (Northeast, Northwest, Southeast, Southwest) magnet program locations can be strategically identified to maximize integration opportunities. By locating magnets in key areas of the Tucson community, the District will not only integrate magnet schools, but will support the integration of all schools throughout the District. By providing a continuum of programs, students may have the option of

continuing a specific area of study or attending other magnets that best meet their interests. Innovative stand-alone programs that do not have a continuum will be used to supplement traditional magnet offerings and will be created as the District expands the magnet plan. Research indicates that robust and successful magnet program themes are typically created and developed by the school community. Although pipeline themes offer continuous and contiguous curriculum, there is a risk in assigning a theme to a school for the sake of creating a pipeline without first developing support for the theme within the school community (administration, staff, students and families). Research clearly shows that community and staff buy-in are essential for successful program implementation.

A. Processes and Schedule for Adding, Revising, or Replicating a Magnet Program

TUSD will consider sites for adding or revising a magnet program based on an assessment of four key criteria: racial/ethnic composition; academic achievement; facility condition/capacity; and geographic location [USP Section (II)(E)(3)(i)]. A cross functional team will conduct research based on these criteria and bring the findings to the Superintendents Leadership (SLT) Team for review and consideration:

1. What is the racial and ethnic composition of students residing in attendance area?

   *Consider the integrative impact within a specific magnet pipeline or within TUSD as a whole.

2. How is the school doing academically compared to other TUSD schools when comparing ethnic categories?

3. What is the site's capacity and condition?

4. What is the capacity/condition of surrounding schools to accept students who do not apply? *Consider whether the facility can support increased student enrollment and support the theme.

5. Is the location geographically feasible for students of racially/ethnically diverse backgrounds as determined by travel time?

6. Does the District have budgetary and staff capacity to sustain a new or revised magnet program?

After considering these criteria, SLT will put forth an invitation to schools to submit a Request for Proposal to become a magnet. The Request for Proposal must include, but not limited to the following:

- Research and rationale in choosing the magnet theme/pedagogy
- Data that indicates the school's potential for integration, or how the magnet will increase a TUSD students opportunity to attend an integrated school

- Plans to address cultural competency
- At least two letters of support from community partners
- Strategies to attract African American and Native American families
- Projected budget for year one as a planning year, and year two as partial implementation
- Surveys that indicate 85% of the families are in support of the magnet and the theme
- Surveys that indicate 90% of the total staff are in support of the magnet and the theme

Invitations for Requests for Proposal will released in July and will be submitted to the Magnet Department no later than January of the same school year. The proposal will be reviewed a cross-departmental team. Schools will be notified by February if the proposal was accepted so as to be included in the budgeting process. The proposal will be taken to the Governing Board for approval. If accepted, the school will spend at least one year in the planning phase.

B. Strategies and Processes for Relocating a Magnet Program

A cross-departmental team and SLT will consider the following key criteria regarding relocation of a magnet program:

1. What is the racial and ethnic composition of students residing in attendance area in area the receiving school?

   *Consider the integrative impact within a specific magnet pipeline or within TUSD as a whole.

   *If the receiving school has an attendance boundary, how will the relocation impact those students?

   *If the magnet is to have no attendance boundaries, consider where students living within the boundary would attend school? Consider the impact this would have integration of surrounding schools.

2. How is the receiving school doing academically compared to other TUSD schools when comparing ethnic categories?

3. What is the receiving site's capacity and condition?

4. What is the capacity/condition of surrounding schools to accept students who do not apply?

   *Consider whether the facility can support increased student enrollment and support the theme.

5. Is the location geographically feasible for students of racially/ethnically diverse backgrounds as determined by travel time?

6. Does the District have budget and staff capacity to sustain a relocated magnet program?

Parents and students at the identified schools will be informed of the requirements of a magnet school. The Magnet Department will conduct a survey of parents, teachers, and students to determine the level of commitment to the change. At least two community forums will be held to gather feedback before moving the idea forward to District leadership and Governing Board. A proposal will be submitted for public review and comment at least 90 days before the Comprehensive Magnet Plan is amended to include the relocated magnet program.

If a magnet school has been labeled FALLS FAR BELOW and faces a possible magnet status change, the cross-functional team will determine if the program would best serve students at another location. The cross-functional team will employ the above criteria; consult with experts, District administration, and the community to make a recommendation to the Superintendents Leadership Team. Parents and students at the identified school will be informed of the requirements of a magnet school. The Magnet Department will conduct a survey of parents, teachers, and students to determine the level of commitment to the change. At least two community forums will be conducted to gather feedback. A proposal will be submitted for public review and comment at least 30 days before the Comprehensive Magnet Plan is amended to include the relocation of the magnet program.

C. Processes and Strategies for Withdrawing Magnet Status [USP Section (II)(E)(3)(i)]

TUSD will consider withdrawing magnet status after assessing the following key criteria: racial/ethnic composition and progress toward integration; academic achievement; and progress in meeting Magnet Standards. The A cross-functional team will consider the following:

1. Has the school attracted students that contribute to the integration of in coming grades?

2. How has the school done academically for the last three enrollment cycles compared to other TUSD schools across all ethnic categories?

3. Has the school fully participated in the Magnet Improvement Process?

4. Has the school made progress toward meeting the Magnet Standards?

In 2013-14, schools were placed on a continuous plan of improvement that included either a two year enrollment cycle or a three year enrollment cycle to show progress toward integration and increase student achievement. Some schools were given two enrollment cycles and others were given three, depending upon the percentage of racial concentration. This Comprehensive Magnet Plan continues to support that process, as defined in the "Interim Plan" approved October, 2013. Starting in 2015-16, the District will implement a continuous cycle of improvement as defined by EXCELLING, MEETS, IMPROVEMENT or FALLS FAR BELOW. If after completing three enrollment cycles the school has not demonstrated progress toward integration as measured by the ethnic composition of accepted application in incoming grades, the school will be considered for elimination. A cross-departmental team and SLT will consider academic achievement and results from the annual evaluation before recommending withdrawing magnet status.

E. Assurances for Currently Enrolled Students

TUSD will ensure that, in the event that a magnet program or school is withdrawn or relocated, students currently enrolled in the magnet school or program will be permitted to remain in that school until they complete the highest grade offered by that school. [USP Section (II)(E)(1)] If or when magnet status at a site is eliminated, subject to minimum enrollment guidelines to be determined by the Governing Board, students currently enrolled in a magnet program will be provided the opportunity to complete that program to the extent possible through the highest grade in that school. Students receiving transportation will continue to receive transportation as long as they are continuously enrolled at the school.

VII. District Collaboration and Support

The District is committed to supporting magnet schools. By garnering resources from all departments across the district, Magnet schools will receive comprehensive support. The Magnet Department will work with each department to support schools, staff, and families by:

A. Collaborating with Human Resources

1. Formalize teacher and administrator recruitment, selection and retention policies to meet the unique needs of individual magnets.
2. Create a process by which professional educators choose to work in a diverse education setting.
3. Support Human Resources in finding appropriate placement for teachers who are transferring.
4. Create flexibility in hiring for non-certified or a paid internship certificate from the state.
5. Create a classification for a highly trained specialized people who can support the magnet theme.
6. Provide specialized endorsements for teachers who complete specific training requirements.
7. CTE certification/ maybe expanding the qualification for the job.
8. Additional expectations/ creating a teacher agreement attached to a job announcement/explore creating a Memorandum of Agreement.

B. Partnering with Curriculum and Instruction to:

1. Support Unit Development
    a. Scope and Sequence
    b. Alignment with District Developed Curriculum
        (1) Documentation of the units
    c. Assessment
2. Support the development of interventions
3. Support the teacher training and supplemental materials to allow for differentiated instruction.

C. **Other District Departments and Schools:** The Magnet Department will consult with all departments as well as non-magnet schools on an as-needed basis in order to provide magnet staff with high quality professional development.

VIII. Magnet Expertise and Training: District-Wide

TUSD must ensure that administrators and certificated staff in magnet schools are provided opportunities and training necessary to ensure successful implementation of the magnet [USP Section (II)(E)(4)(vi)] . Each magnet will designate a leadership team and at least one team member will participate in a required program of professional development including:

- Magnets and Student Assignment
- Purpose of Magnet Programs, Student Lottery Process
- How Magnet Programs are Evaluated
- Strategies for Culturally Responsive Pedagogy
- Magnet Theme Development for Creating Capacity
- Magnet Theme Integration
- Marketing and Recruitment
- Engaging Families and the Community In Meaningful Partnerships
- Theme Visibility
- Theme Integration
- Grant Writing
- Sustainability
- Proficiency- and Competency-Based Learning:
- Technology Integration to Meet the Needs of the Common Core
- Formative Assessment as the Key to Effective Instructional Practice
- Procurement Processes and Procedures,

- Magnet 101 (All administrators and new coordinators)

This series of professional development is focused on creating a baseline and foundation of expertise and understanding across all magnets, district-wide. From this foundational level of expertise, individual site leadership teams will be empowered to build, strengthen, and/or otherwise improve their magnet programs to meet the goals of the USP. The Magnet Director will coordinate the development, implementation, and monitoring of this training through the Magnet Department, and in conjunction with the Department of Curriculum, Instruction, and Professional Development. Resources from Magnet Schools of America and Magnet School Assistance Program (Technical Assistance) will be used to create training opportunities for all coordinators and certificated staff.

Expectations for professional development of magnet staff include:

XI. Magnet Plan of Action 2013-2014

(Approved October, 2013)

I. Specific Strategies for Adding or Replicating Magnets in 2013-14

The approach described above guided the direction and development of the following recommendations for addition, relocation, and/or replication. The new magnets proposed will be phased in as other magnets are eliminated or phased out through the evaluation process. (See Attachment D: Chart of Magnet Additions) One of the strategies for identifying potential new magnets takes into account travel time. Research shows that White students, from the north-east and south east quadrant and Latino students from the north-west and south-west quadrants are not likely to travel more than 20-30 minutes to attend a magnet school.

The primary goals of the plan are two-fold: (1) ensure that students of all races and ethnicities have the opportunity to attend an integrated school (*see* USP Section II.A.1); and (2) ensure that all magnet schools and programs achieve the definition of an integrated school as set forth in the USP (*see* USP Section II.B.2) (See above, pg. 2). Thus, the goal is not simply to increase the number of integrated magnet schools, the goal is also to increase the number of students with an opportunity to attend an integrated school. Adding or replicating magnet schools in the center of town (within a 5-8 mile radius from the center of the District) affords the greatest opportunity for the greatest number of students to attend an integrated school, with the added incentive of free transportation. For sites that are already integrated (e.g., Cragin, Dietz, Hudlow), additional seats will open for integrative transfers once attendance boundaries and/or preference areas are limited or abolished, meaning that presently integrated sites will still have the capacity to increase integration. The District intends to expand the number of students served at these school sites so more students have the opportunity to attend an integrated school.

1. Add/Replicate a Performing Arts Magnet at Cragin Elementary

Cragin was selected as a Performing Arts Magnet because of its integrated population, its location in the north-central quadrant of TUSD, and facility capacity. Being located in the north-central part of TUSD, Cragin can draw from both the west and east sides, and has potential to attract students from outside TUSD as it is located near a border with another district. In the past, the racial/ethnic make-up of Cragin has fluctuated, and Cragin's mobility is significantly higher than the TUSD average. Because magnets offer students the added incentives of free transportation and admissions priority (in cases where the school is oversubscribed), creating a new magnet at a centrally-located, integrated school is a key strategy to ensure that students of all races and ethnicities from

across TUSD have increased opportunities to attend an integrated school. Additionally, within the pipeline, Cragin's integrated population will feed into Utterback middle school to help integrate Utterback. The 2013-14 budget for this program provides for a program coordinator to work with the Magnet Department and the Fine Arts department to begin the planning process. Cragin was included in TUSD's recent federal MSAP Grant application. If TUSD receives the Grant, development and implementation will be accelerated.

2. Add/Replicate a STEM Magnet at Mansfeld Middle School

Mansfeld was selected as a Science, Technology, Engineering and Math (STEM) Magnet because it is centrally located and creating a magnet here has the potential of turning the school from "racially concentrated" to "integrated" within a matter of years. STEM programs have proven across the nation to be successful magnet themes, and replicating successful STEM practices at Mansfeld is promising. Mansfeld's location (across the street from the University of Arizona) is perfect for partnerships with the University and is easily accessible to professionals working at the University and in the downtown areas. Mansfeld was included in the 2013 MSAP Grant. The 2013-14 budget includes a coordinator and additional staff in math, science, and technology. A master schedule has been developed to provide additional team planning, both vertically and horizontally. Funding was set aside for instructional materials for the Engineering component. The Magnet Department will work with TUSD's Science Department and the staff of Race to the Top STEM Program to provide quality professional development to teachers, staff, and families. If the District receives the MSAP Grant, development and implementation will be accelerated.

3. Specific Strategies for Consideration for 2015-16 and Beyond

The following strategies are included for consideration only but, if adopted, may be initiated during SY 2013-14 in order to give adequate time to phase in programs to be in place by SY 2015-16. These strategies are, at this stage, only ideas that require more research, development, and community dialogue. These strategies will be more fully developed, eliminated, or changed in the Comprehensive Magnet Plan. (See Attachment D: Chart of Magnet Additions). The following sites scored high on the four-criteria assessment (See Section III.B.1):

North East Quadrant	**South East Quadrant**	**North West Quadrant**	**South West Quadrant**
Hudlow ES	Dietz K8	Cragin ES	

Catalina HS	Roberts Naylor K8 Santa Rita HS	Mansfeld MS Roskruge K-8	

1. **Add/Replicate an Int'l Business and Dual Language (IBDL) Studies Magnet at Catalina High School**

Catalina Magnet High is currently phasing out its former magnet strands: Aviation, Health Care and, to a lesser extent, the Terra Firma program as a magnet theme (because it was never Governing Board approved). International and Dual Language magnets have proven success in other districts and should be replicated in TUSD. Catalina was selected because of its integrated population which includes TUSD's highest concentration of refugee students (including an incredibly diverse and multilingual student population), its location in the north-central quadrant of TUSD, and facility capacity. Because magnet schools offer students the added incentives of free transportation and (potentially) admissions priority, creating a new magnet at a centrally-located, already-integrated school is a key strategy to ensure that students of all races and ethnicities from across TUSD have increased opportunities to attend an integrated school.

2. **Add/Replicate Expeditionary Learning and Dual Language at Hudlow Elementary**

Hudlow has capacity, and could serve as an integrated magnet that could eventually feed into Dietz or Roskruge and, ultimately, into Catalina's IBDL program. The District is also considering Kellond Elementary as an alternative site for this future magnet.

See Appendix N: Application of Criteria for New Magnets

3. **Add/Replicate Global Enterprise and Dual Language at Dietz K8**

Dietz K-8 could serve as a receiver for Hudlow, and a feeder into Catalina's IBDL program (see III.C.3, above). Dietz is approximately 5 miles from the center of the District (about a 16 minute drive), and approximately 11 miles from south-central Tucson (about a 23 minute drive). Dietz is at the far eastern edge of where the District would seek to place any elementary, K-8, or middle school magnets (our research shows that parents of elementary and middle school students prefer not to send their students more than 22-28 minutes away from their home location). Also, Dietz is the only non-magnet school serving grades 6-8 that has capacity to become a dual-language magnet on the eastside (within the preferred geographic area) to serve students in grades 6-8 in the Dual Language Pipeline into Catalina.

4. Add/Replicate International Business and Dual Language (IBDL) Studies at Roskruge K8

Roskruge's current status, teacher capability, and reputation as a destination bilingual magnet program, in addition to its proximity to the University of Arizona and the revitalization of the downtown area, are positive attributes that should be explored. An IBDL program at Roskruge could serve as a feeder for the IBDL program at Catalina High School. In order for this school to integrate, the school must transition to Total Magnet, employing a weighted lottery. The estimated time for this school to become integrated is six years.

5. Add/Replicate Integrated Technology at Roberts-Naylor K8

Roberts-Naylor has capacity and a strong technology infrastructure and its location, in the South East Quadrant, is a targeted area for magnet placement to maximize integration (the school is currently integrated but, at 67.4% Hispanic, is in danger of becoming Racially Concentrated by exceeding the 70% threshold). Roberts-Naylor is a prime candidate for the federal magnet grant (MSAP) 2017 grant cycle. Roberts-Naylor staff will research, design and implement a technology-driven magnet theme that meets the National Educational Technology Standards (NETS) for learning and teaching. These world-wide standards will be the framework from which Roberts-Naylor develops this unique theme. The NETS sets a standard of excellence in best practices in teaching, learning, and leading with technology in education. The advantage to using NETS includes several overarching enduring understandings:

•Improving higher-order thinking skills, such as problem solving, critical thinking, and creativity

•Preparing students for their future in a competitive global job market

•Designing student-centered, project-based, and online learning environments

•Guiding systemic change in our schools to create digital places of learning

•Inspiring digital age professional models for working, collaborating, and decision making

6. Add/Replicate Early Middle College/Medical Sciences at Santa Rita High School

The Early Middle College (EMC) model has been successful in magnets around the nation. EMC programs are five year programs, tied to a local university and/or community college, where students graduate with an Associate Degree (or equivalent credits). Students graduating from EMC programs may go directly from high school to careers in various fields, or directly into college as sophomores or juniors. Santa Rita's proximity to Pima Community College, its current Dual-Credit program, and its location on the Southeast side (approx. 20-

25 minutes by bus from Tucson's south side), are positive attributes that should be explored. An EMC program at Santa Rita could serve as a receiver for the middle school program at Dodge.

II. Strategies to Improve Magnet Programs

Magnets Schools: "MEETS"

A. Borton Magnet: Project-Based Systems Thinking

Systems Thinking offers a powerful perspective, a specialized language, and a set of tools that can be used to address the most stubborn problems in your everyday life and work. Systems Thinking is a vantage point from which you see a whole, a web of relationships, rather than focusing only on the details of any particular piece. Events are seen in the larger context of a pattern that is unfolding over time. Systems Thinking is a way of understanding reality that emphasizes the relationships among a system's parts, rather than the parts themselves.

This approach to learning is project driven with Common Core Standards embedded into the projects. Borton will work on the following indicators:

- On-going training and coaching in the effective application of systems thinking concepts, habits, and tools in classroom instruction and school improvement.
- Curriculum Documentation
- Assessment Alignment

B. Booth-Fickett- Math Science

Booth-Fickett will work on the following indicators:

- The curriculum at Booth-Fickett needs significant revision K-8
- Teachers need substantial training in unit development and theme integration
- Curriculum needs to be mapped and aligned to assessment

C. Dodge MS – Traditional Academics

Dodge is in the process of defining what it means to offer traditional teaching methodology and curriculum**.** Dodge will work on the following indicators:

- Curriculum Documentation
- Assessment Alignment
- The community will define "Traditional Academics" as part of assessing the school culture

D. Palo Verde HS – Science, Technology, Engineering, Arts, and Math (STEAM)

Palo Verde will be completing the SIG cycle in FY13-14. They will be phasing in a STEAM (Science, Technology, Engineering, Art, Math) program for freshmen in FY 15.

Magnet Schools: APPROACHES

A. Bonillas: revise and strengthen the Traditional Academics theme

- Bonillas is in need of a total revision starting with theme, curriculum, school culture, professional development and family engagement. In SY 2014-15 Bonillas curriculum will be aligned with Common Core with traditional instructional delivery, and teachers will receive targeted professional development centered around:
- Training in systematic reading methodology including screeners, assessments, and benchmarks
- Implement curriculum aligned with Common Core (Open Court, Daily 5/Café, Envisions, Foss)
- Training for **Character Counts**
- To impact school culture, the school community will define "Traditional Academics"

Bonillas will revise its theme, curriculum, school culture, professional development and family engagement. Traditional Academics is a theme that speaks to a highly defined and structured school culture, curriculum, and pedagogy. Theme visibility through school culture is the foundation for Traditional Academics. In the era of project-based learning and problem-based learning, Traditional Academics offers a unique pedagogy that has proven successful at other District magnets. Funding has been allocated for a Magnet Coordinator who will coordinate: Recruitment and Marketing; Curriculum Alignment and Documentation; Theme Integration; Assessment Alignment; and Professional Development. The school magnet team will visit two traditional magnet-themed schools in Phoenix: Benjamin Franklin Elementary School in Mesa, and Magnet Traditional School in Phoenix. The revised program would offer students a Traditional Academic program. This program would offer a solid foundation of fundamental and higher level thinking skills primarily through direct

instruction. The Language Arts Curriculum would utilize a phonics-based reading program. The school would also explore the use of

Envisions Math focusing on basic skills and higher order thinking, and will focus on scientific method using FOSS kits. Bonillas is committed to providing a safe, structured learning environment where expectations for academic success are high and pride is evident. The program would also emphasize the development of respect for others and personal responsibility. Bonillas students would continue to follow a uniform dress code to help in maintaining an orderly environment, free from distractions. The improvements to this magnet align with the successful theme at Dodge, and would serve as a feeder into Dodge within the Traditional Academics pipeline.

B. Drachman Montessori: increase scope of program

Drachman will improve the professional development opportunities for all staff. By the end of the 2013-14 school year, at least one teacher will receive Montessori Certification. They will increase recruitment and marketing efforts. Teachers in 2014-15 will have access to additional training via on-line and in partnership with local Montessori schools. Drachman will return to a pre-K- 5 configuration in 2014-15.

C. Holladay Fine and Performing Arts: increase scope of program

In the past, Holladay has depended upon the after-school and sports programs to attract students. Instead, Holladay will begin to focus on integration of Fine and Performing Arts into the classroom curriculum. Holladay will participate in a strategic recruitment effort with the support of the Magnet Department.

D. Tully: develop a STEM theme

Tully has significant potential to achieve Integration and to improve student achievement if resources are dedicated to revising the program to STEM. Magnet staff, and external consultant(s), will work with Tully to create curriculum and provide professional development resources. The Magnet Department will support Tully in seeking and forming community partnerships. Funding has been allocated for a Magnet Coordinator who will coordinate: Curriculum Development; Curriculum Alignment and Documentation; Theme Integration; Assessment Alignment; and Professional Development.

E. Roskruge K8: Dual Language

Roskruge's current status, teacher capability, and reputation as a destination bilingual magnet program, in addition to its proximity to the University of Arizona and the revitalization of the downtown area, are positive attributes that should be explored.

F. Safford K-8: International Baccalaureate Training/Programme of Inquiry refinement

Safford K-8 staff will received training through International Baccalaureate World Schools whereby every teacher will complete at least two levels of training. The MYP will add a physical modality course option to comply with IB requirements. The staff will work with local consultants to refine the Programme of Inquiry and develop rubrics to assess student work. Safford K-8 will develop a recruitment plan that includes measureable goals and strategies.

G. Cholla: add IB Middle Years Program (MYP)

This improvement is necessary because of the need to complete the International Baccalaureate pipeline. Currently, Cholla offers an International Baccalaureate program for students in grades 11 and 12. The addition of the 9th and 10th grade MYP creates a complete K-12 continuum, starting with Robison's Primary Years Programme (K-5), Safford's Primary Years and Middle Years Program (K-8) and continuing with grades 9 – 12 at Cholla. . The budget for the 2014-15 year provides for coordinators for the MYP and DP, for additional staff for specialized IB coursework, funding for student assessments, and funding for professional development.

H. Tucson High: revise and enhance Performing Arts Curriculum

Tucson High will be revising and enhancing the Performing Arts Curriculum so that magnet students received continuous and unique coursework that will prepare them for college-level performing arts classes. This course work could include performance admission criteria for advanced magnet coursework.

Magnet Schools: IMPROVEMENT 2013-14 (Year One)

A. Carrillo: New Theme, Communication Arts

Carrillo will be researching the theme of Communication Arts. Staff will attend the annual Magnet Schools of America to network and visit communication arts magnet schools. Budgetary considerations for 2014-15 includes increased technology and communication arts equipment.

B. Davis: Recruitment and marketing

Davis has a well established curriculum and extensive community support. Davis, in conjunction with the Magnet Department, will create an extensive two year recruitment and marketing plan.

C. Ochoa:

Improve the Reggio Emilia-Inspired Theme through training, curriculum, and outreach. Staff will continue to be trained in the theme. Ochoa will refine and document curriculum. Staff will work with

consultants to develop an assessment process to document student work and communicate student success with parents and community members. Ochoa will develop a recruitment plan that includes measurable goals and strategies.

D. Robison: International Baccalaureate Training/ Programme of Inquiry refinement

Robison staff will received training through International Baccalaureate World Schools whereby every teacher will complete at least two levels of training. The staff will work with local consultants to refine the Programme of Inquiry and develop rubrics to assess student work. Robison will develop a recruitment plan that includes measureable goals and strategies.

E. Utterback: Improve the Fine and Performing Arts theme

Utterback Fine and Performing Arts (revision). includes funding for a coordinator, specialized staff, professional development, and instructional materials to be used as part of the digital arts coursework being developed. Much work needs to be done to revise this magnet including creating strong community partnerships, stabilizing the staff, and improvements/repairs to the facility.

F. Tucson High: Revise the Science theme to "Natural Sciences"

Tucson High's Science Department will revision the Science Strand to reflect a "Natural Science" focus that utilizes curriculum unique to this school. Palo Verde would develop its science strand around engineering sciences. This would eliminate duplicate science themes (Tucson High and Palo Verde). Funding has been allocated for a Magnet Coordinator who will coordinate: Curriculum Alignment and Documentation; Theme Integration; and Assessment Alignment.

G. Pueblo High: Revise Communication Arts

Pueblo High will revise the Communication Arts magnet theme to include course work that in continuous and contiguous. As new coursework is developed, magnet students will be tracked to this coursework and teachers will be trained in coursework content. The idea is if a key teacher(s) should leave, the programs would continue. Pueblo will create a two year comprehensive marketing and recruitment plan.

Eliminating Magnet Programs/Themes

The following magnet schools were approved for elimination in October of 2014.

- Tucson High School (Math and Technology Strand)

III. Processes and Schedules to Make Changes

Attendance Boundaries

TUSD must determine if each magnet school, or school with a magnet program, shall have an attendance boundary. Each magnet will fall into one of three categories: Total School Magnet (no boundary), Total School Magnet with a Preference Area (limited neighborhood boundary), or Magnet Program (neighborhood boundary). (See above, Section II.A.1) The District will conduct a boundary review in 2014. Below are the recommendations:

Total School Magnet (no attendance boundary)

- Cragin ES
- Drachman ES (K8)
- Dodge MS
- Hudlow ES
- Safford K8
- Roskruge K8
- Mansfeld MS

Total School Magnet with Neighborhood Preference Area

- Bonillas ES
- Borton ES
- Holladay ES
- Ochoa ES
- Tully ES
- Robison ES
- Davis
- Booth-Fickett K8

- Utterback MS
- *Roberts Naylor K8
- *Dietz K8

Magnet Program (neighborhood boundary)

- *Santa Rita HS
- Tucson High Fine and Performing Arts
- Tucson High Natural Science
- Palo Verde HS
- Cholla HS

IV. 2013-14 Process and Schedule for Implementing Family Engagement Strategies

TUSD must develop a process and schedule for including strategies to specifically engage African American and Latino families. Magnet schools will be expected to continuously rejuvenate their programs by providing opportunities for families to be engaged in the given theme. Each school will implement a comprehensive recruitment, sustainability, and marketing plan in conjunction with the District's marketing and recruitment plan to be developed pursuant to the USP. The Magnet Department will facilitate three city-wide events: ***Celebrate Magnet Schools*** show cases magnet programs at two of the city's largest shopping malls (in partnership with Donors Choose), ***Magnet Mania School Choice Expo*** is a magnet fair, and ***Festival of Books*** where magnet schools are showcased. At each event, students will perform, projects will be exhibited, and multi-media presentations will highlight school themes. Individual schools will participate in city-wide events, each showcasing for theme visibility and recruitment. The Magnet Department will conduct walk-through evaluations focusing on theme implementation and integration into curriculum, quality of instruction, and school culture/environment.

Recruitment is a key component of the Annual Evaluation. By August 1, 2013, each magnet program will designate a leadership team. Teams will reflect on past recruitment efforts, best practices utilized at other magnets in TUSD and in other districts. By August 1, 2013, in conjunction with Title I School-wide and Targeted Assistance Plans, magnet schools will create at least one measureable Family Engagement goal which must include specifically engaging African American families and Latino Families, including the families of English Language learner ("ELL") students, including:

- at least three strategies to achieve the goal;
- an action plan
- timeline for implementation.

By January of 2014, select magnet schools will receive training on APTT (Action Parent Teacher Team), a research-based systematic parent engagement program developed by West Ed.

By March of 2014, all teachers will pilot APPT during Spring Parent Teacher Conferences. A survey of parents and teachers will be conducted to determine the feasibility of full program implementation for SY 2014-15.

The District Magnet Department will collaborate with district departments and will use local and national resources to market and recruit students for magnet schools. Strategies to achieve this include:

- Public Service Announcements
- Family Centers
- Community Events
- Participation in local, state, and national organizations and boards
- Public speaking (businesses, organizations, governmental agencies)
- Supporting schools in garnering organizational partnerships
- Creation of magnet theme-specific brochures
- Development of an Annual Magnet Fair
- Planning for Magnet School Site Visits
- Formation of DVDs about Magnets in the District
- Establishment of a Speakers Bureau (this strategy includes identifying TUSD “Ambassadors” to present TUSD’s magnet vision and magnet plan to community groups, civic organizations, and at community events)

V. 2013-14 Process and Schedule for Identifying Goals to Further Integration

TUSD must develop a process and schedule for identifying goals for further integration of magnets. The student assignment goal for all magnet schools and programs shall be to achieve the definition of an integrated school. (See USP Section (II)(E)(2))

The five pillars defined in the TUSD Standards work together to strengthen magnet programs. A strong magnet program will further integration by attracting a diverse population. Based on the Magnet Standard Evaluation, magnet schools will identify specific and measureable goals the will use the data collected from 2012-2013 magnet evaluation or for the first year of implementation as a baseline for each of the following components:

A. Integration

B. Curriculum and Assessment

C. Professional Development

D. Key Personnel

E. Leadership

F. Marketing and Recruitment

G. Stable and Successful Staff

H. Family Engagement

For each goal, there will be at least three strategies to meet the goal. For each strategy, there will be an action plan and timeline. These plans are currently under development. The Magnet Department is working with Title I to create one plan for both programs, with magnets being part of the required reform strategy. Plans will be completed by October 1. Magnet Monthly reports will be reviewed by the Magnet Department and feedback will be given to the schools.

X. Preliminary Magnet Plan of Action 2014-2015

A. This section is intended to be an addendum to the 2013-14 Magnet Plan (Section IX). This is a preliminary Action Plan. The following information needs to be analyzed before the plan can be completed:

1. **District Initiated Efficiency Audit**
2. **Annual Review of Magnets**
3. **Boundary Committee Recommendations**
4. **Results from Arizona Instrument to Measure Standards**
5. **Results from Stanford 10**
6. **Results from Community Forums**
7. **District Five Year Strategic Plan**

B. Specific Strategies for Adding, Relocating or Replicating Magnets in 2013-14

Tucson Unified School District will not be adding, relocating or replicating any programs for the 2014-15 schools year. Two programs identified in 2013-14 Magnet Action Plan, Cragin Performing Arts and Mansfeld Middle STEM Magnet will continue as magnets and will move into year one of full implementation in 2014-15. The 2013-14 Magnet Plan included Dietz K-8 and Kellond as planning year 2014-15. This decision has been put on hold in order to align with the Strategies and Process for Adding New Magnets (section VI). A cross-departmental team will conduct the necessary research to inform SLT. SLT will solicit Requests for Proposals in July, given budget and programmatic capacity.

C. Strategies to Improve Magnet Programs

1. Preliminary Programmatic Evaluation

When comparing projected enrollment plus applications accepted, to the 40th day of 2013-14, some schools saw substantial progress toward integration. If schools made gains, they are moving closer to integration as defined by the USP. If school had net losses, they moved further away from integration. Looking at Kindergarten entry, the average percentage points moving closer to integration was 6.3%. Drachman saw the most percentage points moving toward integration (20%), and the entry grade is integrated. Holladay saw the least (-12%). Looking at entry level for middle schools, the average was a net loss (.8%). The school that saw the most gain was Mansfeld (7%). Two schools, Utterback and Safford, both had a net loss (6% each). High schools saw a gain of 6% with Palo Verde making the most gains (17%) and Tucson High making the least gains (3%).

Preliminary school labels have been determined concerning placement in the improvement process. Two key factors were used : 1. The percentage of one ethnicity over 70% 2. Progress made toward meeting the integration threshold. The information and chart below details current data concerning integration and progress toward integration. (See Attachment I: Preliminary Magnet Evaluation Findings)

How to Read The Chart- The top line of each school is the projected enrollment including magnet applications received through March, 2014, disaggregated by ethnicity. The second line of each school is the 40th day enrollment for the current year, disaggregated by ethnicity. This table is comparing incoming students with current students. In the far right hand column indicates if the incoming grade is integrated, and did the school make progress toward meeting the definition of integration. Schools that are integrated are green, schools that made significant progress are yellow, and schools that experienced significant losses are in pink.

	W	AA	H	NA	AS	MR	
Borton	34	6	53				YES
40TH DAY 2014 GR K	30		52		0	11	PROGRESS
Bonillas	19	5	72	0	0		NO
40TH DAY 2014 GR K	15		67	0	0		NO PROGRESS
Carrillo	17	5	76		0	0	NO
40TH DAY 2014 GR K		6	89		0	0	PROGRESS
Cragin	27	8	59		0		YES
40TH DAY 2014 GR K	27	5	61	0		7	NEUTRAL
Davis	23	0	72	0	0	5	NO
40TH DAY 2014 GR K	13		83	0	0		PROGRESS
Drachman	28	6	64	0	0		YES
40TH DAY 2014 GR K		9	84	0	0		PROGRESS
Holladay	0	6	88	6	0	0	NO
40TH DAY 2014 GR K	0	18	76		0	0	NO PROGRESS
Ochoa	11	0	78	6	0	6	NO
40TH DAY 2014 GR K	0.9	0	81		0	0	PROGRESS
Robison	10	5	78				NO
40TH DAY 2014 GR K			84	0	0.3	0	PROGRESS
Tully	13	8	75		0	0	NO
40TH DAY 2014 GR K	11		73		0.2		NO PROGRESS
Dodge	26	5	59			6	YES
40TH DAY 2014 GR 6	25		63				NEUTRAL
Mansfeld	15		75				NO
40th DAY 2014 GR 6	6		82				PROGRESS
Utterback	5		83	6			NO
40TH DAY 2014 GR 6	6	9	77		0		NO PROGRESS
Roskruge K	13	0	71	10	0	6	NO
40TH DAY 2014 GR K		0	88	8			PROGRESS
Roskruge 6	8		83	5		0	NO
40TH DAY 2014 GR 6			87	6			PROGRESS
Safford K			88		0	0	NO
40TH DAY 2014 GR K			77				NO PROGRESS
Safford 6	6	6	80	7			NO
40TH DAY 2014 GR 6	7		74	13	0	0	NO PROGRESS
Booth K	29	5	55			7	YES

40TH DAY GR K	21	12	59			NEUTRAL
Booth 6	30	7	52		5	YES
40TH DAY GR 6	27		53		6	NEUTRAL
Palo Verde	31	8	50		5	YES
40TH DAY FRESHMEN	22	13	67		9	PROGRESS
Tucson High	14	6	73			NO
40TH DAY FRESHMEN	43	22	76			PROGRESS
Pueblo	5		87	5		NO
40TH DAY FRESHMEN			91			PROGRESS
Cholla	10		78	7		NO
40TH DAY FRESHMEN	7		78	8		NO PROGRESS

Processes and Schedules to Make Changes

A. In 2014-15 Drachman will phase out the 6th grade and return to a K-5. District leadership and school administration felt that Drachman could not offer a full range of electives for middle school students.

B. In 2014-15 Carrillo will explore a Communication Arts theme. District leadership does not support a Museum Magnet theme.

C. Pueblo will explore revising the theme to Dual Language

D. Changes in boundaries are pending. See Magnet Committee recommendations.

E. Changes in magnet school attendance area (preference, no preference area) are pending.

F. See Attachment I: Preliminary Magnet Evaluation Findings. This attachment describes preliminary school labels. These labels are based on the ethnic percentage of students at entry level grades compared to the 40th day enrollment for the current year. The following is a summary for the table:

EXCELLING- This is a new category designed to create exemplar programs within the district. Depending on student achievement scores, Dodge would be an EXCELLING school.

MEETS- Three schools moved into this category: Cragin, Drachman, and Tucson High Science. Drachman saw the most improvement, moving from "IMPROVEMENT". Borton, Booth-Fickett and Palo Verde maintained their label from 2013-14.

IMPROVEMENT- Seven schools moved from "APPROACHES" (a label used in 2013-14 Magnet Plan) to "IMPROVEMENT". Tucson High Fine Arts, Tully, Holladay, Safford, Bonillas and Cholla did not have enough progress to move to "MEETS". Two schools saw gains above the average for magnet schools and therefore maintained their "IMPROVEMENT" label: Roskruge and Davis. Cholla saw a significant increase in applications and was given a second year in "IMPROVEMENT". This was Mansfeld's first year accepting magnet applications. Although they saw gains, it was not enough to move them to MEETS.

FALLS FAR BELOW- These schools did not make large enough gains to maintain "IMPROVEMENT". These schools will be notified that they have an Elimination Warning. Pueblo, Ochoa, Robison, and Utterback have one enrollment cycle to meet the criteria for incoming grades.

Magnet Themes-

A. Program Pipelines will remain the same as defined in the Magnet Plan.
B. Roskruge will return to a Dual Language School

Process and Schedule for Identifying Goals to Further Integration

TUSD must develop a process and schedule for identifying goals for further integration of magnets. The student assignment goal for all magnet schools and programs shall be to achieve the definition of an integrated school. (see USP Section(II)(E)(2)

The five pillars defined in the Magnet Standards work together to strengthen magnet programs. A strong magnet program will further integration by attracting a diverse population. Based on the Magnet Standard Evaluation, magnet schools will identify specific and measureable goals the will use the data collected from 2012-2013 magnet evaluation or for the first year of implementation as a baseline for each of the following components:

A. Integration
B. Curriculum and Assessment
C. Professional Development
D. Key Personnel
E. Leadership
F. Marketing and Recruitment
G. Stable and Successful Staff
H. Family Engagement

For each goal, there will be at least three strategies to meet the goal. For each strategy, there will be an action plan and timeline. These plans are currently under development. The Magnet Department is working with Title I to create one plan for both programs, with magnets being part of the required reform strategy. Plans will be completed by October 1. Magnet Monthly reports will be reviewed by the Magnet Department and feedback will be given to the schools.

Magnet School Strategies for Integration

1. **Consider changing boundaries to improve integration. The Magnet Committee recommends the following:**

Total School Magnet (no attendance boundary)

- Dodge MS

Total School Magnet with Neighborhood Preference Area

- Bonillas ES
- Safford K8
- Borton ES
- Holladay ES
- Ochoa ES
- Tully ES

- Robison ES
- Davis
- Booth-Fickett K8
- Utterback MS
- Roskruge K8
- Mansfeld MS- With Mansfeld being a new magnet, the Magnet Committee recommends
- Cragin ES

* Drachman ES (K8) The Magnet Committee recommends the boundary committee consider not pair/clustering Drachman and Carrillo

ATTACHMENT B: SUMMARY OF 2011 MAGNET STUDY FINDINGS

General District and Site-Level Findings

1. Lack of district-level understanding regarding magnets (referring to magnet schools and programs).
2. Lack of site-level understanding of the Post-Unitary Status Plan (PUSP) enrollment process (especially school groupings by areas A, B, and C), and how the process effects transportation and recruitment.
3. Lack of understanding that magnets should be attractive to neighborhood/non-neighborhood families.
4. Lack of central office consideration and support, notably the absence of a single coordinator/director.
5. Lack of central office-supported marketing and recruitment to help schools with diversity issues.
6. Lack of focus on enrollment/diversity goals; diversity not reflected in many school enrollments.
7. Lack of a policy or process for creating new magnets or significantly revising existing magnets.
8. Lack of attention to magnet pipeline schools when creating new magnet schools/programs.
9. Lack of district-level processes for monitoring magnets' student enrollments or withdrawals
10. Lack of district-level processes for monitoring student achievement at a magnet school program.
11. Lack of appropriate/attractive signage clearly reflecting the theme and scope of the school's theme
12. Lack of professional development that is directly related to a school's magnet theme.
13. Lack of professional development in recent years related to cultural literacy.
14. Because neighborhood students are not required to submit a magnet application for program-within-a-school magnets, reviewers cannot appropriately ascertain magnet diversity, student achievement, or per student costs.
15. Issues with transportation are especially difficult for many schools, taking hours of staff time and resulting in students dropping from programs they had been attending for several weeks.
16. Magnet funding allocations vary significantly; desegregation funds used by schools in a variety of ways.

General Parent and Community-Level Findings

17. Community at large is unaware of the high quality and variety of the magnet programs offered in TUSD.
18. The open enrollment and magnet enrollment processes (including applications) are confusing to parents.
19. The magnet application is confusing; the application process makes it difficult for some parents to apply.
20. Parents equate magnets to GATE programs or schools for smarter students; lack of clear definition.
21. The "Catalog of Schools" does not feature magnets as a group, causing parents to have to hunt for magnets they are interested in. The catalog makes magnets sound like any other district school.
22. Parents available for interviews appeared to be committed to the magnet program at the school.

Specific Site-Level Findings and TUSD's Responsive Strategies

School	2011 Finding	Responsive Strategy
1. **Borton ES**	Inconsistent implementation, academically weak (Internal review did not have this conclusion), Curriculum not documented.	Magnet Director will work with staff to strengthen implementation through professional development, classroom observations, and data analyses. By School Year (SY) 2013-14, curriculum will be developed, taught and reflected.
2. **Bonillas ES**	The Basic Curriculum Magnet at Bonillas was notable. Strong commitment to theme (although the review committee did not feel that back to basics is a theme). Internal review indicates a lack of curriculum congruency in math and science. In-house training of Open Court has diminished with no on-going professional development.	By SY 2013-14, Bonillas will revision their theme and align curriculum with Common Core. Teachers will receive targeted professional development centered around: "Reading First" model of instructional delivery to include LTrS training; training in up-dated "Open Court" implementation; creating an instructional committee to explore Saxon Math; and creating an instructional committee to research and locate a traditional science adoption aligned with Common Core. Strengthen/Build "No Excuses University" and defined Early College Prep.
3. **Dodge ES**	Dodge is a successful magnet program, but the review indicates that Back to Basics is not a theme. What makes Dodge successful is the strict level of application of traditional teaching methodology. Dodge needs a magnet coordinator.	In SY 2013-14, the Dodge community will explore "KIPP" as a possible programmatic framework. A Magnet Coordinator position has been budgeted.
4. **Drachman ES**	Teachers at Drachman need to be trained in Montessori methodology and how to use Montessori materials. Magnet Coordinator needed.	Funding has been allocated for: teachers to attend training (registration, travel), a Magnet Coordinator position, and substitute for classroom coverage for training during the contract day.
5. **Ochoa ES**	Ochoa has professional development related to theme. Ochoa is doing an impressive job of developing their curriculum. Teachers were observed using theme related strategies. Internal review indicates a lack of congruency in implementation across the grades.	Central magnet staff will work with the staff at Ochoa to document the curriculum and provide consistent professional development across all grades. Magnet staff will conduct instructional and theme related walk-through observations.
6. Holladay ES	Holladay should be commended for adding K-2 program. Magnet Coordinator needed.	A staff member has been designated as Magnet Coordinator. Magnet staff will work with Holladay to create integrated instructional units centered around the theme. Holladay will develop a recruitment plan that includes garnering community partnerships.

School	2011 Finding	Responsive Strategy
7. **Carrillo ES**	Carrillo is the only elementary with dual programs to prepare students for two different magnet continuums. Carrillo's science curriculum is not unique- there is not a documented science curriculum. Carrillo should work with Utterback to determine how to strengthen the art curriculum. Internal review indicates there is no technology curriculum, science curriculum is not unique or continuous and none of the themes are integrated with each other or core content areas.	Carrillo will have a Fine Arts teacher and a Music teacher to provide coursework for SY 2013-14. Carrillo's magnet will likely be eliminated in SY 2013-14.
8. Davis ES	School signage and classroom materials indicated dual language not immersion. The school should be marketed as a "Spanish Immersion" if that is what they are doing. Magnet Coordinator needed.	Funding for SY 2013-14 has been allocated for specialized staff to support the theme. Davis' magnet status will be eliminated in SY 2013-14.
9. Robison ES	Well implemented. Classroom strategies observed The school is very involved in professional development. They have potential of being a successful magnet. District must commit to continuing funding the program.	Robison received IB authorization in July of 2012. Funding as been allocated to continue the program.
10. Tully ES	At the time of the external review, Tully had claimed OMA as a magnet theme. The external evaluation indicates that OMA is not unique and therefore can be a magnet theme. Tully needs a Magnet Coordinator.	In SY 2013-14, Tully will revision the magnet and implement STEM theme. Magnet staff will work with Tully to create curriculum and provide professional development resources. The Magnet Office will support Tully in seeking and forming community partnerships. Funding has been allocated for a Magnet Coordinator.
11. **Utterback MS**	The art teachers have done a good job of embedding academic standards into the curriculum, but the core subject areas have not embedded the arts. Reduce the number of schools feeding to Utterback- give neighborhood students options other than attending an arts magnet. Internal review indicates that not all arts teachers are experts or highly qualified.	Magnet staff will work with Utterback to integrate curriculum in content areas. Utterback is under consideration for elimination in SY 2014-15 if new boundaries will not enhance integration. If Utterback's magnet status is eliminated, consideration will be made to relocate the program to central location.

School	2011 Finding	Responsive Strategy
12. Booth-Fickett K-8	The curriculum at Booth-Fickett needs to be significantly revised. There was no evidence of any specialized math or science curriculum in the elementary grades. The curriculum in the elementary is not unique and not taught by experts. At the middle school, students can participate in a "Habitat" course or "Exploring Engineering". However, there are no specialized math/science teachers or continuity or congruency in the curriculum. Needs a Magnet Coordinator.	By SY 2013-14, Magnet staff will support the development of a continuous and congruent curriculum K-8 that is integrated and aligned with Common Core. Booth-Fickett staff will explore "Project Lead The Way" and "Gateway" in order to provide curricular framework. Funding is allocated for a Magnet Coordinator. Magnet staff will work with TUSD and University of Arizona in developing specialized math/science teachers.
13. Roskruge K-8	The magnet theme is only in grades 6-8, yet Roskruge is a K-8 school. The school should become a total school magnet. The district needs to get wireless access to students.	In SY 2013-14, funding was allocated for a Magnet Coordinator. Funding was set aside for support staff to implement the theme. Roskruge's magnet status will be eliminated in SY 2104-15.
14. Safford K-8	The IB MYP Program is an internationally recognized quality program and has the capacity to make a significant difference at Safford. TUSD must commit to continue to fund them after grant funding ceases.	. Safford received IB authorization (MYP) in July of 2013. Funding has been allocated to continue the program.
15. Tucson High – Fine Arts Strand	Courses within the Fine Arts strand progress from beginning to basic to advanced and are taught by expert teachers. Tucson High needs to define what it means to be a "Fine Arts" magnet student as compared to a student who is taking fine arts coursework.	Tucson High will document a contiguous and congruent curriculum for magnet students that are unique to specific programs.
16. Tucson High – Math Strand	While there were numerous math and science classes that are unique, there is no scope and sequence. THMS needs to define what it means to be a "Math/Science" magnet student. Endorsed magnet plans need to be finalized and communicated to parents and students.	For SY 2013-14, the magnet science curriculum will be revised to reflect a unique "Life Science" focus. The math magnet will be eliminated in SY 2014-15. Tucson High Magnet staff will develop a comprehensive magnet plan to share with the community by May of 2014.
17. Pueblo	College prep is not a theme. Communication Arts program at Pueblo is a strong magnet program. Teachers have worked hard to integrate core curriculum standards into the coursework. The coursework is not sequenced or congruent.	Funding has been allocated for SY 2013-14 to fund the Communication Arts coursework. Pueblo's magnet status will be eliminated in SY 2014-15.
18. Palo Verde HS	Palo Verde has only one theme recognized by the governing board which is Engineering Technology.	Palo Verde has revised their theme to STEAM (Science, Technology, Engineering, Art, Math). The "Art" in STEAM will centered around engineering arts and must be unique to Palo Verde. The Magnet Office will support Palo Verde in developing the curriculum.

School	2011 Finding	Responsive Strategy
19. Catalina HS	The district should consider moving the JTED Certified Nursing Assistant program back to Catalina. It should also support adding the Emergency Medical Technician program to the Health Care Program and an Air Traffic Controller sequence to the Aviation Aerospace Program. It is difficult to implement, market, and recruit for programs with only one teacher in each program. Funding is needed to ensure adequate professional development for teachers in the two career related programs as well as for the Terra Firma (College Prep) program teachers. Like the traditional magnets at Bonillas and Dodge, Catalina's College Prep program is highly regarded by parents and students as a successful program. However, the team that visited this magnet believes that all high schools should be offering a college prep curriculum and support for students to be successful in higher education.	During SY 2013-14, the Catalina community will explore magnet themes. It is recommended that International Business and Dual Language be considered.
20. **Cholla HS**	The schools high quality and highly successful IB Diploma program at grades 11 and 12 should be expanded to include IB 9-10 Middle Year. Funding for required IB training is necessary to ensure students success in the program and on IB exams. The Law and Public Safety Program needs strengthening. The once highly regarded program with its courtroom and law library should be revamped and updated with the intent of applying for recently introduced IB Career/Tech Certification program.	Planning and funding has been allocated to ensure the continuance of IB Diploma and the development and implementation of IB Middle Years. Cholla will be making an application for MYP authorization in the Spring of 2014.

TUSD

CODE: 34701
UNIT: Teacher
FLSA: Exempt

CLASSIFICATION
Magnet Site Coordinator (Site Based)

SUMMARY
This position coordinates the activities and services to facilitate the Magnet Program at the assigned site. The Magnet Coordinator will conduct professional development related to both content and pedagogy of magnet theme, collect data, and work with appropriate personnel to provide Magnet site with relevant and up-to-date information regarding Magnet School Information.

MINIMUM REQUIREMENTS
Appropriate Arizona Teaching Certificate

Structured English Immersion (SEI) requirement

Arizona IVP Fingerprint Clearance Card

Experience Developing Thematic Units

Experience providing Professional Development

Five (5) years teaching experience

PREFERRED QUALIFICATIONS
Experience with Magnet School Plan

Knowledge of Magnet Evaluation System

Knowledge of Magnet School Standards and Measures as related to school themes

Knowledge of Unitary Status Plans

ADDITIONAL REQUIREMENTS AFTER HIRE
Proof of immunity to rubeola (measles) and rubella (German measles), or proof of MMR immunization.

ESSENTIAL FUNCTIONS
THE LIST OF ESSENTIAL FUNCTIONS IS NOT EXHAUSTIVE AND MAY BE SUPPLEMENTED.

Coordinates with appropriate personnel to develop, manage, and monitor the magnet curriculum at assigned site.

Coordinates with sites to develop and implement data collection models and tools as related to magnet theme to capture benchmark student achievement data

Provides instructional feedback to teachers and administration regarding magnet themes.

Provide all documentation of magnet activities

Conducts outreach, recruitment, and marketing to ensure students, parents, and public are aware of Magnet School programs.

Desegregates data including enrollment, grade, AIMS (or other state mandated assessments), ATI, DIBLES, and unit assessment to appropriate personnel.

Conducts professional development as related to both content and pedagogy of magnet theme.

In collaboration with appropriate TUSD personnel collaborates and researches outside resources for professional development

Uses Mohave for course designation.

Creates collaborative relationships with outside resources including but not limited to local and national businesses, charitable and professional resources, and community resources.

Works with appropriate district personnel to provide resources for teachers

Attends all district training required for teachers.

Coordinates with site principals and teachers to access, analyze, and collect relevant student achievement data to improve instruction across the curriculum.

Coordinates with site level staff to identify students who are not making adequate academic progress.

Using current research creates informs the district of the best methods and policies that will ensure an equitable educational experience for Magnet School students.

Adheres to all state magnet school laws, regulations and guidelines. Serves as a resource to TUSD personnel regarding magnet school regulations, guidelines, governing board policies, and specialist rulings.

Assists TUSD personnel with planning and monitoring professional development related to magnet school curriculum implementation. Researches magnet school curriculum practices and applies knowledge of training best practices and instructional design principals.

Attends mandatory trainings from the Magnet office including webinars.

Coordinates federal, state, and district report preparation and data collection

MARGINAL FUNCTIONS
Order classroom supplies and instructional materials.

MENTAL TASKS
Communicates – verbally and in writing. Reads. Analyze and evaluate student progress and course curriculum. Develop, implement and evaluate plans. Perform functions from written and oral instructions and from observing and listening to others. Evaluate written materials to include written assignments and tests.

PHYSICAL TASKS
Work involves the performance of duties where physical exertion is not normally required to perform all aspects of the job. Assistance is available as required to perform physically demanding tasks. Work involves sitting for extended periods of time, requires moving from one location to another, reaching, stooping, bending, and holding and grasping objects. Visual weakness must not prohibit the performance of assigned duties. Verbal communicative ability may be required of public contact positions.

EQUIPMENT, AIDS, TOOLS, MATERIALS
Uses blackboard, whiteboard, easel, bulletin board, chalk, markers, and office or instructional equipment, such as telephones, fax-machines, computers and associated technology. May use hand tools and operate power-driven machinery.

WORKING CONDITIONS
Indoor - classroom environment. Contact with the public, employees, children and parents.

CONTROL, SUPERVISION
None

TUSD

CODE: 16250
UNIT: ADM
GRADE: 5-C
FLSA: Exempt

CLASSIFICATION TITLE
Director of Magnet School Programs

SUMMARY
The Director of Magnet School Programs will be responsible for working with site and central staff on magnet curricula, curriculum integration, district-wide program continuity, program evaluation, marketing and recruitment, parent/community involvement, and developing community and business partnerships. Additionally, the Director will be responsible for developing and monitoring magnet policies and procedures, conducting all necessary professional development, grant writing and being a liaison to the TUSD community.

MINIMUM REQUIREMENTS
Master's Degree in Education, Educational Administration, K-12 Curriculum & Instruction or closely related field(s).

Valid Supervisor PreK-12 Certificate, Arizona Administrative Certificate, or Principal Certificate

Three (3) years teaching experience

Five years program management and/or supervisory experience.

Experience developing and managing budgets.

Experience in writing successful local, state and federal grants.

Previous work experience with magnet schools/programs.

Knowledge of federal and state rules and regulations pertaining to the funding and implementation of grants.

Knowledge and ability to use word processing, database, and spreadsheet programs.

Excellent, and effective, verbal and written communication skills in English.

Experience in working with diverse constituencies/populations.

PREFERRED QUALIFICATIONS
Demonstrated successful private fundraising experience.

Demonstrated successful partnership development experience.

ADDITIONAL REQUIREMENTS AFTER HIRE
FBI fingerprint background check (at employee's expense).

Proof of immunity to rubeola (measles) and rubella (German measles), or proof of MMR immunization.

ESSENTIAL FUNCTIONS
THE LIST OF ESSENTIAL FUNCTIONS IS NOT EXHAUSTIVE AND MAY BE SUPPLEMENTED.

Collaborates with central and site staff to develop, establish, and evaluate magnet school policy and procedures; ensures that state and federal requirements are followed.

Coordinates central and site efforts to strengthen magnet programs; includes ensuring the continuity of specific magnet themes K-12.

Develops a yearly magnet timeline plan of tasks including a five year/minimum 5-6 program rotating evaluation plan of existing magnet school programs.

Identifies, investigates, and pursues all applicable federal, state, local and business assistance grants and/or relationship opportunities, including but not limited to the Magnet Schools Assistance Program Grant.

Provides in-services and leadership to staff on district integration needs and magnet school policies and procedures.

Takes leadership in directing, coordinating, planning, and implementing professional development related to magnet themes and shares research related to the themes and student learning.

Directs curriculum specialists in the development of standards-aligned magnet curriculum at individual sites, directs development of new instructional strategies, directs the implementation and evaluation of new alternative programs including technology integration, and directs development of unique and distinctive curricular course offerings, etc.

Facilitates principal and resource teacher meetings, collaborates with principals and teachers to develop course descriptions, syllabi, units of study, and instructional strategies.

Directs the preparation of media and promotional items to publicize magnet school programs. Communicates, markets, and promotes magnet schools to the public.

Represents the district at meetings, workshops, and in-service programs that support the magnet school program including, but not limited to magnet fairs, Governing Board meetings, and other events.

Visits, along with specific magnet school site staff, targeted community areas to inform parents and students of program availability and opportunities, including letter/phone call follow-up. Ensures continuing communication with parents, students, and community regarding magnet school opportunities.

Coordinates with magnet school sites in the analysis, evaluation, and improvement of student achievement.

Directs the evaluation of magnet program activities, and progress and ensures that state and federal requirements are followed.

Serves as liaison between transportation department and parents.

Performs all other duties as assigned.

MENTAL TASKS

Communicates, reads, and comprehends. Performs functions from written and oral instructions and from observing others. Evaluates written materials.

PHYSICAL TASKS

Work involves the performance of duties where physical exertion is not normally required to perform all aspects of the job. Assistance is available as required to perform physically demanding tasks. Work involves sitting for extended periods of time, requires moving from one location to another, reaching, stooping, bending, and holding and grasping objects. Visual weakness must not prohibit the performance of assigned duties. Verbal communicative ability may be required of public contact positions.

EQUIPMENT, AIDS, TOOLS, MATERIALS
Uses office equipment such as telephone, computer, printer and copier.

WORKING CONDITIONS
Indoor, office environment. Contact with employees, students and the public.

CONTROL, SUPERVISION
Supervises assigned staff. Interviews, trains, directs, and appraises the work of others. Disciplines and handles employee complaints.

M: JOB16250
New: 1/12

TUSD

CODE: 92244
UNIT: Exempt Coord (EXC)
GRADE: 3
FLSA: Exempt

CLASSIFICATION TITLE
SENIOR PROGRAM COORDINATOR

SUMMARY
Coordinates the activities and functions of designated programs. Analyzes, evaluates and ensures that the goals and objectives for the program are accomplished according to established priorities, time and funding limitations or other specifications.

[A "program" refers to carrying out a specific service or specific activity within the district. This classification is differentiated from the program coordinator by the number of affected people, the greater impact on the district and the size of the program's budget, as determined by human resources.]

Note: Specific summary information relating to the program this position is being placed in will be provided by the department and approved by Human Resources.

MINIMUM REQUIREMENTS
Master's Degree.
AND
Two years of experience administering or coordinating programs

OR
Bachelor's Degree
AND
Five years of experience administering or coordinating programs

OR
Ten Years of progressive experience administering or coordinating programs.

Knowledge of federal and state legislative requirements related to specific program is required.

Knowledge and ability to use word processing, database, and spreadsheet programs

Three (3) years Supervisory Experience

Any equivalent combination of experience, training, or education.

Some positions within this classification may require some type of certification.

ADDITIONAL REQUIREMENTS AFTER HIRE
FBI fingerprint background check (at employee's expense).

Proof of immunity to rubeola (measles) and rubella (German measles), or proof of MMR immunization.

ESSENTIAL FUNCTIONS
THE LIST OF ESSENTIAL FUNCTIONS IS NOT EXHAUSTIVE AND MAY BE SUPPLEMENTED.

Coordinates the activities of the program with interrelated activities, or with other programs or departments or schools.

Supervises and evaluates assigned personnel.

Provides training, organize conferences and chair committees related to program.

Develops and recommends new or revised program goals and objectives. Develops and implements action plans.

Develops and schedules program work plans based upon established priorities, time and funding limitations or other specifications.

Monitors and approves program expenditures. Prepares or assists with funding or budget proposals.

Confers with and advises staff, students, community members, or others of program goals and objectives, and of the means to achieving those goals and objectives. Collaborates with community, governmental and/or social service agencies as needed.

Prepares periodic reports, financial statements and records on program activities, progress or status.

Adheres to all federal and state laws, court orders, and District policies, and regulations.

Note: Additional specific functions relating to the program this position is being placed in may be provided by the department and approved by Human Resources.

MENTAL TASKS
Communicates. Reads. Comprehends. Performs functions from written and oral instructions and from observing others. Evaluates written materials.

PHYSICAL TASKS
Work involves the performance of duties where physical exertion is not normally required to perform all aspects of the job. Assistance is available as required to perform physically demanding tasks. Work involves sitting for extended periods of time, requires moving from one location to another, reaching, stooping, bending, and holding and grasping objects. Visual weakness must not prohibit the performance of assigned duties. Verbal communicative ability may be required of public contact positions.

EQUIPMENT, AIDS, TOOLS, MATERIALS
Uses office equipment such as telephone, computer, printer and copier.

WORKING CONDITIONS
Indoor. Office environment. Contact with employees, students and public.

CONTROL, SUPERVISION
May coordinate, monitor or supervise the activities of subordinates.

M: JOB 92244
New: 8/06
Revised: 5/13
USP Reviewed 5/13

Section 4 - Key Personnel

Test 12: Magnet schools have personnel that are key to the development and implementation of magnet theme.

12	Key Personnel	Yes	No	Action
12.1	This school has a designated Magnet Coordinator. Name:_____ FTE _____ Attestation(s) Time and Effort			
12.2	There are personnel dedicated to curriculum and/or instructional delivery. 1. 2. 3. Attestation(s) Time and Effort			
12.3	There is a magnet team. (Names and Position) 1. 2. 3. 4. 5.			
12.4	Magnet theme expertise is embedded in the hiring process. Attach job description and interview questions.			
12.5	Staffing decisions are made with the intent of strengthening the magnet. Agendas and minutes of leadership meetings. Organizational plan. Hiring summary from HR packet.			

Summary of Test 12-

Does your magnet have key personnel to ensure that the magnet is implemented with fidelity? YES NO

As a result of this review:

Section 5 - Leadership

Test 13: The magnet leadership at the school level involves multiple stakeholders.

13	Leadership	Yes	No	Action
13.1	The school has an organizational plan for communication of magnet theme implementation. Organizational plan.			
13.2	The school has developed a three year plan for magnet implementation and sustainability. Magnet plan.			
13.3	All stakeholders receive regular information about magnet theme implementation, reviews, and adjustments. Agendas Minutes Newsletters			
13.4	The programmatic needs of the magnet theme drive budgetary allocations. (Of discretionary funding, at least 80% of the budget can be linked to magnet program) Budget			
13.5	All programs in the school support the magnet theme. List of supplemental programs and relationship			

Summary of Test 13:

Does your magnet have an organized leadership structure that involves all stakeholders so that the magnet theme is held with absolute fidelity and is not diluted by supplemental programs? YES NO

As a result of this review:

Section 6 - Recruitment and Marketing

Test 14: There are community partnerships and community members who contribute to the development, resources, and implementation of the magnet theme.

14	Indicator	Yes	No	Action
14.1	Parents are surveyed at least annually to determine knowledge and support of magnet theme. Parent Survey Summary of Results Agenda and minutes that are evidence that survey results were communicated.			
14.2	Pubic meetings are held at least quarterly to inform the community of magnet theme implementation. Sign in sheets Agendas End of session survey			
14.3	The school provides at least four community outreach events to inform the greater community of magnet theme. Pictures Surveys Advertising			
14.4	All of the community partnerships support the magnet theme. List of partnerships and how they support the theme Letters of support			
14.5	Community Champions that contribute to the success of the magnet have been identified and celebrated. List of Champions Evidence of celebrations			

Test 15: There is a marketing and recruitment plan.

15		Yes	No	Action
15.1	The leadership team has developed an annual recruitment plan that indicates what, when, where and who. Plan			
15.2	The leadership team has reviewed data from prior recruitment strategies in order to review and adjust plan.			

	Recruitment data Plan revisions			
15.3	The leadership team has developed an annual marketing plan that indicates what, when, where and who. Plan Method to collect results			
		Yes	No	Action
15.4	Marketing materials have been developed and distributed. Examples of materials			
15.5	The leadership team has reviewed data from prior marketing strategies in order to review and adjust plan. Marketing data Plan revisions			

Summary of Test 14:

Summary of Test 15:

Does your magnet have a recruitment plan and marketing plan that includes the collection and review of indicators for success? YES NO

As a result of this review:

TUSD Theme Immersion Matrix

Extra Curricular

Exploratory Model	Introductory Model	Partial Immersion Model	Full Immersion Model
The Exploratory Model describes a regular school experience, with Magnet-related EXTRA CURRICULAR opportunities offered to students in addition to the regular school day. These experiences may include, but are not limited to: after school clubs, summer programs, science fairs, clubs.	The Introductory Model describes a regular school day, with Magnet-related experiences offered in addition to the current curriculum. These experiences may include, but are not limited to: integrated MAGNET units delivered once the state testing is complete, supplementary stand- alone learning units offered through industry or non-profit partnerships, etc.	The Partial Immersion Model describes a non-traditional school day where Magnet-related experiences are integrated into the curriculum. These experiences may include, but are not limited to: teaching to a school-wide MAGNET theme, teaching year-long integrated Problem/Project-Based Learning Units, teaching dual-enrollment programs, teaching in a "school within a school" model, etc..	The Full Immersion Model describes a non-traditional school where MAGNET- related experiences determine the school's curriculum. Full Immersion schools look more like 21st Century workplace environments rather than 20th century K-12 school environments. Problem-based learning drives the curriculum and instruction. Students constantly collaborate to solve authentic problems, propose solutions and contribute ideas to the larger community.
A 1.Exploratory Model Descriptors: School or district has defined MAGNET as a priority MAGNET programs are traditionally ***"stand alone"*** Programs are conducted ***outside*** the regularly scheduled school-day Programs are assigned to staff as additional duties Programs are optional Includes a ***basic level*** of family engagement and outreach programs (i.e.; math and science family nights) Students explore various facets of MAGNET from project-based investigations to possible career pathways Initial collaboration with one or more business partners, mentors, and/or MAGNET advocates	*A 2. Introductory Model Descriptors:* Implementation in addition Provides an opportunity for student participation in problem/project-base instruction with an end result of teaching through product development Implementation in addition to the regular school curriculum ***during the school-day*** Includes *multiple points of contact with the families of MAGNET participants and at least one family integration activity.* Results in teaching through product development (school/parent presentations, science fairs, evening MAGNET nights, etc.) Initial collaboration with one or more business partners, mentors, and/or MAGNET advocates	*A 3. Partial Immersion Model Descriptors:* Integration of Problem/Project-Based Learning into the regular curriculum Opportunities are provided for student participation in problem-solving and project-based instruction with *integrated content across MAGNET subjects* Interdisciplinary instruction Some inter-grade level planning Emphasis on product development Includes multiple points of contact with families of MAGNET participants and a minimum of three family integration activities Several collaborations with business and industry partners in the geographical area, along with mentors and MAGNET advocates	*A 4. Full Immersion Model Descriptors:* Whole school approach to teaching MAGNET education through a global mission and vision Participation by all schools staff, classroom and special area teachers MAGNET lessons are planned and aligned by all grade levels and special area classes to be integrated, moving into increased complexity and rigor, and constructive in nature Several collaborations with business and industry partners in the geographical area, along with mentors and MAGNET advocates Collaborations and partnerships with Higher Education

TUSD Magnet Theme Immersion Matrix

Exploratory Model	Introductory Model	Partial Immersion Model	Full Immersion Model
Leading			
Leading within the Exploratory Model involves supporting teachers in the creation of ***extra-curricular, after-school*** Magnet-related experiences (programs) for students that ***choose*** to participate. Leaders must embrace a mindset that includes; leading by example, creating an environment of high expectations, taking responsibility for sparking a passion for learning, be excited to prepare students both academically and socially for their future careers, and creates and communicates a "shared vision" of purpose and process.	Leading within the Introductory Model involves supporting teachers in the planning and implementing of Magnet-related experiences that are in addition to the regular curriculum and taught to students during the school day. Leaders arrange schedules so that teachers may plan units as a grade-level or content-area team. Leaders must embrace a mindset that includes; leading by example, creating an environment of high expectations, taking responsibility for sparking a passion for learning, be excited to prepare students both academically and socially for their future careers, and creates and communicates a "shared vision" of purpose and process. Support structures for teachers including common planning time within the school day to support data-driven collaboration, and professional learning(ex. Grade level team)	Leading within the Partial Immersion Model involves setting the expectation that all staff plan and implement Magnet-related experiences that are **integrated into the regular curriculum**. Leaders arrange schedules and set the expectation that teachers plan integrated yearlong units as a ***grade-level or content-area team***. Leaders set the expectation that teachers ***take on more*** of a facilitator role in guiding student learning through inquiry. Leaders must embrace a mindset that includes: leading by example, creating an environment of high expectations, taking responsibility for sparking a passion for learning, enthusiastically preparing students both academically and socially for their future careers, and creating and communicating a "shared vision" of purpose and process.	Leading within the Full Immersion Model involves setting the expectation that all staff plan and implement Magnet-related experiences that ***are the main curriculum***. Leaders arrange the schedule and set the expectation that all teachers plan integrated year-long units as a ***collaborative school team.*** Leaders set the expectation that teachers ***act as facilitators*** in guiding student learning through inquiry. Leaders must embrace a mindset that includes: leading by example, creating an environment of high expectations, taking responsibility for sparking a passion for learning, be excited to prepare students both academically and socially for their future careers, and creates and communicates a "shared vision" of purpose and process.
B 1. Administrative Leadership provides: Decide program purpose/content Support structures for students Select target audience Resource allocation (materials/ supplies) Program location/work space Professional development plan Implementation timelines/ calendars Communication strategies	*B 2. Administrative Leadership provides:* Solo to collaborative, or shared decision making Professional development plan Program location/work space Resource allocation(materials/ supplies) Implementation timelines/ calendars Communication strategies	*B 3. Administrative Leadership provides:* • Support structures for teachers including common planning time within the school day to support data-driven, cross curricular collaboration and professional learning (various grade levels/ school within a school model, for example) Support structures for students including a non graded advisory	*B 4. Administrative Leadership provides:* • Support structures for teachers including common planning time within the school day to support data-driven, cross curricular collaboration and professional learning (for example, various grade levels/school within a school model) Support structures for students including a non graded advisory

TUSD Magnet Theme Immersion Matrix

Budget development/oversight Evaluation protocols Advocacy and marketing for program Strategies for sustainability	Advocacy and marketing for program. Decide program purpose/content Select target audience Support structures for students Budget development/oversight Evaluation protocols Strategies for sustainability Outreach to business and industry	program that focuses on setting and monitoring student goals and personalizing the student experience Establishment a leadership team that establishes mission, vision, scope of project Establishment of a leadership cadre Collaborative, or shared decision making Facilitation support with classified staff Professional development plan Program location/work space Resource allocation (materials/ supplies) Implementation timelines/ calendars Program evaluation Budget development/oversight Evaluation protocols Establishment of end of course/ program goals Communication strategies Advocacy and marketing for program Strategies for sustainability Outreach to business and industry	program that focuses on setting and monitoring student goals and personalizing the student experience Develops a ***shared mission and vision*** and program purpose/ content Establishment of a leadership cadre for ***collaborative decision making*** with defined roles and responsibilities matched to program goals Establishes program review and evaluation that ***measures attainment*** of program goals and ***includes metrics*** such as student achievement, perceptual data, attendance, and demographics Collaboration with parents/ families Selection of grade level participation Establishment of end of course/ program goals Establishment of an ***advisory committee for ongoing monitoring*** of mission, vision, scope of project that includes representatives from school, district, school board, community, higher education institutions, MAGNET industry

TUSD Magnet Theme Immersion Matrix

Exploratory Model	Introductory Model	Partial Immersion Model	Full Immersion Model
TEACHING			
Teaching within the Exploratory Model involves sponsoring or leading ***extra-curricular, after-school*** MAGNET- related experiences (programs) for students that ***choose*** to participate.	Teaching within the Introductory Model involves planning and implementing Magnet-related experiences that are in addition to the regular curriculum and taught to selected students (i.e. grade level band) ***during the school day.*** Teachers may plan units as a grade-level or content-area team.	Teaching within the Partial Immersion Model involves planning and implementing Magnet-related experiences that are ***integrated into the regular curriculum.*** Teachers plan integrated yearlong units as a grade-level or content-area team. The teacher takes on ***more of a facilitator role*** in guiding student learning through inquiry.	Teaching within the Full Immersion Model involves planning and implementing Magnet-related experiences that ***are the curriculum.*** Teachers plan integrated year-long units as a school team. The teacher ***acts as a facilitator*** in guiding student learning through inquiry.
C 1. The teacher: Takes the lead role in planning and facilitating the club or after school program Provides direct instruction while leading students through investigations Connects business/industry skills to classroom instruction Provides authentic, real world experiences with technology integration • Fosters collaboration, communication and social skills within the learning environment Commits to on-going professional development in MAGNET content and pedagogy ***Provides connections*** to outreach/service learning projects for students Embeds a variety of technology in the instructional process	*C 2. The teacher:* • Provides direct instruction while leading students through investigations Connects business/industry skills to classroom instruction Provides authentic, real world problems ***within MAGNET content*** Provides an opportunity for students to participate in guided inquiry and problem-solving Selects cross-curricular MAGNET content ***Provides service learning projects*** for students Embeds a variety of technology in the instructional process, including presentation tools, i.e. PowerPoints, smart boards, multi-media, prezi, etc. Involvement in professional learning communities with other instructors at their grade level in their school, or across their district	*C 3. The teacher:* ***Encourages*** student participation in identification of problem/ project Provides ***limited direct instruction*** while facilitating students moving through MAGNET investigations Provides an opportunity for students to participate in guided inquiry and problem-solving Assists in selection of cross-curricular content that is ***embedded*** into the traditional curriculum ***Provides instruction*** with the outcome of product development Involvement in professional learning communities with other instructors at their grade level and additional grade levels in their school. Provides authentic, real world problems within MAGNET content Connects business/industry skills to classroom instruction Provides opportunities and	*C 4. The teacher:* Facilitates student participation in identification of problem/project Provides a ***facilitative role*** while students move through MAGNET investigations Provides an opportunity for students to participate in ***open-ended*** inquiry and problem-solving Assists in selection of ***rigorous*** cross-curricular MAGNET content ***as the focus*** of the school curriculum ***Facilitates instruction*** with the outcome of product development Involvement in professional learning communities with other instructors at their grade level and additional grade levels, in their school. Provides authentic, real world problems within MAGNET content Connects business/industry skills to classroom instruction Provides opportunities for students to conduct research in

TUSD Magnet Theme Immersion Matrix

		protocols for students to research and participate in outreach/ service learning projects Embeds a variety of technology in the instructional process, including using technology as a ***facilitation*** of student learning in investigations and problem-solving, i.e. data analysis, research, creation of multi-media	university/college labs Embeds a variety of technology in the instructional process, including using technology as a facilitation of student learning in a ***transformative instructional manner***, i.e. using technology tools such as spectrometers, PCR machines, digital microscopes, robots, etc.

TUSD Magnet Theme Immersion Matrix

Exploratory Model	Introductory Model	Partial Immersion Model	Full Immersion Model
LEARNING			
Learning within the Exploratory Model involves engaging in a provided question or problem through an ***extra-curricular or after-school Magnet-related experience that may or may not be related to the school curriculum.*** The learning is collaborative and engaging but may not be relevant or applied.	Learning within the Introductory Model involves engaging in a provided question or problem through Magnet-related experiences that are in addition to the regular curriculum and ***taught to all students during the school day.*** The learning is collaborative and engaging and may be relevant and applied in a local context.	Learning within the Partial Immersion Model involves engaging in selected or negotiated questions or problems through Magnet-related experiences that are ***integrated into the regular curriculum.*** Learning is collaborative, engaging, and is relevant and applied, making use of connections to local issues and/or industry.	Learning within the Full Immersion Model involves engaging in a student posed or negotiated question or problem through Magnet-related experiences that ***are the curriculum***. Learning is collaborative, engaging, and is relevant and applied, with connections to local issues and/or industry.
D 1. The student: Engages in MAGNET content in an "out of the traditional classroom" experience, i.e. after school club, summer program Engages in problem-based, teacher directed investigations that may result in solution or product creation Collaborates in predetermined groups Engages in relevant and authentic learning experiences that may be connected at least in part to local context Engages in critical thinking, problem solving, and in depth learning while exploring MAGNET topics/projects/careers Uses a variety of technology in the investigative process including virtual, computer-based, mobile, and data collection devices May engage in opportunities to conduct research in MAGNET based content with links to	*D 2. The student:* • Engages in ***integrated MAGNET content*** as an addition to the school curriculum Engages in problem-based, teacher directed ***guided inquiry*** that may result in solution or product creation Collaborates with peers in groups determined by teacher Engages in relevant and authentic learning experiences that may be connected at least in part to local context Engages in critical thinking, problem solving, and in depth learning while exploring MAGNET topics/projects/careers Uses a variety of technology in the investigative process including virtual, computer-based, mobile, and data collection devices May engage in opportunities to conduct research in MAGNET based content with links to	*D 3. The student:* Engages in integrated MAGNET content ***as part of*** the school curriculum Experiences the MAGNET content from cross-curricular, inter- disciplinary to trans-disciplinary Engages in problem-based, ***student and teacher directed guided inquiry*** that results in solution creation or product development Collaborates with peers in ***groups determined by teacher*** and/or project and intended outcomes Engages in relevant and authentic learning experiences that are connected at least in part to local context Engages in critical thinking, problem solving, and in depth learning while exploring MAGNET topics/projects/careers Learns in the context of real-world connections with	*D 4. The student:* Engages in interdisciplinary MAGNET content *as the focus* of the school curriculum Engages in problem-based, ***student directed open inquiry*** that results in solution creation or product development Collaborates with peers in ***groups determined by project*** and intended outcomes Participates in collaborative groups that foster innovation and risk in solutions creation and product/project development Engages in relevant and authentic learning experiences that are driven at least in part by local context Engages in critical thinking, problem solving, and in depth learning while exploring MAGNET topics/projects/careers Learns in the context of real-world connections with business/ industry with opportunity to

TUSD Magnet Theme Immersion Matrix

Receives opportunities to inspire and inform under-represented and struggling students about careers in MAGNET fields May engage in real-world connections with business/ industry May have an opportunity to participate in service learning projects Participates in a level of self-evaluation	Multiple in and out of school opportunities to inspire and inform under-represented and struggling students about careers in MAGNET fields Participates in multiple points of contact with the families of the MAGNET participants, and at least three family integration activities Learns in the context of real-world connections with business/ industry Participates in outreach/service learning projects within the school or community May participate in a level of self-evaluation	opportunities to contribute to the knowledge base Engages in opportunities to conduct research in MAGNET based content with links to university/ college labs and possible opportunities to contribute to knowledge base Uses a variety of technologies in the investigative process including: virtual, computer-based, mobile and data collection devices, web-based lessons, computer applications, researching and reporting Participates in outreach/service learning projects within the school or community Participates in multiple points of contact with the families of the MAGNET participants and at least three family integration activities Multiple in and out of school opportunities to inspire and inform under-represented and struggling students about careers in MAGNET fields Participates in a level of self-evaluation.	Engages in opportunities to conduct research in MAGNET based content with links to university/ college labs and opportunities to contribute to knowledge base Uses a variety of technology in the investigative process including: virtual, computer-based, mobile and data collection devices, web-based lessons, computer applications; also researching, and reporting, communicating and collaborating in ways not possible without the technology Participates in opportunities to establish protocols for research and participation in outreach/ service learning projects Participates in multiple points of contact with the families of the MAGNET participants, and at least three family integration activities Multiple in and out of school opportunities to inspire and inform under-represented and struggling students about careers in MAGNET fields Participates in a level of self-

TUSD Magnet Theme Immersion Matrix

Exploratory Model	Introductory Model	Partial Immersion Model	Full Immersion Model
EVALUATING			
Evaluating within the Exploratory Model involves ***informal feedback on program success*** that may include measures of self-efficacy, attitudes, interest, and motivation to pursue additional MAGNET related classes/ experiences.	Evaluating within the Introductory Model involves ***formal feedback on program success***, which includes student assessment data as well as measures of self-efficacy, attitudes, interest and motivation to pursue additional MAGNET related classes/ experiences.	Evaluating within the Partial Immersion Model involves program review that includes ***qualitative and quantitative data.*** Measures should include student achievement data as well as measures of self-efficacy, attitudes, interest and motivation to pursue additional MAGNET related classes/experiences.	Evaluating within the Full Immersion Model involves comprehensive program review that *includes* ***multiple measures both quantitative and qualitative in nature.*** This would include data related to student achievement, classroom observations, attendance and surveys at the student, teacher, administrator, parent and community levels. Data is used to gauge achievement of program goals and inform design and implementation decisions.
E 1. *The Evaluative Process includes*: • Teach- assess-adjust, then re-teach-assess-adjust • Include informal and formal feedback (i.e. participant and parent feedback surveys) Provide professional development for teachers in the evaluative process and interpreting data All teachers and students are immersed in a student-centered environment that supports the use of multiple indicators of success, such as performance, project-based and portfolio assessments Survey data used to inform program decisions Pre- and post-student assessment surveys in interest, content and attitudes Peer observation and dialogue included in quality assessment Invite industry experts/mentors	E 2. *The Evaluative Process includes*: • Alignment of program to internationally benchmarked Common Standards • Participant and parent feedback surveys • Provide professional development for teachers in the evaluative process and interpreting data • All teachers and students are immersed in a student-centered environment that supports the use of multiple indicators of success, such as performance, project-based and portfolio assessments • Survey data used to inform program decisions • Pre and post student assessment surveys in interest, content, and attitudes • Peer observation and dialogue included in quality assessment • Invite industry experts/mentors to	E 3. *The Evaluative Process includes*: • Alignment of program to internationally benchmarked Common Standards • Development of curriculum supports such as scope and sequence and pacing guide for a vertically and horizontally aligned curriculum centered on the Common Core Mathematic and Next Generation Science Standards, 21st Century skills and MAGNET integration • Pre and post student assessment surveys in interest, content, and attitudes • Participant and parent feedback surveys • Peer observation and dialogue included in quality assessment • Survey data used to inform program decisions • Research-based authentic and	E 4. *The Evaluative Process includes:* • Alignment of program to internationally benchmarked Common Standards • Development of curriculum supports such as scope and sequence and pacing guide for a vertically and horizontally aligned curriculum centered on the Common Core Mathematic and Next Generation Science Standards, 21st Century skills and MAGNET integration • Pre and post student assessment surveys in interest, content and attitudes • Participant and parent feedback surveys • Peer observation and dialogue included in quality assessment • Survey data used to inform program decisions • Research-based authentic and

TUSD Magnet Theme Immersion Matrix

to evaluate program Peer observation and dialogue included in quality assessment Survey data used to inform program decisions	evaluate program • Research-based authentic and integrated assessments • Performance assessments that allow students to demonstrate their understanding of MAGNET content and 21st Century skills	integrated assessments • Goal setting and monitoring driven by data • Development of an assessment and intervention plan to address gaps in student achievement and areas for extension • Development and implementation of student self-assessment • Invite industry experts/mentors to evaluate program (Advisory Board) • Provide professional development for teachers in the evaluative process and interpreting data • Performance assessments that allow students to demonstrate their understandings of MAGNET content and 21st Century skills • High Schools: Develops a plan for student success on the post-secondary level • Plan for analysis of evaluation data and collaboration with leadership team to use the data to inform program decisions • All teachers and students are immersed in a student-centered environment that supports the use of multiple indicators of success, such as performance, project-based and portfolio assessments	integrated assessments • Plan for analysis of evaluation data and collaboration with leadership team ***and advisory team to use the data to inform program decisions*** • Goal setting and monitoring driven by data, ***development of individualized learning plans that include student input*** • Development of an assessment and intervention plan to address gaps in student achievement and areas for extension • Development and implementation of student self-assessment • Invite industry experts/mentors to evaluate program (Advisory Board) • Provide professional development for teachers in the evaluative process and interpreting data • Performance assessments that allow students to demonstrate their understandings of MAGNET content and 21st Century skills • High Schools: Develops a plan for student success on the post-secondary level • The school has a collection of feedback related to outreach activities • Development of a process for program review that includes attendance, demographics and student achievement • On-going evaluations of authentic student learning and skill

			• Best /effective practice is employed for engagement, alignment and rigor for instructional improvement • Demonstrate competencies in state assessments (AIMS, PARCC) and college and career readiness (ACT, SAT, TIMSS, PISA, PIAAC)

TUSD Magnet Theme Immersion Matrix

Exploratory Model	Introductory Model	Partial Immersion Model	Full Immersion Model
BUDGETING			
Budgeting in the Exploratory Model involves identifying costs related to personnel, facilities, equipment and supplies.	Budgeting in the Introductory Model involves identifying costs related to personnel, facilities, equipment and supplies	Budgeting in the Partial Immersion Model involves identifying costs related to personnel, facilities, equipment and supplies. Special consideration may be necessary for professional development, travel and program marketing.	Budgeting in the Full Immersion Model involves identifying costs related to personnel, facilities, equipment and supplies. Special consideration may be necessary for professional development, travel and program marketing.
F 1. Budget considerations include: • Lead facilitator • Support staff • Materials and supplies (dependent on labs and planned activities) • Location space (if necessary) • Determine if participants will be charged a registration fee, apply for grants, donations or outside funding • Travel costs (if necessary) • Discretionary funds and other resources are allocated to advance implementation of all the MAGNET strategies outlined in the program plan • Specific budgets for packaged programs are also available from Community Education Centers, outside vendors as well as a variety of grant programs • Research and apply for a variety of local, state, and national grants • Research and inquire about business community funding and partnerships	*F 2. Budget considerations include:* • Lead facilitator ***at each site*** • Support staff • Materials and supplies (dependent on labs and planned activities) • Location space (if necessary) • Determine if participants will be charged a registration fee, apply for grants, donations, or outside funding • Travel costs (if necessary) • Discretionary funds and other resources are allocated to advance implementation of all the MAGNET strategies outlined in the program plan • Specific budgets for packaged programs are also available from Community Education Centers, outside vendors as well as a variety of grant programs • Research and apply for a variety of local, state, and national grants • Research and inquire about business community funding and partnerships	*F 3. Budget considerations include:* • Personnel (all teachers salaries and benefits) • Support staff (salaries and benefits) • Materials and supplies (dependent on labs and planned activities) • Custodial services • Location space (if necessary) including architectural and plan review and permit fees • Construction costs (if necessary) • Design a strategic plan to apply and manage grants, donations or outside funding • Discretionary funds and other resources are allocated to advance implementation of all the MAGNET strategies outlined in the program plan • Travel costs (if necessary) for researching programs and marketing/ recruiting. • Specific budgets for canned programs are also available from Community Education Centers, outside vendors as well as a variety of grant programs • Research and applying for a variety of local, state, and national	*F 4. Budget considerations include:* • School/program administrator (including benefits) • School/program curriculum specialist (including benefits) • Personnel (all teachers salaries and benefits) • Support staff (salaries and benefits) • Materials and supplies (dependent on labs and planned activities) • Custodial services • Location space (if necessary) including architectural and plan review and permit fees • Construction costs (if necessary) • Design a strategic plan to apply and manage grants, donations or outside funding • Discretionary funds and other resources are allocated to advance implementation of all the MAGNET strategies outlined in the program plan • Travel costs (if necessary) for researching programs and marketing/ recruiting. • Specific budgets for canned programs are also available from

TUSD Magnet Theme Immersion Matrix

		grants • Research and inquire about business community funding and partnerships	Community Education Centers, outside vendors as well as a variety of grant programs • Research and applying for a variety of local, state, and national grants • Research and inquire about business community funding and partnerships

TUSD Magnet Theme Immersion Matrix

Exploratory Model	Introductory Model	Partial Immersion Model	Full Immersion Model
SUSTAINING			
Sustaining at the Exploratory Level involves program development with an initial "start up" focus. By creating ongoing program evaluation and gathering reliable data, the goal is to ***build the initial program to the more comprehensive levels.***	Sustaining at the Introductory Level involves program development with a long-term focus, ongoing program evaluation, consistent policies, reliable data and community interest and support.	Sustaining at the Partial Immersion Level involves *program development with a long-term focus*, ongoing program evaluation, consistent policies, reliable data and community interest and support.	Sustaining at the Full Immersion Level involves ***program development with a long-term focus***, ongoing program evaluation, consistent policies, reliable data and community interest and support.
G 1. The Sustaining process: • Establishes leadership and support through development of common goals and mission • Establishes collaborative team to provide feedback based on assessments and evaluations • Establishes plan for materials replenishment • Builds capacity • Collects feedback and refine program implementation from students, teachers and parents • Establishes a ***two year fiscally responsible budget plan to assure sustainability of school/ program*** • Establishes connections to businesses and industry representatives with emphasis on work place competencies • Provides project/product development protocols to assess student success in the MAGNET program • Develops grant writing initiatives with business, industries and university partners to fund, expand, or supplement the program	*G 2. The Sustaining process:* • Ensures that strategic plan and annual action plan addresses investment in professional development for personnel • Establishes leadership and support through development of common goals and mission • Establishes collaborative team to provide feedback based on assessments and evaluations • Establishes plan for materials replenishment • Builds capacity • Collects feedback and refine program implementation from students, teachers and parents • Establishes a ***two year fiscally responsible budget plan to assure sustainability of school/program*** • Establishes connections to businesses and industry representatives with emphasis on work place competencies • Provides project/product development protocols to assess student success in the MAGNET program • Develops grant writing initiatives with business, industries and	*G 3. The Sustaining process:* • Establishes leadership and support through common goals and mission • Establishes collaborative team to provide feedback based on assessments and evaluations • Ensures that strategic plan and annual action plan addresses investment in professional development for personnel • Establishes plan for materials replenishment • Builds capacity • Collects feedback and refines program implementation from students, teachers and parents • Establishes a *three to five year* fiscally responsible budget plan to assure sustainability of school/ program • Establishes sustained connections to businesses and industry representatives with emphasis on student mentor/internships, career counseling and workplace competency skills. • Provides project/product development protocols to assess student success in the	*G 4. The Sustaining process:* • Establishes leadership and support through common goals and mission • Establishes collaborative team to provide feedback based on assessments and evaluations • Ensures that strategic plan and annual action plan addresses investment in professional development for personnel • Establishes plan for materials replenishment • Builds capacity • Collects feedback and refines program implementation from students, teachers and parents • Establishes a ***five to seven year fiscally responsible budget plan to assure sustainability of school/program*** • Establishes sustained connections to businesses and industry representatives with emphasis on student mentor/internships, career counseling and work place competency skills. • Provides project/product development protocols to assess student success in the

TUSD Magnet Theme Immersion Matrix

• Assists in the development of a K-12 MAGNET pipeline with an end in mind to determine who the students are and where they will be going. • Strives to be "future focused"	university partners to fund, expand, or supplement the program • Assists in the development of a K-12 MAGNET pipeline with an end in mind to determine whom the students are and where they will be going. • Works with National MAGNET Network, Higher Education and others to validate effectiveness of school's innovative curriculum, instruction and assessment as evidenced by student achievement and readiness for college, career and MAGNET industry	MAGNET program, shadowing and internships • Develops grant writing initiatives with universities, Arizona MAGNET Network, industry, etc. • Assists in the development of a K-12 MAGNET pipeline with an end in mind to determine who the students are and where they will be going. • Works with National MAGNET Network, Higher Education and others to validate effectiveness of schools' innovative curriculum, instruction and assessment as evidenced by student achievement and readiness for college, career and MAGNET industry.	MAGNET program, shadowing and internships • Develops grant writing initiatives with universities, Arizona MAGNET Network, industry, etc. • Assists in the development of a K-12 MAGNET pipeline with an end in mind to determine whom the students are and where they will be going. • Works with National MAGNET Network, Higher Education and others to validate effectiveness of schools' innovative curriculum, instruction and assessment as evidenced by student achievement and readiness for college, career and MAGNET

2013-2014 MAGNET IMPROVEMENT PLAN

SCHOOL NAME:	MAGNET THEME:
Please write an abstract of your plan (what would someone expect to see during a visit to your site)?	

MAGNET LEADERSHIP TEAM MEMBERS	NAME
Principal	
Magnet Coordinator	
Magnet Director	Victoria Callison
Magnet Senior Program Coordinator	Laurie Westfall
Magnet Senior Program Coordinator	Adelle McNiece
Marketing Specialist	Sally Jacunski

MAGNET LEADERSHIP TEAM MEETINGS	
How many days a month does your Magnet Leadership Team meet?	
Please provide dates/times when your Magnet Leadership Team meets? (ex: Tuesdays @ 1:00 pm)	

Complete the Magnet Review Summary.

With data and information available to you, analyze the needs of your school. The goal is for the school's magnet leadership team to carefully analyze and interpret all data in order to accurately and completely assess the needs of your school. The knowledge gained during this investigative and analytical phase will be the basis for identifying the greatest priorities on which to develop your school's magnet goals. Each goal must be addressed by identifying at least one strategy. **Areas from the Magnet Review Summary marked "NO" or "IP" (in progress) must be addressed in your Magnet Improvement Plan.**

Magnet Review Summary

Strategy #		YES	NO
1	Does your current enrollment meet the definition of integration?		
1	Is your magnet program attracting students to support integration and diversity at your school?		
1	Is your magnet program retaining students to support integration and diversity at your school?		
2	Is the curriculum at this school: documented?		
	paced?		
	assessed?		
	reflected?		
	adjusted?		
2	Is the curriculum at this school unique?		
2	Is the methodology (pedagogy) implemented at this school unique?		
2	Do students experience theme immersion for a minimum of three hours per day?		
2	Is there theme integration in the curriculum?		
2	Is there theme congruency in the curriculum?		
2	Does our professional development support the magnet content or a specialized delivery of instruction?		
3	Does the magnet have key personnel to ensure that the magnet is implemented with fidelity?		
3	Does your magnet have an organized leadership structure that involves all stakeholders so the magnet theme is held with absolute fidelity and is not diluted by supplemental programs?		
1	Does your magnet have a recruitment plan that includes community partnerships?		
1	Does your magnet have a marketing plan that includes the collection and review of indicators for success?		
3	Has this school had a stable staff for the past four years?		
3	Have staff been successful at delivering quality instruction?		
1	Have students in all ethnic categories shown increases in student achievement?		
1	Does your Title I Plan support or supplement you magnet theme?		

Section 2: Developing your School's Magnet Improvement Plan

Guiding Question: How are we going to get to where we want to be?

MAGNET GOAL: INTEGRATION
USP Description: The Magnet School Plan shall, at a minimum, set forth a process and schedule to… identify goals to further the integration of each magnet school which shall be used to assess the effectiveness of efforts to enhance integration at the school. **[III.E.3.xi]**

Magnet Strategy 1: ENROLLMENT [See MAGNET REVIEW: ENROLLMENT (Section 1), RECRUITMENT AND MARKETING (Section 6)]
USP Description: The District shall continue to implement magnet school/program as a strategy for assigning students to schools and to provide students w/opportunity to attend an integrated school. **[II.E.1]** The District…shall recruit a racially and ethnically diverse student body …to ensure that the schools are integrated to the greatest extent practicable. **[II.E.2]** An integrated school is any school in which no racial or ethnic group varies from the district average for that grade level (Elementary School, Middle School, K-8, High School) by more than +/-15 percentage points, and in which no single racial or ethnic group exceeds 70% of the school's enrollment.**[II.B.2]**
SMART Goal:

Methods to support strategy	Person (s) Accountable	**Action Steps** to achieve SMART Goal (add more if needed)	Begin Date	End Date
Recruitment		1. 2. 3.		
Marketing		1. 2. 3.		
Retention		1. 2. 3.		

Magnet Strategy 2: THEME DEVELOPMENT [SEE MAGNET REVIEW: CURRICULUM/ASSESSMENT (Section 2)]
USP Description: In creating the Plan, the District shall… improve existing magnet schools and programs that are not promoting integration **[III.E.3.ii]**
SMART Goal:

Methods to support strategy	Person (s) Accountable	**Action Steps** to achieve SMART Goal (add more if needed)	Begin Date	End Date
Theme Visibility Development		1. 2. 3.		
Theme Integration with Common Core Curriculum (Planning Phase)		1. 2. 3.		
Scope and Sequence (Planning Phase)		1. 2. 3.		
Unit Development, Including Assessments (Planning Phase)		1. 2. 3.		

Magnet Strategy 3: KEY PERSONNEL
[SEE MAGNET REVIEW: PROFESSIONAL DEVELOPMENT (Section 3), KEY PERSONNEL (Section 4), LEADERSHIP (Section 5), STABLE AND SUCCESSFUL STAFF (Section 7)]

USP Description:

In creating the Plan, the District shall…ensure that administrators and certificated staff in magnet schools and programs have the expertise and training necessary to ensure successful implementation of the magnet.**[III.E.3.vi]**

The Magnet School Plan shall, at a minimum, set forth a process and schedule to… provide necessary training and resources to magnet school and program administrators and certificated staff;**[III.E.3.ix]**

SMART Goal:

Methods to support strategy	Person (s) Accountable	**Action Steps** to achieve SMART Goal (add more if needed)	Begin Date	End Date
Theme-Based Professional Development (Research)		1. 2. 3.		
		1. 2. 3.		
		1. 2. 3.		
		1. 2. 3.		

2013-2014 MAGNET IMPROVEMENT PLAN

Magnet Strategy 4: FAMILY ENGAGEMENT
USP Description: The Magnet School Plan shall, at a minimum, set forth a process and schedule to…include strategies to specifically engage African American and Latino families, including the families of English language learner ("ELL") students; **[III.E.3.x]**
SMART Goal:

Methods to support strategy	Person (s) Accountable	**Action Steps** to achieve SMART Goal (add more if needed)	Begin Date	End Date
Increase family volunteerism		1. 2. 3.		
Increase family participation		1. 2. 3.		
		1. 2. 3.		
		1. 2. 3.		

2013-2014 MONTHLY MAGNET REPORT

SCHOOL INFORMATION	
SCHOOL NAME:	
MAGNET THEME:	**MONTH:**

MAGNET LEADERSHIP TEAM MEMBERS	NAME
Principal	
Magnet Coordinator	
Magnet Director	**Victoria Callison**
Magnet Senior Program Coordinator	**Laurie Westfall**
Magnet Senior Program Coordinator	**Adelle McNiece**
Marketing Specialist	**Sally Jacunski**

MAGNET LEADERSHIP TEAM MEETINGS	
Please provide dates/times when your Magnet Leadership Team met this month (ex: 9/12/13, 3:30 – 4:30 pm)	

PROGRAM SUSTAINABILITY
PARTNERSHIPS: What new partnerships were established this month? List contact name(s), contact date(s), and how this partner will contribute/contributed to your site.
GRANTS: List any grants that you (or the staff at your school) applied for this month.

2013-2014 MONTHLY MAGNET REPORT

MAGNET GOAL: INTEGRATION

Magnet Strategy 1: ENROLLMENT (USP: III.E.3.xi, II.E.1, II.E.2, II.B.2)
Copy and paste the ENROLLMENT SMART Goal from your Magnet Improvement Plan:
What strategies have been taken this month that support your integration goal? Be specific – Make note of specific activities which have addressed recruitment, marketing, and retention efforts.

Magnet Strategy 2: THEME DEVELOPMENT (USP: III.E.3.ii)
Copy and paste the THEME DEVELOPMENT SMART Goal from your Magnet Improvement Plan:
What strategies have been taken this month that support your theme development goal? Be specific – Make note of theme visibility, theme integration, scope and sequence, and unit development efforts.

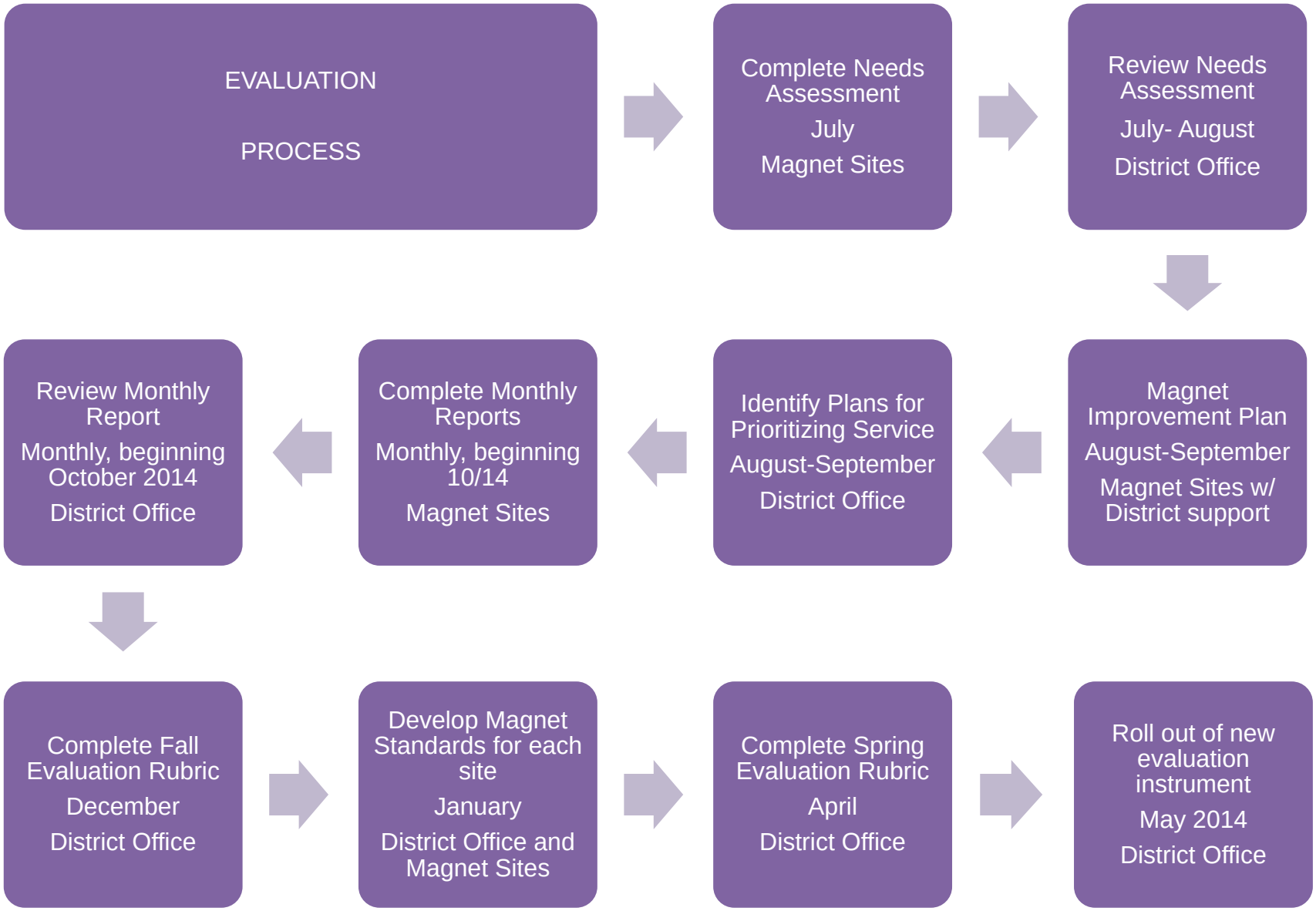
Magnet Strategy 3: KEY PERSONNEL (USP: III.E.3.vi)
Copy and paste the KEY PERSONNEL SMART Goal from your Magnet Improvement Plan:
What strategies have been taken this month that support your key personnel goal? Be specific – Describe any theme-based professional development, specific training opportunities, mentoring, and vertical and horizontal planning.

Magnet Strategy 4: FAMILY ENGAGEMENT (USP: III.E.3.x)
Copy and paste the FAMILY ENGAGEMENT SMART Goal from your Magnet Improvement Plan:
What strategies have been taken this month that support your family engagement goal? Be specific – Describe efforts to recruit family volunteers, family classes and events, showcases, outreach, etc. Please make note of any activities which specifically engage African American and Latino families, including the families of ELL students.

MONTHLY MAGNET REPORT

2013-2014

Magnet Programs – Annual Evaluation Flowchart



TUSD

TUSD

SCHOOL NAME:

Tucson Unified School District Magnet Standards: PILLAR 1 DIVERSITY

National Standard	District Standard	Standard Indicator	5	4	3	2	1	0
Standard 1.1	**1.1.A**	The ethnic composition of applications received	**Requires 1**	**Requires 1 or 2**	**Requires All**	**Requires All**	**Requires ALL**	**Requires 1 or 2**
Student Recruitment and Selection	Magnet schools will be integrated.		1. The ethnic composition needed to integrate the school meets the USP definition of integration: - no group exceeds 70% of the school's enrollment · AND no group is more than 15 percentage points within the district average.	1.The ethnic composition needed to integrate does NOT meet the USP definition of integration. No group exceeds 70% of the school's enrollment OR no group is more than 15 percentage points within the district average. 2.The ethnic composition of all received applications needed to integrate the school does not meet the USP definition of integration. However, accepted applications for the entry grade(s) meet the definition of integration.	The ethnic composition of applications received for the entry grade did NOT meet integration. Progress is evident: 1. Increase in the number of applications received compared to the prior year AND 2. The ethnic composition of applications received shows progress when comparing the ethnic distribution to the current year 40th day.	The ethnic composition needed to integrate the school did NOT meet the USP definition of integration. The number of applications received increased compared to last year, but did not contribute to integration.	The ethnic composition needed to integrate the school did NOT meet the USP definition of integration. The number of applications received increased, but the ethnic composition of the applications would have increased racial concentration.	The ethnic composition needed to integrate the school during the magnet recruitment window did NOT meet the USP definition of integration. 1. No progress was made when comparing accepted applications 2. The number of applications received did not increase compared to prior year.

National Standard	District Standard	Standard Indicator	5	4	3	2	1	0
Standard 1.1	**1.1.B**	Magnet schools participate in recruitment-marketing opportunities.	**Requires All**	**Requires All**	**Requires All**	**Requires All**		
Student Recruitment and Selection	Magnet programs will utilize all available tools for recruitment and marketing.		Magnet school/program personnel participated in ALL recruitment/marketing opportunities offered by the district. Magnet school/program by the District AND the school conducted at least three (3) documented marketing/recruitment efforts on site before December 1.	Magnet school/program personnel participated in at least 75% of recruitment/marketing opportunities offered to the program by the District AND the school conducted at least two (2) documented marketing/recruitment efforts on site before December 1.	Magnet school/program personnel participated in at least 50% of recruitment/marketing opportunities offered to the program by the District AND the school conducted at least one (1) documented marketing/recruitment effort on site before December 1.	Magnet school/program personnel participated in at least 25% of recruitment/marketing opportunities offered to the program by the District AND the school conducted at least one (1) documented marketing/recruitment effort on site before December 1.	Magnet program personnel participated in less than 25% of recruitment/ marketing opportunities offered directly to the program by the district during the school year.	Magnet program personnel participated in zero (0) district wide or school initiated marketing/ recruitment opportunities during the school year.

TUSD

SCHOOL NAME:

Tucson Unified School District Magnet Standards: PILLAR 2 INNOVATIVE CURRICULUM								
National Standard	**District Standard**	**Standard Indicator**	**5**	**4**	**3**	**2**	**1**	**0**
Standard 2.3	**2.3.A**	Evidence of magnet theme	**Requires ALL**	**Requires ALL**	**Requires ALL**	**Requires ALL**		
Environment	Magnet programs will have a clearly defined theme.		Magnet theme is evident in 100% of the Essential Components of the Magnet Site Observation Checklist for all observations through out the year.	All Essential Components of magnet theme is evident in at least 90% of the site observations through out the year.	All Essential Components of magnet theme is evident in at least 80% of the site observations through out the year.	All Essential Components of magnet theme is evident in at least 50% of the site observations through out the year.	Little or no improvement in magnet theme visibility as evidenced by the Essential Components of the Magnet Site Observation Checklist when comparing the first walkthrough to the last walkthrough.	No evidence of magnet theme visibility as evidenced by the any of the Magnet Site Observation Checklists

National Standard	District Standard	Standard Indicator	5	4	3	2	1	0
Standard 2.4	**2.4.A**	Evidence of magnet theme immersion	**Requires All**	**Requires All**	**Requires All**	**Requires All**		
Theme Fidelity	Magnet programs will have a unique theme or pedagogy.		Magnet students immersed in theme related curriculum; At least 3 hours per school day; In all grade levels of the program.	Magnet students immersed in theme related curriculum; Less than 3 but more than 2 hours per school day; In all grade levels of the program.	Magnet students immersed in theme related curriculum; Less than 2 hours per school day; In all grade levels of the program.	Magnet students immersed in theme related curriculum; Less than 2 hours per school day; In some grade levels of the program.	Magnet students immersed in theme related curriculum; Only during extra-curricular activities.	Magnet students are not immersed in theme related curriculum.

National Standard	District Standard	Standard Indicator	5	4	3	2	1	0
Standard 2.5	**2.4.A**	Evidence of magnet theme curriculum with a clearly articulated scope and sequence.	**Requires All**	**Requires All**	**Requires 1 or 2**	**Requires All**		
Curriculum Fidelity	Magnet programs will have a unique theme or pedagogy.		Magnet theme curriculum with documented scope and sequence; At ALL grade levels of the program; Well developed vertical and horizontal progression between grade levels/ courses.	Magnet theme curriculum and documented scope and sequence; Some grade levels of the program; Horizontal progression but limited vertical progression.	Magnet theme curriculum is evident but incomplete. The scope and/sequence is missing; OR There is horizontal progression but no vertical progression.	Curriculum is related to the magnet theme; There is no scope or sequence; AND There is no evidence of vertical or horizontal progression.	Magnet theme curriculum consists of a few units in some grade levels or departments.	No documented magnet theme curriculum.

TUSD

SCHOOL NAME:

Tucson Unified School District Magnet Standards: PILLAR 3 ACADEMIC EXCELLENCE								
National Standard	**District Standard**	**Standard Indicator**	**5**	**4**	**3**	**2**	**1**	**0**
Standard 3.6	**3.6.A**	The school has a shared program-wide philosophy.	**Requires ALL**	**Requires ALL**	**Requires ALL**	**Requires ALL**		
Instructional Fidelity	Magnet teachers and administrators share a program-wide philosophy of teaching and learning focused on delivering instruction aligned to the theme using multiple modes of learning that align to the theme.		Program-wide instructional philosophy; Focused on multiple instructional modes of learning; Modes aligned to the theme; In all classrooms; Bi-annual evaluation with data demonstrates effective approach.	Program-wide instructional philosophy; Limited instructional modes of learning; Modes aligned to the theme; Annual evaluation in all classrooms; Data demonstrates effective approach.	Program-wide instructional philosophy; Limited instructional modes of learning ; Modes aligned to the theme in most classrooms; Data used inconsistently to determine if the approach is effective.	Evidence of the development of an instructional philosophy; Aligned with the theme.	Development of instructional philosophy; No alignment to the theme.	No evidence of a program-wide instructional philosophy for teaching and learning.

National Standard	District Standard	Standard Indicator	5	4	3	2	1	0
Standard 3.7	**3.7.A**	Student achievement in all ethnic categories exceeds the district average when comparing ethnic categories and grade levels.	**Requires All**	**Requires All**	**Requires ALL**	**Requires All**		
Student Achievement	Magnet programs will eliminate disproportionality of student achievement by race.		Students in ALL ethnic categories demonstrate increase in student achievement In reading and math on district/state assessments at ALL grade levels.	Students in all ethnic categories demonstrate increase in student achievement on district/state assessments that mirrors the district average growth.	Students in more than one ethnic category demonstrate growth when compared to district scores.	Students in at least one ethnic category demonstrate growth but it was below the district average.	Student achievement in at least one ethnic group remained stagnant when comparing grade levels year to year.	Student achievement in any one ethnic group has shown backward growth on assessments compared by grade levels year to year.

National Standard	District Standard	Standard Indicator	5	4	3	2	1	0
Standard 3.7	**3.7.B**	Evidence of interventions and extended day programs	**Requires All**	**Requires All**	**Requires ALL**	**Requires All**		
	Magnet schools provide interventions and accelerated opportunities both within the school day and during extended day programs.		Magnet curriculum supports individualized learning; Accelerated opportunities; Tiered levels of interventions related to the theme; For ALL students During the school day; Before and/or after school; 100% of eligible students participate.	Magnet curriculum supports individualized learning: Accelerated opportunities; Tiered levels of interventions related to the theme; For most students; During the school day; More than 80% of eligible students participate.	Magnet curriculum supports individualized learning: Limited accelerated opportunities; For most students; During the school day.	Development of systematic approach using interventions and extended-day programs to individualize learning within the theme.	No development of systematic approach; Some teachers provide classroom support.	No evidence of interventions or extended-day programs.

TUSD						SCHOOL NAME:		
Tucson Unified School District Magnet Standards: PILLAR 4 HQ INSTRUCTIONAL SYSTEMS								
National Standard	**District Standard**	**Standard Indicator**	**5**	**4**	**3**	**2**	**1**	**0**
Standard 4.8	**4.8.A**	Evidence of key personnel trained in the magnet theme. (Example: administration, highly qualified teachers, exceptional education, resource teachers, and magnet coordinator.)	**Requires All** The magnet program has ALL key personnel trained in the theme as required by district standards.	**Requires All** The magnet program has all the following personnel trained in the theme: Administration ; All Highly qualified teachers have received training; A full-time magnet coordinator.	**Requires All** The magnet program has the following personnel trained in the theme: Full-time magnet coordinator and Administration Between 80%-99% highly qualified teachers have received training.	**Requires All** The magnet program has: Full-time magnet coordinator. Between 50%-79% highly qualified teachers have received training. Demonstrated efforts to recruit key personnel related to theme.	The magnet program has a designated magnet coordinator. Between 25%-49% highly qualified teachers have received training.	There is no evidence of theme training opportunities provided by district or school.
Educator Development	Magnet programs will have personnel that are key to the development and implementation of the magnet theme.							

National Standard	District Standard	Standard Indicator	5	4	3	2	1	0
	4.8.B	Evidence of professional development in theme.	**Requires All**	**Requires All**	**Requires ALL**	**Requires All**		
	Magnet program key personnel will receive 25 hours of professional development in theme content annually.		District/Site provides 25 hours professional development in magnet theme; At least 90% of magnet program teachers and administrators participated in ALL 25 hours of training.	District/Site provides 25 hours of professional development in theme; At least 90% of magnet program teachers and administrators participate in all 25 hours of training.	District/Site provides 25 hours of professional development in theme; At least 50%-89% of magnet program teachers and administrators participated in all hours of training.	District/Site provides 25 hours of professional development in theme; Less than 50% of the magnet program teachers and administrators participate in all hours of training.	District/Site provides less than 25 hours of professional development in theme.	The magnet program has evidence of planning for future training in their unique theme areas.

	District Standard	Standard Indicator	5	4	3	2	1	0
	4.8.C		**Requires All**	**Requires All**	**Requires ALL**	**Requires All**		
	Magnet program key personnel will receive 30 hours of professional development in instructional pedagogy annually.	Evidence of professional development in instructional pedagogy, teacher/administrator participation.	District/Site provides 30 hours of documented professional development in instructional pedagogy; At least 90% of magnet program teachers and administrators participated in ALL 30 hours of training.	District/Site provides 30 hours of documented professional development in instructional pedagogy; Fewer than 90% of magnet program teachers and administrators participate in all hours of training.	District /Site provides 30 hours of documented professional development in instructional pedagogy; At least 50%- 89% of the magnet program teachers and administrators participate all hours of training.	District /Site provides 30 hours of documented professional development in instructional pedagogy; Less than 50% of the magnet program teachers and administrators participate all hours of training.	District/Site provides less than 30 hours of professional development in instructional pedagogy.	The magnet program has evidence of planning for future training in instructional pedagogy.

National Standard	District Standard	Standard Indicator	5	4	3	2	1	0
Leadership	**4.9.A**		**Requires All**	**Requires All**	**Requires 1 or 2**	**Requires All**		
	Magnet schools will develop a shared-leadership model through Magnet Leadership Teams and Community Teams.	The school will develop a Leadership Team.	Magnet program has designated Magnet Leadership Team which includes representatives from ALL stakeholders, including administration, magnet coordinator, teachers, parents, and community members; Documented meeting times on regular basis, agendas, meeting minutes; Evidence of shared decision making that supports the magnet theme, mission ,vision, and curriculum.	Magnet program has designated magnet leadership team which includes representatives from most stakeholders; Documented meeting times on regular basis with agendas and meeting minutes; Evidence of shared decision making that supports the magnet theme, mission vision and curriculum and monitoring of the magnet program.	The magnet program has designated magnet leadership team which includes representatives from a few stakeholders; OR Periodic meetings are held to discuss theme integration, mission, vision and curriculum and monitoring of the magnet program and the improvement process. Documented meeting times on regular basis with agendas and meeting minutes.	Meetings have been inconsistent or irregular; Key leaders and stakeholders have been not been involved in the development of the program, magnet mission, vision and curriculum and monitoring of magnet program and the improvement process. Documented meeting times on regular basis with agendas and meeting minutes.	Key leaders and stakeholders have not been involved in the development of the magnet mission, vision, curriculum and do not monitor magnet programs through , data reviews or in the ongoing improvement process.	There is no magnet leadership team.

National Standard	District Standard	Standard Indicator	5	4	3	2	1	0
Effective Organization and Systemic Improvement	**4.10.A**		**Requires All**	**Requires All**	**Requires 1 or 2**	**Requires All**	**Required 1 or 2**	
	The Magnet Improvement Plan or Sustainability Plan integrates the magnet theme with rigor into the curriculum, quality first instruction, interventions, and assessments improve student learning.	Magnet Improvement Plan or Sustainability Plan.	All requirements in Level 4 plus: All strategies are focused on improving instructional practice and student learning; Monthly reports are timely and document continuous improvement process and growth.	Magnet program completes annual magnet evaluation and creates a Magnet Improvement Plan or Sustainability Plan; All strategic planning efforts integrate the magnet theme; Plan includes evidence of rigor, quality first instruction, interventions, assessments; Evidence of continuous improvement model using data-based decisions;	Magnet program completes annual evaluation and creates a Magnet Improvement Plan or Sustainability Plan; Program is developing process for integrating rigor, quality first instruction, interventions, assessments Data is analyzed but not used for decision-making and growth; Monthly reports document growth but are late or inconsistent.	Magnet program completes annual Magnet plan; Program is developing a process for analyzing and using data; Monthly reports are late and missing information .	There is a Magnet Improvement lacks does not include measureable outcomes or processes for improvement. OR The Magnet Improvement Plan is not used as a document to guide change. Monthly reports do not reflect progress toward improvement.	There is no evidence of a magnet plan for the site.

TUSD

SCHOOL NAME:

Tucson Unified School District Magnet Standards: PILLAR 5 FAMILY AND COMMUNITY PARTNERSHIPS								
National Standard	**District Standard**	**Standard Indicator**	**5**	**4**	**3**	**2**	**1**	**0**
Standard 5.11	**5.11.A**	Number of participants and community calendar.	**Requires All**	**Requires All**	**Requires All**	**Requires All**		
Community Engagement and Partnerships	The local community is actively involved in supporting the magnet school.		Documented community event calendar; Evidence of 4 or more connections to multiple organizations that are ongoing partnerships have been in place over time; Partnerships are documented with letters of support on file in magnet coordinators office.	All of Level 5 except: Evidence of at least 3 partnerships to multiple organizations that are ongoing Partnerships are relevant to the magnet theme	Magnet program maintains or has at least 1 partnership to organizations that support the magnet theme Partnerships may be newly established Not all partnerships are documented with letters of support on file in magnet coordinators office.	The magnet program is developing a plan to establish community partnerships to support the magnet theme; There are no letters of support documenting partnerships.	The program has lost community partnerships or has not developed any new community relationships over the past year.	There is no evidence of connections with the community.

National Standard	District Standard	Standard Indicator	5	4	3	2	1	0
Standard 5.12	**5.12.A**	Evidence of frequent contact with families; mailers, newsletters, web-site, parent access to curricular documents, student showcases. Number of families participating increase each year Communication is provided in the languages represented by the school population.	**Requires All**	**Requires All**	**Requires All**	**Requires All**	**1 or 2**	
Family Engagement and Communication	All magnet schools will have a measureable family engagement and communication component in the improvement plan.		Families can contact teachers and the principal & participation is documented Magnet program provides easy access to curricular documents; Magnet program showcases student learning related to the magnet theme more than 4 times/year; Family participation increases each year as documented by the number of families participating; Evidence that data is used to inform families of student academic progress.	All requirements in Level 5 except: Magnet program showcases student learning related to the magnet theme more than 3 times/year; Almost all families are invited to student showcase events;	All requirements in Level 5 except: Magnet program showcases student learning related to the magnet theme more than 2 times/year; Almost all families are invited to student showcase events; Evidence that data is used inconsistently to inform families of student academic progress.	Little to no family communication is documented; Opportunities for family engagement offered less than once a semester; The level of family participation has been maintained documented by the number of families participating; No evidence of using data to inform families of student progress.	No documentation of opportunities for family participation; OR Family participation decreases.	No evidence of communication with families through web, phone, email, or family engagement opportunities.

PRELIMINARY ANNUAL PROGRESS
COMPARING 40TH DAY 2013-14 TO INCOMING ACCEPTED APPLICATIONS

Magnet School Label	**Annual Review competed by Aug 1 each year; Plans developed by September 1**	**School Designations**	**Gains or Loss (Percentage at entry level moving toward integration)**	**Notes**
EXCELLING		Dodge Traditional Magnet Middle	Integrated	
MEETS **70+**	If no deficiencies are found, the magnet continues as a "MEETS" magnet. The programs will continue to be monitored and adjusted as necessary. If deficiencies are found, the magnet is reclassified as **"Improvement"**	Borton Booth-Fickett K-8 Palo Verde Magnet Cragin Drachman Tucson High Science	Integrated Integrated Integrated Integrated Integrated Integrated	 Moved from "Improvement" Moved from "Improvement"
IMPROVEMENT **69%-77%** **Two Enrollment Cycles**	"Improvement" magnets are those that have 69%-77% of any one ethnicity and require significant revisions to the professional development, curriculum, theme, pedagogy, and /or recruitment strategies. "Improvement" magnets will work in conjunction with the Magnet Office to develop and implement a Magnet Improvement Plan, including specific and revisions to the professional development, curriculum, theme, and/or pedagogy strategies. The Magnet Improvement Plan will include and a specific recruitment plan focused on meeting measurable goals. The Magnet Improvement Plan must be approved by the Magnet Director, in conjunction District Leadership, by the end of the first quarter, and will be evaluated for success at the end of the year.	TCHFA YR1 Roskruge YR 1 Davis YR 1 Tully YR 1 Holladay YR 1 Safford YR 1 Bonillas YR 1 Mansfeld YR 1 Cholla YR 2 Carrillo YR 1	2% K=17% 6= 4% 11% -2% -12% K= -11% 6= -6% -5% 7% 0% 13%	Moved from "Approaches" Moved from "Approaches" Gains above district average Moved from "Approaches" Moved from "Approaches" Moved from "Approaches" Moved from "Approaches" New Magnet Moved from "Approaches" Gains above the district average
ELIMINATION WARNING **78% +** **One Enrollment Cycle**	Magnets that have been in improvement and have not met the integration standards using the lottery outcomes in SY 2014. The programs have one more enrollment cycle to make substantial gains.	Pueblo YR 2 Ochoa YR 2 Robison YR 2 Utterback YR 2	4% 3% 6% -15%	