

APPENDIX V - 28

Culturally Responsive Pedagogy and Instruction Department
Report on Status and Activities
SY2020-2021

In 2020-21 SY, most students attended school via a remote platform. This drastically different learning environment presented students and teachers with new and difficult challenges to learning. The feedback provided by teachers indicates that one of those challenges was student engagement.

In an effort to offset the negative effects of disengagement on student learning, the District revised its Manual for Culturally Responsive Teaching to incorporate strategies for remote teaching. These strategies included those designed to mitigate potential learning loss due to student disengagement. This innovative approach addresses student needs by combining culturally responsive approaches with social emotional best practices.

The revised manual was rolled out during the July 2020 Virtual Welcome Back Conference. To further address the social emotional learning needs of students, the CRPI department provided training to District social workers.

In recognizing that student interest is linked to student academic performance, the District worked to increase awareness of the relationship between curriculum and pedagogy, and continued to provide training on how to implement these strategies through the SPARKS framework. This year, all these trainings were provided remotely.

The District provided CRC teachers additional training in addressing the social-emotional learning needs of students via the restorative circle process. This was done through the Tier I and Tier II CRC PD structure. Through Tiered PD structure, CRC teachers were offered training from CRPI on a bi-monthly basis.

1. Culturally Relevant Courses.

In SY2020-21, the District continued to implement the CRC plan, which called for CRC expansion when feasible in elementary, middle, and high schools. CRC teachers continued to develop and revise CRC curriculum and review and revise the curriculum maps for new and existing CRCs.

40th Day CRC Student Enrollment by School Type

| School Level | Year | White | AA | Hisp | NA | API | MR | Total |
|----------------|---------|-------|-----|------|-----|-----|----|-------|
| Elem Schools | 2020-21 | 14 | 5 | 120 | 9 | 0 | 1 | 149 |
| | 2019-20 | 28 | 15 | 177 | 10 | 6 | 9 | 245 |
| | 2018-19 | 24 | 18 | 153 | 5 | 6 | 2 | 208 |
| | 2017-18 | 35 | 28 | 102 | 11 | 8 | 6 | 190 |
| | 2016-17 | 13 | 9 | 90 | 9 | 8 | 4 | 133 |
| K-8 Schools | 2020-21 | 141 | 106 | 943 | 88 | 17 | 41 | 1336 |
| | 2019-20 | 208 | 162 | 1229 | 136 | 24 | 51 | 1810 |
| | 2018-19 | 185 | 128 | 1082 | 144 | 24 | 46 | 1609 |
| | 2017-18 | 131 | 90 | 1179 | 157 | 9 | 53 | 1619 |
| | 2016-17 | 60 | 34 | 313 | 19 | 5 | 12 | 443 |
| Middle Schools | 2020-21 | 547 | 275 | 1192 | 69 | 46 | 86 | 2215 |
| | 2019-20 | 452 | 179 | 1006 | 46 | 27 | 82 | 1792 |
| | 2018-19 | 320 | 130 | 603 | 35 | 26 | 61 | 1175 |
| | 2017-18 | 207 | 70 | 379 | 19 | 16 | 23 | 714 |
| | 2016-17 | 108 | 35 | 316 | 20 | 5 | 15 | 499 |
| High School | 2020-21 | 225 | 175 | 1197 | 52 | 53 | 63 | 1765 |
| | 2019-20 | 167 | 211 | 1157 | 47 | 15 | 38 | 1635 |
| | 2018-19 | 164 | 204 | 1079 | 47 | 18 | 38 | 1550 |
| | 2017-18 | 138 | 207 | 1160 | 50 | 16 | 42 | 1613 |
| | 2016-17 | 108 | 165 | 991 | 36 | 16 | 33 | 1349 |
| | 2015-16 | 54 | 118 | 1012 | 35 | 5 | 19 | 1243 |

A complete list of CR courses offered in SY2020-21 is attached hereto as Exhibit A. Middle school CR courses are taught from the Mexican American Perspective in one semester, and the African American Perspective in the other.

In SY2020-21, the District expanded the required 11th grade CRC-AP English course, AP Language and Composition: Culturally Relevant Mexican American and African American Perspective, at UHS to two sections taught by two different teachers.¹ This increase in teacher capacity encourages the possibility of future expansion of CRC AP offerings not only at UHS, but at other district high schools. Working with a committee of teachers, CRPI further developed curriculum for CRC AP courses and plans to offer these courses at Pueblo HS in the SY2021-22.

¹ Similar to middle school courses, this AP course is taught from the Mexican American perspective one semester, and the African American perspective the other semester.

2. Support and Professional Learning for CRC teachers.

In SY2019-20, the final phase, of the Culturally Responsive Professional Learning Plan was implemented. In SY 2020-21, during the COVID-19 pandemic and school closures, CRPI worked with A&E to develop a set of feedback options for teachers going through the evaluation cycle. These feedback options were referred to as the teacher critical attributes within the Danielson Framework for teacher evaluation.

The District continued to provide support to CRC teachers. At the beginning of SY2020-21, the CRPI department offered new CRC teachers a orientation on the basic elements of teaching CRC. This virtual orientation included exposure to the curricular documents, history of the department, theoretical underpinnings, and applicable strategies used in this setting.

CRPI continued to provide ongoing Tier 1 and Tier 2 professional development to all CRC teachers. This training provided updates on all current and relevant CRC topics during Saturday professional development sessions. This format allowed CRC teachers to engage in Professional Learning Community (PLC) work with other CRC teachers throughout the District. All trainings were held remotely.

Additionally, the District provided a differentiated professional development for CRC teachers who expressed interest in more scholarly work. In CRPI Tier 2 professional development, CRC teachers conducted literature reviews of peer-reviewed, academic articles featuring research on culturally responsive education.

As an extension to the CRPD plan, the District provided SPARKS training to newly hired teachers during the teacher induction process. Throughout the year, CRPI trained site-based instructional support staff (curriculum service providers, MTSS facilitators, and magnet coordinators) on the implementation of culturally responsive practices. The challenges presented by COVID and the reorganization of teacher priorities required modification of plans for additional teacher trainings.

3. CRC Master Teachers

CRC continued to use a teacher mentorship model, whereby experienced classroom teachers (CRC master teachers), who demonstrated a high level of expertise in culturally responsive practices and culturally relevant curriculum, worked virtually with first- and second-year CRC teachers.

These ten master teachers met virtually with their mentees at least once a week and provided guidance and feedback on their classroom practices. Third-year

CRC teachers met with master teachers less frequently because of their increased level of training and expertise.

The District also continued to offer professional development to these master teachers through CRPI internal training, District professional development, and conference opportunities. Additionally, on a biweekly basis, master teachers engaged in PLC work, in which they focused on improving their own CRC practices. This extended learning positively impacts the CRPI department's capacity to effectively support CRC teachers.

While master teachers continued to support more than a dozen CRC teachers as part of their assignment, every master teacher was also assigned a primary site where they observed and engaged in co-teaching with one specific teacher, to whom they provided extended modeling and mentorship. This virtual co-teaching entailed a regular schedule in which these teachers utilized best practices, allowing developing CRC teachers to benefit from regular instructional modeling and mentoring.

4. Professional Learning for Administrators.

CRPI staff continued to provide support and training to District administrators and staff in culturally responsive practices throughout SY2020-21. Training was provided remotely to specific sites upon request and was differentiated to support their specific needs.

In SY2020-21, the District began the planning for further training of administrators on the alignment of the Revised Danielson and the SPARKS framework. This plan includes the training of certificated staff on culturally responsive practices in the classroom. This training is an effort to better utilize the Danielson evaluative framework as an instructional coaching tool.

As noted above, in SY 2020-21, during the COVID-19 pandemic and school closures, CRPI worked with A&E to develop a set of feedback options for teachers going through the evaluation cycle. These feedback options were referred to as the teacher critical attributes within the Danielson Framework for teacher evaluation. Site administrators will be trained on these attributes at the July 2021 Welcome Back training for administrators. The following iteration of this training in SY2021-22 will focus on instructional quality as it relates to culturally responsive practices embedded within the Revised Danielson framework.

Beginning in SY2019-20 and continuing into SY2020-21, the CRPI staff worked with the Special Master to develop an instrument for assessing the effectiveness of

training for administrators, which was ultimately approved by the Court. This tool will be used to measure the effectiveness of training for administrators in assessing the strength of CRP skills of teachers.

5. Cross Departmental Collaboration.

The District uses a culturally responsive framework to address the elements contained within the Supportive and Inclusive Learning Environments (SAIL) approach. The District continued to embed these practices in most aspects involving students and families through collaborative efforts with the Assessment and Evaluation (A&E), Curriculum and Instruction (C&I), Student Relations, and Professional Development departments. Leadership in CRPI and the departments listed above, along with others, participated in various committees that worked toward a closer alignment in approach. CRPI is currently collaborating with ALE in developing a certification process for teachers of courses designated as Honors. CRPI also worked closely with other C&I departments and an outside consultant (Kamm Solutions) to assist in the development of a district-wide instructional framework.

6. National Advisory Panel

The district has commissioned a standing National Panel of Experts in Culturally Responsive Education that advises CRPI on the latest cutting-edge research. In addition to the National Panel, the District has consulted with additional experts when necessary. Specific and intensive consultation was required in the development of the Culturally Responsive Practices Professional Development Plan and in training on Restorative Practices in education. The District has continued to work with premier scholars and practitioners in the fields of critical multiculturalism, culturally relevant and responsive education. Consultation with the National Panel was limited in SY2020-21, but the CRPI Department expects to resume more intensive work with the National Panel in the coming year.

7. Summer Institute

The District was able to hold the annual Summer Institute for Culturally Responsive Education from June 10th -12th, 2021. This event took place virtually via the Zoom platform. Over 200 teachers and administrators took part in this three-day professional development opportunity. A slate of preeminent scholars in their field presented their work alongside local practitioners from within TUSD.

8. Assessment of Program Effectiveness and Strategic Planning.

CRPI conducts an assessment of program effectiveness in a number of ways. The department has collected feedback from CRC teachers indicating areas of strength and points where growth is needed, satisfaction, and needs. Student and teacher surveys are collected at the start and end of each academic year. Master teachers maintain regular communication with CRC teachers where feedback is provided. Post PD surveys and “exit slips” provide immediate feedback on the usefulness of the content and satisfaction of the participants. End of year evaluations are conducted to gauge teacher satisfaction and to inform future training plans.

Master Teachers also conduct observations or walkthroughs for their assigned CRC teachers. During these walkthroughs, master teachers use the current iteration of the Observation and Reflection Instrument. The information gathered is used to coach CRC teachers, document progress, and inform future trainings.

In SY2020-21, the A&E Department conducted a preliminary analysis of data regarding attendance, GPA, and graduation rates to assess the effectiveness of the CR initiative, but the results were not conclusive, and the CRPI Department does not believe that the positive impacts of CR courses were reflected in the results of that study. A copy of the study is attached hereto as Exhibit B. The District will continue to collect data for additional studies, and the CRPI Department currently plans a more comprehensive study after the SY2023-24 school year, using data for matched cohorts of students over a longer period than with the initial study. Because the pandemic’s effects may overwhelm impacts from CR courses, the District believes that it needs to develop new longitudinal data for particular cohorts beginning after the pandemic (for at least a three year period after SY2020-21) to ensure that impacts of CR courses are properly recognizable.

In SY2020-21, following both its regular annual assessment cycle, and the Court’s direction in ECF 2508, the Department made revisions to the CRC Comprehensive Plan, attached hereto as Exhibit C.

EXHIBIT A

CR Courses Offered in SY2021

| School | Course ID | Course Name |
|---------------------------------------|------------------|-----------------------------|
| Borman K-8 | 35628 | CRC Language Arts 8 |
| Borman K-8 | 35630 | CRC/Honors Language Arts 7 |
| Borman K-8 | 49821 | CRC Social Studies 7 |
| Borman K-8 | 49822 | CRC Social Studies 8 |
| Dietz K-8 | 35631 | CRC/Honors Language Arts 8 |
| Dietz K-8 | 49824 | CRC/Honors Social Studies 7 |
| Drachman K-8 Montessori Magnet | 35627 | CRC/Honors Language Arts 6 |
| Drachman K-8 Montessori Magnet | 35630 | CRC/Honors Language Arts 7 |
| Drachman K-8 Montessori Magnet | 35631 | CRC/Honors Language Arts 8 |
| Drachman K-8 Montessori Magnet | 49823 | CRC/Honors Social Studies 6 |
| Drachman K-8 Montessori Magnet | 49824 | CRC/Honors Social Studies 7 |
| Drachman K-8 Montessori Magnet | 49826 | CRC/Honors Social Studies 8 |
| Lawrence 3-8 | 35620 | CRC Language Arts 6 |
| Lawrence 3-8 | 35690 | CRC Language Arts 6 - GATE |
| Lawrence 3-8 | 35626 | CRC Language Arts 7 |
| Lawrence 3-8 | 35628 | CRC Language Arts 8 |
| Lawrence 3-8 | 49820 | CRC Social Studies 6 |
| Lawrence 3-8 | 49821 | CRC Social Studies 7 |
| Lawrence 3-8 | 49822 | CRC Social Studies 8 |
| Miles Exploratory Learning Center K-8 | 35620 | CRC Language Arts 6 |
| Miles Exploratory Learning Center K-8 | 35626 | CRC Language Arts 7 |
| Miles Exploratory Learning Center K-8 | 35628 | CRC Language Arts 8 |
| Miles Exploratory Learning Center K-8 | 49820 | CRC Social Studies 6 |
| Miles Exploratory Learning Center K-8 | 49821 | CRC Social Studies 7 |
| Miles Exploratory Learning Center K-8 | 49822 | CRC Social Studies 8 |
| Pueblo Gardens K-8 | 35620 | CRC Language Arts 6 |
| Pueblo Gardens K-8 | 35626 | CRC Language Arts 7 |
| Pueblo Gardens K-8 | 35628 | CRC Language Arts 8 |
| Pueblo Gardens K-8 | 49820 | CRC Social Studies 6 |
| Pueblo Gardens K-8 | 49821 | CRC Social Studies 7 |
| Pueblo Gardens K-8 | 49822 | CRC Social Studies 8 |
| Robins K-8 | 49820 | CRC Social Studies 6 |
| Rose K-8 | 35620 | CRC Language Arts 6 |
| Rose K-8 | 35630 | CRC/Honors Language Arts 7 |
| Rose K-8 | 35628 | CRC Language Arts 8 |
| Rose K-8 | 49821 | CRC Social Studies 7 |
| Rose K-8 | 49822 | CRC Social Studies 8 |
| Dodge Traditional Magnet Middle | 35620 | CRC Language Arts 6 |
| Dodge Traditional Magnet Middle | 35626 | CRC Language Arts 7 |
| Dodge Traditional Magnet Middle | 35630 | CRC/Honors Language Arts 7 |

CR Courses Offered in SY2021

| School | Course ID | Course Name |
|---|------------------|-----------------------------|
| Dodge Traditional Magnet Middle | 35628 | CRC Language Arts 8 |
| Dodge Traditional Magnet Middle | 49820 | CRC Social Studies 6 |
| Dodge Traditional Magnet Middle | 49821 | CRC Social Studies 7 |
| Dodge Traditional Magnet Middle | 49824 | CRC/Honors Social Studies 7 |
| Dodge Traditional Magnet Middle | 49822 | CRC Social Studies 8 |
| Dodge Traditional Magnet Middle | 49826 | CRC/Honors Social Studies 8 |
| Doolen Middle School | 35626 | CRC Language Arts 7 |
| Doolen Middle School | 35628 | CRC Language Arts 8 |
| Doolen Middle School | 49821 | CRC Social Studies 7 |
| Doolen Middle School | 49822 | CRC Social Studies 8 |
| Booth-Fickett Math/Science K-8 | 35620 | CRC Language Arts 6 |
| Booth-Fickett Math/Science K-8 | 35626 | CRC Language Arts 7 |
| Booth-Fickett Math/Science K-8 | 35628 | CRC Language Arts 8 |
| Booth-Fickett Math/Science K-8 | 49820 | CRC Social Studies 6 |
| Booth-Fickett Math/Science K-8 | 49821 | CRC Social Studies 7 |
| Booth-Fickett Math/Science K-8 | 49822 | CRC Social Studies 8 |
| Gridley Middle School | 35620 | CRC Language Arts 6 |
| Gridley Middle School | 35626 | CRC Language Arts 7 |
| Gridley Middle School | 35628 | CRC Language Arts 8 |
| Gridley Middle School | 49820 | CRC Social Studies 6 |
| Gridley Middle School | 49821 | CRC Social Studies 7 |
| Gridley Middle School | 49822 | CRC Social Studies 8 |
| Magee Middle School | 35620 | CRC Language Arts 6 |
| Magee Middle School | 35626 | CRC Language Arts 7 |
| Magee Middle School | 35628 | CRC Language Arts 8 |
| Magee Middle School | 49820 | CRC Social Studies 6 |
| Magee Middle School | 49821 | CRC Social Studies 7 |
| Magee Middle School | 49822 | CRC Social Studies 8 |
| Mansfeld Magnet Middle School | 35626 | CRC Language Arts 7 |
| Mansfeld Magnet Middle School | 35628 | CRC Language Arts 8 |
| Mansfeld Magnet Middle School | 49821 | CRC Social Studies 7 |
| Mansfeld Magnet Middle School | 49822 | CRC Social Studies 8 |
| Mary Belle McCorkle Academy of Excellence K-8 | 35630 | CRC/Honors Language Arts 7 |
| Mary Belle McCorkle Academy of Excellence K-8 | 35631 | CRC/Honors Language Arts 8 |
| Mary Belle McCorkle Academy of Excellence K-8 | 49824 | CRC/Honors Social Studies 7 |
| Mary Belle McCorkle Academy of Excellence K-8 | 49826 | CRC/Honors Social Studies 8 |
| Naylor K-8 (with Roberts) | 35620 | CRC Language Arts 6 |

CR Courses Offered in SY2021

| School | Course ID | Course Name |
|-------------------------------|------------------|-----------------------------|
| Naylor K-8 (with Roberts) | 35690 | CRC Language Arts 6 - GATE |
| Naylor K-8 (with Roberts) | 35626 | CRC Language Arts 7 |
| Naylor K-8 (with Roberts) | 35691 | CRC Language Arts 7 - GATE |
| Naylor K-8 (with Roberts) | 35628 | CRC Language Arts 8 |
| Naylor K-8 (with Roberts) | 35692 | CRC Language Arts 8 - GATE |
| Naylor K-8 (with Roberts) | 49820 | CRC Social Studies 6 |
| Naylor K-8 (with Roberts) | 49821 | CRC Social Studies 7 |
| Naylor K-8 (with Roberts) | 49829 | CRC/GATE Social Studies 7 |
| Naylor K-8 (with Roberts) | 49822 | CRC Social Studies 8 |
| Naylor K-8 (with Roberts) | 49830 | CRC/GATE Social Studies 8 |
| Pistor Middle School | 35626 | CRC Language Arts 7 |
| Pistor Middle School | 35628 | CRC Language Arts 8 |
| Pistor Middle School | 49821 | CRC Social Studies 7 |
| Pistor Middle School | 49822 | CRC Social Studies 8 |
| Safford K-8 | 35628 | CRC Language Arts 8 |
| Safford K-8 | 35628 | CRC Language Arts 8 |
| Safford K-8 | 49822 | CRC Social Studies 8 |
| Secrist Middle School | 35620 | CRC Language Arts 6 |
| Secrist Middle School | 35626 | CRC Language Arts 7 |
| Secrist Middle School | 35628 | CRC Language Arts 8 |
| Secrist Middle School | 49820 | CRC Social Studies 6 |
| Secrist Middle School | 49821 | CRC Social Studies 7 |
| Secrist Middle School | 49822 | CRC Social Studies 8 |
| Utterback Middle School | 35620 | CRC Language Arts 6 |
| Utterback Middle School | 35626 | CRC Language Arts 7 |
| Utterback Middle School | 35628 | CRC Language Arts 8 |
| Utterback Middle School | 35692 | CRC Language Arts 8 - GATE |
| Utterback Middle School | 49820 | CRC Social Studies 6 |
| Utterback Middle School | 49821 | CRC Social Studies 7 |
| Utterback Middle School | 49822 | CRC Social Studies 8 |
| Vail Middle School | 35626 | CRC Language Arts 7 |
| Vail Middle School | 35628 | CRC Language Arts 8 |
| Vail Middle School | 49821 | CRC Social Studies 7 |
| Vail Middle School | 49822 | CRC Social Studies 8 |
| Valencia Middle School | 35626 | CRC Language Arts 7 |
| Valencia Middle School | 35628 | CRC Language Arts 8 |
| Valencia Middle School | 49824 | CRC/Honors Social Studies 7 |
| Valencia Middle School | 49826 | CRC/Honors Social Studies 8 |
| Wakefield Middle School | 45190 | CRC/Honors Humanities 6 |
| Roskrige Bilingual K-8 Magnet | 35620 | CRC Language Arts 6 |

CR Courses Offered in SY2021

| School | Course ID | Course Name |
|-------------------------------|-----------|--------------------------------------|
| Roskruge Bilingual K-8 Magnet | 35626 | CRC Language Arts 7 |
| Roskruge Bilingual K-8 Magnet | 35628 | CRC Language Arts 8 |
| Roskruge Bilingual K-8 Magnet | 49820 | CRC Social Studies 6 |
| Roskruge Bilingual K-8 Magnet | 49821 | CRC Social Studies 7 |
| Roskruge Bilingual K-8 Magnet | 49822 | CRC Social Studies 8 |
| Catalina High School | 5165 | English 11 Cul Rel AfricanAm View S1 |
| Catalina High School | 5166 | English 11 Cul Rel AfricanAm View S2 |
| Catalina High School | 5167 | English 12 Cul Rel AfricanAm View S1 |
| Catalina High School | 5168 | English 12 Cul Rel AfricanAm View S2 |
| Catalina High School | 5169 | English 11 Cul Rel MexicanAm View S1 |
| Catalina High School | 5170 | English 11 Cul Rel MexicanAm View S2 |
| Catalina High School | 5171 | English 12 Cul Rel MexicanAM View S1 |
| Catalina High School | 5172 | English 12 Cul Rel MexicanAm View S2 |
| Catalina High School | 19061 | American Hist. Cul Rel AfrAm View 1 |
| Catalina High School | 19062 | American Hist. Cul Rel AfrAm View 2 |
| Catalina High School | 19063 | American Hist. Cul Rel MexAm View 1 |
| Catalina High School | 19064 | American Hist. Cul Rel MexAm View 2 |
| Catalina High School | 19073 | American Gov. Cul Rel AfrAm View |
| Catalina High School | 19074 | American Gov. Cul Rel MexAm View |
| Cholla High School | 5165 | English 11 Cul Rel AfricanAm View S1 |
| Cholla High School | 5166 | English 11 Cul Rel AfricanAm View S2 |
| Cholla High School | 5167 | English 12 Cul Rel AfricanAm View S1 |
| Cholla High School | 5168 | English 12 Cul Rel AfricanAm View S2 |
| Cholla High School | 5169 | English 11 Cul Rel MexicanAm View S1 |
| Cholla High School | 5170 | English 11 Cul Rel MexicanAm View S2 |
| Cholla High School | 5171 | English 12 Cul Rel MexicanAM View |
| Cholla High School | 5172 | English 12 Cul Rel MexicanAm View |
| Cholla High School | 19061 | American Hist. Cul Rel AfrAm View 1 |
| Cholla High School | 19062 | American Hist. Cul Rel AfrAm View 2 |
| Cholla High School | 19063 | American Hist. Cul Rel MexAm View 1 |
| Cholla High School | 19064 | American Hist. Cul Rel MexAm View 2 |
| Cholla High School | 19074 | American Gov. Cul Rel MexAm View |
| Palo Verde High Magnet School | 19073 | American Gov. Cul Rel AfrAm View |
| Pueblo High School | 5169 | English 11 Cul Rel MexicanAm View S1 |
| Pueblo High School | 5170 | English 11 Cul Rel MexicanAm View S2 |
| Pueblo High School | 5171 | English 12 Cul Rel MexicanAM View S1 |
| Pueblo High School | 5172 | English 12 Cul Rel MexicanAm View S2 |
| Pueblo High School | 19063 | American Hist. Cul Rel MexAm View 1 |
| Pueblo High School | 19064 | American Hist. Cul Rel MexAm View 2 |
| Pueblo High School | 19074 | American Gov. Cul Rel MexAm View |

CR Courses Offered in SY2021

| School | Course ID | Course Name |
|---------------------------|-----------|--------------------------------------|
| Rincon High School | 5169 | English 11 Cul Rel MexicanAm View S1 |
| Rincon High School | 5170 | English 11 Cul Rel MexicanAm View S2 |
| Rincon High School | 5171 | English 12 Cul Rel MexicanAM View S1 |
| Rincon High School | 5172 | English 12 Cul Rel MexicanAm View S2 |
| Rincon High School | 19061 | American Hist. Cul Rel AfrAm View 1 |
| Rincon High School | 19062 | American Hist. Cul Rel AfrAm View 2 |
| Rincon High School | 19063 | American Hist. Cul Rel MexAm View 1 |
| Rincon High School | 19064 | American Hist. Cul Rel MexAm View 2 |
| Sabino High School | 5167 | English 12 Cul Rel AfricanAm View S1 |
| Sabino High School | 5168 | English 12 Cul Rel AfricanAm View S2 |
| Sabino High School | 19061 | American Hist. Cul Rel AfrAm View 1 |
| Sabino High School | 19062 | American Hist. Cul Rel AfrAm View 2 |
| Sahuaro High School | 5165 | English 11 Cul Rel AfricanAm View S1 |
| Sahuaro High School | 5166 | English 11 Cul Rel AfricanAm View S2 |
| Sahuaro High School | 5167 | English 12 Cul Rel AfricanAm View S1 |
| Sahuaro High School | 5168 | English 12 Cul Rel AfricanAm View S2 |
| Sahuaro High School | 5169 | English 11 Cul Rel MexicanAm View S1 |
| Sahuaro High School | 5170 | English 11 Cul Rel MexicanAm View S2 |
| Sahuaro High School | 5171 | English 12 Cul Rel MexicanAM View S1 |
| Sahuaro High School | 5172 | English 12 Cul Rel MexicanAm View S2 |
| Sahuaro High School | 19063 | American Hist. Cul Rel MexAm View 1 |
| Sahuaro High School | 19064 | American Hist. Cul Rel MexAm View 2 |
| Sahuaro High School | 19073 | American Gov. Cul Rel AfrAm View |
| Sahuaro High School | 19074 | American Gov. Cul Rel MexAm View |
| Santa Rita High School | 5167 | English 12 Cul Rel AfricanAm View S1 |
| Santa Rita High School | 5168 | English 12 Cul Rel AfricanAm View S2 |
| Santa Rita High School | 5169 | English 11 Cul Rel MexicanAm View S1 |
| Santa Rita High School | 5170 | English 11 Cul Rel MexicanAm View S2 |
| Tucson High Magnet School | 5165 | English 11 Cul Rel AfricanAm View S1 |
| Tucson High Magnet School | 5166 | English 11 Cul Rel AfricanAm View S2 |
| Tucson High Magnet School | 5167 | English 12 Cul Rel AfricanAm View S1 |
| Tucson High Magnet School | 5168 | English 12 Cul Rel AfricanAm View S2 |
| Tucson High Magnet School | 5169 | English 11 Cul Rel MexicanAm View S1 |
| Tucson High Magnet School | 5170 | English 11 Cul Rel MexicanAm View S2 |
| Tucson High Magnet School | 5171 | English 12 Cul Rel MexicanAM View S1 |
| Tucson High Magnet School | 5172 | English 12 Cul Rel MexicanAm View S2 |
| Tucson High Magnet School | 19061 | American Hist. Cul Rel AfrAm View 1 |
| Tucson High Magnet School | 19062 | American Hist. Cul Rel AfrAm View 2 |
| Tucson High Magnet School | 19063 | American Hist. Cul Rel MexAm View 1 |
| Tucson High Magnet School | 19064 | American Hist. Cul Rel MexAm View 2 |

CR Courses Offered in SY2021

| School | Course ID | Course Name |
|----------------------------------|------------------|--|
| Tucson High Magnet School | 19065 | American Hist. Cul Rel NativeAm View 1 |
| Tucson High Magnet School | 19066 | American Hist. Cul Rel NativeAm View 2 |
| Tucson High Magnet School | 19073 | American Gov. Cul Rel AfrAm View |
| Tucson High Magnet School | 19074 | American Gov. Cul Rel MexAm View |
| University High School | 5993 | AP Engl Lang & Com-CRC Mexican Am&African Am Eng 1 |
| Teenage Parent High School (TAP) | 5171 | English 12 Cul Rel MexicanAM View S1 |

EXHIBIT B

The Impact of Culturally Relevant Courses on Student Performance in Tucson Unified School District using School-Based Measures SY 2019-20

Executive Summary

This study examined the impact of Culturally Relevant (CR) courses on student performance in grades 6 – 12 during SY 2019-20 in the Tucson Unified School District (TUSD). Five outcomes were selected to assess if students who were enrolled in one or more CR courses (the treatment group) performed differently than a matched cohort of students who were not enrolled in any CR courses in SY 2019-20 (the comparison group). A regression analysis was used to understand the amount of impact of CR course enrollment on each of the outcomes for students who chose to take CR courses. One methodological challenge with assessing impact of CR courses is that students could self-select to enroll in a CR course rather than being placed in the course through randomization. The results of this study must therefore be read with caution because one group may possess characteristics that are systematically different and/or may be specific to its members.

This study revealed that enrollment in a CR course in High School or Middle School did not impact overall academic performance in terms of English Language Arts (ELA) and Math benchmark testing or the number of F's received when compared to the comparison group. This finding is not surprising because students in the treatment and comparison group were matched on prior academic performance from SY 2018-19.

The results did show that greatest difference between High School and Middle School was that Middle School students who enrolled in CR courses had a significantly higher attendance rate than those not enrolled in CR courses as well as a significantly lower overall GPA. It is possible that these students enrolled in one or more CR course not only attended school more frequently but also had a more rigorous course load than students who were not enrolled in CR courses.

Introduction

Tucson Unified District currently operates under a desegregation order, referred to as the Unitary Status Plan (USP) that was implemented in SY 2014-15. The USP evolved out of a school desegregation case that began in 1974 and continues to this day. The Court recently mandated a study on the impact of Culturally Relevant (CR) courses on student performance. The purpose of this evaluation thus is to determine whether TUSD's Culturally Relevant (CR) courses had a measurable impact on selected student outcomes for which data exists. During SY 2019-20, CR courses were offered in grades 6 – 8 and 11 and 12. These courses were open to all students and they could choose to enroll or not.

To determine program impact, the definitive experimental technique is by random assignment that assigns participants to different groups with, for example, a random number generator to ensure that each participant has an equal chance of being placed in any group. This approach guarantees that any

The Impact of Culturally Relevant Courses on Student Performance in Tucson Unified School District using School-Based Measures SY 2019-20

differences between and within the groups are not systematic at the outset of the experiment and that any differences between groups at the end of the experiment can be more confidently attributed to the experimental procedures. One methodological challenge in assessing impact of CR courses is that students could self-select to enroll in a CR course rather than being placed in the course through randomization. The results of this study must therefore be read with caution because one group may possess characteristics that are systematically different and/or may be specific to its members.

This study used a quasi-experimental design using a matched comparison group because a random experimental design was beyond the scope of this study in both time and resources. Two groups of matched students were identified that met specific criteria: the treatment group and the comparison group. The treatment group was made up of students who took one or more CR course in SY 2019-20 and the comparison group was made up of students who did not take any CR courses in SY 2019-20. Criteria for the group identification are shown below in Table 1:

| Table 1. Criteria for Identified Groups | |
|---|--|
| Treatment Group | Comparison Group |
| <ul style="list-style-type: none"> Enrolled at a single TUSD school for all of 2018-19 Enrolled at a single TUSD school for all of 2019-20 Did not take any CR courses in 2018-19 Took one or more CR courses for the entire 2019-20 Was not missing data for any treatment, outcome, or control variables (complete case analysis) | <ul style="list-style-type: none"> Enrolled at a single TUSD school for all of 2018-19 Enrolled at a single TUSD school for all of 2019-20 Did not take any CR courses in 2018-19 Did not take any CR courses in 2019-20 Was not missing data for any treatment, outcome, or control variables (complete case analysis) |

The N size for the two matched groups varied depending upon the outcome and is reported separately for each table of results. Please see Appendix 1 for a more detailed explanation of how the matched groups were formulated. The five SY 2019-20 outcomes selected for analysis were:

- Attendance rate
- GPA for students who had 5 or more letter grades in Semester 1
- Number of Fs received in Semester 1
- ELA Benchmark mean proficiency levels
- Math Benchmark mean proficiency levels

The Impact of Culturally Relevant Courses on Student Performance in Tucson Unified School District using School-Based Measures SY 2019-20

Findings: Average Treatment Effect Using Regression Analysis

To examine impact, the treatment group (students who were enrolled in one or more CR courses in SY 2019-20) was compared against a matched comparison group (students who were not enrolled in any CR courses in SY 2019-20) using a regression analysis. This approach is meant to reveal evidence of causality between treatment and the associated outcome where such evidence exists. A major advantage of a regression model is the ability to control for as many other factors as needed. For the five outcomes variable below, the coefficient explains the average expected treatment effect on the treatment group, holding all other factors constant. The P-value explains if the difference between the two groups is statistically significant at .05 or less. For this study, the regression outputs can answer the following question: If two students have the same FRL status, same ethnicity, same 1819 core course GPA or AzMERIT scores, same gender, same ELL status, same ExEd status, and same 1819 baseline outcome, but only one of them took CR courses, *how would that student's SY 2019-20 outcomes change?*

A. Outcome 1: Attendance Rate

The findings are organized into two groups: High School and Middle School. The tables below explain not only how big the treatment effect is (the Coefficient) and if the difference is statistically significant (P-value), but also gives information on the control variables and if their contribution to the identified outcome is significant or not. For example, in Table 2 below, High School Attendance is the outcome variable. The small negative Coefficient of -0.0038 indicates that enrollment in CR courses did not have an impact on attendance rates and the P-value of 0.989 shows that the difference is not significant. A result that is non-significant indicates that we cannot be confident that CR courses produced any impact on attendance for High School students outside of the initial dataset. Additionally, the coefficients on the control variables reveal that differences in attendance rates among students are most likely to be driven primarily by SY 2018-19 core course GPA, gender, and SY 2018-19 attendance rate. All control variables that were significant for the coefficient are highlighted in a darker grey. Significant control variables in Table 2 therefore are more likely to have affected attendance rates among all high school students than enrollment in a CR course. This analysis therefore demonstrates that CR courses were not found to have a significant impact on attendance rate at the High School level.

The Impact of Culturally Relevant Courses on Student Performance in Tucson Unified School District using School-Based Measures SY 2019-20

Table 2. High School Attendance Rates

| High (N=2,168) | School | Coefficient | P-value |
|------------------------------|-----------------------------|-------------|---------|
| | | -0.0038 | 0.989 |
| <i>Control variables</i> | | | |
| | <i>FRL Status</i> | -0.1968 | 0.442 |
| | <i>White</i> | -1.8567 | 0.086 |
| | <i>AfAm</i> | -1.7579 | 0.105 |
| | <i>Hisp</i> | -1.9099 | 0.057 |
| | <i>NaAm</i> | -- | -- |
| | <i>AsAm</i> | 1.4905 | 0.616 |
| | <i>Multi</i> | -2.1388 | 0.108 |
| | <i>1819 Core Course GPA</i> | 1.0280 | <0.001 |
| | <i>Gender</i> | -1.3674 | <0.001 |
| | <i>ELL Status</i> | -0.4393 | 0.525 |
| | <i>ExEd Status</i> | 0.6289 | 0.296 |
| | <i>1819 Attendance Rate</i> | 0.7907 | <0.001 |
| R² =0.5376 | | | |

Table 3 presents the Middle School attendance rate findings. The Coefficient is .3412 and the P-value is statistically significant at .05 indicating that enrollment in one or more CR courses is expected to raise a Middle School student's attendance by 0.34 percentage points on average with all other factors being equal. CR course enrollment therefore did have a significant, positive impact on SY 2019-20 attendance rate at the Middle School level.

Table 3. Middle School Attendance Rates

| Middle (N=2,779) | School | Coefficient | P-value |
|--------------------------|-------------------------|-------------|---------|
| | | 0.3412 | 0.050 |
| <i>Control variables</i> | | | |
| | <i>FRL Status</i> | -0.5722 | 0.005 |
| | <i>White</i> | -0.7251 | 0.677 |
| | <i>AfAm</i> | -0.9688 | 0.585 |
| | <i>Hisp</i> | -1.2319 | 0.478 |
| | <i>NaAm</i> | -1.3632 | 0.447 |
| | <i>AsAm</i> | -- | -- |
| | <i>Multi</i> | -0.9962 | 0.587 |
| | <i>1819 AzMERIT ELA</i> | 0.0044 | 0.780 |

The Impact of Culturally Relevant Courses on Student Performance in Tucson Unified School District using School-Based Measures SY 2019-20

| | | |
|------------------------------|---------|--------|
| <i>1819 AzMERIT Math</i> | 0.0188 | 0.217 |
| <i>Gender</i> | -0.2140 | 0.203 |
| <i>ELL Status</i> | 0.6137 | 0.147 |
| <i>ExEd Status</i> | -0.9810 | 0.001 |
| <i>1819 Attendance Rate</i> | 0.6525 | <0.001 |
| R² =0.5466 | | |

B. Outcome 2: 2019-20 Semester 1 GPA

Table 4 shows that CR course enrollment did not have a significant impact on GPA at the High School level with a non-significant P-value of .30.

Table 4. High School GPA for Semester 1 2019-20

| High School (N=2,146) | Coefficient | P-value |
|------------------------------|-------------|---------|
| | 0.0307 | 0.302 |
| <i>Control variables</i> | | |
| <i>FRL Status</i> | -0.0386 | 0.165 |
| <i>White</i> | -0.2411 | 0.429 |
| <i>AfAm</i> | -0.3007 | 0.325 |
| <i>Hisp</i> | -0.3048 | 0.313 |
| <i>NaAm</i> | -0.3920 | 0.223 |
| <i>AsAm</i> | -- | -- |
| <i>Multi</i> | -0.0086 | 0.978 |
| <i>1819 Core Course GPA</i> | 0.6434 | <0.001 |
| <i>Gender</i> | 0.0205 | 0.462 |
| <i>ELL Status</i> | 0.1254 | 0.094 |
| <i>ExEd Status</i> | 0.8189 | 0.217 |
| <i>1819 S1 GPA</i> | 0.0938 | 0.020 |
| R² =0.5884 | | |

Table 5 demonstrates that CR course enrollment did have a small, significant, and negative impact on GPA at the Middle School level with the Coefficient of -0.07 and a P-value of 0.039. In other words, students who did not enroll in CR courses could be expected to have a somewhat higher GPA than those who were enrolled in CR courses. It is unclear from this study what impact Math or Science grades might have on the overall GPA for the treatment or comparison group.

The Impact of Culturally Relevant Courses on Student Performance in Tucson Unified School District using School-Based Measures SY 2019-20

Table 5. Middle School GPA Semester 1 2019-20

| Middle School (N=1,644) | School | Coefficient | P-value |
|-------------------------------|--------------------------|-------------|---------|
| | | -0.0685 | 0.039 |
| <i>Control variables</i> | | | |
| | <i>FRL Status</i> | -0.1057 | 0.007 |
| | <i>White</i> | -0.1861 | 0.606 |
| | <i>AfAm</i> | -0.1678 | 0.649 |
| | <i>Hisp</i> | -0.3235 | 0.368 |
| | <i>NaAm</i> | -0.6480 | 0.084 |
| | <i>AsAm</i> | -- | -- |
| | <i>Multi</i> | 0.0625 | 0.872 |
| | <i>1819 AzMERIT ELA</i> | 0.0122 | <0.001 |
| | <i>1819 AzMERIT Math</i> | 0.0010 | 0.001 |
| | <i>Gender</i> | 0.0856 | 0.010 |
| | <i>ELL Status</i> | 0.1584 | 0.064 |
| | <i>ExEd Status</i> | 0.1148 | 0.049 |
| | <i>1819 S1 GPA</i> | 0.6616 | <0.001 |
| R² = 0.5861 | | | |

C. Outcome 3: 2019-20 Semester 1 Number of Fs Received

Tables 6 and 7 reveals that CR course enrollment did not have a significant impact on the number of Fs a student received at both the High School and the Middle School level with P-values that exceeded the 0.5 threshold.

Table 6. High School Number of F's Received Semester 1

| High School (N=1,839) | School | Coefficient | P-value |
|--------------------------|-------------------|-------------|---------|
| | | 0.0024 | 0.971 |
| <i>Control variables</i> | | | |
| | <i>FRL Status</i> | 0.8686 | 0.187 |
| | <i>White</i> | -0.0995 | 0.727 |
| | <i>AfAm</i> | -0.1452 | 0.622 |
| | <i>Hisp</i> | 0.1899 | 0.454 |
| | <i>NaAm</i> | 0.3761 | 0.201 |
| | <i>AsAm</i> | -11.3282 | 0.986 |
| | <i>Multi</i> | -- | -- |

The Impact of Culturally Relevant Courses on Student Performance in Tucson Unified School District using School-Based Measures SY 2019-20

| | | |
|-------------------------------------|---------|--------|
| <i>1819 Core Course GPA</i> | -1.2300 | <0.001 |
| <i>Gender</i> | 0.1099 | 0.078 |
| <i>ELL Status</i> | -0.2372 | 0.113 |
| <i>ExEd Status</i> | -0.3238 | 0.015 |
| <i>1819 S1 Number of Fs</i> | -0.0411 | 0.108 |
| Pseudo R² =0.3024 | | |

Table 7. Middle School Number of F's Received Semester 1

| Middle School (N=2,782) | Coefficient | P-value |
|-------------------------------------|-------------|---------|
| | 0.0442 | 0.405 |
| <i>Control variables</i> | | |
| <i>FRL Status</i> | 0.2750 | 0.001 |
| <i>White</i> | -0.0612 | 0.794 |
| <i>AfAm</i> | -0.1495 | 0.551 |
| <i>Hispanic</i> | 0.1648 | 0.464 |
| <i>NaAm</i> | 0.8256 | 0.001 |
| <i>AsAm</i> | -12.9765 | 0.978 |
| <i>Multi</i> | -- | -- |
| <i>1819 AzMERIT ELA</i> | -0.0271 | <0.001 |
| <i>1819 AzMERIT Math</i> | -0.0517 | <0.001 |
| <i>Gender</i> | -0.3064 | <0.001 |
| <i>ELL Status</i> | -0.2276 | 0.035 |
| <i>ExEd Status</i> | -0.3171 | <0.001 |
| <i>1819 S1 Number of Fs</i> | 0.3081 | <0.001 |
| Pseudo R² =0.2225 | | |

D. Outcomes 4 and 5: 2019-20 Average ELA and Math Benchmark Proficiency Level

Tables 8 and 10 show High School ELA and Math Benchmark scores and Tables 9 and 11 show Middle School ELA and Math Benchmark scores. For High School, Tables 10 and 12 both indicate that CR course enrollment had a small, near-significant positive impact on average ELA and Math Benchmark proficiency. This data should be viewed with caution because of the relatively small N size. Benchmark testing was offered in grades 9 - 11 in High School in SY 2019-20 whereas CR courses were only offered in grades 11 and 12. These results may or may not be representative of all High School students enrolled in one or more CR course. Tables 9 and 11 indicate that CR course enrollment did not have a significant impact on ELA or Math Benchmark proficiency levels with P-Values that exceeded 0.05.

The Impact of Culturally Relevant Courses on Student Performance in Tucson Unified School District using School-Based Measures SY 2019-20

Table 8. High School ELA Benchmark Proficiency

| High (N=341) | School | Coefficient | P-value |
|-------------------------------|-----------------------------|-------------|---------|
| | | 0.1897 | 0.075 |
| <i>Control variables</i> | | | |
| | <i>FRL Status</i> | -0.0747 | 0.395 |
| | <i>White</i> | 0.2727 | 0.713 |
| | <i>AfAm</i> | 0.3188 | 0.668 |
| | <i>Hisp</i> | 0.2448 | 0.740 |
| | <i>NaAm</i> | -- | -- |
| | <i>AsAm</i> | -- | -- |
| | <i>Multi</i> | 0.5822 | 0.450 |
| | <i>1819 Core Course GPA</i> | 0.1219 | 0.010 |
| | <i>Gender</i> | 0.1422 | 0.104 |
| | <i>ELL Status</i> | 0.2112 | 0.571 |
| | <i>ExEd Status</i> | -0.0915 | 0.597 |
| | <i>1819 ELA BM Avg</i> | 0.6054 | <0.001 |
| R² = 0.4223 | | | |

Table 9. Middle School ELA Benchmark Proficiency

| Middle (N=1,613) | School | Coefficient | P-value |
|-------------------------------|--------------------------|-------------|---------|
| | | -0.0317 | 0.220 |
| <i>Control variables</i> | | | |
| | <i>FRL Status</i> | 0.0102 | 0.739 |
| | <i>White</i> | -0.2207 | 0.059 |
| | <i>AfAm</i> | -0.1670 | 0.200 |
| | <i>Hisp</i> | -0.1386 | 0.221 |
| | <i>NaAm</i> | -0.2346 | 0.096 |
| | <i>AsAm</i> | -0.0914 | 0.760 |
| | <i>Multi</i> | -- | -- |
| | <i>1819 AzMERIT ELA</i> | 0.0391 | <0.001 |
| | <i>1819 AzMERIT Math</i> | 0.0091 | <0.001 |
| | <i>Gender</i> | 0.0504 | 0.045 |
| | <i>ELL Status</i> | 0.0068 | 0.932 |
| | <i>ExEd Status</i> | -0.0569 | 0.226 |
| | <i>1819 ELA BM Avg</i> | 0.4316 | <0.001 |
| R² = 0.7171 | | | |

The Impact of Culturally Relevant Courses on Student Performance in Tucson Unified School District using School-Based Measures SY 2019-20

Table 10. High School Math Benchmark Proficiency

| High (N=314) | School | Coefficient | P-value |
|------------------------------|-----------------------------|-------------|---------|
| | | 0.1903 | 0.060 |
| <i>Control variables</i> | | | |
| | <i>FRL Status</i> | -0.1924 | 0.026 |
| | <i>White</i> | 0.3135 | 0.408 |
| | <i>AfAm</i> | -0.3458 | 0.368 |
| | <i>Hisp</i> | 0.2045 | 0.574 |
| | <i>NaAm</i> | -- | -- |
| | <i>AsAm</i> | -- | -- |
| | <i>Multi</i> | 0.3220 | 0.449 |
| | <i>1819 Core Course GPA</i> | 0.2983 | <0.001 |
| | <i>Gender</i> | -0.1576 | 0.069 |
| | <i>ELL Status</i> | -0.1098 | 0.529 |
| | <i>ExEd Status</i> | 0.3277 | 0.054 |
| | <i>1819 Math BM Avg</i> | 0.4104 | <0.001 |
| R² =0.5376 | | | |

Table 11. Middle School math Benchmark Proficiency

| Middle (N=1,645) | School | Coefficient | P-value |
|------------------------------|--------------------------|-------------|---------|
| | | -0.0081 | 0.776 |
| <i>Control variables</i> | | | |
| | <i>FRL Status</i> | -0.0133 | 0.696 |
| | <i>White</i> | 0.1451 | 0.642 |
| | <i>AfAm</i> | -0.1105 | 0.728 |
| | <i>Hisp</i> | 0.0048 | 0.988 |
| | <i>NaAm</i> | -0.2029 | 0.530 |
| | <i>AsAm</i> | -- | -- |
| | <i>Multi</i> | -0.0926 | 0.782 |
| | <i>1819 AzMERIT ELA</i> | 0.0100 | <0.001 |
| | <i>1819 AzMERIT Math</i> | 0.0380 | <0.001 |
| | <i>Gender</i> | -0.0607 | 0.029 |
| | <i>ELL Status</i> | -0.0314 | 0.670 |
| | <i>ExEd Status</i> | 0.1163 | 0.021 |
| | <i>1819 Math BM Avg</i> | 0.2804 | <0.001 |
| R² =0.5884 | | | |

The Impact of Culturally Relevant Courses on Student Performance in Tucson Unified School District using School-Based Measures SY 2019-20

Summary

According to Gloria Ladson-Billings (1994), culturally relevant teaching or CRT includes “a pedagogy that empowers students intellectually, socially, emotionally, and politically by using cultural referents to impart knowledge, skills, and attitudes.” Geneva Gay (2010) further explains that CRT “uses the cultural knowledge, prior experiences, frames of reference, and performance styles of ethnically diverse students to make learning more relevant and effective.” (<http://avid.org>). TUSD’s Culturally Responsive Pedagogy and Instruction (CRPI) Department has been instrumental in writing Culturally Responsive (CR) curriculum and training TUSD teachers to provide CR courses to students over the past 7 years. To date, TUSD provides CR courses in grades 6 – 12 in Social Studies and English Language Arts. More than 150 teachers taught CR courses in SY 2019-20 including Middle School course titles such as CRC Language Arts and CRC Social Studies as well as High School course titles such as English: CRC African American or Mexican American History Viewpoint and Social Studies: CRC African American or Mexican American Government Viewpoint. CR courses are offered in all middle/K-8 schools (grades 6 – 8) and high schools (grades 11 and 12).

The analysis of the five outcome variables for High School and Middle School indicated similar trends in that enrollment in CR courses did not impact overall academic performance over the course of a year as measured by ELA and Math benchmark testing and the number of F grades when compared to students not enrolled in CR courses. However, a higher attendance rate in Middle School was associated with students enrolled in CR courses. Please see Table 12 for a summary of the impact of CR courses on each of the five outcomes, broken out by High School and Middle School.

Table 12. Summary of the impact of CR courses by their Significance level (P-Value .05 or lower = Yes) on the 5 Outcomes between the Treatment Group and the Comparison Group Broken out by High School and Middle School

| Outcome | High School | Middle School |
|--|-------------|----------------|
| Attendance Rate | No | Yes |
| GPA for students who had 5 or more letter grades in Semester 1 | No | Yes (negative) |
| Number of F’s received in Semester 1 | No | No |

The Impact of Culturally Relevant Courses on Student Performance in Tucson Unified School District using School-Based Measures SY 2019-20

| | | |
|--|----|----|
| ELA Benchmark mean proficiency levels | No | No |
| Math Benchmark mean proficiency levels | No | No |

High School students enrolled in one or more CR courses demonstrated:

- No treatment effect on attendance rates, GPA, the number of F's received or ELA and Math benchmark performance when compared to the comparison group.

Middle School students enrolled in one or more CR courses demonstrated:

- No treatment effect on the number of F's received or Math and ELA Benchmark performance when compared to the comparison group.
- A statistically significant negative treatment effect on GPA. In other words, students who were not enrolled in CR courses could be expected to have a somewhat higher GPA.

Parallel to the High School results, enrollment at the Middle School level in CR courses did not appear to impact overall academic performance in terms of ELA or Math benchmark performance or the number of F's received when compared to the comparison group. The only difference between High School and Middle School was that Middle School students enrolled in CR courses are expected to have a higher attendance rate than those not enrolled in CR courses as well as a lower overall GPA. It is possible that these students may have had a more rigorous course load than students who were not enrolled in CR courses.

The results of this study demonstrated that enrollment in CR courses did not significantly impact mean academic performance over the course of a year. This finding is not unexpected because students in the treatment and comparison group were matched on their prior academic performance and only one year of data was analyzed. This study confirms other research findings that the greatest predictor of a student's academic performance is his/her prior year's performance. Nonetheless, students may be receiving benefits from CR courses over the course of a year that may not be translated into improved grades or test scores such as a sense of connection to the lessons in the curriculum or to the social organization of the class.

The Impact of Culturally Relevant Courses on Student Performance in Tucson Unified School District using School-Based Measures SY 2019-20

Appendix 1

Matched Comparison Groups: To reduce the influence of confounding variables, the two groups were matched on the following control variables using coarsened exact matching in descending order of importance:

- 2018-19 Free and Reduced Lunch (FRL) status
- 2018-19 Unitary Status Plan (USP) ethnicity categorization
- 2018-19 AzMERIT scores (Middle School) or 2018-19 core course GPA (high school)
- Gender
- 2018-19 end of year ELL status
- 2018-19 ExEd status
- 2018-19 grade level

The dataset was analyzed using two techniques. First, post-treatment each of the five outcomes were compared across groups using t-tests. This technique determines whether a statistically significant difference existed in the distribution of outcome observations between treatment and comparison groups. Second, each outcome was regressed on treatment and controls using the weights generated by the coarsened exact matching procedure. The regression technique was either linear regression or Poisson regression, depending upon the outcome under analysis. The regression analyses allowed for the calculation of an average treatment effect for each outcome. This effect describes the average expected impact of CR course enrollment while holding all else constant.

Note that for all analysis, Middle School and High School grades (SY 2019-20) were analyzed separately. This separation accounted for differences in available control data as well as anticipated differences in the unobservable characteristics of the two age groups.

EXHIBIT C

**Culturally Relevant Curriculum and Instruction
Five Year Plan
Revised SY2020-21**

This document sets out the broad outlines of the District's vision for culturally relevant curriculum and instruction over the next five years.

A. Growth.

The District has seen extraordinarily rapid growth in enrollment in culturally relevant courses over the last four years. Further expansion of CR courses must continue, but forced expansion is no longer necessary. Further expansion of staff and resources will depend on increased need determined by student demand and enrollment in CR courses. In alignment with the courses offered, the district is likewise committed to supporting those courses and teachers by maintaining current levels of staffing and instructional resources necessary for their success. The district hopes to expand into content areas, grade levels and viewpoints when feasible based on student interest.

1. Continued Work with School Staff. The CRPI staff will continue to work with individual school sites to maintain current CR courses, and, where feasible, to add new courses or additional sections of existing courses.

2. Outreach and Recruitment. The success of the growth in the program over the past four years suggests that the District should continue the current practices of student and family outreach.

B. Curriculum Development.

1. New Courses. The CRPI staff will also continue to develop and add courses with current and additional ethnic viewpoints when viable (perhaps additional Native American and Asian-Pacific Islander). The CRPI Department, along with the ALE Department, has committed to the schedule for offering a CR AP course at each high school in the District, as follows:

2. Existing Courses. The CRPI staff will continue revising and updating existing course curricula to ensure compliance with new standards, and to take advantage of new research and studies on the efficacy of CR courses.

3. AP Courses. The CRPI and ALE departments work together to implement culturally relevant AACs in high schools and at schools with middle school grades, including by writing curriculum or importing elements of the culturally relevant courses (CRC) and/or Multicultural Curriculum into IB, honors, and/or advanced courses.

Recently, the District worked closely with the College Board and the CRPI department to create the first-of-its-kind course, AP English Language and Composition: CRC African

American and Mexican American Perspective at University High School (“UHS”). This course is the required English course for all UHS juniors.

Creating the CRC AP course and implementing it as the first school in the country was a complex process that took time, financial resources, and extensive work with The College Board. Expanding this course to new schools will likewise be a complex process that will take time and financial resources to implement, particularly considering the need for AP teachers and supports that may not be as readily available as they are at UHS.

Based on these factors and others the District considers in its quarterly and yearly evaluation of ALE course implementation, the District anticipates expanding the CRC AP course to one additional high school in SY2022-23, and continuing to expand to one additional school every other year until a CRC AP course is at each traditional high school in the District. The District also anticipates that implementing this course will become less complex and costly over time.

Currently, the District is considering which high schools have the greatest likelihood for successfully implementing this course within the next few years. The District anticipates the CRC AP course will first be added at Tucson High, Sabino, Palo Verde or Pueblo.

3. Dual Credit. The CRPI staff will work with the ALE Department to explore whether CR courses, including the CR AP courses, can serve as dual credit high school courses for college credit.

C. CRC Teachers.

1. Finding and Training New CRC Teachers. The District will continue to recruit and train teachers for CR courses as needed. The District is committed to maintaining the current staffing levels within CRPI and the support for CR teachers (the same ratio of Master Teachers to CR teachers) over the foreseeable future.

2. Professional Learning for CRC Teachers. The District will continue to revise and improve its professional learning for CRC teachers, in consultation with the national panel of experts. Through the use of research-based best practices, the CRPI staff will develop training modules for trainers of site or administrator professional development sessions. These trainings will implement research proven strategies in the establishment of inclusive school culture and climate and educational approaches in the areas of culturally responsive education, and restorative practices. When further expertise is required, a highly regarded scholar(s) in the field is contracted to work with the director of CRPI to inform decisions made by the committee.

Professional learning opportunities will utilize the train the trainer model of implementation and will be scheduled during the existing training schedules. Certificated staff receive training during the Wednesday in-service session at the sites. Site administrators and central leadership will receive training during regularly scheduled Instructional Leadership Academy (ILA) sessions. Classified staff receive training during monthly in-service training

provided by their respective departments. In limited cases, on-line training may be provided via the True North Logic Learning Portal.

3. Assessment of CR Teachers

The CRPI Department is expanding the assessment of CR teachers in several ways: first, it regularly conducts training for administrators in assessing CRP skills in teachers, and is using an approach for measuring the effectiveness of that training for administrators, developed over the past two years and approved by the Special Master. Second, the District has recently conducted a first round review of the District's main evaluation instrument (the TUSD Modified Danielson Framework) designed to assess CR teachers' understanding and use of CR teaching practices. The modifications this round included improving the drop-down menus available to observers, to provide more meaning feedback to teachers in CRP techniques. For a second round, the CRPI Department plans to collaborate with various entities within the district to further review and enhance the teacher evaluation tool. The CRPI Department will continue to provide training to teachers and supervising administrators on how to better assess teachers on their use of culturally responsive practices found in the modified Danielson framework. CRPI staff will work with stakeholders to propose and approve enhancements to the adopted teacher evaluation tool. Possible enhancements may include additional indicators to more clearly articulate the difference between the various levels of proficiency in each element of the modified Danielson.

D. Administrators, Certificated Staff, and Classified Staff

1. New Employee Onboarding

As part of the district's commitment to ensure capacity and sustainability in implementing culturally responsive practices, CRPI staff will strengthen and regularize training in culturally relevant practices for all new employees at the time of orientation or soon thereafter. Through a collaborative effort between the departments of Professional Development, Culturally Responsive Pedagogy and Instruction, Curriculum and Instruction, and New Teacher Induction/Mentoring, new teachers will receive training on CRP during the new teacher induction training, while administrators will be trained during the new administrator training during the back to school professional development sessions. New classified employees will receive training during the orientation process through their specific departments. This training will be delivered by a variety of personnel, but will be overseen by CRPI.

2. Administrator Training on the Teacher Evaluation Tool

CRPI has developed and will continue to refine and implement professional learning for administrators on assessing CR practices of CRC teachers. The training will be provided during four sessions of Instructional Leadership Academy. Site administrators will receive training on the CR addition to the TUSD Modified Danielson Framework, paying focused attention on the culturally responsive language and observable actions identified. These

training sessions will provide practice on norming of observable actions for increased validity of the evaluation tool. Resources will be provided to assist evaluating administrators on identifying the indicators of distinguished instruction in alignment with culturally responsive pedagogy.

Administrators will continue to be trained on the alignment of the teacher evaluation tool with the district administrator evaluation process. They will work with the Professional Standards for Educational Leaders, which are the current standards used to evaluate administrators. The goal is to create a vertical articulation between the Modified Danielson and the administrator evaluation process to focus on increase student achievement. Using engaging activities, administrators will use strategies such as role-play to increase proficiency in assessing teacher instruction. Utilizing the trainer-of-trainer model, administrators will deliver this professional development to their staff on district-identified dates.

The CRPI Department developed and is using an approach for measuring the effectiveness of training for administrators, developed over the past two years and approved by the Special Master. The results of the measurement of effectiveness are analyzed each year for insights on modifying the training program for administrators.

3. CR Practices Extended Support: Instructional Coaching

The development of capacity in CR practices is a process requiring continued support and resources to maintain any progress gained. As part of this continued alignment of the support systems, close collaboration between CRPI, New Teacher Induction/Monitoring Program, Multi-Tiered System of Support, Professional Development and Curriculum & Instruction is essential to the delivery of a consistent district message as it relates to instruction. These entities will collaborate to deliver consistent and complimentary instructional training to MTSS, CSP and Teacher Mentors through the CIPDA Academy training sessions.

E. Continued Improvement in Data Collection and Analysis

While there are numerous qualitative measures to assess the effectiveness of the CR initiative, the long-term impact of culturally responsive practices emerge in the quantitative data. The data points that often reflect the impact of CR include but are not limited to; higher attendance rate, increased GPA, higher graduation rates, increased college-going rates, reduced incidents of student discipline, and increased scores on standardized and benchmark tests.

The limitation in assessing the CR initiative lies in the difficulty in disaggregating the various elements comprising this approach. The implications of this approach are far reaching and may not clearly link the causal effect. For instance, a restorative approach to a disciplinary infraction, combined with positive teacher-student relationships might manifest itself in increased attendance, leading to improved performance in math scores.

While isolating the cause and effect connection with specific aspects of this approach is difficult, research shows that these approaches are effective in increasing student achievement and significantly reducing the “achievement gap.”

In SY2020-21, the District conducted a preliminary analysis of data regarding attendance, GPA, and graduation rates to assess the effectiveness of the CR initiative, but the results were not conclusive, and the District does not believe that the positive impacts of CR courses were reflected in the results of that study. The District will continue to collect data for additional studies, and currently plans a more comprehensive study after the SY2023-24 school year, using data for matched cohorts of students over a longer period than with the initial study. Because the pandemic’s effects may overwhelm impacts from CR courses, the District believes that it needs to develop new longitudinal data for particular cohorts beginning after the pandemic (for at least a three year period after SY2020-21) to ensure that impacts of CR courses are properly recognizable.

F. Research & Development

Data informed analysis highlights gaps in existing tools, illustrating the need to revise or create new tools required in the implementation of new strategies to address areas of concern. Through a collaborative process, in conjunction with the director of CRPI, and working with the A& E Department, the CRE Implementation and Monitoring Committee will develop new tools, strategies and trainings necessary to address the needs identified in the analysis phase of this process.