Recommendations Report

Re: ALE Department implementing an Algebra readiness assessment

From: Michael Konrad, Interim Director of Advanced Learning Experiences

Date: 4/19/16

Earlier this year the District convened a committee to review the possibility of providing an assessment which could be used to help recruit students for entrance into Algebra for High School credit at the Middle School level. When the committee met they reviewed the following topics:

- -Purpose for an Algebra Screener.
- -Current status of Algebra for High School Credit.
- -What exams have been used in the past?
- -What samples might be available for future use?
- -What barriers might exist to using an Algebra Screener?

The committee was in agreement as to the purpose of the screener to be used for recruitment and not as a barrier to restrict enrollment in this course. The committee found that any exams that might have been used in the past would no longer be viable due to the curriculum shifts that have occurred within Arizona and TUSD. The committee noted barriers to the use of a screener such as the level of testing already occurring and the identification at the 7th grade being too late to get a student into preparatory program to be ready for Algebra in the 8th grade.

In order to screen students at the 5th grade while limiting an increase to the number of assessments used within the district, the committee decided to use already existing assessments such as quarterly benchmarks as a means to screen for recruitment. However, as TUSD has a limited number of years to draw data from with the new benchmarks, there cannot be a direct correlation drawn between 5th grade benchmark scores and success in Algebra in the 8th grade. Therefore, the committee developed a "stop-gap" recruitment method using available data while further development is done.

For SY 2016-17 the regular recruitment process for advanced 6th grade math will continue including: teacher recommendation, Student/Parent Request, site review of student data, and placement in Self Contained GATE. In addition, the TUSD Math Innovation Team created a list of 5th grade non-

GATE students that could be targeted for recruitment as well. The targeted list of students included non Anglo students who scored greater than or equal to 25/27 (raw score) correct on any one benchmark as well as non Anglo students who scored greater than or equal to 20/27 (raw score) correct on two or more benchmark exams.

This list of students will be provided to school counselors for use in targeting students to Advanced 6^{th} grade Math classes to ensure a strong pipeline for Algebra in the 8^{th} grade.

Looking ahead:

-In school year 2016-2017- Secondary Leadership should work with the math department to create a more consistent accelerated track for advanced middle school math leading up to successful Algebra for HS credit in 8th grade.

-The Math Innovation Team should examine teacher-level data to identify very successful 8th grade Algebra teachers and struggling 8th grade Algebra teachers. By examining indicators, we could attempt to improve teacher quality, math content, and instructional strategies of 8th grade Algebra teachers where needed.

-As correlation benchmark data becomes more available (after three years of use) the Math Innovation team should revisit correlating 5^{th} grade benchmark performance with 8^{th} grade success in Algebra.