SACRAMENTO CITY UNIFIED SCHOOL DISTRICT
BOARD OF EDUCATION

Agenda Item 10.1e

Meeting Date: October 6, 2016

Subject: Approve Board Policy No. 6152.1: Placement in Mathematics Courses (2nd Reading)

- ☐ Information Item Only
- ☒ Approval on Consent Agenda
- ☐ Conference (for discussion only)
- ☐ Conference/First Reading (Action Anticipated: 10-6-16)
- ☐ Conference/Action
- ☐ Action
- ☐ Public Hearing

Division: Curriculum and Instruction

Recommendation: The Sacramento Board of Education is requested to approve Board Policy No. 6152.1. *Placement in Mathematics Courses*. The policy will provide guidance in ensuring appropriate placement of students in mathematics courses, particularly those courses that may impact their ability to take more advanced math courses required for admittance to colleges and universities and access to science, technology, engineering, and math (STEM) fields of study.

Background/Rationale: In October 2015, the state of California passed Senate Bill 359, the California Mathematics Placement Act of 2015, which requires governing boards of local educational agencies (LEAs) that serve grade 9 to adopt a fair, objective and transparent mathematics placement policy in a regularly scheduled public meeting.

Financial Considerations: NA

Documents Attached:
Executive Summary
Board Policy 6152.1

Estimated Time of Presentation: NA
Submitted by: Iris Taylor, Chief Academic Officer, Matt Turkie Assistant Superintendent of Curriculum and Instruction
Approved by: José L. Banda, Superintendent

Board of Education Executive Summary

Curriculum and Instruction: Board Policy No. 6252.1: Placement in Mathematics Courses
October 6, 2016

I. Overview of Board Policy 6152.1: Placement in Mathematics Courses

SCUSD recognizes that student achievement in mathematics is a vital part of preparing students for college, career, and life. Mathematical competency and success in advanced mathematics courses is even more important for students wishing to pursue careers in science, technology, engineering, and math or STEM fields. Placement in mathematics courses during a student's middle school and early high school years is therefore critical as these placements can determine whether or not students take advanced math courses needed for admittance into postsecondary institutions such as the California State University (CSU) and University of California (UC) systems. Improper or misplacement in the sequence of mathematics courses can serve as a barrier. The most egregious examples of misplacement occur when students, and disproportionately students of color, are incorrectly placed or required to repeat math courses despite evidence that they are likely to be successful in the next level course.

Mathematics misplacement has far reaching consequences and can impact a student's confidence, ability to learn math concepts, high school experiences, and the college and career opportunities that are available to the student. Research indicates great disparity in the number of students of color who reach calculus by grade 12 compared to their white and Asian peers (Scott & Martin, 2012). All students, regardless of race, ethnicity, gender, or socio-economic status deserve an equal chance to take advanced mathematics courses. The shifts and more challenging expectations in Common Core Mathematics require that greater diligence be paid to how students are progressing in mathematics attainment and course enrollment to ensure that all students have access to high quality courses and programs, thus meeting the expectations of these standards.

A policy to ensure correct mathematics placement is therefore essential and serves as one measure to guarantee a fair process and chance of success for students. Additional measures include preparing teachers, counselors, and site leaders to provide advisement to students and parents on the importance of mathematics course enrollment and its impact on future college and career eligibility and opportunities. To address these requirements, SCUSD has drafted Board Policy 6152.1 *Placement in Mathematics Courses* to outline the processes for math placement decisions at the end of grade 6 and Integrated Math 1. Increasing students' access to more advanced mathematics by removing barriers such as misplacement is critical if we are to prepare students for college, career and life in an increasingly diverse and globally competitive economy.

II. Driving Governance

In October 2015, the state of California passed Senate Bill 359, the California Mathematics Placement Act of 2015, which requires governing boards of local educational agencies (LEAs) that serve grade 9 to adopt a fair, objective and transparent mathematics placement policy in a regularly scheduled public meeting that does the following:

1. Systematically takes multiple objective academic measures of pupil performance into consideration. For purposes of this paragraph, "objective academic measures" means measures, such as statewide mathematics assessments, including interim and summative assessments authorized pursuant to Section 60640, placement tests that are aligned to state-adopted content standards in mathematics, classroom assignment and grades, and report cards.
2. Includes at least one placement checkpoint within the first month of the school year to ensure accurate placement and permit reevaluation of individual pupil progress.
3. Requires examination of aggregate pupil placement data annually to ensure that pupils who are qualified to progress in mathematics courses based on their performance on objective academic measures selected for inclusion in the policy pursuant to paragraph (1) are not held back in a disproportionate manner on the basis of their race, ethnicity, gender, or socioeconomic background. The local educational agency shall report the aggregate results of this examination to the governing board or body of the local educational agency.
4. Offers clear and timely recourse for each pupil and his or her parent or legal guardian who questions the pupil's placement.

The bill further outlines that governing boards of LEAs serving students who are transitioning between elementary and middle school may develop and implement a mathematics policy for those students, as applicable, that satisfies the same criteria outlined in numbers 1-4 above. Additional stipulations require that the LEA ensures that its mathematics placement policy is posted on its Internet Web site.

III. Budget

This policy does not have any new budget implications. Associated costs include the purchase of the district's assessment system platform which serves as the on-line method for administering the Integrated Math 1 End of Course assessment as well as other district assessments. The mathematics program continues to be supported through the use of local

funding and a grant from a philanthropic partner. The district incurs minimal costs to implement the California Mathematics Placement Act of 2015.

IV. Goals, Objectives and Measures

The district's goals for implementing the California Mathematics Placement Act of 2015 are two-fold: 1) to eliminate student misplacement in mathematics courses at key junctures in their secondary schooling and 2) to decrease the disparity in mathematics course taking between students of color and their white and Asian peers. In order to achieve these goals, SCUSD will closely monitor the results of placement decisions made at the end of grade 6 and as a result of the Integrated Math 1 End of Course Exam. Data will be analyzed at the end of each school year and disaggregated by race/ethnicity as well as socio-economic status and gender. Placement decisions will be reassessed for accuracy within the first month of school and will be reported to the Board annually. In 2016-17, the district will establish a baseline and specific metrics and targets for the two goals outlined above.

In addition to the two goals, the Academic Office will assess the quality, effectiveness, and fidelity of the implementation of the 6th grade and Integrated Math 1 placement tests by seeking feedback from students, teachers, and site leaders on an annual basis. These data will inform revisions to the process in accordance with Education Code and State Law.

V. Major Initiatives

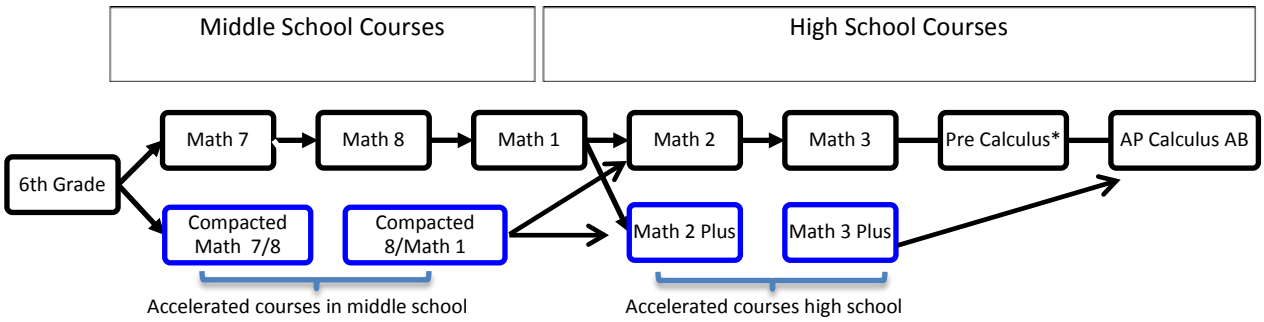
The proposed Board Policy 6152.1 *Placement in Mathematics Courses* addresses mathematics course placement at two key junctures, placement in grade 7 based upon grade 6 performance and placement in Integrated Math 2 based upon performance in Integrated Math 1. Below we outline the mathematics course progression for secondary mathematics including points where students have the opportunity to accelerate. In addition, we detail the criteria for establishing mathematics placement at the secondary level.

<u>Secondary Math Course Sequence</u>

The California Common Core State Standards for Mathematics (CA CCSS-M) establishes clear, consistent guidelines for what every student should know and be able to do from kindergarten through 12th grade. The standards outline the knowledge, skills, and behavioral expectations that are necessary for students to be college and career ready upon high school graduation, with each grade-level's standards building upon the previous grade-level.

Within the regular math courses progressing from kindergarten through high school, SCUSD has created two key "decision points" to determine math placement. These two decision points occur during transition points at the secondary level and students who are prepared and willing to advance through the mathematics standards at an accelerated rate have the opportunity to be placed in accelerated/advanced courses

The first decision point comes after 6th grade as students enter middle school and the second decision point comes after students have completed Integrated Math 1 (either in middle school or high school). For students who are seeking to complete AP Calculus in high school (e.g. students who are interested in entering a STEM major (science, technology, engineering, or math) in college, these decision points provide opportunities to do so. Below we outline the secondary math course progression and the key decision points:



All students in SCUSD have the opportunity to be placed in an accelerated/advanced mathematics course, at either or both decision points. District-wide placement criteria have been established for both decision points in order to determine the most appropriate placement for students

<u>Criteria for Math Course Placement</u>

The majority of students entering into 7th grade will place into a math 7 course. With the advent of the Math CCSS, Math 7 and Math 8 courses are more rigorous than their predecessors and are considered an appropriate placement for students at those grade levels. Similarly, most 9th grade students will place into Integrated Math 1. In order for students to be placed in the accelerated course pathway in grades 7 and for Integrated Math 2, the district will utilize multiple measures including the following:

- Performance in the previous course - performance in the previous course will be

determined by report card grades or transcript evaluation

- Performance on a placement assessment - students will take the Mathematics Diagnostic Testing Project (MDTP) developed by UC Davis and district developed open ended assessment items to determine 7th grade math placement. Students will take the Integrated Math 1 End of Course Exam, a district developed assessment, to determine Integrated Math 2 placement.
- Recommendations – recommendations by teachers, students, and parents/guardians will also be utilized for placement. Recommendations are optional and can only be used to positively influence placement.

Screening for math placement will take place in the spring (April/May for 6th grade students and June for Integrated Math 1 students). Placement decisions will be reassessed in September to ensure proper placements and data will be analyzed and disaggregated by race/ethnicity, socio economic status, and gender. Although the district has identified key math placement decision points at grades 7 and Integrated Math 2, students seeking to accelerate can be assessed at any grade level. Decisions for acceleration outside of these key decision points will be made in accord with BP 5123 Promotion/Acceleration/Retention.

VI. Results

Once approved, the district will assess the impact of the policy as outlined in the Goals, Objectives and Measures section of this document, and will report results annually.

VII. Lessons Learned/Next Steps

Next steps include the following:

- Present the proposed mathematics policy in a second reading to the Board
- Once approved, draft administrative regulations for the policy to provide further guidance on policy implementation

References
Scott, A., Martin, A. (2012). Dissecting the Data 2012: Examining STEM Opportunities and Outcomes for Underrepresented Students in California. Retrieved from http://www.lpfi.org/wp-content/uploads/2015/05/dissecting_the_data_2012_final.pdf

Board Policy
Placement In Mathematics Courses

BP 6152.1
Instruction

The Governing Board believes that a sound educational program must include the study of subjects that prepare students for admission to higher education and/or a fulfilling career. To the extent possible, district students shall be provided an opportunity to complete a sequence of mathematics courses recommended for admission into the University of California and California State University systems.

(cf. 6141.5 - Advanced Placement)
(cf. 6142.92 - Mathematics Instruction)
(cf. 6143 - Courses of Study)
(cf. 6146.1 - High School Graduation Requirements)

The Superintendent or designee shall work with district teachers, counselors, and administrators and the representatives of feeder schools to develop consistent protocols for placing students in mathematics courses offered at district high schools. Such placement protocols shall systematically take into consideration multiple objective academic measures that may include, but are not limited to, interim and summative assessments, placement tests that are aligned to state-adopted content standards in mathematics, classroom assignment and grades, and report cards.

(cf. 5121 - Grades/Evaluation of Student Achievement)
(cf. 6162.5 - Student Assessment)
(cf. 6162.51 - State Academic Achievement Tests)

Students shall be enrolled in mathematics courses based on the placement protocols. No student shall repeat a mathematics course which he/she has successfully completed based on the district's placement protocols.

When a student does not qualify to be enrolled in a higher level mathematics course based on a consideration of the objective measures specified in the placement protocols, he/she may nevertheless be admitted to the course based on the recommendation of a teacher, counselor or parent who has personal knowledge of the student's academic ability.

The placement protocols shall specify a time within the first month of the school year when students shall be reevaluated to ensure that they are appropriately placed in mathematics courses and shall specify the criteria the district will use to make this determination. Any student found to be misplaced shall be promptly placed in the appropriate mathematics course.

Within 15 school days of an initial placement decision or a placement decision upon reevaluation, a student and his/her parent/guardian who disagrees with the placement of the

student may appeal the decision to the Superintendent or designee. The Superintendent or designee shall decide whether or not to overrule the placement determination within 15 school days of receiving the appeal. The decision of the Superintendent or designee shall be final.

(cf. 5123 - Promotion/Acceleration/Retention)

District staff shall implement the placement protocols uniformly and without regard to students' race, sex, gender, nationality, ethnicity, socioeconomic background, or other subjective or discriminatory consideration in making placement decisions.

(cf. 0410 - Nondiscrimination in District Programs and Activities)

The Superintendent or designee shall ensure that all teachers, counselors, and other district staff responsible for determining students' placement in mathematics courses receive training on the placement protocols.

(cf. 4131 - Staff Development)

Prior to the beginning of each school year, the Superintendent or designee shall communicate the district's commitment to providing students with the opportunity to complete mathematics courses recommended for college admission, including approved placement protocols and the appeal process, to parents/guardians, students, teachers, school counselors, and administrators.

This policy and the district's mathematics placement protocols shall be posted on the district's web site. (Education Code 51224.7)

(cf. 1113 - District and School Web Sites)

Annually, the Board and the Superintendent or designee shall review student data related to placement and advancement in the mathematics courses offered at district high schools to ensure that students who are qualified to progress in mathematics courses based on their performance on objective academic measures are not held back in a disproportionate manner on the basis of their race, ethnicity, gender, or socioeconomic background. The Board and Superintendent shall also consider appropriate recommendations for removing any identified barriers to students' access to mathematics courses.

(cf. 0500 - Accountability)

Legal Reference:
EDUCATION CODE
200-262.4 Prohibition of discrimination
48070.5 Promotion and retention; required policy
51220 Areas of study, grades 7-12
51224.5 Completion of Algebra I or Mathematics I
51224.7 California Mathematics Placement Act of 2015

51225.3 High school graduation requirements
51284 Financial literacy
60605 State-adopted content and performance standards in core curricular areas
60605.8 Common Core standards

Management Resources:
CSBA PUBLICATIONS
Math Misplacement, Governance Brief, September 2015
Governing to the Core, Governance Briefs
CALIFORNIA DEPARTMENT OF EDUCATION PUBLICATIONS
Mathematics Framework for California Public Schools: Kindergarten Through Grade Twelve, 2013
California Common Core State Standards: Mathematics, January 2013
COMMON CORE STATE STANDARDS INITIATIVE PUBLICATIONS
Appendix A: Designing High School Mathematics Courses Based on the Common Core State Standards
LAWYERS' COMMITTEE FOR CIVIL RIGHTS OF THE SAN FRANCISCO BAY AREA (LCCR)
Held Back - Addressing Misplacement of 9th Grade Students in Bay Area School Math Classes
WEB SITES
CSBA: http://www.csba.org
California Department of Education: http://www.cde.ca.gov
Common Core State Standards Initiative: http://www.corestandards.org/math
Lawyers' Committee for Civil Rights of the San Francisco Bay Area (LCCR): http://www.lccr.com

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