

TO: Board of Education

FROM: Randall Booker, Superintendent
Dr. Cheryl Wozniak, Director of Curriculum and Instruction

SUBJECT: **REPORT ON COMMON CORE ALIGNED SECONDARY MATH
CURRICULUM RECOMMENDATION: *COLLEGE PREPARATORY
MATHEMATICS (CPM)***

I. **SUPPORT INFORMATION**

In 2014, the Piedmont School Board adopted the Common Core State Standards for Mathematics (CCSS-M). In the 2014-15 school year, a Math Task Force, consisting of teachers, administrators, parents, and students, was formed to develop math pathways for secondary students. In March of 2015, the School Board adopted the pathways recommended by the Math Task Force, which were the Common Core Integrated Model for high school mathematics and a secondary math pathway offering compression points in middle and high school for advanced math students who wished to accelerate their math learning. The pathways also included Math Lab classes for students who needed math intervention.

Full implementation of the CCSS-M requires the adoption of instructional materials that align to the new math content standards and the mathematical practice standards. Designed to provide multiple opportunities for input from stakeholders, PUSD employed a thorough process of reviewing, piloting, and selecting instruction materials for recommendation.

Secondary teachers and administrators are recommending College Preparatory Mathematics as the primary math curriculum for all secondary grades, 6th-12th.

College Preparatory Mathematics (CPM) is a comprehensive Common Core aligned math curriculum. Teachers who piloted CPM recommend these materials be adopted for several reasons, some of which include: rich problem-solving connected to real-life situations; accessibility for students of all learning levels, including special education students and advanced learners; the mastery approach to learning through repeated exposure to concepts, a wide range of learning activities, using manipulatives, visual aids, and word problems; an emphasis on group work, which meets the Common Core requirement for improving students' communication skills and provides opportunities for high levels of collaboration; and online access to curriculum and support materials for students and parents.

The following appendix is a summary of the secondary math adoption process beginning in March 2015 through the present, an overview of the State guidelines

for an instructional materials adoption process, PUSD's pilot process, and a communication timeline.

II. **RECOMMENDATION: REVIEW**

Review report on Common Core Aligned Secondary Math Curriculum
Recommendation: *College Preparatory Mathematics (CPM)*

California State Board Adoption Process Overview

The California State Board of Education provided updated guidelines for piloting textbooks and instructional materials in January, 2015. All guidelines were followed as part of PUSD's secondary math adoption process. For more details, visit the CDE website <http://www.cde.ca.gov/ci/cr/cf/imagen.asp> and click on the document titled: Guidelines for Piloting Textbooks and Instructional Materials. A basic overview of the process is outlined below.

Overview of the Process:

1. Determine which materials to pilot
 - a. Establish a representative committee.
 - b. Define and prioritize evaluation criteria.
 - c. Develop an evaluation instrument.
 - d. Ensure that instructional materials comply with [state laws and regulations for social content](#).
2. Pilot instructional materials using a representative sample of classrooms for a specified period of time. Effective pilots help teachers determine whether the materials actually provide the needed resources to teach the standards at their grade level. The evaluation of the teachers piloting the materials should carry considerable influence in the decision making process.
3. Other piloting considerations
 - a. Keep the committee informed about the process.
 - b. Verify correlations of standards provided by publishers to actual standards.
 - c. Survey educators outside the district on their experiences with pilot materials under considerations.
4. Develop a curriculum map to identify the materials to be utilized to ensure complete coverage of the standards taught at each grade level. Seek out supplemental materials if needed.

6-12 Math Adoption Committees

All middle school math teachers and one district administrator were on the Middle School Adoption Committee and teacher representatives from MHS and PHS and one District administrator were on the 9-12 Math Adoption Committee. Secondary principals, District administrators, and teachers who work with special populations of students (advanced learners and students in special education) were consulted throughout the process to ensure the instructional materials meet the specialized needs of these populations of students. Below is a list of the committee members.

Middle School Math Adoption Committee Members

Karen Bloom (7th grade teacher, math coach)
Lucas Denman (6th grade teacher)
Melissa Fong (7th grade teacher)
Tamara Knapp (8th grade teacher)
Stephanie Roth (PMS department chair, 6th grade teacher, 7/8A teacher)
Gail Scruggs (6th grade teacher)
Raminder Sidhu (6th & 8th grade teacher)

Kate Waldron (7th & 8th grade teacher)
Cheryl Wozniak (Director of Curriculum and Instruction)

High School Math Adoption Committee Members

Emily Boyes (MHS)
John Hayden (PHS math teacher, math coach)
Bill Marthinsen (department chair)
Diana Miller (PHS math teacher)
Doyle O'Regan (PHS math teacher)
Auban Willats (MHS & PHS math teacher)
Cheryl Wozniak (Director of Curriculum and Instruction)

Adoption Committee Timeline and Scope of Work

In March of 2015, the School Board adopted new secondary math pathways. In April, the 6-8 and 9-12 Math Adoption Committees were formed. Each committee met 2-3 days to review the instructional materials available. The members of the Secondary Math Adoption Committees conducted an analysis of each of the curricula available for consideration using a comprehensive instructional materials evaluation tool. Programs that met the criteria were considered for the pilot process.

To select the criteria for instructional materials, Piedmont Unified used the Instructional Materials Evaluation Tool, or IMET, a tool for evaluating a comprehensive textbook or textbook series for alignment to the shifts and major features of the CCSS, published by Achieve.org. The tool is considered the “gold standard” for evaluating instructional materials as it aligns directly with the K-8 Publishers’ Criteria for the Common Core State Standards in Mathematics and the High School Publishers’ Criteria for the Common Core State Standards in Mathematics.

There is a new law that allows districts to select instructional materials that are not on the state-adopted list, as long as a review committee consists primarily of teachers who are working directly with students at the time of the adoption process. For more information, refer to the Instructional Materials FAQ posted on the CDE website.

Pilot Process

The middle school teachers piloted Springboard, published by College Board, during the 2014-15 school year. Given the results of the curricula review, College Preparatory Mathematics (CPM) was selected as teachers’ preferred curriculum to pilot. CPM met all requirements for Common Core-aligned math curriculum, provided rigor and depth in problem-solving, routinely embedded the Standards for Mathematical Practice throughout the lessons, provided access for students of varying math ability levels through low-floor, high ceiling tasks, and provided opportunities for teachers to differentiate their math instruction. Teachers on the committee recommended a pilot of CPM in all general education and most special education classrooms beginning in August of 2015. If CPM proved not to be a good fit, middle school teachers would pilot Eureka Math; however, this third curricula was not required so as not to disrupt the students’ math learning experience.

The high school teachers reviewed all curricula and eliminated several textbooks that were not aligned to CCSM or did not teacher the Standards for Mathematical Practice. Teachers selected College Preparatory Mathematics (CPM) because it met all

requirements for Common Core-aligned math curriculum: alignment to CCSM, depth and rigor, Standards for Mathematical Practice, support materials for populations with special learning needs, opportunities for differentiation, and Common Core-aligned assessments. High school committee members recommended CPM be piloted in all Integrated Math I and Integrated Math 1/2A courses beginning in August of 2015.

Teachers began teaching CPM beginning in August. Members of the Math Adoption Committee reported the progress of the committee's work at SAC meetings, parent club meetings, site council meetings, and at a parent education night. Teachers and parents were given multiple opportunities to ask questions and provide input throughout the process.

Communication and Stakeholder Feedback

Communication between grade levels is important. Throughout the process, middle school and high school teachers communicated at Math Leadership Team meetings, on Professional Development days, and at weekly Math Coaches meetings.

In December and January, students and parents were surveyed to provide their feedback on the CPM textbook materials. On January 26, a mid-year update on the progress of the math pilot, which included parent and student survey data, was provided for the School Board. At the School Board presentation, teachers reported an overwhelmingly positive response to the pilot of CPM. All secondary math teachers were required to report their level of support for CPM. Math teachers unanimously voted that a recommendation be made to the School Board to adopt CPM as their primary textbook for teaching the Common Core Math Standards and the Standards for Mathematical Practice (Teachers' Comments previously shared with School Board).

Parents were engaged in the process in a few ways. Parent Clubs and Site Council members heard presentations at several meetings and were given an opportunity to ask questions and provide feedback. Parents gave input in the writing of the parent survey questions. A parent education night was held on September 24. Instructional materials were displayed for public review beginning the week of February 22. Note: As of the date of this writing, no public comment has been recorded on forms provided in the public display of materials.

A summary of the communication on the math pilot of CPM is included below.

Communication

August

On August 24, a District communication was sent through Infinite to the parents of all 6th-9th grade students providing information about the secondary math pilot of CPM. The communication provided parents with links to resources such as the Parent Guide, Homework Help, and Textbook.

September/October

District and site administrators presented on the math curriculum being piloted in CC6, CC7, CC8, Integrated Math 1, and Integrated Math 1/2A classrooms.

CPM Parent Education Night

On September 24, a CPM staff developer provided an overview of the CPM curriculum

for parents and middle and high school teachers taught sample lessons.

October

Math Leadership Team members met and discussed the progress of Common Core implementation and the piloting of textbook materials.

November

High school teachers who were not piloting CPM were provided access to all of the online materials to review and teach sample lessons to students.

December/January

Students and parents were surveyed and provided feedback on CPM. Cheryl Wozniak gave an updated report at all middle and high school parent club meetings.

January

A district communication was sent to parents of all 6th-9th graders reporting a summary of the parent survey results. Cheryl Wozniak and members of the middle and high school math departments provided an update on the secondary math pilot of CPM for the School Board.

February

A letter was sent through Infinite Campus to parents of all 6th-12th graders announcing that secondary math instructional materials would be available for them to review in the District Office from February 23-April 27.

March

Ryan Fletcher, Eric Mapes, and Sati Shah provided an update to PMS, PHS, and MHS parent clubs on the math adoption process.

March 23 & April 27

First and second reading recommending to the School Board the adoption of College Preparatory Mathematics.