

CVUSD

Board Policy

BP 6142.92

Instruction

Mathematics Instruction

The Governing Board desires to offer a rigorous mathematics program that progressively develops the knowledge and skills students will need to succeed in college and career. The district's mathematics program shall be designed to teach mathematical concepts in the context of real-world situations and to help students gain a strong conceptual understanding, a high degree of procedural skill and fluency, and ability to apply mathematics to solve problems.

***Note: The Common Core State Standards (CCSS) for mathematics, modified in January 2013, are based on the three principles of (1) focus, placing strong emphasis on the concepts in the standards so that students have sufficient time to think about, practice, and integrate new ideas; (2) coherence, linking topics across grade levels and establishing connections with other topics; and (3) rigor, requiring that conceptual understanding, procedural skills and fluency, and applications be pursued with equal intensity. ***

****Note: Education Code 51284, as amended by AB 166 (Ch. 135, Statutes of 2013), requires that, concurrent with the next revision of textbooks or the curriculum framework in mathematics, the SBE ensure the integration of financial literacy, including, but not limited to, budgeting and managing credit, student loans, consumer debt, and identity theft security. An appendix to the 2013 curriculum framework provides examples and resources to assist in incorporating problems or exercises that teach financial literacy concepts and skills. ***

For each grade level, the Board shall adopt academic standards for mathematics that meet or exceed the Common Core State Standards. The Superintendent or designee shall develop or select curricula that are aligned with these standards and the state curriculum framework.

The district's mathematics program shall address the following standards for mathematical practices which are the basis for mathematics instruction and learning:

1. Overarching habits of mind of a productive mathematical thinker: Making sense of problems and persevering in solving them; attending to precision
2. Reasoning and explaining: Reasoning abstractly and quantitatively; constructing viable arguments and critiquing the reasoning of others
3. Modeling and using tools: Modeling with mathematics; using appropriate tools strategically
4. Seeing structure and generalizing: Looking for and making use of structure; looking for and expressing regularity in repeated reasoning

In addition, the program shall be aligned with grade-level standards for mathematics content.

For grades K-8, content shall address, at appropriate grade levels, counting and cardinality, operations and algebraic thinking, number and operations in base ten, fractions, measurement and data, geometry, ratios and proportional relationships, functions, expression and equations, the number system, and statistics and probability. Students shall learn the concepts and skills that prepare them for the rigor of higher mathematics.

For higher mathematics, the district shall offer a pathway of courses through which students shall be taught concepts that address number and quantity, algebra, functions, modeling, geometry, and statistics and probability.

***Note: AB 97 (Ch. 47, Statutes of 2013) eliminated the Professional Development Block Grant (Education Code 41530-41532) and the Mathematics and Reading Professional Development Program (Education Code 99230-99242) and redirected that funding into the local control funding formula. At their discretion, districts may provide professional development opportunities to meet the purposes of those programs or other local needs. ***

The Superintendent or designee shall ensure that certificated staff has opportunities to participate in professional development activities designed to increase their knowledge and skills in effective mathematics teaching practices.

The Superintendent or designee shall ensure that students have access to sufficient instructional materials, including manipulatives and technology, to support a balanced, standards-aligned mathematics program.

The Superintendent or designee shall provide the Board with data from state and district mathematics assessments and program evaluations to enable the Board to monitor program effectiveness.

(cf. 0460 - Local Control and Accountability Plan)
(cf. 0500 - Accountability)
(cf. 6162.5 - Student Assessment)
(cf. 6162.51 - State Academic Achievement Tests)
(cf. 6162.52 - High School Exit Examination)
(cf. 6190 - Evaluation of the Instructional Program)

Legal Reference:

EDUCATION CODE

51210 Areas of study, grades 1-6

51220 Areas of study, grades 7-12

51224.5 Algebra in course of study for grades 7-12

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

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, rev. January 2013

COMMON CORE STATE STANDARDS INITIATIVE PUBLICATIONS

Appendix A: Designing High School Mathematics Courses Based on the Common Core State Standards

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>