Common Core Standards

August 24, 2010

RSDSS Meeting

The Common Core Standards (CCS) were developed by the Council of Chief State School Officers and the National Governor's Association Center for Best Practices, and were formally released on June 2, 2010.

The focus of the CCS is to guarantee that all students are college and career ready as they exit from high school.

Overarching Goals for K-12 CCS

Ensure that our students are:

- Meeting college and work expectations
- Prepared to succeed in our global economy and society, and
- Provided with rigorous content and applications of higher knowledge through higher order thinking skills.

The CCS build upon the strengths and lessons of current state standards.

What are the benefits of the CCS?

- Internationally benchmarked
- Student expectations are clear to parents, teachers, and the general public
- Allows for collaboration with other states on best practices, instructional materials, and professional development
- Reduces costs to the state

4 expert groups were involved in the development of the standards:

- An advisory group
- A standards development workgroup
- An expert feedback group
- A validation committee

The CCS provide an historic opportunity to improve access to rigorous academic content standards for students with disabilities.

Many experts in this area were involved in the development of these standards.

The CCS articulate rigorous grade level expectations to prepare all students to be college and career ready, including English learners.

The development of the ELA CCS involved linguists and EL experts. And they had a huge impact on the language and vocabulary standards.

The developers of the CCS will consider the development of ELD standards for the CCS.

California Academic Content Standards Commission (CACSC)

SB 5X 1 created the 21 member standards commission:

- 11 Governor Appointees
- 5 Senate Appointees
- 5 Assembly Appointees

Not less than half must be current teachers.

Timeline for Work

- June 2, 2010 – July 15, 2010
- The State Board of Education had until August 2, 2010 to take final action.

- For California, 85% of the standards recommendation must be the CCS.
- 15% could be additional standards added by California to ensure the rigor.

California's Additional 15%

Based on the following criteria:

- Substantively enhance
- Address a perceived gap
- Be defensible to classroom practitioners
- Keep the original standard intact
- Ensure the rigor of California's existing standards is maintained

The primary goal of the Commission is to ensure that the rigor of the state's reading, writing, and mathematics academic content standards, curricula, and assessment is maintained…

…so that all high school graduates are prepared for college and careers by establishing a process to adopt new standards based on the Common Core State Standards Initiative.

On August 2, 2010, the State Board of Education adopted the standards recommended by the California Academic Content Standards Commission.

http://www.scoe.net/castandards

The State Superintendent and the State Board of Education shall present to the Governor and appropriate Legislature Committees a schedule and implementation plan for integrating the CCS into the state educational system.

This includes the development of:

- frameworks
- instructional materials
- professional development
- assessment (2014-2015)

English Language Arts & Literacy in History/Social Studies, Science and Technical Subjects

The Common Core and California's 15%

Key Characteristics of the Common Core State Standards (CCSS) in ELA/Literacy

1. CCSS are anchored in college and career readiness
2. Focus on text complexity and what students read
3. Address reading and writing across the curriculum
4. Emphasize analysis of informational text
5. Focus on writing arguments and drawing evidence from sources
6. Include required reading of seminal US texts
7. Offer a selection of student writing samples with annotations (appendices)

Reading and Writing Across the Curriculum

- In K-5, CCSS align to NAEP's 50:50 percentage of reading of literature and reading of informational texts in history, science, etc.
- In 6-12, CCSS align to NAEP's demand that a significant amount of reading of informational texts take place in and outside the ELA classroom. (30:70 split in high school)

Based on the evidence that:

- Reading broadly and widely builds students' general knowledge and cultivates a joy in reading.
- About 80% of postsecondary reading consists of informational text.

Intentional Design Limitations

What is not covered by the *Standards*

The Standards do…	The Standards do not…
set grade-level standards	define the intervention methods or materials
allow for the widest possible range of students to participate fully permitting appropriate accommodations	define the full range of supports appropriate for English learners and students with special needs
define general, cross-disciplinary literacy expectations	Define the whole of college and career readiness

Intentional Design Limitations

What is not covered by the *Standards* *(continued)*

The Standards do…	The Standards do not…
define what all students are expected to know and be able to do	define how teachers should teach
focus on what is most essential	describe all that can or should be taught
establish a baseline for advanced learners	define the nature of advanced work

Sample CCR Standard for Reading

Standard 3: *Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.*

Kindergarten: With prompting and support, identify characters, settings, and major events in a story. (p. 11)

Third grade: Describe characters in a story (their traits, motivations, or feelings) and explain how their actions contribute to the sequence of events. (p. 12)

Increasing Complexity Across Grade Levels

Sixth grade: Describe how a particular story's plot unfolds in a series of episodes as well as how the characters respond to or change as the plot moves toward a resolution. (p. 36)

Ninth/Tenth: Analyze how complex characters (those with multiple or conflicting motivations) develop over the course of a text, interact with other characters, and advance the plot or develop the theme. (p. 38)

Increasing Complexity Across Grade Levels

Grades 11-12: Analyze the impact of the author's choices regarding how to develop and relate elements of a story or drama (e.g., where a story is set, how the action is ordered, how the characters are introduced and developed).

Emphasis on Informational Text

- The *Standards* aim to align instruction with the National Assessment of Educational Progress (NAEP) framework

Distribution of Literary and Informational Passages by Grade in the 2009 NAEP Reading Framework		
Grade	Literary	Information
4	50%	50%
8	45%	55%
12	30%	70%

- Percentages do not imply that high school ELA teachers must teach 70% informational text; they demand instead that a great deal of reading should occur in other disciplines

Sample Standards Comparison for English Language Arts

California Standard	Common Core Standard
1st Grade *Writing* 2.1 Write brief narratives (e.g., fictional, autobiographical) describing an experience.	1st Grade *Writing* 3. Write narratives in which they recount two or more appropriately sequenced events, include some details regarding what happened, use temporal words to signal event order, and provide some sense of closure.

Sample Standards Comparison for English Language Arts

California Standard	Common Core Standard
3rd Grade *Reading* 2.3 Demonstrate comprehension by identifying answers in the text.	3rd Grade *Reading Standards for Informational Text* 1. Ask and answer questions, referring explicitly to text as basis for answers.

Sample Standards Comparison for English Language Arts

California Standard	Common Core Standard
9th/10th Grade *Reading* 2.1 Analyze the structure and format of functional workplace documents, including the graphics and headers, and explain how authors use the features to achieve their purposes.	9th/10th Grade *Reading Standards for Informational Text* 5. Analyze in detail how an author's ideas or claims are developed and refined by particular sentences, paragraphs, or larger portions of a text (e.g., a section or chapter). a. Analyze the use of text features (e.g., graphics, headers, captions) in functional workplace documents.

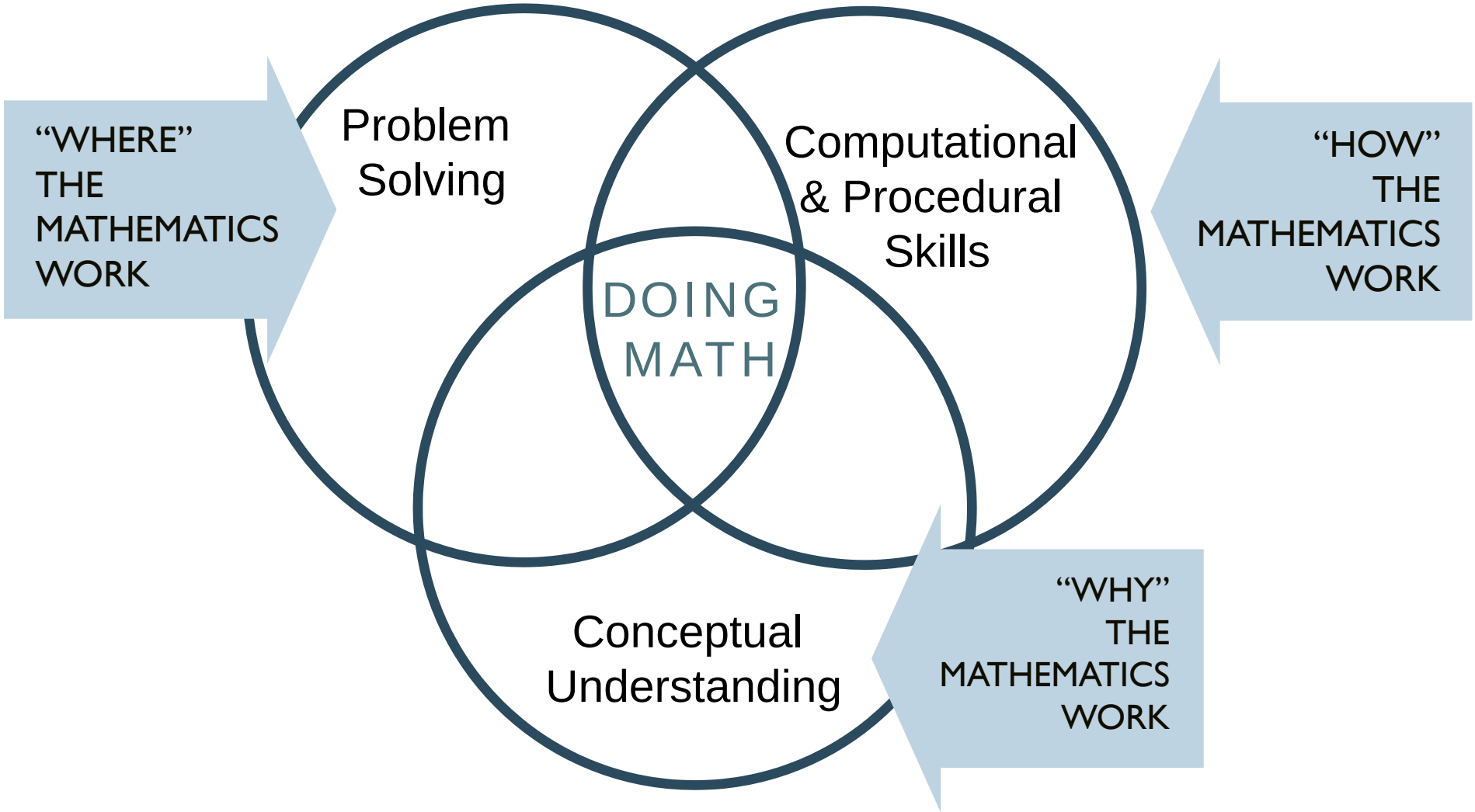
Common Core State Standards

Overview of California's Mathematics Standards

Coherence Design

- Topics and performances are logical over time
- Based on learning progressions research on how students learn
- Reflect hierarchical nature of the content
- Evolve from particulars to deeper structures

Mathematical Proficiency as Defined by the California Framework



Standards for Mathematical Practice…

" …describe ways in which developing student practitioners of the discipline of mathematics increasingly ought to engage with the subject matter as they grow in mathematical maturity and expertise throughout the elementary, middle and high schools years."

Standards for Mathematical Practice

1. Make sense of problems and persevere in solving them
2. Reason abstractly and quantitatively
3. Construct viable arguments and critique the reasoning of others
4. Model with mathematics
5. Use appropriate tools strategically
6. Attend to precision
7. Look for and make use of structure
8. Look for and express regularity in repeated reasoning

Connecting Practices to Content

- Standards
  - Balanced combination of procedure and understanding
  - “Understand” expectations connect practice to content.
    - Lack of understanding prevents students from engaging in the mathematical practices
    - Weighted toward central and generative concepts that most merit the time, resources, innovative energies and focus

Grade K-8 Standards

- Overview page
  - Lists domains, clusters and mathematical practices
- Standards-by grade level
  - Defines what students should understand and be able to do
- Clusters
  - Groups of related standards. Standards from different clusters may be closely related
- Domains
  - Larger groups of related standards. Standards from different domains may be closely related.
- Additional standard language or whole standards
  - Bolded and underlined
  - Added to maintain rigor of California expectations

Mathematics Standards for High School

- Arranged by conceptual cluster, not in courses:
  - Number and Quantity
  - Algebra
  - Functions
  - Modeling
  - Geometry
  - Statistics and Probability
- Same K-8 structure of domain, cluster and standard

K-8 Grade Section Overview Page

Grade 3 Overview

Operations and Algebraic Thinking

- Represent and solve problems involving multiplication and division.
- Understand properties of multiplication and the relationship between multiplication and division.
- Multiply and divide within 100.
- Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Number and Operations in Base Ten

- Use place value understanding and properties of operations to perform multi-digit arithmetic.

Number and Operations—Fractions

- Develop understanding of fractions as numbers.

Mathematical Practices

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Measurement and Data

- Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.
- Represent and interpret data.
- Geometric measurement: understand concepts of area and relate area to multiplication and to addition.
- Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.

Geometry

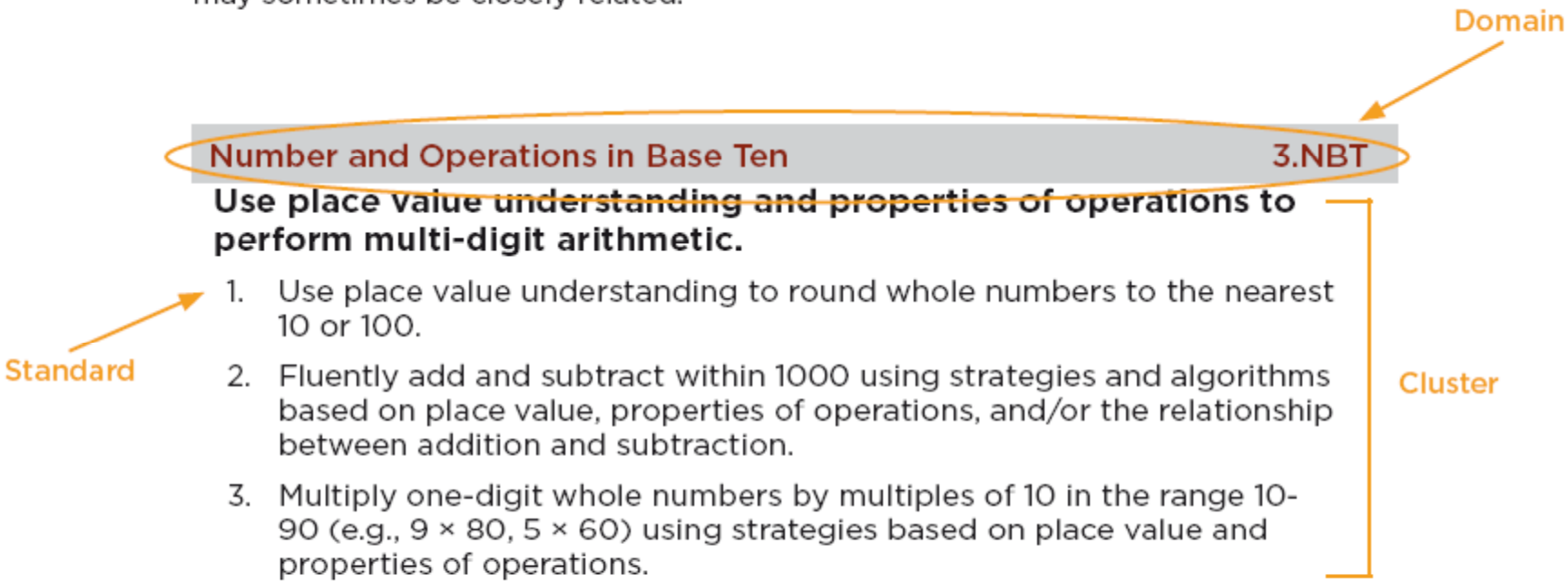
- Reason with shapes and their attributes.

How to Read the Grade Level Standards

Standards define what students should understand and be able to do.

Clusters are groups of related standards. Note that standards from different clusters may sometimes be closely related, because mathematics is a connected subject.

Domains are larger groups of related standards. Standards from different domains may sometimes be closely related.



Domains K-5

Domains	Grade Level
Counting and Cardinality	K only
Operations and Algebraic Thinking	1-5
Number and Operations in Base Ten	1-5
Number and Operations--Fractions	3-5
Measurement and Data	1-5
Geometry	1-5

Middle Grades Domains

Domains	Grade Level
Ratio and Proportional Relationships	6-7
The Number System	6-8
Expressions and Equations	6-8
Functions	8
Geometry	6-8
Statistics and Probability	6-8

California Grade 8 Options

- Goal for 8th grade students is Algebra 1
- Not all students have the necessary prerequisite skills for Algebra 1
- Two sets of standards for grade 8 that prepare students for college and career
  - Standards for Algebra 1
    - Taken from 8th grade Common Core and the high school Algebra content cluster
  - 8th grade Common Core
- Goal of grade 8 Common Core is to finalize preparation for students in high school
- K-7 standards as augmented prepare students for either set of standards

Mathematics Standards for High School

- Specify the math that all students should study to be college and career ready
- Identify additional math standards that students should learn in order to take advanced courses such as calculus, advanced statistics, or discrete mathematics. These are indicated by (+).
- Include the addition of two courses from California:
  - Calculus
  - Advanced Statistics and Probability
- Development of course descriptions will be done by CDE as part of their long-range implementation plan
  - Traditional v. Integrated

Some Comparison Examples

Grade	California Standard	Common Core
Kindergarten	Use concrete objects to determine the answers to addition and subtraction problems (for two numbers that are each less than 10).	Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.
First	Count, read, and write whole numbers to 100.	Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.
Third	Memorize to automaticity the multiplication table for numbers between 1 and 10.	Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division and the properties of operations.

Some Comparison Examples

Grade	California Standard	Common Core
Fifth	Understand the concept of multiplication and division of fractions.	Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction. Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions. (A unit fraction is one with a numerator of 1 and the denominator is a positive integer)
Seventh	Construct and read drawings and models made to scale.	Solve problems involving scale drawings of geometric figures, including actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.
Seventh	Use variables and appropriate operations to write an expression, an equation, an inequality, or a system of equations or inequalities that represents a verbal description (e.g., three is less than a number, half as large as area A).	Use variables to represent quantities in real-world and mathematical problems and construct simple equations and inequalities to solve problems about the quantities.

Where are they?

Topic	Grade
Know from memory all sums of two one-digit numbers	End of grade 2
Know from memory all products of two one-digit numbers	End of grade 3
Initial development of multiplication and division	Grade 3
Initial development of fractions	Grade 3
Initial development of integers	Grade 6

What Now?

- Stay the Course!
  - More similarities than differences in the standards
  - Implement a truly balanced math program as this will support the mathematical practices
  - Continue to use quality assessments to inform and drive effective instruction
  - Provide opportunities for teachers to collaborate and plan