TAP Presentation
November 28, 2012

A Closer Look at the Common Core State Standards

Carrie Roberts
California Department of Education
### Intentional Design
Limitations of CCSS for ELA

<table>
<thead>
<tr>
<th>The Standards DO...</th>
<th>The Standards DO NOT...</th>
</tr>
</thead>
<tbody>
<tr>
<td>set grade-level standards</td>
<td>define the intervention methods or materials</td>
</tr>
<tr>
<td>allow for the widest possible range of students to participate fully permitting appropriate accommodations</td>
<td>define the full range of supports appropriate for English learners and students with special needs</td>
</tr>
<tr>
<td>define general, cross-disciplinary literacy expectations</td>
<td>define the whole of college and career readiness</td>
</tr>
</tbody>
</table>
CCSS for ELA

Key Design Considerations

1. Organized around the College and Career Readiness Standards for Reading, Writing, Speaking and Listening, and Language that are identical across all grades and content area and define cross-discipline literacy expectations to prepare students for career/college

2. Integrated model of literacy, with shared responsibility for students’ literacy, including expectations for reading and writing in the social and natural sciences

3. Research and media skills blended into standards
## Strand Organization

| Reading Strand | Reading Standards for Literature and Informational Text:  
1) Key ideas and details  
2) Craft and Structure  
3) Integration of Knowledge and Ideas  
4) Range and Level of Text Complexity |
|----------------|----------------------------------------------------------------------------------|
| Writing Strand | 1) Text Types and Purposes  
2) Production and Distribution of Writing  
3) Research to Build and Present Knowledge  
4) Range of Writing |
| Speaking and Listening | 1) Comprehension and Collaboration  
2) Presentation of Knowledge and Ideas |
| Language | 1) Conventions of Standard English  
2) Knowledge of Language  
3) Vocabulary Acquisition and Use |
Common Core “Shifts” in Instruction

Expectations for instruction embedded in the standards:

1. Building knowledge through content-rich nonfiction.
2. Reading, writing, and speaking grounded in evidence from text, both literary and informational.
3. Regular practice with complex text and its academic language.

…What does that look like?

Source: http://www.achievethecore.org
Reading

Shifts instruction to focus on:

- Questions and tasks that are text dependent, where use of supporting evidence is text-based
- Careful selection of texts, meeting the complexity requirements at each grade
- Increased use of informational text
- Connections between reading and writing across the curriculum
Writing
Shifts focus of student writing to:

• Argumentative and informative writing, using evidence from sources as support
• Short, focused research projects
• Three types and purposes:
  - Opinions/Arguments
  - Informative/Explanatory
  - Narratives

<table>
<thead>
<tr>
<th></th>
<th>Grade 4</th>
<th>Grade 8</th>
<th>Grade 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>To Persuade</td>
<td>30%</td>
<td>35%</td>
<td>40%</td>
</tr>
<tr>
<td>To Explain</td>
<td>35%</td>
<td>35%</td>
<td>40%</td>
</tr>
<tr>
<td>To Convey Experience</td>
<td>35%</td>
<td>30%</td>
<td>20%</td>
</tr>
</tbody>
</table>

Source: NAEP 2011 Writing Framework
Speaking and Listening

Shifts in instruction asks students to:

1. Engage in collaborative conversations
2. Come prepared, drawing on preparation or other information known about the topic/ideas under discussion
3. Pose and respond to questions to clarify, contribute, link and/or elaborate on remarks of others
4. Identify the reasons and evidence or summarize the reasons and evidence a speaker or media source provides to support points
Language

Shifts focus on vocabulary acquisition and use

• Engage in the study of vocabulary needed to access grade level complex texts (i.e. both academic and domain-specific words and phrases)
• Learn a variety of strategies to discern meaning of words in the context they are used
• Understand figurative language, word relationships, and nuances

Conventions of Language

• Use knowledge of language and conventions of standard English grammar when writing, speaking, listening, and reading
Anchor Standards

• The College and Career Readiness (CCR) anchor standards and grade-specific standards are necessary complements.

• The CCR define general, cross-disciplinary literacy expectations that must be met for students to be prepared to enter college and workforce training programs ready to succeed.

• The K–12 grade-specific standards define end-of-year expectations and a cumulative progression.
**College and Career Readiness Anchor Standards**

The K-12 Common Core standards define what students should understand and be able to do by the end of each grade. They correspond to the College and Career Readiness (CCR) anchor standards below by number. The CCR and grade-specific standards are necessary complements—the former providing broad standards, the latter providing additional specificity—that together define the skills and understandings that all students must demonstrate.

### Reading

**Key Ideas and Details**
1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
2. Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.
3. Analyze how and why individuals, events, and ideas develop and interact over the course of a text.

**Craft and Structure**
4. Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings and analyzing how specific words choices shape meaning or tone.
5. Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.
6. Assess how point of view or purpose shapes the content and style of a text.

**Integration of Knowledge and Ideas**
7. Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.*
8. Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.
9. Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.

**Range of Reading and Level of Text Complexity**
10. Read and comprehend complex literary and informational texts independently and proficiently.

### Writing

**Text Types and Purposes**
1. Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant evidence. 
2. Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content. 
3. Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.

**Production and Distribution of Writing**
4. Produce and develop coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. 
5. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach. 
6. Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

**Research to Build and Present Knowledge**
7. Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation. 
8. Gather relevant information from multiple print and digital sources, assessing the credibility and accuracy of each source, and integrate the information while avoiding plagiarism. 
9. Draw evidence from literary or informational texts to support analysis, reflection, and research.

**Range of Writing**
10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

### Speaking and Listening

**Comprehension and Collaboration**
1. Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others’ ideas and expressing their own clearly and persuasively.
2. Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.
3. Evaluate a speaker’s point of view, reasoning, and use of evidence and data.

**Presentation of Knowledge and Ideas**
4. Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.
5. Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.
6. Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English when indicated or appropriate.

### Language

**Conventions of Standard English**
1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

**Knowledge of Language**
3. Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when listening or reading.

**Vocabulary Acquisition and Use**
4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials as appropriate.
5. Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.
6. Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when encountering an unknown term important to comprehension or expression.

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*Please see “Research to Build and Present Knowledge” in Writing and “Comprehension and Collaboration” in Speaking and Listening for additional standards relevant to gathering, assessing, and applying information from print and digital sources.

** These broad types of writing include many subgenres. See Appendix A for definitions of key writing types (found at cognosstandards.org).
Literacy in History/Social Studies, Science, and Technical Subjects

- Built upon the same anchor standards for reading and writing
- A focus on discipline-specific vocabulary
- An acknowledgement of unique text structures found in informational text
- The expectation that students will develop informational/technical writing skills in all disciplines
Common Core Standards for Mathematics

The standards for mathematics:

- Are focused, coherent, and rigorous
- Aim for clarity and specificity
- Stress conceptual understanding of key ideas
- Balance mathematical understanding and procedural skill
- Are internationally benchmarked

\[(a + b)^2 = a^2 + 2ab + b^2\]
Mathematical Proficiency
as defined by the California Framework (2006)

Conceptual Understanding

Problem Solving

Procedural Skills

DOING MATH
Two Types of Interrelated Standards

- **Mathematical Practices** (the same at every grade level)

- **Mathematical Content** (different at each grade level)
## CCSS Domains K–5

<table>
<thead>
<tr>
<th>Domain</th>
<th>K</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<tr>
<td>Counting and Cardinality (CC)</td>
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<tr>
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<tr>
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CCSS Domains 6–8

<table>
<thead>
<tr>
<th>Domain</th>
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<th>8</th>
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<tbody>
<tr>
<td>Ratios and Proportional Relationships (RP)</td>
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<tr>
<td>The Number System (NS)</td>
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<td>Expressions and Equations (EE)</td>
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<tr>
<td>Geometry (G)</td>
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<tr>
<td>Statistics and Probability (SP)</td>
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<tr>
<td>Functions (F)</td>
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<td>✓</td>
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</table>
Standards for Mathematical Practice

Describe ways students **engage** with the subject matter throughout the elementary, middle and high school years.

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.
Standards for Mathematical Practice

• Review the standards on pages 1 and 2 of your standards document

  ▪ Which standards might be familiar or unfamiliar to teachers? Why?

  ▪ How might these standards impact teaching and learning?
Transitioning to the CCSS for Mathematics

1. **Focus** strongly where the standards focus

2. **Coherence**: Think across grades, and link to major topics within grades

3. **Rigor**: In major topics, pursue conceptual understanding, procedural skill and **fluency**, and application

Source: [http://www.achievethecore.org/](http://www.achievethecore.org/)
# Shift 1: Key Areas of Focus

<table>
<thead>
<tr>
<th>Grade</th>
<th>Focus Areas for Fluency and Conceptual Understanding</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-2</td>
<td>Addition and subtraction – concepts, skills, and problem solving and place value</td>
</tr>
<tr>
<td>3-5</td>
<td>Multiplication and division of whole numbers and fractions – concepts, skills, and problem solving</td>
</tr>
<tr>
<td>6</td>
<td>Ratios and proportional reasoning; early expressions and equations</td>
</tr>
<tr>
<td>7</td>
<td>Ratios and proportional reasoning; arithmetic of rational numbers</td>
</tr>
<tr>
<td>8</td>
<td>Linear algebra</td>
</tr>
</tbody>
</table>
## Shift 2: Alignment in Context: Neighboring Grades and Progressions

One of several staircases to algebra designed in the OA domain.

### Expressions and Equations 6.EE

3. Apply the properties of operations to generate equivalent expressions. For example, apply the distributive property to the expression $3 (2 + x)$ to produce the equivalent expression $6 + 3x$; apply the distributive property to the expression $24x + 18y$ to produce the equivalent expression $6 (4x + 3y)$; apply properties of operations to $y + y + y$ to produce the equivalent expression $3y$.

### Operations and Algebraic Thinking 5.OA

2. Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. For example, express the calculation "add 8 and 7, then multiply by 2" as $2 (8 + 7)$. Recognize that $3 (18932 + 921)$ is three times as large as $18932 + 921$, without having to calculate the indicated sum or product.

### Operations and Algebraic Thinking 3.OA

5. Apply properties of operations as strategies to multiply and divide. Examples: If $6 	imes 4 = 24$ is known, then $4 	imes 6 = 24$ is also known (Commutative property of multiplication). $3 	imes 5 	imes 2$ can be found by $3 	imes 5 = 15$, then $15 	imes 2 = 30$, or by $5 	imes 2 = 10$, then $3 	imes 10 = 30$ (Associative property of multiplication). Knowing that $8 	imes 5 = 40$ and $6 	imes 2 = 16$, one can find $8 	imes 7$ as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$. (Distributive property)

### Operations and Algebraic Thinking 1.OA

3. Apply properties of operations as strategies to add and subtract. Examples: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$. (Associative property of addition.)

Source: [http://www.achievethecore.org](http://www.achievethecore.org)
Shift 3: Rigor

• A balance of:
  - Solid conceptual understanding,
  - Procedural skill and fluency, and
  - Application of skills in problem solving situations

• Pursuit of all three requires equal intensity in time, activities, and resources
Questions
Contact Information

Carrie Roberts, Administrator
Literacy, History, and Arts Leadership Office

croberts@cde.ca.gov
916 319-0587

Barbara Murchison
Common Core Systems Implementation Office
bmurchison@cde.ca.gov
916-319-0490