

# The Common Core for State Standards **CCSS**

## A Brief Overview



# The CCSS is:

- Led by The Council of Chief State School Officers (CCSSO) and the National Governors Association (NGA)
- The most dramatic reform of K-12 education our country has ever seen
- An initiative utilizing the expertise of educators, parents, national researchers and content experts
- Built upon the best of previous state standards
- Comprised of English Language Arts & Literacy Standards including Reading and Writing, and Math Standards

Source Common Core for State Standards document

# The CCSS have been widely adopted throughout the United States



- 46 States, 2 territories and the District of Columbia have adopted the CCSS.

# Why National Standards?

- To ensure that all of our students are college and career ready- “While reading demands in college, workforce training programs and life in general have held steady or increased over the last half century, K-12 texts have actually declined in sophistication and relatively little attention has been paid to students’ ability to read complex texts independently. These conditions have left a serious gap between many high school seniors’ reading ability and the reading requirements they will face after graduation.”

Source: CCSS Appendix A

# To Succeed in 21<sup>st</sup> Century college and careers, students need to be able to:

- Solve Problems
- Communicate
- Adapt to change
- Work in teams
- Analyze and conceptualize
- Reflect on and improve performance
- Manage themselves
- Create, innovate, and critique
- Engage in learning throughout life

# The CCSS emphasize

- High Expectations that support rigorous, cross-curricular teaching of literacy
- Higher levels of literacy skills with an equal weight on reading and writing
- Students learn to read and write complex texts independently at high levels of proficiency
- Higher level of comprehension skills, including students with IEPs
- Every state is held to the same measuring stick
- Clear and succinct (10 anchor standards in reading and writing)
- Acknowledgment that growth occurs over time by providing a progression of skills to meet each standard, through time across disciplines
- Respect for the professional judgment of teachers

• Source: *Pathways to the Common Core*

# The CCSS respect the professional judgment of classroom teachers

- “The Standards define what all students are expected to know and be able to do, not how teachers should teach”.
- ...the standards acknowledge that teachers need to draw upon the knowledge of our field in order to bring students to these ambitious levels.
  - Source: *Pathways to the Common Core*

# Two Consortia have been developed to plan assessment and be responsible for accountability:

Both consortia are:

- Based on CCSS standards
  - Use technology
- Require summative year-end assessments
- Have optional interim, nonsummative, and formative assessments
- In development, (with changes expected)



The Partnership for the Assessment for  
Readiness for College and Careers (PARCC)  
Grades 3-8 and high school

- Four Components
- 2 summative components (required)
- 2 nonsummative (optional-speaking and listening)
- Non-summative
  - Diagnostic assessment
  - Midyear assessment containing Performance-based items and tasks, also an emphasis on hard-to-measure tasks

Smarter Balanced Assessment Consortium (SBAC)  
Grades 3-8 and 11

\*\* CT has adopted SBAC\*\*

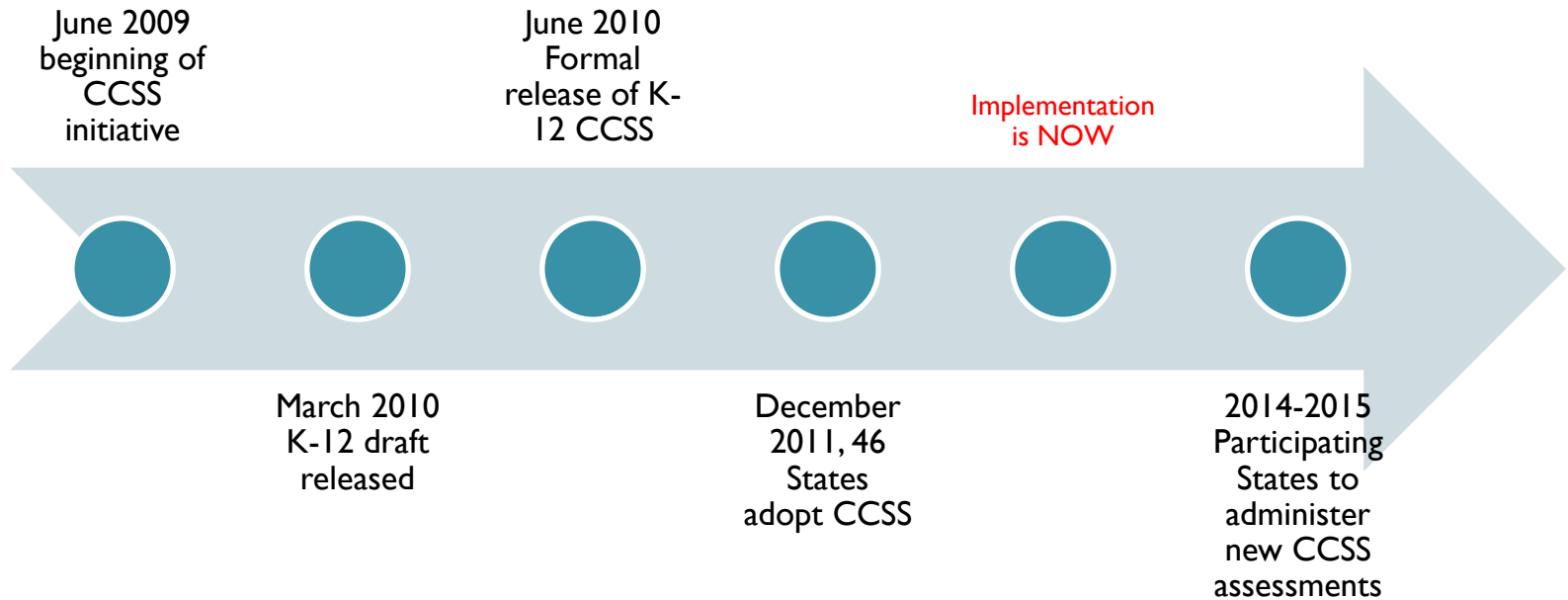
- Summative assessment, two parts:
  - Computer-adaptive test 40-65 items per content area
  - Performance tasks, 1 reading, 1 writing, 2 math
- Formative assessment resources and tools
- Optional interim assessments

# Two CCSS Consortia

Source: ASCD

# CCSS Timeline

Source: ASCD



Literacy instruction occurring in all content areas,  
aligning to curriculum, assessment, instruction and  
materials





# 3 Key Shifts in ELA in CCSS

**Shift 1: Building knowledge through content-rich nonfiction .**

(CCSS suggests 50% fiction vs. 50% nonfiction in elementary classroom libraries).  
“Reading content-rich nonfiction about history, social studies, science and the arts in elementary school is critical for later reading growth and achievement”.

Source: Three Core Shifts to Deliver on the Promise of the Common Core State Standards in Literacy and Math

# 3 Key Shifts in ELA in CCSS

- **Shift 2: Reading, writing, and speaking grounded in evidence from text, both literary and informational.**
- Students must be able to answer a range of questions that require they have read the text with care, not having answered using solely prior knowledge or experience.
- Great importance is placed on writing to sources by using evidence from the text to present careful analysis, well-defended claims, and clear information.

# 3 Key Shifts in ELA in CCSS

- **Shift 3: Regular practice with complex texts and its syntax and vocabulary.**
- Text complexity is the main focus of the CCSS because the ability to comprehend complex texts is the most significant factor differentiating college-ready from non-college ready readers. Academic vocabulary is also a focus of the CCSS.

# Writing Standards-an overview

## Three types of writing

- Argument
- Informative/Explanatory
- Narrative

The CCSS require that all teachers are teachers of writing. All teachers in every content area and every discipline, need to teach writing to students.

# Math 3 Shifts - CCSS

- **Focus-** strongly where the Standards focus
- **Coherence-Think** across grades, and **link** to major topics within grades
- **Rigor-** In major topics, pursue **conceptual understanding**, procedural skill and **fluency**, and application



# Design and Organization- Math

- **Content Standards-** define what students should understand and be able to do
- **Clusters-** groups of related standards
- **Domains-** larger groups that progress across grades

# Format of Content Standards

- **Content and conceptual categories:** Overarching ideas that describe strands of content (high school only).
- **Domains or clusters:** Groups of standards that describe coherent aspects of the content category.
- **Standards:** What students should know and be able to do at each grade level.

# Design and Organization- Math

## Number and Operations in Base Ten 3 NBT ← Domain

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

Standard

1. Use place value understanding to round whole number to the nearest 10 or 100.
2. Fluently add and subtract within 1000 using strategies and algorithms base on place value properties of operation and /or relationship between addition and subtraction.
3. 3. Multiply one-digit whole numbers by multiples of 10 in the range 10-90 (e.g.  $9 \times 80$ ,  $5 \times 60$ ) using strategies based on place value and properties of operations.

Cluster



# Key Advances in Mathematics

## Focus and Coherence

- Focus on key topics at each grade level;
- Coherent progressions across grade levels.

## Balance of Concepts and Skills

- Content standards require both conceptual understanding and procedural fluency.



# Key Advances in Mathematics

## Mathematical Practices

- Foster reasoning and sense-making in mathematics.

## College and Career Readiness

- Level is ambitious but achievable.



# 8 Standards of Mathematical Practice

**Make sense of problems and persevere in solving them**

**Reason abstractly and quantitatively**

**Construct viable arguments and critique the reasoning of others**

**Model with mathematics**







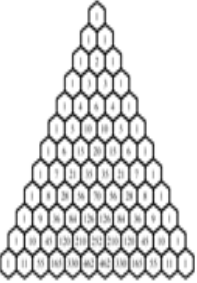

Use appropriate tools strategically

Attend to precision

Look for and make use of structure

Look for and express regularity in repeated reasoning

## Mathematically Proficient Students Will...

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



Take a Look at the  
**CONTENT  
STANDARDS**





# Themes or Strands Throughout the Standards

These are the most important ideas in the mathematics standards that need attention:

- Properties of operations; their role in arithmetic and algebra
- Mental math and algebra versus algorithms
- units and unitizing
- Operations and the problems they solve
- Quantities, variable, functions modeling
- Number, operations, expressions, equations
- Modeling
- Practices

## Common Core State Standards – Mathematics

## Standards Progressions

Kindergarten	1	2	3	4	5	6	7	8	HS
<a href="#">Counting and Cardinality</a>									Number and Quantity
<a href="#">Number and Operations in Base Ten</a>						<a href="#">Ratios and Proportional Relationships</a>			
			<a href="#">Number and Operations - Fractions</a>			<a href="#">The Number System</a>			
<a href="#">Operations and Algebraic Thinking</a>						<a href="#">Expressions and Equations</a>			Algebra
									<a href="#">Functions</a>
<a href="#">Geometry</a>						<a href="#">Geometry</a>			Geometry
<a href="#">Measurement and Data</a>						<a href="#">Statistics and Probability</a>			Statistics and Probability

# Overview of K-8 Mathematics

- The K-5 standards provide students with a solid foundation in whole numbers, addition, subtraction, multiplication, division, fractions and decimals.
- The 6-8 standards describe robust learning in geometry, algebra, and probability and statistics.
- Modeled after the focus of standards from high performing nations the standards for grade 7 and 8 include significant algebra and geometry content.
- Students who have complete 7<sup>th</sup> grade and mastered the content and skill will be prepared for algebra in 8<sup>th</sup> grade or after.

# Overview of High School Mathematics

- The high school standards call on students to practice applying mathematical ways of thinking to real-world issues and challenges.
- The standards require students to develop a depth of understanding and the ability to apply mathematics to novel situations, as college students and employees are regularly called to do.
- The standards emphasize mathematical modeling and the use of mathematics and statistics to analyze empirical situations understand them better and improve decisions.
- They identify the mathematics that all students should study to be college and career ready

# Make Sense of Problems and Persevere in Solving Them



- Frame the class environment to encourage student interaction and conversation – math discourse
- Allow students to “struggle” with the mathematical tasks – ***avoid rescuing too soon to diminish the cognitive load***
- Emphasize equivalent representations of a given situation or mathematical relationship



## 21<sup>st</sup> Century Summative Assessment: The Power of Cornerstone Tasks

- Effective 21<sup>st</sup> century assessment is anchored on culminating performance assessment task and projects.
- Culminating tasks and projects require genuine transfer of key competencies and require student to engage in authentic, real world performances.

# 21<sup>st</sup> Century Summative Assessment: The Power of Cornerstone Tasks

Typically, a great cornerstone assessment task should have:

- Real world goals aligned with 21<sup>st</sup> century competencies.
- An authentic set of roles and responsibilities.
- A real-world audience.
- An authentic scenario or situation involving decision making and problem solving.
- Authentic culminating performances and work products.
- Clearly articulated evaluation standards aligned with 21<sup>st</sup> century competencies and articulated via scoring rubrics.

# Education

- “Children must be taught how to think,  
not what to think.” Margaret Mead





THANK YOU!!

- Questions & Concerns

