Common Core State Standards
Charter Schools Institute

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Director of Standards, NJDOE
Acceptance Video
What does it mean to be college and career ready?
What does it mean to be college & career ready?

- Students graduate high school
- Students Need NO Remediation in College or Workplace Training Programs

Percent of ACT-Tested School Graduates Meeting College Readiness Benchmarks By Subject 2011
How can PK-12 ensure all students are college and career ready?
How can PK-12 ensure all students are college and career ready?

• Non-fiction, reading-for-information, should be 50% to 70% of ALL reading during A SCHOOL DAY

<table>
<thead>
<tr>
<th>Grade</th>
<th>Literary</th>
<th>Informational</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>8</td>
<td>45</td>
<td>55</td>
</tr>
<tr>
<td>12</td>
<td>30</td>
<td>70</td>
</tr>
</tbody>
</table>

How can PK-12 ensure all students are college and career ready?

- Using evidence and argument is key to “college and workplace writing” during **A SCHOOL DAY**

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

How can PK-12 ensure all students are college and career ready?

- **Student Reading Ability Must Increase 2 to 3 Grade Levels.**

**Current**
Typical text measures (by grade)

**Common Core**
Text complexity grade bands and associated Lexile ranges

<table>
<thead>
<tr>
<th>Grade Band</th>
<th>Lexile (L) Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>K–1</td>
<td>N/A*</td>
</tr>
<tr>
<td>2–3</td>
<td>450–790</td>
</tr>
<tr>
<td>4–5</td>
<td>770–980</td>
</tr>
<tr>
<td>6–8</td>
<td>955–1155</td>
</tr>
<tr>
<td>9–10</td>
<td>1080–1305</td>
</tr>
<tr>
<td>11–CCR</td>
<td>1215–1355</td>
</tr>
</tbody>
</table>
How can PK-12 ensure all students are college and career ready?

Establish fluency in key mathematical skills:

“Fluency- can carry out skill quickly and without support”

<table>
<thead>
<tr>
<th>Required Fluency</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>K</strong> Add/subtract within 5</td>
</tr>
<tr>
<td><strong>1</strong> Add/subtract within 10</td>
</tr>
<tr>
<td><strong>2</strong> Add/subtract within 20</td>
</tr>
<tr>
<td><strong>3</strong> Add/subtract within 100 (pencil and paper)</td>
</tr>
<tr>
<td><strong>4</strong> Multiply/divide within 100</td>
</tr>
<tr>
<td><strong>5</strong> Add/subtract within 1,000</td>
</tr>
<tr>
<td><strong>6</strong> Multidigit multiplication</td>
</tr>
<tr>
<td><strong>7</strong> Multidigit division</td>
</tr>
<tr>
<td><strong>8</strong> Multidigit decimal operations</td>
</tr>
<tr>
<td><strong>9</strong> Solve px + q = r, p(x + q) = r</td>
</tr>
</tbody>
</table>
How can PK-12 ensure all students are college and career ready?

**RIGOR is achieved when…**

1. Students know how to create their own meaning out of what they learn
2. Students organize information so they create mental models/schema
3. Students integrate individual skills into their whole set of knowledge, understanding, and strategy
4. Students apply what they’ve learned to new/novel situations
The Common Core State Standards Initiative

Beginning in the spring of 2009, Governors and state commissioners of education from 48 states, 2 territories and the District of Columbia committed to developing a common core of state K-12 English-language arts (ELA) and mathematics standards.

The **Common Core State Standards Initiative (CCSSI)** is a state-led effort coordinated by the National Governors Association (NGA) and the Council of Chief State School Officers (CCSSO).

[www.corestandards.org](http://www.corestandards.org)
Why Common Core State Standards?

• Not a Federal/US DOE mandate - THEY HAVE BEEN VOLUNTARILY ADOPTED by nearly ALL STATES to improve school outcomes

• “…provide a consistent, clear understanding of what students are expected to learn, so teachers and parents know what they need to do to help them.”

• Additionally…”The standards are designed to be robust and relevant to the real world, reflecting the knowledge and skills that our young people need for success in college and careers,” which will place American students in a position in which they can compete in a global economy.
Why Common Core State Standards?

- **Preparation:** The standards are college- and career-ready. They will help prepare students with the knowledge and skills they need to succeed in education and training after high school.

- **Competition:** The standards are internationally benchmarked. Common standards will help ensure our students are globally competitive.

- **Equity:** Expectations are consistent for all – and not dependent on a student’s zip code.

- **Clarity:** The standards are focused, coherent, and clear. Clearer standards help students (and parents and teachers) understand what is expected of them.

- **Collaboration:** The standards create a foundation to work collaboratively across states and districts, pooling resources and expertise, to create curricular tools, professional development, common assessments and other materials.
46 States + DC have adopted the Common Core Standards
- Born out of the America Diploma Project (ADP)
- Achieve, Inc. leading effort to align to CC Readiness
- Managing the PARCC Assessment Consortium
- Adopted by the NJ State Board June 16, 2010

<table>
<thead>
<tr>
<th></th>
<th>ELA</th>
<th>Mathematics</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-2012</td>
<td></td>
<td>K-2</td>
</tr>
<tr>
<td>2012-2013</td>
<td>K-12</td>
<td>3-5, HS</td>
</tr>
<tr>
<td>2013-2014</td>
<td></td>
<td>6-8</td>
</tr>
</tbody>
</table>
PARCC Assessment Design
English Language Arts/Literacy and Mathematics, Grades 3-11

- **Diagnostic Assessment**
  - Early indicator of student knowledge and skills to inform instruction, supports, and PD
  - Non-summative

- **Mid-Year Assessment**
  - Performance-based
  - Emphasis on hard-to-measure standards
  - Potentially summative

- **Performance-Based Assessment (PBA)**
  - Extended tasks
  - Applications of concepts and skills
  - Required

- **End-of-Year Assessment**
  - Innovative, computer-based items
  - Required

- **Speaking And Listening Assessment**
  - Locally scored
  - Non-summative, required

2 Optional Assessments/Flexible Administration

BEGINNING OF YEAR

END OF YEAR
Why Common Core State Standards?

- THEY ARE INTENDED TO...
  - Increase Rigor of Instruction
  - Increase the Number of College Graduates
  - Increase American Competitiveness

- THEY ARE DESIGNED TO...
  - Improve College/Career Learning by increasing and improving…
    - Non-Fiction Reading
    - More Complex / Difficult Reading
    - Math Instruction Beyond “Memorization”
    - Critical Thinking & Problem Solving
Common Core State Standards:

What are the Critical Shifts to Consider?
6 Significant Pedagogical *Shifts* in ELA Literacy and Mathematics

**Common Core Implementation**
1. Balancing Informational and Literary Text
2. Building Knowledge in the Disciplines
3. Staircase of Complexity
4. Text-based Answers
5. Writing from Sources
6. Academic Vocabulary

**Common Core Assessment**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 &amp; 2:</td>
<td>Non-fiction Texts&lt;br&gt;Authentic Texts</td>
</tr>
<tr>
<td>3:</td>
<td>Higher Level of Text Complexity&lt;br&gt;Paired Passages</td>
</tr>
<tr>
<td>4 &amp; 5:</td>
<td>Focus on command of evidence from text: rubrics and prompts</td>
</tr>
<tr>
<td>6:</td>
<td>Academic Vocabulary</td>
</tr>
</tbody>
</table>

**Key Skills**
1. Focus
2. Coherence
3. Fluency
4. Deep Understanding
5. Applications
6. Dual Intensity

1: Intensive Focus
2: Linking Back
4, 5, 6: Mathematical Modeling
The CCSS Difference: Grade 7 ELA

1. Produce written work and oral work that demonstrate comprehension of informational materials.

After: CCSS (2010)
2. Determine two or more central ideas in a text and analyze their development over the course of the text; provide an objective summary of the text.
The CCSS Difference: Grade 8 Mathematics

1. Understand and apply the Pythagorean Theorem.

After: CCSS (2010)
1. Explain a proof of the Pythagorean Theorem and its converse.
2. Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.
3. Apply the Pythagorean Theorem to find the distance between two points in a coordinate system.
Overview of Common Core State Standards

Grade-Level Standards
- K-8 grade-by-grade standards organized by domain
- 9-12 high school standards organized by conceptual categories

Standards for Mathematical Practice
- Describe mathematical “habits of mind”
- Standards for mathematical proficiency: reasoning, problem solving, modeling, decision making, and engagement
- Connect with content standards in each grade
Overview of K-8 Mathematics Standards

The K-8 standards:

- 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 grades 7 and 8 include significant algebra and geometry content.

- Students who have completed 7th grade and mastered the content and skills will be prepared for algebra, in 8th grade or after.
Grade 1 Overview

Operations and Algebraic Thinking

- Represent and solve problems involving addition and subtraction.
- Understand and apply properties of operations and the relationship between addition and subtraction.
- Add and subtract within 20.
- Work with addition and subtraction equations.

Number and Operations in Base Ten

- Extend the counting sequence.
- Understand place value.
- Use place value understanding and properties of operations to add and subtract.

Measurement and Data

- Measure lengths indirectly and by iterating length units.
- Tell and write time.
- Represent and interpret data.

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.

Each grade includes an overview of cross-cutting themes and critical areas of study.
Format of K-8 Mathematics Standards

- **Domains**: overarching ideas that connect topics across the grades
- **Clusters**: illustrate progression of increasing complexity from grade to grade
- **Standards**: define what students should know and be able to do at each grade level
Overview of **High School** Mathematics Standards

The high school mathematics standards:

- Call on students to practice *applying mathematical ways of thinking* to real world issues and challenges

- Require students to develop a *depth of understanding and ability to apply mathematics to novel situations*, as college students and employees regularly are called to do

- Emphasize *mathematical modeling*, the use of mathematics and statistics to *analyze empirical situations*, understand them better, and improve decisions

- Identify the mathematics that all students should study in order to be *college and career ready*. 
Format of High School Mathematics Standards

- **Conceptual categories**: overarching ideas that describe strands of content in high school
- **Domains/Clusters**: groups of standards that describe coherent aspects of the content category
- **Standards**: define what students should know and be able to do at each grade level
Each content category includes an overview of the content found within it.

Number and Quantity Overview

The Real Number System

- Extend the properties of exponents to rational exponents
- Use properties of rational and irrational numbers.

Quantities

- Reason quantitatively and use units to solve problems

The Complex Number System

- Perform arithmetic operations with complex numbers
- Represent complex numbers and their operations on the complex plane
- Use complex numbers in polynomial identities and equations

Vector and Matrix Quantities

- Represent and model with vector quantities.
- Perform operations on vectors.
- Perform operations on matrices and use matrices in applications.

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.
Significant Shifts in ELA/Literacy:

• Building knowledge through content-rich nonfiction.

• Reading, writing and speaking grounded in evidence from text, both literary and informational.

• Regular practice with complex text and its academic language
The CCSS Difference: Grade 3-5 ELA: Integration of Knowledge and Ideas

<table>
<thead>
<tr>
<th>Grade 3</th>
<th>Grade 4</th>
<th>Grade 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compare and contrast the most important points and key details presented in two texts on the same topic</td>
<td>Integrate information from two texts on the same topic in order to write or speak about the subject knowledgably</td>
<td>Integrate information from several texts on the same topic in order to write or speak about the subject knowledgably.</td>
</tr>
</tbody>
</table>
Write arguments to support claim(s) in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.

Introduce **precise** knowledgeable claims(s), establish the **significance** of the claim(s), **distinguish** the claim(s) from alternate or opposing claims, and create an **organization** that logically sequences claim(s), counterclaim(s), reasons and evidence.

Develop claim(s) and counterclaim(s) **fairly and thoroughly**, supplying the **most relevant evidence** for each while pointing out the **strengths and limitations** of both in a manner that **anticipates the audience’s** knowledge level, concerns, values, and possible biases.
Limitations of Textbooks and Programs

- CCSS requires the re-evaluation of textbooks, materials and programs
- Rubrics for evaluating resources can be found at the NJDOE website under CCSS
# Model Curriculum 1.0 & 2.0

<table>
<thead>
<tr>
<th>WHAT Students need to Learn</th>
<th>HOW We can best Instruct</th>
<th>WHEN do we know students have Learned</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Standard</strong></td>
<td><strong>Student Learning Objectives</strong></td>
<td><strong>Instruction</strong></td>
</tr>
<tr>
<td>CCSS Standard 1</td>
<td>SLO #1</td>
<td>• Model Lessons</td>
</tr>
<tr>
<td></td>
<td>SLO #2</td>
<td>• Model Tasks</td>
</tr>
<tr>
<td>CCSS Standard 2</td>
<td>SLO #3</td>
<td>• Engaging Instructional Strategies</td>
</tr>
<tr>
<td></td>
<td>SLO #4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SLO #5</td>
<td></td>
</tr>
</tbody>
</table>

General Bank of Assessment Items 2.0
- Student level learning reports
- Professional development
- Resource reviews

Unit Assessment SLOs 1-5
Why Unit-based Formative Assessments?

- Clarify the level of rigor for SLOs
- Create common expectations in common courses
- Provide data to effectively inform classroom instruction
- Provide data that can be combined with observation data to inform PD
### Unit Assessment

#### Grade 3 sample formative assessment items

<table>
<thead>
<tr>
<th>Code #</th>
<th>CCSS and/or NJCCCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.NF.1</td>
<td>Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into $b$ equal parts; understand a fraction $a/b$ as the quantity formed by $a$ parts of size $1/b$.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>#</th>
<th>STUDENT LEARNING OBJECTIVES</th>
<th>CORRESPONDING CCSS/NJCCCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Identify unit fractions and fractions composed of unit fractions on the number line.</td>
<td>3.NF.1</td>
</tr>
</tbody>
</table>

#### Vocabulary

- Partitioning, Unknown, Equation, Multiple, Properties of Operations, Arrays

#### Assessment

**Sample SLO #3**

Find the fraction numeral which names the location $X$.

- a. $\frac{2}{4}$
- b. $\frac{2}{3}$
- c. $\frac{1}{2}$
- d. $\frac{3}{4}$

**Sample SLO #3**

Bob, Jasmine, Margo, Tim and Elijah were a team. Only Bob and Margo were bused to school. What part of the team did not arrive by bus?  
A. $\frac{2}{3}$  
B. $\frac{3}{5}$  
C. $\frac{2}{5}$  
D. $\frac{1}{2}$
Students are on-track or ready for college and careers (ELA)

Students read and comprehend a range of sufficiently complex texts independently

- Reading Literature
- Reading Informational Text
- Vocabulary Interpretation and Use

Students write effectively when using and/or analyzing sources.

- Written Expression
- Conventions and Knowledge of Language

Students build and present knowledge through research and the integration, comparison, and synthesis of ideas.
Students are on-track or ready for college and careers (Math)

- Solve problems involving the major content for their grade level with connections to practices
- Solve problems involving the additional and supporting content for their grade level with connections to practices
- Express mathematical reasoning by constructing mathematical arguments and critiques
- Use the modeling practice to solve real world problems
- Demonstrate fluency in areas set forth in the Standards for Content in grades 3-6
Common Core State Standards (CCSS) / Model Curriculum / Partnership for Assessment of Readiness for College and Careers (PARCC)

Welcome!

The central goal of the NJDOE is to ensure that all children, regardless of life stage, are ready for college and career. We believe that the implementation of Common Core State Standards (CCSS) supported by state-developed model curriculum and professional development is a necessary component for reaching our goal. This section of the website is intended for parents and community members to access the most up-to-date information on CCSS implementation and the Partnership for Assessments of Readiness for College and Careers (PARCC). The website is also intended to receive input from parents and community members to improve the content and effectiveness of the website.

Common Core State Standards (CCSS)

In June 2010, the New Jersey State Board of Education (NJBOE) and the New Jersey Department of Education (NJDOE) adopted the Common Core State Standards (CCSS). This adoption followed the approach taken by a majority of states in the country to develop standards that are more aligned with college and career readiness. The Common Core State Standards represent a coherent and consistent body of knowledge for students to master in order to be ready for college and a career.

Model Curriculum 1.0 and 2.0

Model curriculum 1.0 is a work in progress - which you may view on this website. Providing a model curriculum is to assist all districts and schools with implementing the Common Core State Standards effectively.
Common Core on the Go

• iPhone
• Android
Achieving the Core Standards for all students to become internationally competitive.

Steal these tools
Free resources especially useful for implementation this year

You’ve got to read this
Articles, sites and research you shouldn’t miss

By teachers for teachers
Voices of educators doing the work of the Core

The Common Core State Standards are a new set of expectations designed to ensure all students achieve college and career readiness.

Forty-six states have now adopted these shared standards so their students can compete and succeed on a world stage.

This site is here to provide free, high-quality resources to educators now doing the hard work of implementing these higher standards.

www.achievethecore.org
Parent Roadmaps
K-8
ELA & Math
English & Spanish
Thank you!

Kimberley Harrington
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