

## Common Core State Standards – Deepening Core Academic Content and Strengthening Critical Skills

### *Brief Summary*

The Common Core State Standards (CCSS) for English language arts and mathematics - developed in 2010 and voluntarily adopted by 45 states, the District of Columbia, of 45 states, District of Columbia, four U.S. territories, and the Department of Defense Education Activity – establishes a high bar of learning objectives for students as they matriculate through states' K-12 education systems. The intent of these objectives is for students to be college- and career-ready upon high school graduation and have the necessary skills – critical-thinking, communication, and collaboration – to help businesses continue to innovate and compete in the global economy. Most states are on track to implement their more rigorous standards by school year 2014-2015 and are developing/implementing their aligned assessment systems, curricula, instructional materials, and teacher/leader professional development systems.

Below are key concepts and examples of what students will know upon high school graduation in English language arts and mathematics that has implications for other core subject areas such as history and science.

### *English Language Arts (ELA) – Concepts and Examples*

- Reading
  - The standards are designed to increase the complexity of what students are able to read and comprehend as students progress through later grades.
  - Students will be exposed to various classic and contemporary literature as well as challenging informational texts in a range of subject areas in order to build knowledge, gain insights, explore possibilities, and broaden their perspectives.
  - Students will be exposed to foundational U.S. documents and technical texts.
- Writing
  - Students will learn how to write logical arguments based on substantive claims, sound reasoning, and relevant evidence with opinion writing starting at the earliest grades.
  - Students will conduct research – short, focused projects and long-term, in-depth – and be able to present their findings to their peers along with their written analyses.
- Speaking and Listening
  - Students will gain, evaluate, present increasingly complex information, ideas, and evidence through listening and speaking as through various media platforms
  - Students will participate in various formats, including small group discussions, one-on-one discussions, and entire classroom discussions.
  - Students will be able to collaborate with each other to identify problems, build understanding of problems, answer thought-provoking questions, solve problems, etc.

- Language
  - Students will grow their vocabularies through a mixture of discussions, direct instruction, and reading.
  - Students will learn word meanings, nuances of words, and expand their use of complex words and phrases.
- Media and technology
  - Skills related to media use – critical analysis and production of media – are integrated throughout the standards.

***ELA Example – K-5 grade level***

*Frog and Toad Together* by Arnold Lobel – popular book read in 2nd or 3rd grades that is now expected to be read in kindergarten and 1<sup>st</sup> grades.

*Before CCSS*

Students retell main events and identify characters and the setting.

*With CCSS*

Students compare and contrast the experiences of the frog and toad and participate in collaborative conversations about their comparisons.

***Mathematics – Concepts and Examples***

- *K-5 Standards* – The standards are organized into the following domains: counting and cardinality; operations and algebraic thinking; number and operations in base ten; number and operations – fractions.
  - The domains will vary by grade level with counting and cardinality starting in kindergarten and number and operations with fractions in the 3<sup>rd</sup> grade; and
  - *Kindergarten* – students will learn how numbers correspond to quantities
- *Middle School* – The standards for grades 6-8 are organized in the following domains: ratios and proportional relationships; the number system; expressions and equations; functions; geometry; and statistics and probability.
  - Students build upon their learning during the K-5 grades with deeper exposure to geometry, algebra, and probability and statistics in middle school; and
  - Expectations will be for students to master these areas and skills in 7<sup>th</sup> grade and be prepared for additional algebra in 8<sup>th</sup> grade and later.
- *High School* – The standards are organized in the following domains: number and quantity; algebra; functions; geometry; and statistics and probability.
  - Students will be able to apply mathematical concepts to real-world challenges and continue to think critically and reason mathematically; and
  - Emphasizes mathematical modeling – the use of mathematics and statistics to analyzes empirical situations

***Math Example – high school level***

*Solving equations as a series of mechanical steps before CCSS compared to solving equations as a process of reasoning.*

*Before CCSS*

If  $3(y-1) = 8$ , then what is  $y$ ?

*With CCSS*

What are two different equations with the same solution as  $3(y-1) = 8$ ?

**References**

*Achieving the Common Core: Understanding the K-12 Common Core State Standards in Mathematics* by Achieve

*Achieving the Common Core: Understanding the K-12 Common Core State Standards in English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects* by Achieve

*Old Standards v. Common Core: A Side-By-Side Comparison of English Language Arts* by Foundation for Excellence in Education