

# Common Core State Standards: A Tool for Improving Education

*We believe that this initiative is a critical step in state efforts to provide every student with a comprehensive, content rich education. These standards can support the collaboration across states and stakeholders in providing programs, resources and policies that will help overcome the weaknesses and inequities in our schools today.*

—NEA President Dennis Van Roekel

**F**or many years, there have been efforts to promote the development of national standards for education in the United States. For several reasons, including concerns about potential ideological bias and political pressure, those efforts did not gain wide support. In addition, there is no research



or evidence indicating that national standards are essential for a nation's students to be high achievers. However, the potential for a set of

common educational goals to help states focus resources and system planning remained attractive to many education policy makers.

In the Spring of 2010, the National Governors Association (NGA) and the Council of Chief State School Officers (CCSSO) completed the a project to develop Common Core State Standards (CCSS). Leading education organizations, such as the National Education Association (NEA), the College Board, Achieve, and ACT agreed to become partners with NGA and CCSSO. Members of major teacher organizations, NEA, the American Federation of Teachers (AFT), the International Reading Association (IRA), the National Council of Teachers of Mathematics(NCTM), and the National Council of Teachers of English(NCTE) served as review groups. Their comments led to a number of changes for the final draft of the CCSS.

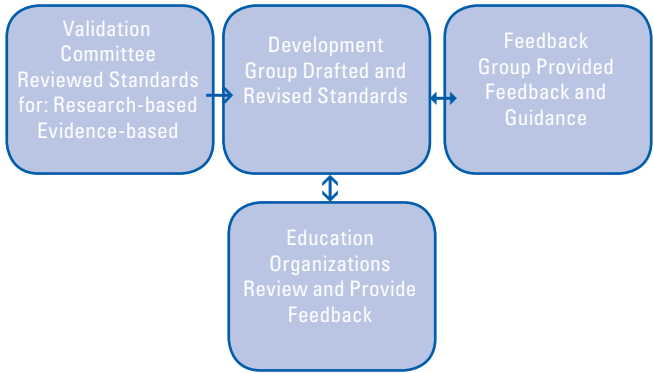
## How were the Common Core State Standards developed?

Students are entering into a world that most of us would have found hard to contemplate even 10-15 years ago. Whether students enter post-secondary education, the workplace, or both, articulating what students need to know and be able to do in order to be successful in both college and a career was central to the development of the Common Core Standards. The first part of the effort entailed drafting College and Career Ready (CCR) Standards in English language arts and mathematics. The main participants in this initial stage included CCSSO and NGA as the leaders and coordinators, the College Board, ACT, and Achieve.

After the CCR standards were drafted, many teacher groups, including NEA, AFT, IRA, NCTM, and NCTE, weighed in with comments and concerns. As a result of those comments, changes were made to the CCR standards before the final draft. After the CCR standards were approved by states, work began on the Common Core State Standards (CCSS) for grades k -12. Throughout the development process, drafts of the CCSS were reviewed by an NEA team of National Board Certified teachers as well as teachers from the content organizations.

A system of input groups guided the development of the CCSS. A Development Group drafted and

revised the standards. A Feedback Group informed the work of the Development Group by providing guidance and input to drafts of the standards. A Validation Committee reviewed the standards to ensure the standards were research-based and evidence-based. This group was completely independent from the Development Group.



**What do the Common Core State Standards cover?**

The CCSS cover English language arts and mathematics. While NEA advocates addressing and setting goals for all curricular areas, it acknowledges that initial development of common standards must start with a feasible task and addressing only these two content areas was challenging but manageable. Efforts are now underway to begin developing common state standards for science and social studies. If having common standards proves to be a support for education improvement, common state standards should be developed for all content areas, including the arts and physical education.

**The Standards for English Language Arts**

*The Role of Increasingly Complex Texts*

There are some key characteristics and organizing principles for the CCSS in English language arts. One is the guiding notion that reading comprehension and writing composition skills do not

change much after students began to read and write; rather, what changes are the complexity of the texts they read and the tasks or purposes for reading. For example, a sixth grader could read *A Wrinkle in Time* and identify the relatively concrete themes of the book without using much interpretation or abstraction. A student in a high school literature course would need to use much more abstraction, synthesis, and interpretation to identify the themes in *To Kill a Mockingbird*. For a detailed explanation of the role of text complexity in reading see Appendix A of the English language arts standards.

**Learning Progressions**

A key organizing principle for the English language arts CCSS is the notion of learning progressions. Learning progressions can be defined as “descriptions of the successively more sophisticated ways of thinking about a topic that can follow one another as children learn about or investigate a topic over a broad span of time (e.g., 6 to 8 years).”<sup>11</sup> Here is an example of a portion of a learning progression from the CCSS for Reading for Literature.

College and Career Ready Standard 6	Grade 4 Reading Standard for Literature 6	Grade 5 Reading Standard for Literature 6
End Goal of K -12 Education	What a Student needs to Be Able to Do at the End of Grade 4 to Be on Track to Achieve the End Goal	What a Student needs to Be Able to Do at the End of Grade 6 to Be on Track to Achieve the End Goal
Assess how point of view or purpose shapes the content and style of a text.	Compare the point of view from which different stories are narrated, including the difference between first and third person narrative.	Identify how a narrator’s perspective or point of view influences how events are described.

Below is an example from the Standards for Informational Text that follows the same CCR standard 6 cited above. It demonstrates a learning progression applied to informational rather than literary reading materials.

College and Career Ready Standard 6	Grade 3 Reading Standard for Informational Text 6	Grade 4 Reading Standard for Literature 6
Assess how point of view or purpose shapes the content and style of a text.	Compare what is presented in the text with relevant prior knowledge and beliefs, making explicit what is new and surprising.	Compare an eyewitness account to a second hand account of the same event or topic.

The use of learning progressions such as those in the CCSS in order to outline goals for curriculum and instruction is a practice commonly used in many countries that perform well on international assessments of academic achievement. It has the potential to provide greater coherence across grade level standards as well as research-based learning sequences.

### The Standards for Mathematics

In the mathematics, the CCSS standards include an overarching set of standards for mathematical practice that are goals and guides for instruction at all levels.

These standards are:

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique 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.

The overarching aim of the CCSS in mathematics for grades K through 7 is to prepare students to succeed in algebra in grade 8. The K-8 standards are organized in domains that include:

- Counting and Cardinality (K only)
- Operations and Algebraic Thinking (K-5)
- Number and Number Operations in base 10 (K-5)
- Number and Operations – Fractions (3-5)
- Measurement and Data (K-5)
- Geometry (K-8)
- Ratios and Proportional Relationships (6-8)
- Expressions and Equations (6-8)
- Statistics and Probability
- The Number System (6-8)

The standards for high school are organized in conceptual categories that align with courses.

- Number and Quantity
- Algebra
- Functions
- Modeling
- Geometry
- Statistics and Probability

### What Is Special about These Standards?

These standards were developed with the aim of establishing common educational goals that states could share. The standards were designed to be:

- Focused, coherent, clear, and rigorous
- Internationally benchmarked
- Anchored in college and career readiness
- Evidence and research-based.

The standards articulate broad, high goals for each grade, rather than strings of specific enabling skills. While they are focused, they leave flexibility for multiple ways of achieving them. They guide, but do not restrict curriculum. Because they are fewer, they are manageable for teachers. They are expressed clearly and in terms that parents and the public can understand. For example, Writing Standard 7 for Grade 5 is: “Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.”

The standards are internationally benchmarked through comparisons to standards of countries that perform well on international assessments and through the use of standards from other countries as models.

The standards are anchored in college and career readiness through two vehicles. First, the College and Career Readiness Standards (CCR) were based on data from business and higher education. Then the K-12 CCSS were mapped to the CCR standards through learning progressions.

Several aspects of the standards are research or evidence-based. In the English language arts standards, the role of text complexity is based on research indicating that students need to develop competency in dealing with increasingly complex texts if they are to be successful with the reading demands beyond high school. In mathematics, the K-8 standards focus on understanding numbers, operations, and fractions is based on research linking success in algebra with competency in these areas.

The CCSS are not national standards. They were not developed by a federal entity. States controlled the development of the standards and

retain the decision making related to whether to adopt the standards and how to implement them. The CCSS will not necessarily lead to a national test. The adoption and implementation of the standards is in the hands of the states. The assessments tied to the standards are also in the hands of the states. There are currently two consortia of states working on assessment systems tied to the CCSS. The US Department of Education has funded both of these consortia, but the power to develop and use any specific assessments remains in the hands of the member states.

### What Can the Standards Accomplish?

These standards have the potential to leverage some important education improvements. Individual states have the option to adopt or ignore these standards. If states do adopt the standards, they have the possibility of working with other states to develop common assessments and instructional resources. Teachers can collaborate across states in developing their own professional capacity and sharing ideas. This potential for sharing across states is especially important in the context of states’ current financial challenges.

The standards can lead to better assessment systems. Current English language arts and mathematics standards in most states consist of lists of highly specific skills and concepts that supposedly enable students to perform complex tasks and develop deep understandings. However, the assessments linked to such standards consist of mainly multiple choice items that do not provide valid indicators of the ability to deal with more complex tasks. For example, picking a good topic sentence for a reading passage from several possibilities is used on assessments as a typical indicator of whether a student can actually summarize what has been read. However, the relevant goal

for instruction related to this type of assessment question is that students should be able to summarize what they read. Picking a topic sentence of someone else's summary is not the same as actually articulating one's own summary.

Below are examples from the CCSS that will require assessment tasks on which students must actually demonstrate they have learned the more complex skills that are the goals of an education that will truly prepare them for success beyond K-12 schooling.

**Grade 5, Reading Standard for Informational Text 9:**

Integrate information from several texts on the same subject in order to write or speak about the subject knowledgeably

**Grade 8, Reading Standard for Literature 2:**

Determine a theme or central idea of a text and analyze its development over the course of the text, including its relationship to characters, setting, and plot; provide an objective summary of the text.

**Grade 5, Geometry, Standard 1:** Use a pair of perpendicular lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using a pair of ordered numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g. x-axis and x-coordinate, y-axis and y-coordinate).

**Grade 7, Statistics and Probability Standard 7:**

Develop a probability model and use it to find the possibilities of events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy.

Students' achievement of these standards cannot be demonstrated through the use of multiple choice items. Not even a set of such items can indicate whether students actually have achieved the standards. On inspecting the standards, one can see the potential for developing assessment tasks that cover several standards in one task. The grade 5 English language arts standard above can be assessed with a task that includes the application of other standards in reading, writing, listening, or speaking.

The standards can lead to better instruction. While they do not dictate how teachers should teach, they do provide clear goals. They leave flexibility and the room to apply new understandings of teaching and learning as they are discovered. Only rich, well-planned instruction can prepare students to demonstrate competency in the examples of standards cited above. Drills and worksheets will not be sufficient. Teachers will need to work with students not only on the subskills and concepts involved but also on integrating skills and ideas to perform tasks that approximate what students need to be able to do at work and in college.

### What Happens after the Standards Are Adopted in States?

Implementation of the CCSS in states will require time and resources. Assessment systems will need to change. It is not likely that simply matching existing assessment items to the CCSS will yield valid information on whether students are meeting the CCSS. Cut scores for levels of proficiency may no longer be relevant, and scores on rubrics for complex tasks may be the indicators of whether students have achieved standards with exemplary performance or with proficiency, or have not reached the standards. Teachers can

use formative or instructionally-embedded assessments in the classroom to track student progress and determine whether students are likely to be able to demonstrate proficiency. An effective assessment system needs to include classroom resources for formative assessment that support teaching as well as summative assessments that are used for accountability.

New curriculum resources will be necessary. States adopting the CCSS can work together to create both assessment and instructional tools. The professional development related to the standards can be addressed partly through the involvement of teachers in the determination of curriculum and new assessments. In order to increase their capacity to teach students to achieve the standards, teachers also need opportunities to share ideas as they examine student work and responses on assessments. This is a powerful form of staff development, supported by research both in the United States and in other countries.

Parents and communities will need time to become familiar with the CCSS and the types of student work they will see coming home as a result of teachers focusing on the standards. They will need to be informed and given time to develop clear understandings of the standards.

The implementation stage of the CCSS is a critical time that should not be rushed if the standards are going to be used effectively to improve the

achievement of our students. Poor, incomplete professional development and invalid, irrelevant assessments can derail the process. The creativity and careful thought that produced the CCSS will be needed more than ever as the standards are implemented. Policy needs to take into account all the factors that are involved in developing a new education system guided by common standards and not rush or neglect any of the various pieces or constituencies.

### **What else is needed to improve education?**

In order to improve the access of every child to a quality education, efforts must be guided by broader goals for education that include accountability for the provision of services and programs that promote student well being. In addition, education should include goals that promote students' capacity to participate in their communities and in our democracy. We need to put content standards into the larger context of providing the best access possible for our students to gain the wide range of skills and knowledge that allow them to thrive in their whole lives, not just college and career.

### References

<sup>1</sup> Duschl, R.A.; Schweingruber, H. A.; and Shouse, A. W. (2007). Taking science to school: Learning and teaching science in grades k-8. Washington: The National Academies Press.

### Resources

**Association for Supervision and Curriculum Development.** Campaign for the Whole Child resources at [www.wholechildeducation.org](http://www.wholechildeducation.org)

**Economic Policy Institute.** Broader Bolder Initiative resources at [www.boldapproach.org](http://www.boldapproach.org)

**The Hunt Institute.** *Blueprint for Education Leadership*, Numbers 3 and 4, June 2009 and June 2010, [www.hunt-institute.org](http://www.hunt-institute.org)

**Common Core Standards Initiative.** The standards and resource materials. [www.corestandards.org](http://www.corestandards.org)

