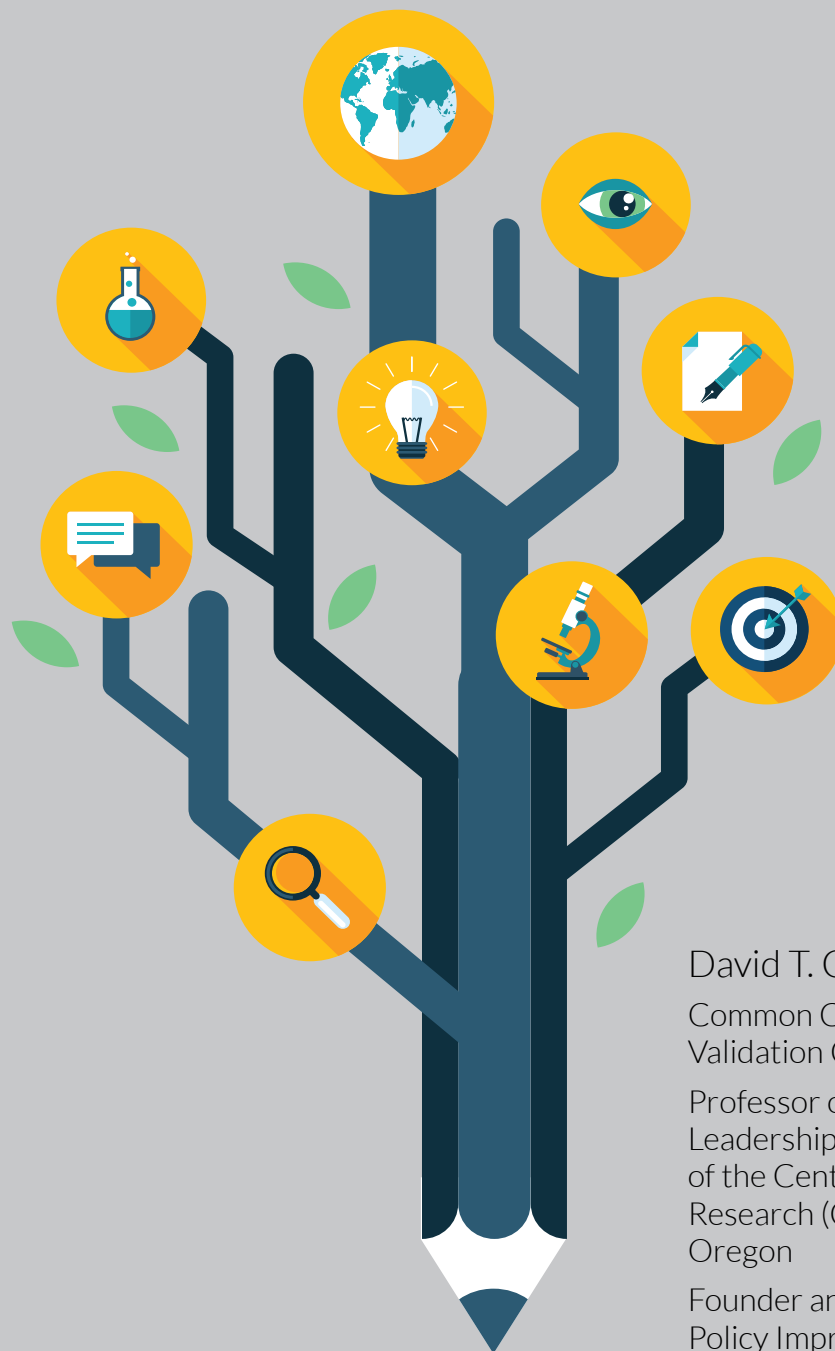


# The Common Core State Standards: Insight into Their Development and Purpose



David T. Conley

Common Core State Standards  
Validation Committee Co-Chair

Professor of Educational Policy and  
Leadership and Founder and Director  
of the Center for Educational Policy  
Research (CEPR) at the University of  
Oregon

Founder and CEO of the Educational  
Policy Improvement Center (EPIC)



This publication provides a clear, concise, and accurate summary of the following:

- the rationale for the standards
- an overview of how they were developed
- a summary of the research base supporting them
- some of the evidence that the Common Core State Standards will prepare students for college and careers
- insight into the changes in teaching and learning that are likely to occur as the standards are implemented
- how to use the standards

These represent some of the most important issues on the minds of teachers, administrators, parents, policymakers, and members of the public at large.

# The Common Core State Standards: Insight into their development and purpose

## Why Common Standards?

Educational standards are not new. Every state has had grade-level educational standards for at least a decade, and most for much longer than that. Standards help ensure that students in every school will acquire the knowledge and skills critical to success in college, career, and life. Standards help guide local school boards as they make critical decisions about curriculum, textbooks, teachers, course offerings, and other aspects of district instructional programs. While standards provide a framework, they do not require a certain curriculum or specific teaching methods. Those decisions are left up to educators.

In the past, vast differences in educational expectations existed across states. A 2010 study by the American Institutes of Research documented a huge expectations gap, with some states expecting their students to accomplish far more in school than other states with much lower standards<sup>1</sup>. In essence, what a fourth grader was expected to know in math could vary dramatically depending on the state in which she lived. Until recently, this patchwork of high and low standards that varied from state to state had few consequences, in part because formal education was not as important to all students, many of whom were able to obtain stable, well-paying employment



in their local community without high levels of education. The situation is much different today. Local economies in many parts of the country have seen radical transformation. Few jobs provide career-long security. To retain their jobs, workers need to acquire new, more complex skills. An educational system

that is based on the assumption that people will live in one community doing one job their whole lives is no longer realistic. Neither is one that enables students in some parts of the country to be lifelong learners while leaving many others with minimal knowledge and skills.

The Common Core State Standards are a response to the new realities of the US economy. The role of the new common standards is to ensure that all students are able to be successful in an economy and society that is changing at a remarkable pace and that will continue to do so throughout their lifetimes. Several statistics show that this need to better prepare students for college is an urgent one. ACT annually publishes a report on the number of students taking its test who meet its college readiness benchmarks. In 2013, 54 percent of all high school graduates took the ACT, and only 26 percent of test-takers reached the college readiness level in all four areas tested (English, reading, mathematics,

and science).<sup>2</sup> The Institute for Education Sciences reported that 20 percent of students in 2007-2008 indicated that they took remedial courses in college.<sup>3</sup> The rate was even higher for two-year institutions and open-enrollment colleges. According to data from 33 states, more than 50 percent of students entering two-year colleges and almost 20 percent of students entering four-year colleges are placed into remedial courses<sup>4</sup>, which are estimated to cost more than \$3 billion annually.<sup>5</sup>

The Common Core State Standards allow educators to share a common language about what they want students to learn, and they enable development of high-quality materials that address the standards. They build upon previous experience with standards, both in the US and abroad, to create a focused, challenging, appropriate set of learning expectations that educators can interpret and implement locally through the curriculum, programs, and teaching methods they decide are best suited to their students.

They help educators create *consistency* of expectations, *clarity* of learning targets, and *economies of scale* in the production of instructional materials carefully crafted to support student success. Above all, the new standards aim to hold all students to the same high expectations for college and career readiness. While the standards do represent a challenge, they are based on expectations that students in the US and elsewhere have proven capable of meeting. Achieving them will require changes in educational practice, examples of which are discussed later.

## How They Were Developed

With this backdrop of students' lack of preparedness for college and careers, governors and chief state school officers began talking about the need for a common set of high standards. In November 2007, state education chiefs met in Columbus, Ohio to discuss the opportunity to collaborate on a single set of world-class K-12 standards benchmarked to college- and career-readiness. The following year, CCSSO, NGA, and Achieve - a group established by governors and business leaders in 1996 - released an influential report [Benchmarking for Success: Ensuring U.S. Students Receive a World-Class Education](#). The report, guided by an advisory group that included governors, state education chiefs, and leading education researchers, recommended states "upgrade state standards by adopting a common core of internationally benchmarked standards in math and language arts for grades K-12 to ensure that students are equipped with the necessary knowledge and skills to be globally competitive." Following the recommendations of the report, in April 2009 NGA and CCSSO convened governors' education policy advisors and chief state school officers in Chicago to discuss creation of the Common Core State Standards Initiative. As a result, NGA and CCSSO invited states to commit to a process to develop common standards in English language arts/literacy and mathematics. Based on the interest from states, work to develop the standards commenced. By June 2009, governors and chief state school officers from 49 states and territories were participating in a state-led process to develop com-



**The Common Core State Standards allow educators to share a common language about what they want students to learn, and they enable development of high-quality materials that address the standards.**

mon standards for English language arts/literacy and mathematics. By September, the final tally included 51 states and territories.

Development of the new standards was guided with one goal in mind: to prepare students for college and careers. So rather than designing the standards from kindergarten up, they were designed from high school down. To develop the Common Core State Standards,<sup>6</sup> work and feedback groups consisting of teachers, content experts, states, and leading thinkers, drew upon over a decade's worth of evidence describing what it takes to be ready to succeed in college or in career training programs. The list of work and feedback group members can be found [here](#).

In addition, the experience of other countries with high educational expectations helped identify the knowledge and skills that are universally important. The initial drafts of the Common Core State Standards, then, incorporated the combined expertise and experience of states, teachers, education organizations, and other nations that have sought to raise educational expectations and achievement.

These initial drafts of the standards, grounded in research and best practices, were provided to all state education agencies, educators, and the public at large for review, scrutiny and comments. The feedback received from these groups resulted in significant revisions and refinements over multiple drafts. The final version was presented to states in June 2010.

## A Strong Evidence Base

The evidence behind the standards reflects what has been learned about college and career readiness standards over the past decade. In 2003, Standards for Success<sup>7</sup> released the first comprehensive set of college readiness standards based on research conducted at over a dozen universities around the country, all members of the Association of American Universities. The American Diploma Project<sup>8</sup> quickly followed suit with standards that also addressed community college and workplace readiness. Soon after, both ACT<sup>9</sup> and the College Board<sup>10</sup> released their versions of college readiness standards, as did the Texas Higher Education Coordinating Board.<sup>11</sup> All of these documents influenced the Common Core State Standards and helped ensure that they

were derived from standards developed with significant educator input and previously tested and validated in the field.<sup>12</sup> Content area standards from prestigious groups such as the National Assessment Governing Board and the National Council of Teachers of Mathematics also served as important references.<sup>13</sup> In addition, states considered to have high-quality standards, including Massachusetts and California, were consulted.<sup>14</sup>

International comparisons also helped ensure the standards were set at a high level. For example, the Third International Mathematics and Science Study (TIMSS) yielded detailed profiles of how numerous other countries teach math, which assisted in identifying the most effective sequencing of mathematics topics.<sup>15</sup> Additional research conducted on TIMSS data and the results from the Programme for International Student Assessment (PISA) along with observations about high performing nations such as Singapore, Hong Kong, and Korea helped to identify the language skills that are expected in other countries and the types of texts and level of complexity found in those nations.<sup>16</sup> The Common Core State Standards bibliography identifies much of the research and many of the reports that contributed to the development of the standards. This information can be located for [Mathematics here](#) (see pages 91-93) and for [English Language Arts here](#).

In addition, the evidence base underlying the Common Core State Standards and the process used to develop them were scrutinized by a specially appointed Validation Committee. The Validation Committee was appointed by a group of governors and chief state school officers in 2009, and the Committee members were chosen based on their experience in the development or implementation of national or international standards in education or their demonstrated record of exceptional or unique expertise in English language arts, mathematics, or a related field, such as special education, English language learners, assessments, teaching, or curriculum development.

After five months of review by the Validation Committee that included group meetings and individual critiques and comments, the Committee voted overwhelmingly to confirm that the standards met the seven validity criteria established by the Committee. Specifically, the Committee's review process determined that the standards were a valid

representation of the knowledge and skills necessary for students to be college and career ready.<sup>17</sup>

## Common Core State Standards: Aligned with What Students Need to Succeed

One of the most important goals of the Common Core State Standards is that they provide the knowledge and skills necessary to succeed in college, career, and life. Determining that the standards meet this goal was accomplished by comparing them to the best state standards, examining them in relation to previously developed college and career readiness standards, and having them reviewed by postsecondary instructors who teach entry-level courses.

Almost every state has compared its previous standards to the Common Core State Standards to identify commonalities and differences. National organizations have also undertaken such analyses. The authors of a 2010 study sponsored by the Thomas B. Fordham Foundation concluded that the Common Core State Standards are clearer and more rigorous than the vast majority of previous state standards.<sup>18</sup> A separate study published in 2012 used statistical techniques to conclude that states with standards more like the Common Core math standards had, on average, higher NAEP scores than did states whose standards aligned less with the Common Core.<sup>19</sup>

Two other studies undertaken by the Educational Policy Improvement Center (EPIC) specifically examined the relationship between the Common Core State Standards and college and career readiness. The first study<sup>20</sup> compared the Common Core to five sets of high quality standards. One was Standards for Success, described previously. Two of the five were exemplary state K-12 standards (California and Massachusetts). One was the Texas postsecondary system's college and career readiness standards, and one was the International Baccalaureate, an international organization with a long history of preparing students for the most demanding postsecondary institutions in the world. The study found a high

degree of alignment between the Common Core State Standards and these exemplary standards geared to college and career readiness.

A second EPIC study<sup>21</sup> queried nearly 2,000 instructors from a cross-section of US postsecondary institutions to determine if the Common Core State Standards were applicable and important to entry-level courses in 25 different subject areas. These included subjects necessary for a baccalaureate degree along with those associated with career preparation. The results of the study indicated that instructors found nearly all of the Common Core State Standards to be applicable and important to the success of students in their courses.

Another study explored the relationship of the Common Core State Standards in mathematics to student achievement internationally.<sup>22</sup> It found a very high degree of similarity between the Common Core mathematics standards and the standards of the highest-achieving nations that participated in the Third International Mathematics and Science Study (TIMSS) in 1995.

Looking at the ELA standards, an Achieve comparison of standards from the high-achieving educational systems in Alberta, Canada and New South Wales, Australia with the Common Core found that, generally, standards across all three systems are comparable in rigor.<sup>23</sup>

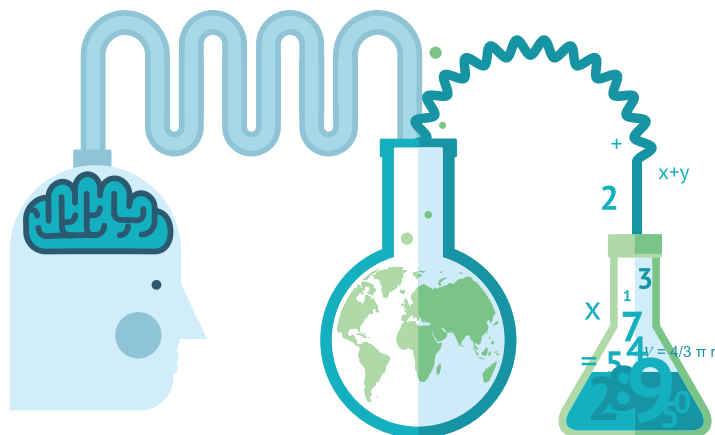
These studies help strengthen the conclusion that the Common Core State Standards are clearer and more rigorous than many previous state standards. They also illustrate the observation that the Common Core State Standards do not take education in a new, untested direction, but instead create a framework for focusing teaching and learning on the knowledge and skills that are widely agreed to be most important to post-high school success. While additional efforts to validate, refine, and improve the standards will always be needed and welcomed, the Common Core State Standards start from a position of strength.



Learn more about the Common Core State Standards at <http://www.corestandards.org>

## Major Shifts in Teaching Will Need to Occur<sup>24</sup>

As states and schools implement the Common Core State Standards, teachers will need to adapt to a new set of learning expectations that are clearer, deeper, and often more rigorous than what they were used to. Here are some examples from Student Achievement Partners<sup>25</sup> of important shifts that will support successful implementation of the Common Core State Standards:



### Mathematics

#### 1. **Emphasis:** Greater focus on fewer topics.

*Focus:* The Common Core State Standards call for a greater focus in mathematics. Rather than racing to cover topics in a mile-wide, inch-deep curriculum, the Standards require significant narrowing and deepening in the way time and energy is spent in the math classroom. The standards focus deeply on the major work of each grade so that students can gain strong foundations: solid conceptual understanding, a high degree of procedural skill and fluency, and the ability to apply the math they know to solve problems inside and outside the math classroom.

#### 2. **Coherence:** Linking topics and thinking across grades.

*Thinking across grades:* The Common Core State Standards are designed around coherent progressions from grade to grade. Learning is carefully connected across grades so that students can build new understanding onto foundations built in previous years. Each standard is not a new event, but an extension of previous learning.

*Linking to major topics:* Instead of allowing additional or supporting topics to detract from the focus of the grade, these concepts serve the grade level focus. For example, instead of data

displays as an end in themselves, they are an opportunity to do grade-level word problems.

#### 3. **Rigor:** Pursue conceptual understanding, procedural skills and fluency, and application with equal intensity.

*Conceptual understanding:* The Common Core State Standards call for conceptual understanding of key concepts, such as place value and ratios. Students must be able to access concepts from a number of perspectives so that they are able to see math as more than a set of mnemonics or discrete procedures.

*Procedural skill and fluency:* The Common Core State Standards call for speed and accuracy in calculation. Students are given opportunities to practice core functions such as single-digit multiplication so that they have access to more complex concepts and procedures.

*Application:* The Common Core State Standards call for students to use math flexibly for applications in problem-solving contexts. In content areas outside of math, particularly science, students are given the opportunity to use math to make meaning of and access content.



**The Common Core State Standards are a response to the new realities of the US economy.**

## English Language Arts/Literacy

1. Regular practice with complex texts and their academic language

Rather than focusing solely on the skills of reading and writing, the Common Core State Standards highlight the growing complexity of the texts students must read to be ready for the demands of college and careers. The Common Core State Standards build a staircase of text complexity so that all students are ready for the demands of college- and career-level reading no later than the end of high school. Closely related to text complexity—and inextricably connected to reading comprehension—is a focus on academic vocabulary: words that appear in a variety of content areas (such as ignite and commit).

2. Reading, writing and speaking grounded in evidence from texts, both literary and informational

The Common Core State Standards place a premium on students writing to sources, i.e., using evidence from texts to present careful analyses, well-defended claims, and clear information. Rather than asking students questions they can answer solely from their prior knowledge or experience, the Common Core State Standards expect students to answer questions that depend on their having read the text or texts with care. The Common Core State Standards also require the cultivation of narrative writing throughout the grades, and in later grades a command of sequence and detail will be essential for effective argumentative and informational writing.

Likewise, the reading standards focus on students' ability to read carefully and grasp information, arguments, ideas and details based on text evidence. Students should be able to answer a range of text-dependent questions, questions in which the answers require inferences based on careful attention to the text.

3. Building knowledge through content-rich nonfiction

Building knowledge through content rich non-fiction plays an essential role in literacy and in the Common Core State Standards. In K–5, fulfilling the standards requires a balance between informational and literary reading. Informational reading primarily includes content rich non-fiction in history/social studies, science and the arts; the K–5 Standards strongly recommend that students build coherent general knowledge both within each year and across years. In 6–12, ELA classes place much greater attention to a specific category of informational text—literary nonfiction—than has been traditional. In grades 6–12, the Standards for literacy in history/social studies, science and technical subjects ensure that students can independently build knowledge in these disciplines through reading and writing.

To be clear, the Common Core State Standards do require substantial attention to literature throughout K–12, as half of the required work in K–5 and the core of the work of 6–12 ELA teachers.



**While additional efforts to validate, refine, and improve the standards will always be needed and welcomed, the Common Core State Standards start from a position of strength.**



## How Educators Can Be Successful with the Common Core State Standards

Educators who are making the transition from their current standards to the Common Core State Standards will likely do so in several steps. To start, they may want to compare their old standards to the new Common Core State Standards. That analysis lets teachers decide how best to arrange their classroom lessons to align with the new standards.

It may also be beneficial for educators to gauge and understand the cognitive level of the Common Core State Standards by looking at the verbs of the standards and not just the nouns. The verbs indicate the type of thinking in which students will be expected to engage, and knowing them helps teachers see where their instruction is aligned with the thinking skills contained in the Common Core State Standards. For example, the math standards expect students to conjecture, analyze, reason, communicate, and discern. The English standards expect students to integrate, summarize, convey, cite, and interpret. Being familiar with the verbs helps teachers plan lessons that get students to develop new ways of thinking that use and apply the content knowledge contained in the Common Core State Standards.

Knowing where the standards expect more and different thinking from students is important as curriculum developers, teachers, and others begin to translate the standards into practice. This knowledge helps all students achieve the fundamental goal of the Common Core State Standards, which is to develop deeper understanding of a core set of content and skills—and to do so in a way that leads to readiness for college, career, and life. This happens through locally-developed, approved, and implemented curriculum.

Educators may also choose to take advantage of the resources being created to help all students learn the content and develop the thinking skills specified in the Common Core State Standards. The availability of this wealth of materials, strategies, and resources means that each individual educator does not need to work alone to figure out how to get all students to higher levels of achievement. One key advantage is that as educators find solutions to teaching to specific standards or addressing particular challenges, these solutions and strategies can be shared rapidly throughout the teaching profession.

## What's True about the Common Core

A great deal has been written and said about the Common Core State Standards. It is important to know the truth in order to implement them properly and to engage in a thoughtful and reasoned critique of the new standards.<sup>26</sup> Several of the most commonly raised questions about the Common Core State Standards are addressed here.

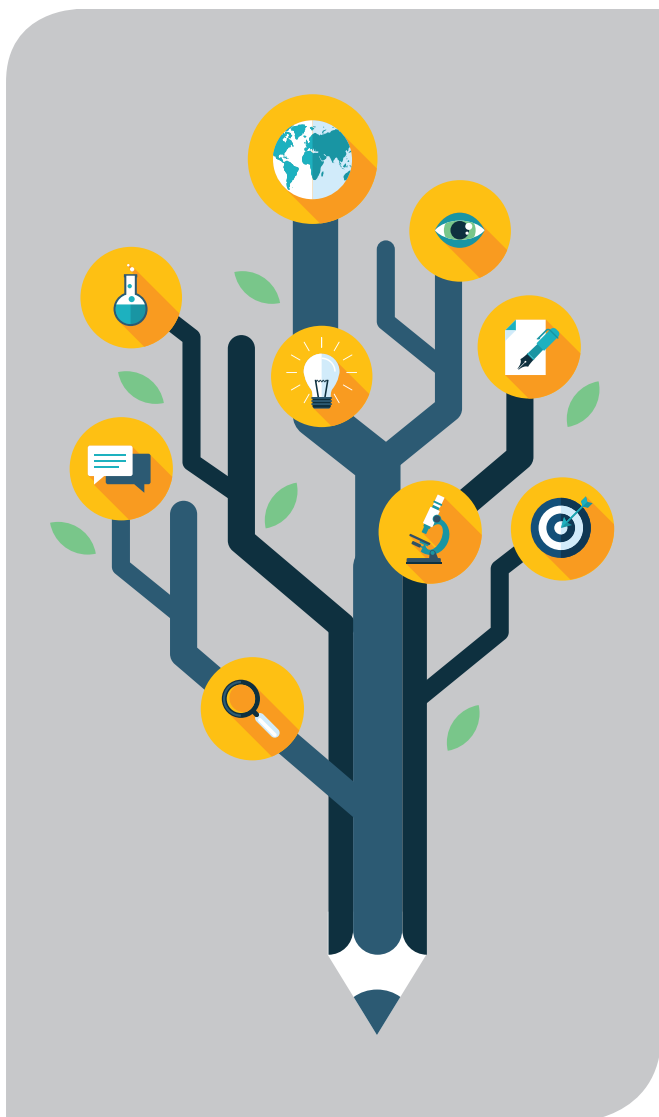
First, the standards were not developed by the federal government. They resulted from a process that was initiated entirely outside of the federal government by the nation's governors and education commissioners. They were subjected to careful and rigorous scrutiny by experts in math and reading, state education department staff, teachers, school district administrators, members of community groups, parents, and many other individuals. Much has been debated about the role of the federal Race to the Top competition in encouraging states to adopt the new standards. This 2010 initiative from the U.S. Department of Education offered states the chance at \$4 billion in grants if they adopted certain education-improvement ideas. The contest afforded a small number of points to states that adopted a set of college and career readiness standards, and many states, but not all, chose to adopt the Common Core State Standards around the time of this competition.<sup>27</sup> In a 2010 survey, state education leaders cited educational quality issues more often than Race to Top (RttT) as important factors in their states' decision to adopt the Common Core State Standards.

Second, the Common Core State Standards initiative is separate from the two assessments being developed by states to measure them. The Partnership for Readiness for College and Careers (PARCC) and Smarter Balanced Assessment Consortium (SBAC) are both voluntary groups of states that have banded together to create high quality assessments that are tied to the common standards and that provide meaningful feedback to educators. States can choose to participate or not participate in either of these assessment consortia, and a number have changed allegiances or dropped out altogether. Some states have chosen to remain in a consortium but also to develop their own tests or contract with other vendors to provide tests.

Third, the standards identify what is important for

students to learn; they do not specify the instructional methods or curriculum that teachers must use. This is not a one-size-fits-all approach. The outcomes students ultimately achieve are varied and include readiness for hundreds of college majors and literally thousands of careers. The Common Core State Standards let teachers choose instructional methods that result in students having these choices available to them when they complete high school.

Fourth, as noted previously, the Common Core State Standards are not such a radical departure that they require educators to start from scratch and redesign all that they do. The Common Core State Standards organize and sequence content in ways that lead toward all students being college and career ready, and they do so by focusing on key content and by setting higher expectations. In this sense, the Common Core State Standards encourage best practices in teaching and learning. Educators build on their current effective methods to implement the Common Core State Standards in ways that make



the most sense for the students in their classroom.

## Notes

1. Phillips, Gary W. (2010). *International benchmarking: State education performance standards*. Washington, DC: American Institutes of Research.
2. ACT. (2013). *The condition of college & career readiness 2013*. Iowa City, IA.
3. Sparks, Dinah, & Malkus, Nat. (2013). *First-year undergraduate remedial coursetaking: 1999–2000, 2003–04, 2007–08*. Washington, DC: Institute for Education Sciences, National Center on Educational Statistics.
4. Complete College America. (2012). *Remediation: Higher education's bridge to nowhere*. Washington, DC.
5. Alliance for Excellent Education. (2011). *Saving now and saving later: How high school reform can reduce the nation's waser remediation dollars*. Washington, DC.
6. For more details on the development process, see <http://www.corestandards.org/resources/process>.
7. Conley, David. (2003). *Understanding university success. A report from Standards for Success*. Eugene, Oregon: Center for Educational Policy Research.
8. Achieve, The Education Trust, & Thomas B. Fordham Foundation. (2004). *The American Diploma Project: Ready or not: Creating a high school diploma that counts*. Washington, D.C.: Achieve, Inc.
9. ACT. (2011). *ACT College Readiness Standards*. Retrieved November 23, 2011, from <http://www.act.org/standard/>
10. The College Board. (2006). *Standards for College Success*. New York, NY: Author.
11. Texas Higher Education Coordinating Board, & Educational Policy Improvement Center. (2009). *Texas college and career readiness standards*. Austin, TX.
12. Conley, David, McGaughy, Charis, Cadigan, Katie, Flynn, Kathleen, Forbes, Jennifer, & Veach, Darya. (2009). *Alignment of the Texas college and career readiness standards with entry-level general education courses at Texas postsecondary institutions*. Eugene, OR: Educational Policy Improvement Center.

Conley, David, McGaughy, Charis, Cadigan, Katie, Forbes, Jennifer, & Young, Brittany. (2009). *Texas college and career readiness initiative: Texas career and technical education phase I alignment analysis report*. Eugene, OR: Educational Policy Im-

provement Center.

13. National Assessment Governing Board. (2008). *Mathematics framework for the 2009 National Assessment of Educational Progress*. Washington, DC.

National Council of Teachers of Mathematics. (2003). *A Research Companion to Principles and Standards for School Mathematics*. Reston, VA.

14. Stotsky, Sandra. (2005). *The state of state English standards*. Washington, DC: Thomas B. Fordham Foundation.

Klein, David, Braams, Bastiaan J., Parker, Thomas, Quirk, William, Schmid, Wilfried, & Wilson, W. Stephen. (2005). *The state of state math standards*. Washington, DC: Thomas B. Fordham Foundation.

15. Schmidt, William H., McKnight, Curtis C., Houang, Richard T., Hsing Chi, Wang, Wiley, David, Cogan, Leleand S., & Wolfe, Richard G. (2001). *Why schools matter: A cross-national comparison of curriculum and learning*. San Francisco: Jossey-Bass.

16. Ginsburg, Alan, Cooke, Geneise, Leinwand, Steve, Noell, Jay, & Pollock, Elizabeth (2005). *Reassessing U.S. international mathematics performance: New findings from the 2003 TIMSS and PISA*. Washington, DC.

Ginsburg, Alan, Leinwand, Steven, Anstrom, Terry, & Pollock, Elizabeth. (2005). *What the United States can learn from Singapore's world-class mathematics system (and what Singapore can learn from the United States): An exploratory study*. Washington, DC: American Institutes for Research.

Ginsburg, Alan, Leinwand, Steven, & Decker, Katie. (2009). *Informing grades 1-6 mathematics standards development: What can be learned from high-performing Hong Kong, Korea, and Singapore?* Washington, DC: American Institutes for Research.

17. Council Of Chief State School Officers, & National Governors Association Center for Best Practices. (2010). *Reaching higher: The Common Core State Standards Validation Committee*. Washington, DC.

18. Carmichael, Sheila Byrd, Martino, Gabrielle, Porter-Magee, Kathleen, & Wilson, W. Stephen. (2010). *The state of state standards—and the Common Core—in 2010*. Washington, DC: Thomas B. Fordham Foundation.

19. Schmidt, William H., & Houang, Richard T. (2012). *Curricular coherence and the Common Core State Standards for mathematics*. *Educational Researcher*, 41(8).

20. Conley, David, Drummond, Katie, de Gonzalez, Alicia, Seburn, Mary, Stout, Odile, & Rooseboom, Jen-

nifer. (2011). *Lining up: The relationship between the Common Core State Standards and five sets of comparison standards*. Eugene, OR: Educational Policy Improvement Center.

21. Conley, David, Drummond, Kathryn V., DeGonzalez, Alicia, Rooseboom, Jennifer, & Stout, Odile. (2011). *Reaching the goal: The applicability and importance of the Common Core State Standards to college and career readiness*. Eugene, OR: Educational Policy Improvement Center.

22. Schmidt, William H., & Houang, Richard T. (2012). *Curricular coherence and the Common Core State Standards for mathematics*. *Educational Researcher*, 41(8).

23. Achieve, Inc. (2010). *Achieving the Common Core: Comparing the Common Core State Standards for English Language Arts & literacy in history/social studies, science and technical subjects and the standards of Alberta, Canada and New South Wales, Australia*. Washington, DC.

24. This section excerpted and adapted from: Conley, David. (2014). *Getting Ready for College, Careers, and the Common Core: What Every Educator Needs to Know*. San Francisco: Jossey-Bass.

25. Student Achievement Partners. (2014). <http://achievethecore.org/search?q=shifts>. Accessed June 9, 2014.

26. For a detailed discussion of these issues, see: <http://www.corestandards.org/resources/myths-vs-facts>

27. Kober, Nancy, & Rentner, Diane Stark. (2011). *States' progress and challenges in implementing Common Core State Standards*. Washington, DC: Center on Education Policy.

© 2014 Council of Chief State School Officers. All rights reserved.

Graphics used by permission ©PureSolution/Shutterstock.