

sharing child and youth development knowledge volume 28, number 2 2014

Social Policy Report

Common Core Development and Substance

David T. Conley University of Oregon

Abstract

his policy report provides an overview of the Common Core State Standards, how they were developed, the sources that were referenced in their development, the need for educational standards generally, what they entail, and what it will mean for educators to implement them. The report draws from research and reference material to outline the argument for the Common Core and the sources used in its development. These include college and career readiness standards developed over the past 15 years, high quality state standards, and the content specifications from other nations whose educational systems are widely respected. Additional research demonstrates the relationship between the Common Core and college and career readiness. While this report does offer insight into the structure of the standards, most of the information presented here is designed to help policymakers, educators, and other interested parties understand the effects on educational practice.

Social Policy Report

Volume 28, Number 2 | 2014 ISSN 1075-7031

www.srcd.org/publications/socialpolicy-report

Social Policy Report is published four times a year by the Society for Research in Child Development.

Editorial Team

Samuel L. Odom, Ph.D. (Lead editor & Issue editor) slodom@unc.edu

Iheoma Iruka Ph.D. (editor) iruka@unc.edu

Kelly L. Maxwell, Ph.D. (editor) kmaxwell@childtrends.org

Leslie Fox (Assistant editor) lcfox@live.unc.edu

Director of SRCD Office for Policy and Communications Martha J. Zaslow, Ph.D. mzaslow@srcd.org

> Managing Editor Amy D. Glaspie aglaspie@srcd.org

Governing Council

Lynn S. Liben Ann S. Masten **Ron Dahl** Nancy E. Hill **Robert Crosnoe** Kenneth A. Dodge **Mary Gauvin Richard Lerner** Kofi Marfo **Seth Pollak Kenneth Rubin** Deborah L. Vandell Thomas Weisner **Dawn England** Susan Lennon, ex officio Lonnie Sherrod, ex officio

Martha J. Zaslow, ex officio

Policy and Communications Committee

Rachel C. Cohen

Maureen Black
Elizabeth T. Gershoff
Tina Malti
Kenneth Dodge
Shelley Alonso-Marsden
Martha J. Zaslow, ex officio

Brenda Jones Harden
Rebekah Levine Coley
Rebekah Levine Coley
Taniesha Woods
Seth Pollak
Lonnie Sherrod, ex officio
Sarah Mancoll

Publications Committee

Judith G. Smetana Marian Bakersmans-Kranenburg Pamela Cole Nancy E. Hill **Diane Hughes** Roger Levesque **Chris Moore** Laura L. Namy Peter A. Ornstein Lonnie Sherrod, ex officio Richard Lerner **Mary Gauvain** Anna Markowitz Patricia Bauer, ex officio Rob Kail. ex officio Jeffrey Lockman, ex officio Samuel L. Odom, ex officio Angela Lukowski, ex officio Jonathan B Santo, ex officio Susan Lennon, ex officio

From the Editors

In the last decade, few issues in public education have aroused a more emotional and political response than the Common Core. Emerging from a bipartisan effort to improve college and career readiness for students in public education, many state departments of education initially adopted the Common Core as the guiding standards for educational reform. There is now great pushback from state legislatures and political action groups, with rationales based on polemics and politics. In this SRCD Social Policy Report, Dr. David Conley examines the Common Core Standards. He begins by proposing the importance of educational standards, discussing the process employed in developing the standards, and describing the evidence on which the Common Core Standards were based. Dr. Conley identifies the practices emphasized in mathematics and literacy instruction for school-age children as well as the implications for early childhood education. He highlights some of the misconceptions that have emerged in discussions of the Common Core and also acknowledges some of the challenges to implementation. In her commentary on Dr. Conley's paper, Dr. Venezia discusses how policymakers and professionals in California have addressed issues of implementation and identifies, based on their experiences, questions that still remain about future implementation. In a second commentary, Dr. Thurlow describes issues related to the learning needs of students with disabilities and other learning challenges. With this report and commentaries, the intent is to provide factual information about the Common Core that will inform the important policy decisions that are currently being made in many states.

Samuel L. Odom (Issue Editor)
 Kelly L. Maxwell (Editor)
 Iheoma U. Iruka (Editor)

Common Core Development and Substance

he Common Core State Standards burst upon the scene in June 2010 and were quickly adopted by the vast majority of states, 43 as of spring 2013. This initial embrace has been followed by a period of reexamination in some states. Although the idea of standards that are consistent across states has become controversial in certain circles, the underlying content knowledge and cognitive skills that comprise the Common Core State Standards themselves have not been seriously questioned or challenged. When ideological arguments about educational governance and who should control curriculum are stripped away, the Common Core State Standards are more likely to be viewed more dispassionately as a synthesis of college and career readiness standards already developed, the expectations contained in the standards of high performing U.S. states and in the educational systems of countries that are equipping their citizens for life in the dynamically changing economic and social systems of the 21st century (Conley, Drummond, de Gonzalez, Rooseboom, & Stout, 2011a; Conley, Drummond, de Gonzalez, Rooseboom, & Stout, 2011b; Council of Chief State School Officers & National Governors Association Center for Best Practices, 2010).

This Social Policy Report considers the Common Core State Standards, where they came from, what they are, and what effect they are likely to have on education. It begins with an overview of the importance of educational standards in U.S. schools, the need for more students who are college and career ready, and the role of the Common Core State Standards in achieving this goal. The process by which the standards were developed is described, followed by a consideration of the facts about the standards and the evidence base used to create and validate them. Next is a high level summary of the standards at the college and career ready level, which indicates the targets toward which the educational system should be pointing from preschool onward. This is

followed by a discussion of the implications for teaching and learning generally and for early childhood educators particularly. The brief concludes with tips on how educators can be successful implementing the Common Core, policy implications and recommendations, and sites where readers can go for Common Core-related resources.

Why Common Standards?

Educational standards are not new. They have been around since the early 1990s. Every state has had grade-level educational standards for at least a decade, and most for much longer than that. They express the knowledge and skills students need to master at each grade level and in specified courses or subject areas to be successful. Standards by their very nature leave the choice of the curriculum and teaching methods to local educators. Educational standards are well established in schools throughout the nation. They are widely accepted as the reference point for decisions about curriculum and instruction at the school district and school level.

Educational standards are important in the US because of its long tradition of local governance of schools. Educational standards can help ensure that students in every school have the opportunity to acquire the knowledge and skills critical to success in college, career, and life. Standards serve as a frame of reference for local school boards as they make critical decisions about curriculum, textbooks, teachers, course offerings, and other aspects of district instructional programs. When developed and implemented properly, they help ensure all students have access to an education that addresses the knowledge and skills they will need to be successful.

In the past, vast differences in educational expectations existed across states. However, this variation had fewer 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. The U.S. economy has transformed over the past 40 years (Carnevale, 1991). Local economies in many parts of the country have seen radical transformation. Fewer jobs provide career-long security. To retain their jobs, workers more often need to acquire new, more complex skills (Carnevale, Gainer, & Melzer, 1990). 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 as realistic. Neither is a system that enables some students to be lifelong, adaptive learners while leaving many others with only minimal knowledge and skills. The role of educational standards is to ensure that all students have access to an education that enables them to be successful in a rapidly changing economy and society. Success is going to require

the strong knowledge foundation that high, consistent academic standards provide.

The need for improved college and career readiness has been made elsewhere in greater detail (Carnevale, Javasundera, & Cheah, 2012; Conley, 2014). However, several statistics help illustrate the need for students to be prepared better for college. ACT annually publishes a report on the number of students taking its test who meet its college readiness benchmarks. In 2012, 52 percent of all

high school graduates took the ACT, and 25 percent of test takers reached the college readiness level in all four areas tested (English, reading, mathematics, and science) (ACT, 2012). The Institute for Education Sciences reported that 20 percent of students in 2007-2008 indicated that they took remedial courses in college (Sparks & Malkus, 2013). The rate was higher for twoyear institutions and open-enrollment colleges.

The Common Core State Standards are a potentially important component in any comprehensive strategy to make more students fully ready for college and careers. Evidence suggests they are aligned with the demands of college and careers (Conley et al., 2011a, 2011b). They can be used to create a common language that identifies what students need to learn to be college and career ready. Building upon previous experience with U.S. and

international standards. Common Core State Standards are a focused and challenging 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.

How They Were Developed

The Common Core State Standards came into being in response to the challenges of the new U.S. economy and the desire of states to ensure their standards were sufficient to meet those challenges. They were designed to ensure that students have the opportunity to learn core knowledge and develop critical skills and to equip students to be successful lifelong learners who can adapt to new challenges and take advantage of new opportunities.

> They help educators create equity of opportunity, clarity of learning targets, and economies of scale as they make decisions about their practices.

consistency of expectations, curriculum and instructional

Evidence Used in the Development of the Common Core State Standards

The development process for the Common Core State Standards drew upon over a decade's worth of evidence describing what it takes to

be ready to succeed in postsecondary career-training or general-education courses. The evidence base that underlies the standards contains much of what has been learned about college and career readiness standards over the past decade and includes studies of the content of entry-level college courses, focus groups of instructors in those courses, readiness standards developed from expert judgment processes, validation studies of these standards, and instructor surveys of the major topics taught in general education courses.

In 2003, Standards for Success (Conley, 2003) 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 (Achieve, Inc., The Education Trust, & Thomas

... Common Core State Standards

are a focused and challenging

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.

B. Fordham Foundation, 2004) quickly followed suit with standards that also addressed community college and workplace readiness. Both ACT and the College Board released their versions of college readiness standards, as did the Texas Higher Education Coordinating Board, soon thereafter (ACT, 2011; The College Board, 2006; Texas Higher Education Coordinating Board & Educational Policy Improvement Center, 2009). National testing organization ACT in 2009 conducted a nationwide curriculum survey that collected information about college instructor perceptions of the skills students need to succeed in their courses (ACT, 2009). The College Board administered a similar survey that included high school teachers along with college instructors (Kim, Wiley, & Packman, 2009).

All of these documents provided important reference points for the Common Core State Standards. They helped ensure they were derived from standards that were developed with significant educator input and previously tested in the field and validated (Conley, McGaughy, Cadigan, Flynn, et al., 2009; Conley, McGaughy, Cadigan, Forbes, & Young, 2009). 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 reference points (National Assessment Governing Board, 2008; National Council of Teachers of Mathematics, 2003). In addition, state standards were referenced. Most notably, Massachusetts and California standards were valuable sources, and both have been identified as being of high quality by independent studies of state standards (Klein et al., 2005; Stotsky, 2005).

The standards are longitudinal in scope, designed down from the goal of college and career readiness. This is a departure from most previous standards, which tended to be designed independently at the elementary, middle, and high school levels. The standards sought to follow a developmentally appropriate sequence across grade levels leading to college and career readiness by the end of high school. 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 though, and examples of which are discussed later.

In addition, the experience of other countries with high educational expectations helped identify knowledge and skills that are universally important (Schmidt et al., 2001). These international comparisons helped ensure the standards were set at the right level of challenge. For example, the Third International Mathematics and

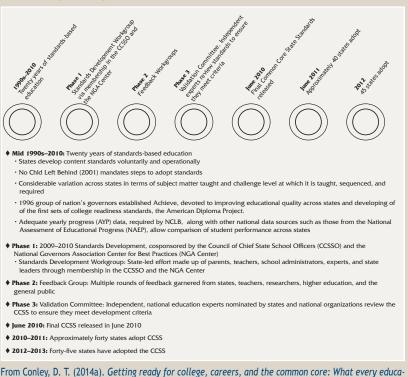
Science Study (TIMSS) yielded detailed profiles of the subject matter taught at each grade level in numerous countries, which assisted in identifying the most effective sequencing of mathematics topics (Schmidt et al., 2001). Additional research conducted on TIMSS data and the results from the Programme for International Student Assessment (PISA) along with observations about high performing nations such as Singapore, Hong Kong, and Korea helped to identify the mathematics skills that are expected in other countries and the types of texts and level of complexity found in other nations (Ginsburg, Cooke, Leinwand, Noell, & Pollock, 2005; Ginsburg, Leinwand, Anstrom, & Pollock, 2005; Ginsburg, Leinwand, & Decker, 2009). A study by the American Institutes of Research demonstrated the wide range of challenge levels present in U.S. state standards when they were benchmarked against TIMSS (Phillips, 2010).

Development and Review Process

The initial drafts of the Common Core State Standards were widely reviewed and commented upon by educators, state education department staffers, subject-area organizations, and a wide range of interested parties in the general public. The results generated from the review process were incorporated into the final version, which was presented to states in June 2010. Forty-four states have now adopted the English language arts (ELA) Common Core State Standards, and 43 have adopted the math standards. Figure 1 presents an overview of the timeline for the development process for the Common Core State Standards.

The evidence base underlying the Common Core State Standards and the process used to develop the standards was reviewed in detail by a Validation Committee appointed by the sponsors, the Council of Chief State School Officers and the National Governors Association (Council of Chief State School Officers & National Governors Association Center for Best Practices, 2010). After five months of review that included group meetings and individual critiques and comments, the committee voted overwhelmingly to endorse the standards. It indicated that standards contained the core knowledge students need to be college and career ready, was informed by research, had been developed appropriately, was clear and challenging, and was comparable to expectations that other leading nations have of their students.

Figure 1. Common Core development process timeline



tor needs to know. San Fransisco, CA: Jossey-Bass. Reprinted with permission.

Evidence of the Quality of the Common Core State Standards

Once the standards were developed and released a number of analyses were conducted to ascertain the quality of the standards. Almost every state compared its standards to the Common Core State Standards to identify commonalities, differences, and omissions. National organizations undertook similar 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 existing state standards (Carmichael, Martino, Porter-Magee, & Wilson, 2010). 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 (Schmidt & Houang, 2012). These studies strengthen the conclusion that the Common Core State Standards represent an improvement on the standards currently in place in most states.

Two other studies specifically examined the relationship between the Common Core State Standards and college and career readiness. The first study, *Lining Up*, compared the Common Core to five sets of high quality standards (Conley et al., 2011b). 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 study, *Reaching the Goal*, queried nearly 2,000 instructors from a cross-section of U.S. postsecondary institutions to determine if the Common Core State Standards were applicable and important to entry-level courses in 25 different subject areas (Conley et al., 2011a). 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.

A study of curricular coherence explored the relationship of the Common Core State Standards in mathematics to student achievement internationally (Schmidt & Houang, 2012). It found a very high degree of similar-

ity 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. A subsequent analysis revealed wide variation in the degree of alignment of the math standards of state standards in effect in 2009 and those in high-achieving nations.

Looking at the ELA standards, Achieve, Inc. compared high-achieving educational systems in Alberta, Canada and New South Wales, Australia with the Common Core State Standards (Achieve, Inc., 2010). They found that, while the specific language of grade-level expectations may differ, standards across all three systems are comparable in rigor and share a similar organizing structure (i.e., by outcomes, by strand, by level) and a common focus on the most important student knowledge and skills in English language arts.

These studies support the conclusion that the Common Core State Standards are clearer in emphasis and at a higher level of cognitive challenge than many previous state standards. These analyses also illustrate the fact that the Common Core State Standards are consistent with the national and international consensus about student performance important to post-high school success. While additional efforts to validate, refine, and improve the Common Core State Standards will be necessary, the standards in their current form represent a solid starting point toward the goal of ensuring consistent, high, and appropriate expectations for U.S. students.

Summary of the Common Core State Standards

The major elements of the Common Core State Standards can be accessed online. Below is a summary of several important areas covered by the standards with an example of their structure. The summaries include the college and career readiness anchor standards in reading and writing and the Standards for Mathematical Practice to provide a better sense of what students are supposed to know in these areas. Understanding the larger picture of learning outcomes helps in the process of setting appropriate expectations at each grade level leading to college and career readiness. This is different from the more common practice of designing scope and sequence based on grade-level preferences or traditions and not necessarily on learning progressions tied to student developmental capabilities and the goal of college and career ready students.

Figure 2. Reading College and Career Readiness Anchor Standards

Reading College and Career Readiness Anchor Standards

Key Ideas and Details

- Read closely to determine what the text says explicitly.
- Read closely to make logical inferences from it.
- Cite specific textural evidence when writing or speaking to support conclusion drawn from the text.
- Determine central ideas or themes of a text and analyze their development
- Summarize the key supporting details and ideas.
- Analyze how and why individuals, events, or ideas develop and interact over the course of a text.

Craft and Structure

- Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings.
- Analyze how specific word choices shape meaning or tone.
- Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.
- Assess how point of view or purpose shapes the content and style of a text.

Integration of Knowledge and Ideas

- Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.
- Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.
- Analyze how two or more text address similar themes or topics in order to build knowledge or to compare the approaches the authors take.

Range of Reading and Level of Text Complexity

 Read and comprehend complex literary and information texts independently and proficiently.

From Conley, D. T. (2014a). *Getting ready for college, careers, and the common core: What every educator needs to know.* San Fransisco, CA: Jossey-Bass. Reprinted with permission. The standards are Copyright 2010. National Governors Association Center for Best Practices and Council of Chief State School Officers. All rights reserved.

Figure 3. Writing College and Career Readiness Anchor Standards

Writing College and Career Readiness Anchor Standards

Text Types and Purpose

- Write arguments to support claims in an analysis of substantive topics or texts.
- Use valid reasoning and relevant and sufficient evidence.
- Write informative/explanatory text to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.
- Write narratives to develop real or imagined experiences or events.
- Use effective technique, well-chosen details, and well-structured event sequences.

Production and Distribution of Writing

- Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
- Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
- Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

Research to BUild and Present Knowledge

- Conduct short as well as more sustained research projects based on focused questions.
- Demonstrate understanding of the subject under investigation.
- Gather relevant information from multiple print and digital sources.
- Assess the credibility and accuracy of each source.
- Integrate the information while avoiding plagiarism.
- Draw evidence from literary or informational texts to support analysis, reflection, and research.

Range of Writing

Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

From Conley, D. T. (2014a). *Getting ready for college, careers, and the common core: What every educator needs to know.* San Fransisco, CA: Jossey-Bass. Reprinted with permission. The standards are Copyright 2010. National Governors Association Center for Best Practices and Council of Chief State School Officers. All rights reserved.

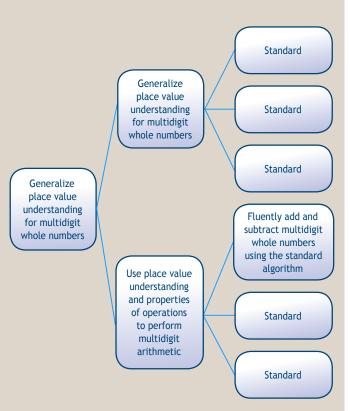
Figure 4. Standards for Mathematical Practice

Standards for Mathematical Practice

- 1. Make sense of problems and persevere in solving them
- 2. Reason abstractly and quantitatively.
- 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.

From Conley, D. T. (2014a). *Getting ready for college, careers, and the common core:* What every educator needs to know. San Fransisco, CA: Jossey-Bass. Reprinted with permission. The standards are Copyright 2010. National Governors Association Center for Best Practices and Council of Chief State School Officers. All rights reserved.

Figure 5. Example of the Structure of Common Core State Standards: Fourth Grade Math



From Conley, D. T. (2014a). Getting ready for college, careers, and the common core: What every educator needs to know. San Fransisco, CA: Jossey-Bass. Reprinted with permission.

Practices Emphasized by the Common Core State Standards

While much of what is in the Common Core State Standards is currently taught in schools that already successfully prepare students for college and careers, all schools will need to review their practices to ensure their curriculum and instructional program addresses the content and learning processes contained in the standards (Conley, 2014a). Student Achievement Partners (2014) has identified practices that support successful implementation of the Common Core State Standards ("Florida Board of Education", 2014). These examples focus on mathematics and literacy.

Mathematics

Greater focus on fewer topics. The Common Core State Standards call for greater focus in mathematics. Rather than racing to cover numerous topics that are then not retained, the Standards deepen student engagement with key mathematical content. 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 math to solve problems inside and outside the math classroom.

Stronger linkage among topics and 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. Additional or supporting topics are designed to serve the grade level focus, not to detract from it. For example, instead of data displays as an end in themselves, they are an opportunity to do grade-level word problems.

More emphasis on conceptual understanding, procedural skills and fluency, and application. The 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. In addition, they 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. The standards also expect 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.

English language arts/Literacy

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. They build a staircase of text complexity so that all students are ready for the demands of college- and career-level reading by the time they leave 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 and have different meanings in different academic contexts.

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 guestions 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 a text or texts with care. The Common Core State Standards also require the cultivation of narrative writing throughout the grades. In later grades a command of sequence and detail will be essential for effective argumentative and informational writing. The reading standards also 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.

Building knowledge through content-rich nonfiction. The Common Core State Standards represent a new balance between content rich non-fiction and literary texts. In K-5, fulfilling the standards requires a 50-50 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 the case previously. 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. It is worth noting that the Common Core State Standards do require substantial attention to literature throughout K-12. Half of the required reading in K-5 and the core of the reading in 6-12 is assumed to be literature.

Implications for Early Childhood Educators

While the Common Core State Standards were not necessarily designed with early childhood education specifically in mind, it is crystal clear that the Common Core cannot succeed fully without the involvement and contributions of early childhood educators. What are some of the things they can do?

First and foremost, early childhood educators can help students develop the academic vocabulary critical to academic success. Words such as *argument* or *explain* are used in multiple academic contexts in sometimes radically different ways, and helping young children understand how these important words mean different things in different contexts in school is an important foundational skill.

Figure 6 contains examples of some academic words that students will encounter throughout their schooling. Most of these are not necessarily appropriate for preschool children without extensive scaffolding and support, but the idea that some words are associated with academic learning and that their meanings might be somewhat different in school than they are outside of school can be developed by preschool educators.

Figure 6. Sample Verbs of the Common Core

Analyze	Extract	Modify	Refer
Annotate	Foreshadow	Note	Rephrase
Anticipate	Frame	Outline	Review
Compare	Generate	Persuade	Show
Compile	Hypothesize	Portray	Specify
Define	Incorporate	Preclude	Suggest
Derive	Integrate	Presume	Validate
Discern	Locate	Prove	Verify
Excerpt	Model	Recall	

From Conley, D. T. (2014a). *Getting ready for college, careers, and the common core: What every educator needs to know.* San Fransisco, CA: Jossey-Bass. Reprinted with permission.

Another area where young children can begin developing capabilities that will support success in mastering the Common Core is the acquisition of key learning skills (Figure 7). In other words, children can begin developing techniques and dispositions from a very early age that enable them to be learners who are in charge of their own learning.

Strategies and techniques such as goal setting, self- monitoring, attention to detail, time management and sustained task focus, and persistence are examples of tools that will be increasingly critical as students progress through the grades and are given assignments that require increased self-direction and the ability to engage in learning more deeply.

The Four
Keys to College
and Career Readiness is an empirically validated
model that contains 42 components associated

Figure 7. Key Learning Skills and Techniques

Key Learning Skills & Techniques

Act

Ownership of Learning

- Goal Setting
- Persistence
- Self-awarenes

Motivation

- Help-seeking
- Progress Monitoring
- Self-efficacy

Learning Techniques

- Time Management
- Test Taking Skills
- Note Taking Skills
- Memorization/recall
- Strategic Reading
- Collaborative Learning
- Technology

From Conley, D. T. (2014a). Getting ready for college, careers, and the common core: What every educator needs to know. San Fransisco, CA: Jossey-Bass. Reprinted with permission.

with success in postsecondary studies (Conley, 2014a). The four Keys are Key Cognitive Strategies, Key Content Knowledge, Key Learning Skills and Techniques, and Key Transition Knowledge and Skills. While early childhood educators can address all four Keys in different ways, they may be able to add the greatest value to student learning success by teaching children the specific strategies and techniques needed to do well in academic settings. Many of these skills also generalize to life success as well.

This Key is divided into Ownership of Learning and Learning Techniques. Students can be taught to take greater responsibility for and control over their learning by setting goals for themselves, reflecting on which learning techniques are working well and which are not, and by persisting with challenging and difficult tasks, not giving up. They can also begin to master specific techniques such as learning to remember things efficiently, working with others to learn, making decisions about how they manage their time, and being exposed to technology as a learning tool. These are all important capabilities that will help them subsequently in school and will begin to prepare them for postsecondary success while not restricting their ability to learn as young children by exploring, experimenting, and experiencing the sheer joy of discovery.

Finally, early childhood educators can begin helping children set high aspirations for themselves and be aware of the wide range of futures available to them. Although anything like career exploration is too much to ask, young children can be made aware of a range of opportunities beyond the stereotypical occupations that young children often cite when asked, "What do you want to be when you grow up?" The goal here is only to suggest possibilities and, in the process, establish a mindset that predisposes children to academic engagement, goal setting, and the cultivation of high but achievable aspirations.

One other important implication of the Common Core for early childhood educators is the need to align programs better with the PreK-3 education. This can be done a variety of ways including the increasingly popular Preschool-Grade 3 approach (PreK-Third Grade National Work Group, 2014). The Common Core creates a framework for alignment between high school and college, middle school and high school, elementary school and middle school, and also between preschool and the primary grades. While informal alignment may exist locally in some places, the Common Core State Standards create both the need and the means to increase alignment. Educators can identify the knowledge, skills, and learning dispositions that students will need to determine the learning experiences needed in the PreK-3rd grade years to ensure that they are achieving the foundational skills necessary to progress through the Common Core sequence successfully (National Association for the Education of Young Children, 2012).

How Educators Can Be Successful with the Common Core State Standards

Educators who are making the transition from their current state standards to the Common Core State Standards likely do so in several steps. They may want to begin with

an awareness of the relationship between current standards and the Common Core State Standards by examining gap analyses that show which areas are covered by both sets of standards and which are addressed only by one set or the other (Achieve3000, 2014). Then educators can decide which content to add or remove from their curriculum. This process lets teachers decide how best to organize their curricula.

It will also be beneficial for educators to gauge and understand the cognitive level of the standards. While a gap analysis often focuses on the nouns (i.e., content covered), cognitive challenge is gauged by looking at the verbs (i.e., the cognitive processes students are expected to use when learning the content). Doing so helps teachers see that although the Common Core State Standards often contain familiar content, they may need to teach the material at a different, higher cognitive level than currently. Knowing where the standards expect more cognitive engagement is important as curriculum developers, teachers, and others begin to translate the standards into practice. This knowledge helps achieve the fundamental goal of the Common Core State Standards, which is to develop deeper understanding of a core set of content and skills by all students, and to do so in a way that leads to readiness for college, career, and life (Conley, 2014).

Myths and Truths about the Common Core State Standards

A great deal has been written and said about the Common Core State Standards. Several of the most commonly raised questions about the Common Core State Standards are addressed here.

Common Core State Standards Were Developed by the Federal Government

The standards were not developed by the federal government. As noted, they resulted from a process that was initiated entirely outside of government by the nation's governors and education commissioners. They were subjected to careful and rigorous scrutiny by content-area experts, state education department staff, teachers, school district administrators, members of community groups, parents, and many other individuals. The federal Race to the Top competition provided 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. In a 2010 survey, state education leaders cited educational quality

issues more so than Race to the Top (RttT) as important factors in their states' decision to adopt the Common Core State Standards (Kober & Rentner, 2011).

Common Core State Standards Require a Common Assessment

The Common Core State Standards are owned and managed entirely independently and separately from the two assessments being developed by states to measure the standards. The Council of Chief State School Officers (CCSSO) and the National Governors Association (NGA), both voluntary non-profit organizations composed of state leaders, hold the copyright for the Common Core State Standards. Entirely separately from the sponsoring agencies, two consortia of states are being funded by the U.S. Department of Education to create assessments of the Common Core State Standards. The Partnership for Readiness for College and Careers (PARCC) and Smarter Balanced Assessment Consortium (SBAC) consist of voluntary groups of states that have banded together to create high quality assessments to measure student progress toward learning key skills identified in the Common Core State Standards in English language arts and mathematics. States can choose to participate in either, both, or neither of these assessment consortia, and a number of states never signed up in the first place, changed allegiances, or dropped out altogether and are now developing their own tests of the Common Core State Standards (Gewertz, 2013).

Common Core State Standards Specify the Instructional Methods and Curricula That Teachers Must Follow

The standards identify outcomes that are important for students; they do not specify the instructional methods or curriculum teachers choose to address the broad framework established by the Common Core State Standards. The outcomes students will ultimately achieve are varied and include readiness for hundreds of potential college majors and literally thousands of potential careers. The Common Core State Standards expect teachers to pick curriculum and use instructional methods best suited to their students and that result in their students having choices available to them when they complete high school.

The Common Core State Standards Require Schools to Start from Scratch to Redesign Their System

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. They are organized and sequenced in ways that lead toward all students being college and career ready, and they do so by focusing on key content and higher cognitive challenge. This is consistent with current knowledge about learning theory (Bransford, Brown, & Cocking, 2000; Donovan, Bransford, & Pellegrino, 1999; Pellegrino & Hilton, 2012). 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.

Implications for Policy and Implementation

Implementing the Common Core State Standards with fidelity creates the potential for substantial and positive changes and improvements in the ways in which students learn. Current curriculum and instructional methods largely favor compliance-based learning where children follow directions to complete tasks without engaging deeply in what they are learning. The key changes contained in the Common Core all suggest greater student ownership of learning and more cognitive processing of content by students, who will need to be able to use and apply what they are learning, not just repeat it. Implications for policy and implementation may be based on several key features.

Professional Development

Adoption of the standards will be a major undertaking in most school systems. Most teachers will need time and training to modify their current approaches in ways that reflect the focus and depth of the Common Core. For example, many teachers may find it challenging to expect students to use evidence to support their assertions, to read informational texts, to think more deeply and systematically, to demonstrate a better command of language, and to use core mathematical concepts to solve more complex problems that may have more than one possible correct answer. As noted, school systems will not be starting from scratch when adopting Common Core State Standards, but they will be changing from "business as usual" to a new way of thinking about learning, and such change does not happen without a consistent and well planned professional development effort.

Nature and Form of Assessment

A revised assessment process may be necessary to capture this type of learning and outcomes promoted by the Common Core State Standards. While Smarter Balanced and PARCC will create useful tools that measure many aspects of the standards, those tests will by no means assess all the standards. Nor will one-time summative assessments of this nature get at student development over time in areas such as complex problem solving, writing in multiple genres, or interpreting complex texts. If teaching and learning becomes focused primarily or exclusively on performing well on one of the consortia assessments, much of the promise of the Common Core State Standards will be lost. The ultimate success of the standards will hinge to some degree on the ability of educators to develop and use a range of formative assessments that let students demonstrate the more complex thinking the standards are designed to elicit.

Postsecondary Education

Third is the issue of postsecondary education and its willingness to use and even to demand the more complex and meaningful information on student readiness for college that the Common Core State Standards, implemented with fidelity and measured with appropriately sophisticated assessments, will generate. Without a demand by colleges for more information on complex student performance and deeper mastery of key content, it is less likely students and teachers will expend the energy necessary to make this happen. Alternatives to traditional transcripts will be necessary. A digital profile that captures information across multiple dimensions of student knowledge, skills, dispositions, and metacognitive learning skills is one way to approach this challenge (Conley, 2014b). Additionally, admission officers will need to communicate the value of such information and their willingness to use it in a range of decisions, not all necessarily high stakes.

Scope, Sequence, and Learning Progressions

Learning progressions identify the development of key knowledge and skills across grade levels. Preschool and elementary teachers will need to make many more strategic decisions about the curriculum and instructional activities they select to enable students to develop the skills in the learning progressions, many of which will require practice over multiple years with increasing sophistication and reduced scaffolding at each subsequent

level. The Common Core is organized in a way that facilitates skill development across grade levels. Educators, used to operating in isolation from one another, will need to plan and work together in much more systematic and deliberate ways if students are to encounter these more complex cognitive capabilities from year to year, leading to mastery before they exit high school.

Student Aspirations

The Common Core creates a demanding set of learning expectations. Currently, while schools and educators may hope their students strive for challenging futures, they do little systematically or programmatically to help raise student aspirations. Students will need far more opportunities to understand the academic and career options available to them if they take ownership of their learning and pursue the high standards of the Common Core State Standards. They will need to aspire to postsecondary education from a very early age because the learning progressions of the standards take time to master. They will need to have experiences that allow them to learn more about themselves, their interests, how they learn best, and what skills they will need to pursue the future of their choice.

Conclusion

The Common Core State Standards represent a new way of thinking about education in the US. The practical effects of implementing a set of standards that attempts to raise expectations in all U.S. schools to levels currently found only in the best U.S. schools and around the world in the educational systems of high performing countries are yet to be fully understood. And while the goals of Common Core advocates are clearly well intentioned, it may also be worth restating that the goal is not standardization, but higher achievement. This needs to occur while simultaneously preserving and even energizing the local diversity and creativity that is the hallmark of the best of the U.S. educational system and what makes it unique in the world.

References

- Achieve, Inc. (2010). Achieving the common core: Comparing the common core state standards for English language arts and literacy in history/social studies, science and technical subjects and the standards of Alberta, Canada and New South Wales, Australia. Washington, DC: Author. Retrieved from
- Achieve, Inc., The Education Trust, & Thomas B. Fordham Foundation. (2004). *The American diploma project: Ready or not: Creating a high school diploma that counts.* Washington, DC: Achieve, Inc.
- Achieve3000. (2014). 10 steps for migrating your curriculum to the Common Core. Retrieved July 3, 2014 from http://www.achieve3000.com/resources/white-papers/gated/31
- ACT. (2011). ACT College Readiness Standards. Retrieved November 23, 2011 from http://www.act.org/standard/
- ACT. (2009). ACT national curriculum survey® 2009. Iowa City, Iowa: Author.
- ACT. (2012). The condition of college & career readiness 2012. Iowa City, Iowa: Author.
- Bransford, J. D., Brown, A. L. & Cocking, R. R. (Eds.). (2000). How people learn: Brain, mind, experience, and school: Expanded edition. Washington, DC: National Academy of Sciences, National Research Council, Commission on Behavioral and Social Sciences and Education, U.S. Department of Education.
- Carmichael, S. B., Martino, G., Porter-Magee, K., & Wilson, W. S. (2010). The state of state standards—and the Common Core—in 2010. Washington, DC: Thomas B. Fordham Institute.
- Carnevale, A. P. (1991). America and the new economy: How new competitive standards are radically changing American workplaces. San Francisco, CA: Jossey-Bass.
- Carnevale, A. P., Gainer, L. J., & Meltzer, A. S. (1990). Workplace basics: The skills employers want. Alexandria, VA: American Society of Training and Development, U.S. Department of Labor, Employment and Training Administration.
- Carnevale, A. P., Jayasundera, T., & Cheah, B. (2012). *The college advantage: Weathering the economic storm.* Washington, DC: Georgetown Public Policy Institute, Center on Education and the Workforce.
- The College Board. (2006). Standards for college success. New York, NY: Author.
- Conley, D. T. (2014). The Common Core State Standards: Insight into their development and purpose. Washington, DC: Council of Chief State School Officers.
- Conley, D. T. (2014a). Getting ready for college, careers, and the Common Core: What every educator needs to know. San Francisco, CA: Jossey-Bass/Wiley.
- Conley, D. T. (2014b). New conceptions of college and career ready: A profile approach to admission. *The Journal of College Admission* (223).
- Conley, D. T. (2003). *Understanding university success*. A report from Standards for Success. Eugene, OR: Center for Educational Policy Research.
- Conley, D. T., Drummond, K. V., de Gonzalez, A., Rooseboom, J., & Stout, O. (2011a). *Lining up: The relation-ship between the Common Core State Standards and five sets of comparison standards*. Eugene, OR: Educational Policy Improvement Center.
- Conley, D. T., Drummond, K. V., de Gonzalez, A., Rooseboom, J., & Stout, O. (2011b). *Reaching the goal:*The applicability and importance of the Common Core State Standards to college and career readiness.

 Eugene, OR: Educational Policy Improvement Center.
- Conley, D. T., McGaughy, C., Cadigan, K., Flynn, K., Forbes, J., & Veach, D. (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, D., McGaughy, C., Cadigan, K., Forbes, J., & Young, B. (2009). *Texas College and Career Readiness Initiative: Texas career and technical education phase I alignment analysis report.* Eugene, OR: Educational Policy Improvement Center.
- 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: Author.
- Donovan, M. S., Bransford, J. D., & Pellegrino, J. W. (Eds.). (1999). How people learn: Bridging research and practice. Washington, DC: National Academy Press.

- Florida Board of Education approves Common Core changes. (2014, February 18). Retrieved from *redefinED* website: http://www.redefinedonline.org/2014/02/florida-board-education-approves-common-core-changes/
- Gewertz, C. (2013). Assessment consortia: Who's in and who's out? Education Week. Retrieved from Curriculum Matters website: http://blogs.edweek.org/edweek/curriculum/2013/10/missouri_chooses_vendor_for_20.html
- Ginsburg, A., Cooke, G., Leinwand, S., Noell, J., & Pollock, E. (2005). *Reassessing U.S. international mathematics performance: New findings from the 2003 TIMSS and PISA*. Washington, DC: American Institutes for Research.
- Ginsburg, A., Leinwand, S., Anstrom, T., & Pollock, E. (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, A., Leinwand, S., & Decker, K. (2009). *Informing grades 1-6 standards development: What can be learned from high-performing Hong Kong, Korea, and Singapore?* Washington, DC: American Institutes for Research.
- Kim, Y., Wiley, A., & Packman, S. (2009). *National curriculum survey on English and mathematics*. New York, NY: College Board.
- Klein, D., Braams, B. J., Parker, T., Quirk, W., Schmid, W., & Wilson, W. S. (2005). *The state of state math standards*. Washington, DC: Thomas B. Fordham Foundation.
- Kober, N., & Rentner, D. S. (2011). States' progress and challenges in implementing common core state standards. Washington, DC: Center on Education Policy.
- National Assessment Governing Board. (2008). Mathematics framework for the 2009 national assessment of educational progress. Washington, DC: Author.
- National Association for the Education of Young Children. (2012). *The Common Core State Standards: Caution and opportunity for early childhood education*. Washington, DC: Author. Retrieved from http://www.naeyc.org/files/naeyc/11_CommonCore1_2A_rv2.pdf
- National Council of Teachers of Mathematics. (2003). A research companion to Principles and Standards for School Mathematics. Reston, VA: Author.
- Pellegrino, J., & Hilton, M. (Eds.). (2012). Education for life and work: Developing transferable knowledge and skills in the 21st century. Washington, DC: National Academy Press.
- Phillips, G. W. (2010). *International benchmarking: State education performance standards*. Washington, DC: American Institutes for Research.
- PreK-Third Grade National Work Group. (2014). *Reducing the achievement gap by 4th grade: The PreK-3rd approach in action*. Retrieved from http://prek-3rdgradenationalworkgroup.org/node/1
- Schmidt, W. H., & Houang, R. T. (2012). Curricular coherence and the Common Core State Standards for mathematics. *Educational Researcher*, 41(8), 294-308. doi:10.3102/0013189X12464517
- Schmidt, W. H., McKnight, C. C., Houand, R. T., Hsing Chi, W., Wiley, D., Cogan, L. S., & Wolfe, R. G. (2001). Why schools matter: A cross-national comparison of curriculum and learning. San Francisco, CA: Jossey-Bass.
- Sparks, D., & Malkus, N. (2013). First-year undergraduate remedial course taking: 1999-2000, 2003-04, 2007-08. Washington, DC: Institute for Education Sciences, National Center on Educational Statistics.
- Stotsky, S. (2005). The state of state English standards. Washington, DC: Thomas B. Fordham Foundation.
- Student Achievement Partners. (2014). Retrieved January 31, 2014 from http://achievethecore.org/search?q=shifts
- Texas Higher Education Coordinating Board, & Educational Policy Improvement Center. (2009). *Texas College* and Career Readiness Standards. Austin, TX: Authors.

Commentary

Tracking Common Core Implementation in California

Andrea Venzia
California State University
Sacramento

s with most education reform initiatives, politics is overtaking the Common Core in many states. Given the current backlash against the Common Core in many states, Conley's article provides an important reminder that the Common Core is not an ideologically driven effort, nor is it the driving force behind teacher evaluation and over-testing-two hot-button issues that are conflated with the Common Core. It is also very timely to be reminded of the evidence and process utilized in the development of the Common Core. In addition, the article provides useful examples of practice-based changes that practitioners could implement in their own classrooms. It is clear from a couple of decades' worth of experimentation with content and performance standards that standards alone are not the silver bullet to raise student achievement. The most important issue is whether the standards help provide a useful frame for, and spark the capacity to support, high-level and equitable learning. This commentary provides some examples of how California is, so far, avoiding

some of the divisive issues confronting other states.

California is an example of a state with policy leaders who are trying to create a logical, sustainable, progression of change, along with an infusion of funding to support local efforts. California has not tied teacher evaluations to the new Common Core-aligned assessments, and we received a waiver from the state's NCLB-era assessments during this field testing year. Those two differences seemed to relieve a lot of pressure on our education system, and the state has allowed for a no-stakes phase of initial implementation and learning. The focus on accountability is not punitive in California, and there is much conversation about how to use formative information and multiple indicators (or data points) to inform teaching and learning during the academic year (as opposed to relying solely on end-of-year test scores). Also, the state provided \$1.25 billion to districts during the 2013-2014 academic year to support the implementation of the Common Core, with another \$450 million approved for K-12 schools and community colleges in the 2014-15 budget.

In addition to Common Core standards in English language arts and math, California has adopted new English language development standards and Next Generation Science Standards. The new Local Control Funding Formula-a radical change to the state's school finance model-moved control from the state to the local level, provides a base amount for each district and restores funding to the 2007-8 level (prerecession cuts), requires parent and community engagement in decisionmaking, and increases funding to target supports to improve academic achievement of traditionally underserved students. Implementation research focused on studying these massive changes is sprouting up around the state, and the State Board of Education is a supportive state entity in terms of learning from research and looking for potential course corrections.

In the area of postsecondary readiness and success, California has become known for its Early Assessment Program (EAP) in which, for participating districts, scores on the state's 11th grade assessment are used as a signal to students about their readiness for credit-bearing

English and math courses in the states' community colleges and California State University system. Based on that assessment, if students are not ready for college-level work, high school seniors can enroll in an English class that is aligned with postsecondary readiness expectations, and/or use online preparatory materials to improve readiness in math. Current plans are for the Smarter Balanced 11th grade assessment to become the assessment used in the EAP, meaning that districts will not have to select into the program; instead, all 11th graders will be in the EAP next year. With this increase in testing population, it is expected that a larger number of seniors will require college readiness courses than in previous years, yet it is clear that schools do not have the capacity to serve the increased numbers. It is not clear that there is the capacity to provide the kinds of opportunities for teacher learning necessary to

develop new curricula at the scale that will probably be needed. Capacity is further questionable given that students do not receive their scores until August before their senior year. Schools cannot change the kinds of courses and the numbers of sections at that late date. From a glass half-full perspective, this allows for a window of opportunity to re-think how, why, and what we offer to high school seniors to ensure that a larger proportion of students graduates from high school ready to succeed in their next pursuit.

Even though California seems to be avoiding some of the Common Core-related controversies so far, it is still a very challenging reform with lots of questions that California will have to address. For example-What kinds of professional learning opportunities catalyze improved teaching and learning in schools? Can the constant flux and churn in education settle down enough to give Common

Core a chance to work as intended? How will the new standards affect how English Language Learners and students with disabilities are served? Will the assessments have predictive validity with regard to college and career readiness? Will postsecondary institutions use assessment data to provide diagnostic information to students to help improve their readiness? Will the senior year of high school be transformed to cultivate improved readiness for life after high school (as opposed to current opportunities for "senioritis")? How will students' socio-emotional growth be supported? Even though California's policymakers are working hard to lay a strong foundation, the list of uncertainties is guite long. The promise of the Common Core is monumental, but the success depends on our systems' abilities to implement effectively, learn from mistakes and create constructive course corrections, support educators, and keep students front and center.

Commentary

Common Core for All— Reaching the Potential for Students with Disabilities

Martha L. Thurlow University of Minnesota

he development and substance of the Common Core State Standards, as described by David Conley, provide a picture of hope for the future of the college and career readiness of students across the United States. Certainly there are implementation challenges, as Conley notes, including the need for extensive professional development, new assessment approaches, postsecondary education changes, clarification of learning progressions, and student aspiration and engagement improvements. With these challenges addressed, the outcome is likely to be, as Conley suggests, "greater student ownership of learning and more cognitive processing of content by students, who will need to be able to use and apply what they are learning, not just repeat it" (p. 12).

The impetus for the Common Core, and the development process itself, sought to ensure that the standards were appropriate for all students in the U.S. (see "Application to Students with Disabilities" at www.corestadards.org). Still, there remain greater challenges for educators implementing the Common

Core for students with disabilities who have Individualized Education Programs (IEPs). These are students who receive special education services through the Individuals with Disabilities Education Act (IDEA). The additional challenges, beyond those that Conley has identified, need to be recognized and addressed.

There are several reasons for the greater challenges surrounding the realization of the potential of the Common Core for students with disabilities. The challenges for students with disabilities are related, in part, to the diversity in the characteristics of students who receive special education services. Another part is due, I believe, to the continued silos that exist throughout the education system and the tendency to excuse the education system from ensuring that students with disabilities have access to the requirements that accompany expectations for their success. Although the challenges noted by Conley apply as well to students with disabilities, the additional challenges that exist for these students require careful consideration not only in terms of implementation, but also in terms of policy development.

Characteristics of Students with Disabilities

Most students with disabilities (approximately 85% or more) have disabilities that may create barriers to their learning but do not prevent them from learning to the same standards as other students, if they receive appropriate supports and accommodations (Camara & Quenemoen, 2012; Thurlow, 2010). Some students with disabilities (approximately 15% or less) have significant cognitive disabilities that make it appropriate to hold them to different achievement standards (not different content standards) (Kleinert, Kearns, Quenemoen, & Thurlow, 2013; Quenemoen, 2008). Although most students with disabilities receive most of their instruction in the general education classroom (see www.ideadata.org), this does not necessarily mean that they have equal access to that curriculum and the standards on which that curriculum is based (Nolet & McLaughlin, 2005).

Additional Common Core Implementation Challenges for Students with Disabilities

Studies have shown that for students with disabilities to have meaningful

access to the curriculum and to be successful in each grade as they move toward graduation, there needs to be a focused district-wide commitment to their success (Cortiella & Burnette, 2009; Donahue Institute, 2004; Louis, Leithwood, Wahlstrom, & Anderson, 2010; Telfer, 2012). The Common Core helps to ensure that there is a consistent focus on the knowledge and skills that students need to attain in each grade level, and that there is an appropriate progression across grades so that critical skills are not ignored. The Common Core can also help to ensure that parents and students know what is expected for students with disabilities to be college and career ready.

Still, it may be more difficult to realize the promise of the Common Core for students with disabilities than it is for other students, even those who are English language learners (Hakuta & Santos, 2013; Lee, Quinn, & Valdes, 2013). Among the greatest challenges that face students in special education are low expectations (Jorgensen, 2005) and lack of access to the curriculum (Thurlow, 2012). Math educators, for example, perceive themselves to not be well prepared to teach students with disabilities (Banilower, Smith, Weiss, Malzahn, Campbell, & Weiss, 2013). Access to the curriculum challenges are exacerbated further by the continued exclusion of special educators from the professional development experiences of other educators, as well as by misunderstandings about the purpose and application of accommodations and other supports for students with disabilities (Bolt & Roach, 2009; Laitusis & Cook, 2007). Still, there is important work being done to ensure access (Courtade & Browder, 2011; Haager & Vaughn, 2013).

Policy Challenges for Students with Disabilities and the Common Core

Less attention has been given to some of the policies that might interfere with access to and progress in the Common Core for students with disabilities. For example, IEPs that are designed to ensure access to the standards are not consistently implemented across the U.S. Although required by federal regulation for those students participating in an alternate assessment based on modified achievement standards (AA-MAS), the policy was never required to be applied to all students with disabilities. With the apparent rescinding of the AA-MAS, standardsbased IEPs may disappear from practice (see "Successfully Transitioning Away from the AA-MAS" at www.nceo.info).

Policies about promotion from grade to grade and for graduation also put students with disabilities at risk for not being held to high standards such as those represented by the Common Core (Achieve and Education Trust, 2008). Requiring all but students with disabilities to meet the same criteria for graduation with a regular high school diploma "effectively allows too many students with disabilities the opportunity to graduate without the preparation they need for life after high school" (Thurlow & Johnson, 2013, p. 1).

Conley has confirmed the thought and care behind the development of the Common Core, and the challenges that remain for their implementation. Attention to these, and to the additional challenges for ensuring that the potential benefits of the Common Core are realized for students with disabilities, is something that cannot be ignored.

References

- Achieve and Education Trust. (2008).

 Measures that matter: Making
 college and career readiness the
 mission for high schools: A guide for
 state policymakers. Washington, DC:
 Achieve, The Education Trust. Available at http://www.edtrust.org/dc/
 press-room/press-release/measuresthat-matter-making-college-andcareer-readiness-the-mission-for
- "Application to students with disabilities." (n.d.). Available at www.corestandards.org/assets/application-to-students-with-disabilities.pdf
- Banilower, E. R., Smith, P. S., Weiss, I. R., Malzahn, K. A., Campbell, K. M., & Weiss, A. M. (2013). Report of the 2012 national survey of science and mathematics education. Chapel Hill, NC: Horizon Research, Inc.
- Bolt, S., & Roach, A. T. (2009). Inclusive assessment and accountability: A guide to accommodations for students with diverse needs. New York, NY: Guilford Press.
- Camara, W., & Quenemoen, R. (2012).

 Defining and measuring college and career readiness and informing the development of performance level descriptors (PLDs). Washington, DC:
 Partnership for Assessment of Readiness for College and Careers. Available at: http://www.parcconline.org/new-white-papers-available
- Cortiella, C., & Burnette, J. (2009).

 Challenging change: How schools
 and districts are improving the
 performance of special education
 students. New York, NY: National
 Center for Learning Disabilities.
- Courtade, G., & Browder, D. M. (2011).

 Aligning IEPs to the Common Core
 State Standards for students with
 moderate and severe disabilities.
 Verona, WI: Attainment Company.
- Donahue Institute. (2004). A study of MCAS achievement and promising practices in urban special education: Data analysis and site selection methodology. Amherst: University of Massachusetts.
- Haager, D., & Vaughn, S. (2013). Common core state standards and students with learning disabilities: Introduction to the special issue. *Learning Disabilities Research & Practice*, 8(1), 1-4. doi:10.1111/ldrp.12005

- Hakuta, K., & Santos, M. (2013). Challenges and opportunities for language learning in the context of the CCSS and the NGSS. *Journal of Adolescent & Adult Literacy*, 56(6), 451-454. doi:10.1002/JAAL.164
- Jorgensen, C. (2005). The least dangerous assumption: A challenge to create a new paradigm. *Disability Solutions*, 6(3), 1, 5-9, 15.
- Laitusis, C. C., & Cook, L. L. (2007).

 Large-scale assessment and accommodations: What works? Arlington,
 VA: Council for Exceptional Children.
- Lee, O., Quinn, H., & Valdes, G. (2013).
 Science and language for English
 language learners in relation to next
 generation science standards and
 with implications for Common Core
 State Standards for English language
 arts and mathematics. Educational Researcher, 42(4), 223-233.
 doi:10.3102/0013189X13480524
- Louis, K. S., Leithwood, K., Wahlstrom, K. L., & Anderson, S. E. (2010). Investigating the links to improved student learning: Final report of research findings. Minneapolis: University of Minnesota.

- Kleinert, H., Kearns, J., Quenemoen, R., & Thurlow, M. (2013). Alternate assessments based on Common Core State Standards: How do they relate to College and Career Readiness? (NCSC GSEG Policy Paper). Minneapolis: University of Minnesota, National Center and State Collaborative.
- Nolet, V., & McLaughlin, M. J. (2005).

 Accessing the general curriculum:
 Including students with disabilities
 in standards-based reform (2nd ed.).
 Thousand Oaks, CA: Corwin Press.
- Quenemoen, R. (2008). A brief history of alternate assessments based on alternate achievement standards (Synthesis Report 68). Minneapolis: University of Minnesota, National Center on Educational Outcomes.
- "Successfully transitioning away from the 2% assessment." (2014). Available at www.nceo.info/AAMAStransition/default.html

- Telfer, D. M. (2012). A synthesis of lessons learned: How districts used assessment and accountability to increase performance for students with disabilities as part of district-wide improvement. Minneapolis: University of Minnesota, National Center on Educational Outcomes.
- Thurlow, M. L. (2010, April). ESEA reauthorization: Standards and assessments (Oral Testimony). United States Senate, Health, Education, Labor and Pensions Committee (HELP), Washington, DC.
- Thurlow, M. L. (2012). Common Core State Standards: The promise and the peril for students with disabilities. *The Special Edge*, 25(3), 1, 6-8.
- Thurlow, M., & Johnson, D. (2013). Graduation requirements for students with disabilities: Ensuring meaningful diplomas for all students. Washington, DC: Achieve.

About the Authors

David Conley is Professor in the College of Education and Director of the Center for Educational Policy Research at the University of Oregon. He also serves as CEO of EPIC, the Educational Policy Improvement Center, and President of Edlmagine Strategy Group. He conducts research on high school-college alignment and transition, high school and college course content analysis, and large-scale diagnosis and assessment of college readiness. His findings have been published in numerous technical reports, conference papers, book chapters, and journals, such as Education Week, Educational Administration Quarterly, Educational Policy, the Journal of College Admission, Principal Leadership, and Educational Leadership. His latest book is entitled Getting Ready for College, Careers, and the Common Core. Dr. Conley serves on numerous technical and advisory panels. He co-chaired the Common Core State Standards Validation Committee and is a member of the Smarter Balanced Technical Advisory Committee. He received the University of Oregon Fund for Faculty Excellence Award in 2012 and its Innovation in Research Award in 2008 for his impact in the field.

Martha Thurlow is Director of the National Center on Educational Outcomes at the University of Minnesota. In this position, she addresses the implications of contemporary U.S. policy and practice for students with disabilities and English Language Learners, including state and local graduation requirements, national and statewide assessment policies and practices, and standards-setting efforts. With a career that has spanned 40 years, Dr. Thurlow has a broad range of experience and expertise on policy and practice issues that affect students with disabilities and those who are English learners. During the past decade, Dr. Thurlow has been the principal investigator on more than 20 federal or state projects that have focused on students with special needs in state and national policies and in large-scale accountability assessments, including graduation exams. Particular emphasis has been given to how to obtain valid, reliable, and comparable measures of the knowledge and skills of these students while at the same time ensuring that

the assessments are truly measuring their knowledge and skills rather than their disabilities or limited language when these are not the focus of the assessment. Studies have covered a range of topics, including participation decision making, accommodations, universal design, accessible reading assessments, computer-based testing, graduation exams, and alternate assessments.

Andrea Venezia is Associate Professor in the Public Policy and Administration Department and Associate Director of the Institute for Higher Education Leadership & Policy at California State University, Sacramento. Her work focuses on improving student readiness for, and success in, some form of postsecondary education, particularly for students who are traditionally underserved. Before she joined Sacramento State, Venezia worked at WestEd and oversaw a line of work focused on such issues as high school reform, state and federal policy with regard to college and career readiness, and community college readiness and success. Prior to joining WestEd, Venezia was Senior Policy Analyst at the National Center for Public Policy and Higher Education. Before that, she directed Stanford University's Bridge Project, the first large-scale national study that documented state policy barriers inhibiting student progression from high school to college. She has authored, co-authored, and co-edited numerous reports, chapters, articles, and books, including Supporting the College Dream (forthcoming), Minding the Gap: Why Integrating High School with College Makes Sense and How to Do It (2007), and From High School to College (2004). She received a BA in English from Pomona College, an MA in administration and policy analysis in higher education from Stanford University, and a PhD in public policy from the Lyndon B. Johnson School of Public Affairs at the University of Texas at Austin.

Social Policy Report is a quarterly publication of the Society for Research in Child Development. The *Report* provides a forum for scholarly reviews and discussions of developmental research and its implications for the policies affecting children. Copyright of the articles published in the *SPR* is maintained by SRCD. Statements appearing in the *SPR* are the views of the author(s) and do not imply endorsement by the Editors or by SRCD.

Purpose

Social Policy Report (ISSN 1075-7031) is published four times a year by the Society for Research in Child Development. Its purpose is twofold: (1) to provide policymakers with objective reviews of research findings on topics of current national interest, and (2) to inform the SRCD membership about current policy issues relating to children and about the state of relevant research.

Content

The *Report* provides a forum for scholarly reviews and discussions of developmental research and its implications for policies affecting children. The Society recognizes that few policy issues are noncontroversial, that authors may well have a "point of view," but the *Report* is not intended to be a vehicle for authors to advocate particular positions on issues. Presentations should be balanced, accurate, and inclusive. The publication nonetheless includes the disclaimer that the views expressed do not necessarily reflect those of the Society or the editors.

Procedures for Submission and Manuscript Preparation

Articles originate from a variety of sources. Some are solicited, but authors interested in submitting a manuscript are urged to propose timely topics to the lead editor (slodom@unc.edu). Manuscripts vary in length ranging from 20 to 30 pages of double-spaced text (approximately 8,000 to 14,000 words) plus references. Authors are asked to submit manuscripts electronically, if possible, but hard copy may be submitted with disk. Manuscripts should adhere to APA style and include text, references, and a brief biographical statement limited to the author's current position and special activities related to the topic.

Reviews are typically obtained from academic or policy specialists with relevant expertise and different perspectives. Authors then make revisions based on these reviews and the editors' queries, working closely with the editors to arrive at the final form for publication.

The Committee on Policy & Communications, which founded the *Social Policy Report*, serves as an advisory body to all activities related to its publication.