Common Core State Standards

What Are They?

Inlike most imposed programs and policies, the committee for the Common Core State Standards (CCSS), sponsored by the National Governors Association (NGA) and the Council of Chief State School Officers (CCSSO), worked diligently to gather grassroots support for a common core curriculum. "The standards were developed in collaboration with teachers, school administrators, and experts to provide a clear and consistent framework to prepare our children for college and the workforce" (Common Core State Standards, I, 2010a).

In addition to working with a wide variety of diverse stakeholder groups, the designers of the common core "have also received initial feedback on the draft standards from national organizations representing, but not limited to, teachers, postsecondary educators (including community colleges), civil rights groups, English language learners, and students with disabilities" (CCSS, I, 2010). The committee for common standards explained how members sought effective models for high standards: "The standards are informed by the highest, most effective models from states across the country and countries around the world, and provide teachers and parents with a common understanding of what students are expected to learn. Consistent standards will provide appropriate benchmarks for all students, regardless of where they live" (CCSS, I, 2010a).

In order to ensure that the common core standards would hold practical benefits for students, the committee examined what knowledge and skills were necessary for career and college-level opportunities. "These standards define the knowledge and skills students should have within their K–12 education careers so that they will graduate high school able to succeed in entry-level, credit-bearing academic college courses and in workforce training programs" (CCSS, I, 2010a).

The committee for the common core standards identified the six characteristics of the CCSS that were most valuable. They stated that the standards:

- Are aligned with college and work expectations;
- Are clear, understandable, and consistent;
- Include rigorous content and application of knowledge through high-order skills;
- Build upon strengths and lessons of current state standards;
- Are informed by other top-performing countries so that all students are prepared to succeed in our global economy and society; and
- Are evidence based. (CCSS, I, 2010a)

COMMON CORE STATE STANDARDS: MORE THAN STANDARDS WITH AN INTERNATIONAL FLAVOR

The CCSS have been created with the world stage in mind. They borrow heavily from standards across many states and nations. They are designed to mirror the rigor and relevance of standards used in those countries with whom we are competing globally. There is a stepwise design relating to content, skills, and process that builds sequentially on the content, skills, and dispositions that must be acquired in prior grade levels. Starting with kindergarten and ending with high school graduation, the CCSS provide a pathway for students to follow that enables high school graduates to have the requisite capacity to enter college or progress directly to the world of work. Practical, technical, and vocational education programs require these same skills in graduates who wish to enter the trades or be self-employed entrepreneurs.

The CCSS have also been designed with curriculum and assessment as integral partners to the standards themselves. As we have

seen with many state standards, the quality of implementation often varies from school to school and district to district. In some locations, the standards themselves are perceived as curriculum rather than a roadmap to guide curriculum development, instruction, and student assessments.

If not ultimately accompanied by a local core curriculum, poor and inconsistent implementation of the common core and weak assessments will lead to irregular responses to student evidence and failure to achieve mastery. The result would be the same negative consequences of previous reform efforts that left large numbers of students without the requisite skills to compete on the world stage.

In the local core curriculum, teachers and school leaders must plan for specific evidence that constitutes *success* in meeting the standards. Without agreed-upon rubrics and evidence for students' successful acquisition of the standards' criteria, teachers will continue to teach children blindfolded. They will cover the curriculum, check off the standards that were taught, and forget to ensure that each child has mastered the behavior, thinking, and dispositions required by the standard criteria.

The CCSS should form the requisite baseline for content, skills, and processes that new and experienced teachers alike must learn and master to fully practice their profession. Teacher preparation programs as well as locally generated professional development must avoid an emphasis on developing surface knowledge and rote skills. Teachers need to learn how to merge the CCSS and local curriculum. They need training in the design and use of formative assessments to more precisely identify which students need help in specific areas of the curriculum.

Teachers need ongoing professional development in the use of varied strategies to help their students explore the applications of knowledge. Teacher preparation programs and in-service courses should focus on developing deep capacity among new and experienced teachers to move students from a current state of learning to mastery level applications of the CCSS.

Schmidt, Houang, and Cogan (2011) examined data from the 2010 Teacher Education and Development Study in Mathematics, a 16-country survey of math teachers in training near the end of their final semester. They concluded that "U.S. middle school math teacher preparation does not produce teachers with an internationally competitive level of mathematics knowledge" (p. 1266). At least 60 percent of U.S. math teachers' preparation was dedicated

to pedagogical knowledge related to teaching math and general pedagogical knowledge related to instructional practices. Only 40 percent of their preparation was dedicated to "generally agreed upon cognitive competencies necessary for teaching mathematics" (p. 1266). The Russian Federation and Taiwan, with highly competitive math students, dedicated 50 percent of their math teacher preparation to math knowledge, 30 percent to math pedagogy, and only 20 percent to general pedagogy (p. 1266).

Therefore, using the common core standards to design curricula and assessments for college teacher preparation programs, although a good approach in itself, will not be sufficient unless the CCSS frameworks are treated as the minimum standard that all children must learn at mastery level. By mastery level, we mean that all children must be able to consistently solve problems and use mathematics and language in ways that the CCSS require.

No excuses should be tolerated for teachers who fail to grow their students' skills equal to and beyond the CCSS at their grade levels. Naturally, some students will require more time and more intensive interventions than others to achieve mastery knowledge. Schools must be structured so that teachers can provide appropriate differentiations in time and instructional options for every student. To show progress toward grade-level common core standards in mathematics and language arts, students must be assessed weekly and monthly with locally developed formative assessments. Teachers have to be trained to be competent designers of formative assessments and to work collaboratively in the interpretation of their results.

Currently, the United States has adequate protections and guarantees for children with special needs and English language learners to receive special support and interventions to ensure they learn in the least restrictive environment and gain sufficient knowledge to be productive students. Every school community and each state has to conduct constant vigils to ensure that those with the greatest needs receive effective instructional programs that benefit their social, emotional, and cognitive needs. We also advocate that the theories, methods, and tools to enact the CCSS must be constantly honed and refined in a collaborative, research-informed, national consortium of practitioners.

The implementation of these standards will require nothing less than a sincere, well-articulated national commitment to education and supportive social policies accompanied by significant national resources. In the United States, K–8 school leaders encounter many newly graduated teachers with minimal training in language arts who require many hours of additional instruction and training to develop their skills as teachers of literacy and writing. The training and backgrounds of these same common core teachers in mathematics are woefully inadequate. The common core standards need to be the foundation of teacher preparation programs as well as the basis for professional development programs for in-service teachers.

When all is said and done, the CCSS should create a framework to guide the development of 21st-century educational curricula, programs, and assessments. Many decisions required to give life to the common core framework should be made locally. Teachers must be given important roles in the design of local curriculum and formative assessments. In the 21st century, teachers have to transform curriculum, instruction and learning, and student formative assessments into a systemic process that leads to all children mastering the CCSS in the public schools.

The CCSS present challenges to redesign and reframe curriculum. These new requirements demand changes in mental models among school leaders, teachers, parents, and students regarding how children learn and who can learn. The structure of relationships, school schedules, differentiation of instruction, time specialists spend with children, and co-teaching must fit the needs of the students. The design and intent of our book are to provide educators, school leaders, and parents with practical assistance and guidance in the restructuring of their schools for the 21st century.

A QUICK TRIP AROUND THE WORLD

When reviewing the educational structures, policies, and cultures of those countries with whom we seem to be competing, one notices several patterns that emerge. With some notable exceptions, social, educational, and economic policies seem to dovetail nicely. Teachers are afforded status in those competitive economies and societies appropriate to the importance of the profession and its contributions to the future of the nation. Culturally, in the nations with the highest student achievement, the value of an education is unquestioned, and teachers enter the profession from the top third of the college graduating classes (Domenech, 2011).

In the most competitive nations, there are national standards and curricula that appear to be far more rigorous than those that appear in most American schools. World languages and cultural awareness are not considered optional or elective learning events. Social emotional literacy is embedded within all curricula. Every child is expected to master curricula expectations at high levels of mastery and apply new knowledge in fresh circumstances (Schmidt, Houang, & Cogan, 2011). The CCSS in language and mathematics present school leaders and teachers (K–12) with precise and powerfully linked expecta-

tions for what students should be able to do after instruction.

Porter, McMaken, Hwang, and Yang (2011b) suggest that the CCSS offer all states four benefits: (1) shared high expectations; (2) greater focus on quality curriculum; (3) greater efficiencies in the development of curriculum materials, assessments, and teacher training; and (4) better delivery of quality and electronic common core assessments. They analyzed alignment of CCSS with 16 state standards in math and English language arts (ELA) using data of state standards stored at the Wisconsin Center for Educational Research. They found only moderate alignment between the common core and the majority of local state standards.

In mathematics, the CCSS "represent a modest shift toward higher levels of cognitive demand" (Porter et al., 2011b, p. 106) with greater emphasis on demonstrating understanding and less emphasis than state standards on memorization and performing procedures. In ELA, the common core standards put much greater emphasis on analysis, evaluation, and language study, while states tend to stress that students "perform procedures" and "generate ideas" (Porter et al., 2011b, pp. 105–108). In many cases, local State standards do not align well with CSS (Porter et al., 2011a).

In most high-performing countries, the U.S. federal and state government-sanctioned, grade-by-grade obsession with testing is virtually nonexistent. Other competitive countries seem to believe in and design for Deming's (1986) notion of building quality into the initial process and continuously developing stakeholder capacity so that they assess quality throughout each stage of development rather than test the end result and find how many errors have been produced.

Exit exams are prevalent in most of these countries at Grades 8 and 12. Many of these countries employ educational inspectors who visit schools and classrooms to verify that school leaders manage appropriate instructional designs and supervise teachers effectively.

They verify that instructional and managerial processes at the school produce desired results, and they seek innovative adaptations if results are less than desired.

In highly competitive countries, teacher training programs are very competitive, rigorous, and highly aligned to the skills that teachers must acquire to make independent decisions about their students' learning processes. In those countries, there are no jokes made that those who cannot make it in the "real world" become teachers. Teachers are among the most respected professionals within their society.

In fact, as opposed to teacher salaries in the United States, where frequently teachers earn much less after seven years than other professionals, the gap between teacher salaries and those paid to other professionals is markedly less in the most competitive countries in Asia and Europe (Paine, 2010). In many countries competing with the United States, teachers are expected to be professional and are therefore treated professionally. In South Korea, teachers are referred to as *nation builders*.

Condron (2011) examined inequalities of wealth among 27 affluent countries and demonstrated that the United States, which ranked among the top five countries for income concentration in the hands of the smallest portion of citizens, also ranked among the top four countries with the greatest portion of students who did not achieve math proficiency. He concluded that school-based reforms "place the burden of boosting achievement and reducing economically based disparities on the education system rather than the broader economic system" (p. 54). He noted that affluent countries with less income inequalities contend with less economic disparities among their students and achieve higher performance in science and math along with higher-order cognitive processes.

Teachers and school leaders cannot wait for politicians to get the economic balance right in their communities. In high-wealth communities, more than 95 percent of the students graduate and attend college. In high-poverty communities, more than 30 percent of the students fail to graduate. Poverty cannot be an excuse for student failure. It is a condition within a community that schools must overcome with inventive and collaborative work designed to engage all students in learning activities. Teachers and school leaders must partner with each other and find new ways to organize students within the classroom so that peer tutors and co-teachers can help differentiate instruction and the students' school-day experiences.

Principals and teachers must win the support of parents for changes that their children must make in how they approach learning. For some children, learning must be extended every day, and in some cases, their learning must be guided by precise formative assessments and one-to-one instruction.

Individual patterns of student performance, when examined as the products of the whole economic and social system in the United States, present a more accurate picture of the clusters of school failure that school leaders, teachers, and parents face. Failing schools are associated with high-poverty communities because they are structured to serve a middle-class population with all of the enriched opportunities, language assumptions, and family support that middle-class families enjoy. Certainly, it is obvious that it is much more difficult to teach and to identify ways to help poor children acquire prior knowledge and learn new material at mastery level than students who come to class with the prior knowledge already mastered. America has great teachers and school leaders, caring professionals seeking to make a difference in the lives of every child in their schools. No matter how hard they try to make the middle-class model of learning work in non-middle-class schools, they will be ineffective. School leaders and teachers have to redesign the school day to fit the needs of their students if they are going to help more students achieve mastery of the common core standards. It is also interesting to note that, despite their higher test scores, these high-performing countries look to the American education system with envy because it seems that we produce a greater portion of students who are creative and innovative. The creative and innovative elements of our schools often are associated with the fine and technical arts, clubs, activities, sports, and projects that teachers use to engage students.

Translated into a cognitive comparison of students competing with American high school graduates, the United States tends to have proportionately more children who are capable of performing at the upper levels of Bloom's taxonomy, where students must analyze, evaluate, and create solutions. We could have many more students operating at these highly creative levels if we had systemic rewards for them and did not rely mostly on our individualistic culture to produce our entrepreneurs and risk takers.

All students must be expected to master the building blocks to independent and creative problem solving. The common core standards represent a national effort to raise expectations, to improve

instructional practice, and to expand teacher training for greater content mastery across the core curriculum. Clearly, the benefits that the CCSS promise are something we do not want to lose.

Yet, truth be told, many of our students are not even close to performing at high levels of mastery in even the basic skills. There is much work still to be done within the context of 21st-century schools. Friedman and Mandlebaum (2011) in their new book, *That Used to Be Us*, cite an Education Trust report that 23 percent of the U.S. high school graduates who take the military enlistment test do not achieve the minimum score for any branch of the military (p. 220). Teachers and school leaders should reflect on this statistic because only 75 percent of our cohort age group graduates high school. Almost half of our current high school age-appropriate graduates are not prepared to achieve proficient scores on the military enlistment test.

MOVING FORWARD

The CCSS are the closest we will come to national standards in the United States. Given the process used to seriously engage stakeholders as well as the intent and design of the standards and their indicators, they can and should serve as a springboard to transport American students onto the global stage in a position to perform competitively. School leaders and teachers must insist on mastery of the common core.

Every child, no matter where one is born or resides, is inextricably linked to a world where traditional boundaries are disappearing. Every country, no matter its geography or culture, is finding its people have more in common with people from other countries than ever thought possible a decade ago. Our students no longer are in competition with the community next door. Their ability to maintain the standard of living Americans have enjoyed for many decades depends on their capacity to grow, to change, and to reinvent themselves. What our public schools engender today is what we will reap tomorrow. The world is indeed becoming flatter and flatter, and our students must be global citizens in a world economy.

It is up to our educational leaders working in collaboration with their faculties, staff, and other internal and external stakeholders to write the story about America's continued prosperity throughout the 21st century. It is a challenge we can meet if we stop the blame game and seek to reframe the work of teachers and students in terms of lifelong learning, the process of discovery, and the application of knowledge and critical reasoning skills. School leaders and teachers must cease their emphasis on covering curriculum and focus their efforts on helping students master the essential curriculum at each grade level.

In 2011, the United States faces an uncertain future and multiple opportunities to create a new world where educators lead in the development of science, technology, engineering, mathematics, and creative arts instruction. We are at a critical juncture in our country's history. Perhaps American educators and citizens need to adopt a vision of educators as nation builders. As citizens of a global community in need of greater equality and opportunities to learn, all students should receive the appropriate guidance that leads to mastery of the skills and dispositions they need to be a free people.

As we design high-quality schools that enable children to compete on the world stage and demonstrate their mastery of the CCSS, we will need to reject old mental models of teaching with chalk-boards, rows of desks, and teachers talking. We must create a new vision of how teachers, students, technology, and the community interact.

We have an espoused national vision that places before us a clear goal that all children be prepared to enter the world of college or work ready to meet the contextual challenges of the 21st century. We expect that our children will graduate high school and be prepared for full citizenship. We want them to have the skills and flexibility to ensure that they may work and live happy lives.

Frankly, we believe that to merely prepare students for work or college is too limiting, and we encourage local schools and districts to think bigger. Each community school needs to create a vision for itself that paints a picture of what children who complete its educational experience can do. Schools must raise their own expectations. As Jim Collins (2001) advocates, create Big Hairy Audacious Goals (BHAGs) that motivate and inspire all stakeholders. School leaders, teachers, and parents should aspire to accomplish that which others say is impossible. Developing creativity, imagination, talents in the arts and sciences, and team leadership must be part of any curriculum that children are asked to pursue.

At your school, merge the CCSS with your curriculum in ways that lead students to take joy in learning new things. Create engaging discovery opportunities with nature. Use imagery, sound, touch, and movement that help students experience what they do not know. Let them experiment with technology to create messages of what they do know and to explore what they do not know.

We hope to inspire you to think bigger than you ever imagined possible. It is our goal to explore the CCSS in four ways. First, we will examine them through the lens of how the standards look and feel when fully implemented and connected to your local curriculum. Second, we will view the CCSS through the lens of professional development and explore how to best teach the standards to all stakeholders. Third, and perhaps most importantly, we will discuss how to supervise all aspects of the CCSS initiative.

Finally, in the fourth section, we will explore ways to pursue the CCSS as pathways to new worlds for children of many cultures and languages in the United States. In fact, in that section, we will offer a school evaluation model where members of an intervention team use the collective wisdom of the personnel, parents, and students at a school to help the school design more effective teaching and learning processes.

Our system will serve to deepen the understanding of all stake-holders about the CCSS. We will help to ensure the fidelity of the common core standards implementation by leading you through a process in which a shared vision of the value of the CCSS is created. We will share ways that the common core should impact many educational domains including, but not limited to, curriculum, assessments, instruction, pedagogy, supervision, technology, and community involvement.

We seek to make the application and merger of common core standards with local school curriculum as practical as possible for anyone involved in any stage of the CCSS process whether you are a teacher, administrator, member of the board of education, or an interested student or parent. Please enjoy the journey we have planned for you.