The Role of Common Core Standards in College and Career-Readiness Education
Introduction

Junior Achievement USA (JA USA) periodically produces position papers that focus on important societal issues. This paper provides details about the changing landscape of the global workforce, outlines the Common Core State Standards Initiative (CCSSI), and provides information about the inclusion of college and career-readiness standards and assessments within the initiative. Also discussed is the role that Junior Achievement plays in fostering work readiness, entrepreneurship, and financial literacy skills through experiential-learning methodologies. JA USA’s 22 elementary, middle, and high school programs support the goal of the CCSSI to ensure students are college and career ready.

Understanding the Need for College And Career-Readiness Education

America’s schools face unprecedented challenges to prepare students for postsecondary education and entry into the U.S. and global workforce. The skills of the current and future workforce are closely tied to our nation’s ability to thrive in a global economy. Yet, workers today must navigate significant shifts that have taken place in the United States in recent decades, including structural changes in the national economy, an expanding global marketplace, and advanced levels of technology in the workplace.¹

In today’s complex job market, employers require entry-level workers who possess greater knowledge and skills than comparable workers in previous decades. In a 2011 survey, more than half of U.S. companies reported a significant challenge in recruiting non-managerial employees with requisite skills and knowledge—despite high levels of unemployment.²

Employers are seeking entry-level workers who are proficient in 21st century skills, such as teamwork, problem solving, and technology skills. The American Society for Training and Development (ASTD) conducted a poll in 2009 in which nearly 50 percent of U.S. respondents reported that 21st century skills are among those noticeably absent from the workforce.³

The Center on Education and the Workforce at Georgetown University predicts the number of jobs requiring postsecondary training and education—referred to as middle- and high-skills jobs—is expected to grow at significantly higher rates over the next decade while the number of low-skills jobs requiring little to no previous experience or training is expected to decline.⁴ As early as 2014, it is projected that nearly eight out of 10 (78 percent) job openings will require more than a high school diploma.⁵ The Organisation for Economic Co-operation and Development (OECD)* 2010 report indicates U.S. students complete college at lower rates than students in the 25 OECD and partner nations that

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![Challenge Level in Recruiting Non-Managerial Employees with the Required Skills, Training, and Education](chart.png)

Source: Across the Great Divide: Perspectives of CEOs and College Presidents on America’s Higher Education and Skills Gap

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serve as our closest global competitors. This has economic implications for the United States and further underscores the need to take concrete steps to enable our students to be competitive in the global labor market.

As the number of middle- and high-skills jobs is predicted to dramatically climb in coming years, it is vital to the economy that we prepare students for various types of advanced training, including college, vocational schools, and trade programs. We need to equip them with the appropriate skills, training, and knowledge necessary to successfully compete at the global level. Because of the urgency to prepare a new generation for success in college and the workplace, a number of organizations recommend that K-12 education focus on essential skills as early as the primary school years. That concept has garnered support from business, industry, and lawmakers. During the past few years, the push for the implementation of new standards of learning in education has resulted in revised policies and practices at all levels of government. In early 2010, the federal government demonstrated its commitment to college and career readiness by setting new funding priorities to support state efforts to maintain and strengthen college and career-readiness education across all grade levels.

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College and Career Readiness and The Common Core State Standards

Early research efforts on college and career readiness considered each to be its own distinct pathway. More recent studies suggest the two are inseparable because of their shared dependence on core academic subjects, such as English and advanced mathematics. Pathways to college and career readiness incorporate an important focus on what have been identified as 21st century skills: critical thinking and problem solving, collaboration, communication, and creativity and innovation.

It is generally understood what it means to be “college ready.” It is harder to articulate what it means to be “career ready.” The Career Readiness Partner Council, a coalition of education, policy, business, and philanthropic organizations formed in 2012, suggests career readiness is predicated on a person’s ability to adapt to and adopt a process of lifelong learning. “A career-ready person effectively navigates pathways that connect education and employment to achieve a fulfilling, financially secure and successful career.” Experts agree that to be career ready, students must possess core academic skills, such as English and math, and they must be capable of applying those skills in context. They must also have the necessary skills to effectively navigate the 21st century workplace and the technical, job-specific skills that enable them to succeed in a particular job or career pathway.

To this end, the Common Core State Standards (CCSS) were established “to define the knowledge and skills students should achieve in order to graduate from high school ready to succeed in entry-level, credit-bearing academic college courses and in workforce training...”

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7 This is the correct spelling of this Paris-based international organization.
12 Association for Career and Technical Education. (n.d.) What is “career ready”? Retrieved from https://www.acteonline.org/general.aspx?id=2216#UazCAdgo3To
Taken together, the standards are intended to provide a framework that educators in every state can use to build a curriculum that is explicit, relevant, and successful. Detailed, measurable standards ensure that students are learning the knowledge, skills, and attitudes they need to succeed across schools, districts, and state lines.

According to Gene Wilhoit, former executive director of the Council of Chief State School Officers:

The Common Core State Standards (Common Core) articulate what students need to know and be able to do in English language arts/literacy and mathematics for success in college and careers. Implementation of the Common Core State Standards will be strengthened in schools, districts, and states by looking at the Common Core in the context of career readiness.

Overview of the Common Core State Standards Initiative

On June 1, 2009, the National Governors Association Center for Best Practices and the Council of Chief State School Officers announced a joint effort to create what they called Common Core State Standards. Content experts, teachers, and researchers came together to write a set of K-12 standards in English and mathematics. According to their mission statement:

The Common Core State Standards provide a consistent, clear understanding of what students are expected to learn, so teachers and parents know what they need to do to help them. The standards are designed to be robust and relevant to the real world, reflecting the knowledge and skills that our young people need for success in college and careers. With American students fully prepared for the future, our communities will be best positioned to compete successfully in the global economy.¹⁴

The standards are divided into two categories: college and career-readiness standards and grade-specific standards for elementary school through high school. The college and career-readiness standards provide a broad outline of what students are expected to learn by the time they have graduated from high school so they have the foundation needed to successfully complete college and workforce-training programs. The grade-specific standards explicitly define end-of-year expectations in English and mathematics. Students are expected to meet each year’s grade-specific standards; retain content and skills developed in previous grades; and progress toward meeting the broader expectations described by the college and career-readiness standards.


English Language Arts and Mathematics Standards

The English language arts standards are intended to “lay out a vision of what it means to be a literate person in the twenty-first century.” Specifically, the standards outline progressive development of reading comprehension; mandate certain types of reading content; set expectations for writing logical arguments based on sound reasoning and relevant evidence; require students to progressively grow their vocabulary; and call for the integration of technology throughout learning.

The standards for math outline specific content-knowledge expectations and provide standards for mathematical practice. The standards include broader topics that will enable students to be college and career ready, such as the ability to reason abstractly and quantitatively; to construct viable arguments and critique the reasoning of others; to use appropriate tools strategically; and to apply mathematics to solve everyday problems.

Overall, the mathematics standards blend the development of procedural skills and conceptual understanding. Standards in elementary school focus more heavily on fluency to better prepare U.S. students for advanced math in later grades. For example, standards in K-5 grades provide students with a “solid foundation in whole numbers, addition, subtraction, multiplication, division, fractions, and decimals.” These standards also build upon model standards from key states and follow successful international models. The middle school standards focus on preparing students for high school mathematics by developing techniques in statistics, algebra, and geometry. High school standards require students to apply “mathematical ways of thinking to real world issues and challenges.”

Relating CCSS to College and Career Readiness

The new English and mathematics standards demand the development of skills that will serve students well in higher education and in the workplace. The English standards require students to read multiple, sophisticated sources, from informational and non-fiction text to literature, and synthesize what they read to develop critical-thinking skills. The literacy standards apply not only to English but to reading and writing expectations in history, social studies, and the sciences. The new math standards require students to demonstrate deeper knowledge than previous state standards by asking them to perform accurate calculations and understand and “apply mathematical concepts to solve real-world problems.”

Recent research conducted by the Educational Policy Improvement Center (EPIC) examined the knowledge and skills contained in the Common Core State Standards and the extent to which these standards are important and directly applicable to college and career readiness. A survey of nearly 2,000 college instructors found they believe the standards to be a valid indicator of college and career readiness. That is, “students who are generally proficient in the Common Core standards will likely be ready for a wide range of postsecondary courses.” The survey also found that the greater the number of standards in which students are proficient, the more likely they will be prepared for postsecondary courses.
Current Status of the CCSS Initiative

The final Common Core State Standards were released in June 2010, following review and feedback from nearly 10,000 teachers, parents, school administrators, and citizens. As of January 2012, 45 states and the District of Columbia have adopted the standards. Minnesota has adopted only English standards, deeming the CCSS in mathematics less rigorous than existing state standards. Alaska, Nebraska, Texas, and Virginia have no plans to adopt the standards. Officials from Texas and Alaska have said they will not adopt the standards because they want to maintain state-level control and because of the cost burden of implementation. Virginia officials have expressed similar concerns.

Common Core Standards Adoption by State

States highlighted in green have adopted the standards.
State highlighted in blue adopted only the standards for English language arts.
States highlighted in gray do not plan to adopt the standards.

Promising Practices and Unresolved Issues

Policymakers see the drive to develop and adopt the Common Core State Standards at the national and state level as a way to unify this country’s approach to prepare students for college and the world’s 21st century workforce. Ensuring a consistent, quality education regardless of geographic location is a key to this initiative. The standards have been reviewed by numerous organizations and by every state in which they have been adopted and been deemed to be rigorous and comprehensive. In an analysis by the Thomas B. Fordham Institute, the standards were found to be clearer and more rigorous than the English standards in 37 states and the math standards in 39 states. In a recent survey by the Center on Education Policy, state officials most often cited educational quality as the primary reason for adopting the Common Core State Standards over existing state standards.

The standards show promise in allowing teachers to share best practices between schools and across geographic boundaries and in identifying the best instructional methods for students. States also can collaborate to develop comprehensive assessment systems that will measure student performance. The standards also enable educational publishers to develop courses and materials that fit needs across the country rather than produce different versions of textbooks and classroom materials for each state. This has the potential to reduce the cost of educational materials.

Implementation Challenges

As the Common Core State Standards are implemented in the classroom, assessments must be developed to measure their impact. A 2012 survey conducted by the Center on Education Policy found most states are making progress in switching over to the Common Core State Standards but do not expect full implementation before the 2014-15 school year. States have cited challenges in finding funding to implement and assess the standards. Those states that did not receive federal funding through Race to the Top grants were more likely to cite delayed implementation due to resource restrictions.

Cost estimates to implement the Common Core State Standards vary nationally. Experts at the Thomas B. Fordham Institute suggest the total cost will exceed $12 billion. It is certain that the need for new textbooks or e-books, new (and online) state and local assessments, teacher evaluation systems, and professional development will continue to grow even as state and local education budgets shrink.

Adequate teacher training to implement the standards is a challenge. In tight economic times, professional development of teachers is often underfunded. To ensure the Common Core State Standards are implemented, new and existing classroom instructors will need to modify their instruction and implement assessments matched to the standards. Extensive and ongoing professional development will be needed to help teachers in these tasks.

This curriculum change also requires developing new classroom materials and acquiring updated textbooks and other curricular materials. Many of the print textbooks in use now will be outdated immediately as the standards are implemented. While some print texts will be replaced by e-texts, the cost to purchase either will be sizable, especially as e-texts will require upgrades to the hardware infrastructure within schools. And legislation in many states, such as Georgia, requires both print and electronic versions of textbooks. This may slow implementation and create additional burdens on schools as teachers modify their curriculum.

Standardized testing presents another challenge. The transition to the Common Core State Standards will be difficult as students are tested and teachers are evaluated based on new assessments. Adapting to the structure and accountability of national standards will present a steep learning curve and will require extensive communication with stakeholders, including parents who must understand the possible consequences of increased testing at all grade levels. Standardized testing must also provide an equitable environment and fair results for special-needs students.

Some states will require revised evaluation systems that hold teachers and principals accountable for student mastery of the content demanded by the new standards. Data gathered at the district and state level will provide information to the public about educational achievement levels. This will invite comparison between schools, districts, and even states. Teacher evaluation measures tied to student performance on assessments will provide additional challenges during implementation. One critical element of CCSS that has yet to be addressed is the need to provide pathways for students with special needs to acquire the same skills that their peers are expected to master. Providing these pathways will require additional money to modify curriculum and testing and to provide specialized professional development for teachers.

Assessment

To meet the goal of graduating students who are college and career ready, the transition to Common Core State Standards requires new tests to measure student achievement. Additional expenditures for the infrastructure to perform online testing may also be needed. Both the Partnership for Assessment of Readiness for College and Careers (PARCC) and the Smarter Balanced Assessment Consortium (Smarter Balanced) have formed to further this goal. PARCC and Smarter Balanced received funding from the U.S. Department of Education in 2010 to develop and deploy assessment systems aligned to the Common Core State Standards by the 2014-15 school year.

Proponents of the new assessment systems point to the validity and volume of data that will be immediately available when testing is moved to an online format. The new assessments will provide timely information about whether students are on track for graduation and also will measure important knowledge and skills needed for college and career readiness. An online system may offer immediate access to data and facilitate sophisticated data analytics. Data collection will be critical to implementing the standards. In some cases, this will require new software and hardware infrastructure.

Implementing the Common Core State Standards provides an opportunity to explore more effective models of assessment. Given that the CCSS provide explicit standards that define measurable learning objectives, a competency-based approach to instruction and

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assessment can be developed and adopted. Research from the International Association for K-12 Online Learning (iNACOL) suggests a competency-based instruction and assessment model is preferable because it is driven by student mastery of important content, including the college and career-readiness skills outlined in CCSS. In this format, assessment becomes a tool to provide immediate feedback to teachers and students about knowledge and skills that may have been missed, encouraging both to return to difficult concepts and material until student mastery is achieved. The implementation of competency-based models of learning and assessment is on the rise from elementary-level through graduate schools. Pilot assessments have been developed by both PARCC and Smarter Balanced and are currently being tested in multiple states.

Conclusion

Despite the challenges outlined previously, 45 states and the District of Columbia have adopted the Common Core State Standards and are taking active steps to implement them within the next two years. The demands of a rapidly changing global marketplace require that our students graduate from high school more prepared to successfully enter college, postsecondary training, and the workforce. In addition to demonstrating competency in core academic subjects, students must also possess 21st century skills not currently taught in the classroom. The Common Core State Standards Initiative identifies the key knowledge, skills, and attitudes that will prepare students to be successful and competitive beyond high school. While the standards do not focus on every essential skill for college and career success—career planning, time management, and ethical reasoning are not addressed, for example—they reflect many critical readiness skills and require an academic foundation in English language arts and math.

The standards also drive the development of competency-based curriculum aligned with college courses and workplace needs. The transparency of the competency-based model of implementation and assessment also allows the use of data to inform and improve education for all students. Proponents hope the initiative may ultimately empower students, teachers, parents, schools, and employers to make informed, data-driven decisions that provide the pathways to future success.

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A third of JA USA’s 22 programs are focused specifically on improving career-readiness skills and preparing students to successfully enter postsecondary institutions, training, and the workplace.

JA USA champions education and recognizes the need for students to not only complete high school but also to seek and succeed in postsecondary education and training opportunities. In recent years, JA USA has taken steps to address the dropout crisis and encourage students to finish school. In 2011, through the support of the Goizueta Foundation, Junior Achievement developed a research-based strategy called JA Graduation Pathways that is designed to support students in completing high school. The research identified key indicators that lead to dropping out of high school, and it examined current JA programming to find alignment between the two. JA Graduation Pathways targets students in the middle grades, when they are most at risk of dropping out of school, and it provides them with volunteer-led programming at planned intervals throughout their remaining school experience.

We are at a critical juncture in our national education system, and the anticipated implementation of the Common Core State Standards promises both increased success for students entering college and the development of a more highly skilled workforce.

Junior Achievement USA

Junior Achievement is the world’s largest organization dedicated to giving young people the knowledge and skills they need to own their economic success, plan for their future, and make smart academic and economic choices. JA USA programs are delivered by business and community volunteers and provide relevant, hands-on experiences that equip students from kindergarten through high school with the knowledge and skills to become financially literate, work ready, and entrepreneurial thinkers. Today, JA USA reaches 4.2 million students each year in 119 markets across the United States, with an additional 5.8 million students served by operations in 120 other countries worldwide. Please visit www.ja.org to learn more about JA.

Junior Achievement fosters work readiness, entrepreneurship, and financial literacy skills by using experiential-learning methodologies. Programs developed by JA USA directly support the goals of the Common Core State Standards Initiative at elementary, middle, and high school levels to ensure students are college and career ready. The common learning theory of building on prior knowledge to increase fluency is also evident in JA USA programs, as it is in CCSS. To ensure its offerings are relevant, JA USA correlates all its programs to the Common Core State Standards. Correlations are mapped at the state level because some state-specific standards can remain as long as CCSS represents at least 85 percent of a state’s English and mathematics standards. To access the correlations of JA programs by state, please visit http://www.ja.org/programs/programs_correlat.shtml.