

Common Core: Here to Stay?

*by Allison Armour-Garb, Senior Fellow
The Public Policy Institute of New York State, Inc.
April 13, 2016*



*"The bar has been raised... So now what does a typical 4th grade student think about herself in this new rigorous math world in which struggle and persistence precede success? The pronouncement of that 10-year-old student as she left my room that day answers with a resounding confidence, 'I am a mathematician!'"**

Karen Marino, Academic intervention services (AIS) math specialist, Skaneateles, Central New York

Executive Summary

Over the past five years, at the same time that the media have been reporting controversies and protests, the Common Core standards were taking root firmly in classrooms across the nation. The New York Common Core Task Force's recent review of the standards has yielded a set of recommendations for change, some of which are considered quite significant by teachers and parents. Most notably, the Board of Regents has adopted the Task Force's recommendation to remove any consequences for teachers' and principals' evaluations related to New York's grades 3-8 ELA and math tests until the 2019-2020 school year.¹ As for the standards themselves, the Task Force explicitly affirmed that New York must "maintain high educational standards" and "build upon the foundation established by the Common Core standards," while acknowledging that some changes should be considered to ensure that the standards in the early grades are developmentally appropriate.² The New York State Education Department has pledged to use feedback received from parents and teachers familiar with the standards to "identify where and what changes are needed to make New York's Common Core ELA and Math Learning Standards stronger."³ This paper argues that higher education standards are important to the economic future of our state and our citizens, and lays out seven reasons to think that the Common Core is here to stay:

- 1. The Common Core Standards Represent "the Best of Our Knowledge."** Developed through an open and collaborative process that drew input from thousands of teachers, higher education faculty, and researchers with expertise in the U.S. labor market and top-performing education systems from around the world, the Common Core embodies the state of the art in math and English language arts standards.
- 2. Early Results Are Promising.** The Common Core movement has tapped a phenomenal burst of energy and creativity among New York's teachers, many of whom are developing and sharing classroom strategies on **EngageNY.org**, the New York State Education Department's website that contains free resources for teachers and principals. Teachers' growing comfort with the standards is beginning to translate into student results: The percentage of New York test takers in grades 3-8 who scored at the proficient level in math has already increased by seven points, from 31 percent in 2013 up to 38 percent in 2015.⁴
- 3. Business and Higher Education Leaders Support College- and Career-Ready Standards to Bridge the Skills Gap and Boost New York's Economy.** With clearer standards to guide educators, a higher percentage of New York's high schoolers will graduate with the knowledge and skills they need to succeed in college, and fewer of them will require remedial courses in college. A reduction in the need for remediation will increase college attainment rates, and economists have shown that higher levels of college attainment lead to a more productive workforce. College-educated workers earn higher wages, which enables them to contribute more in tax revenue and rely less on state assistance programs.⁵ This explains why leaders from IBM's Stanley Litow to the State University of New York's Chancellor Nancy Zimpher support college- and career-ready standards.

"I don't want a quiet classroom with kids sitting at their desk and hands folded waiting for me to spill out the next lesson. My classroom is filled with inquisitive students gaining knowledge through complex text, using close reading strategies to infer meaning and providing supporting evidence in their responses. When students are doing most of the talking their thinking gets stronger and they can then build on this knowledge when they write."

Rochelle Jensen, elementary school teacher, Rome, Mohawk Valley

- 4. The Common Core is Not About Zany Math or Indoctrinating Children. It's About Conceptual Understanding and Critical Thinking in Real-World Contexts (Just Like the New SAT).** The Common Core standards and the new SAT both seek to engage students in evidence-based reading and writing, drawing on more non-fiction texts from science and social studies sources. They also focus on the areas of math that are most important for college and career, and ask students to solve the kinds of math problems that they might encounter in daily life or on the job.

* The teacher and principal testimonials throughout this paper are from the Engaged Voices section of the New York State Education Department's **EngageNY.org** website, unless otherwise noted.

5. Common Core Opposition Is Largely Based on Misconceptions and Testing Worries; Public Support for High Standards Is Strong. The New York Common Core Task Force found that “even vocal opponents... have noted that although they may not support the implementation of and assessments related to the Common Core, they are in favor of high standards for students and accountability for schools and districts.”⁶

6. The Common Core Standards Have Created Powerful Efficiencies in the Market for Educational Materials. With the adoption of common ELA and math standards in more than 40 states, all the major publishers are competing to create Common-Core-aligned textbooks and tests, and newer developers are entering the marketplace as well. Non-profit and governmental entities are developing and disseminating free Common Core curriculum materials, and individual teachers are developing and sharing their own Common Core-aligned resources online. Publishers now benefit from a larger market for each product they develop, and consumers enjoy a larger selection of better materials at lower prices.

7. You Can Join in Supporting College and Career Readiness in Your Community. New York’s employers are making strategic investments in education and sending an important signal about their priorities by showing their support for the Common Core standards.

Introduction

Each passing week seems to bring another negative story about “Common Core”: viral social media posts show nonsensical math homework assignments that stump students’ parents, presidential candidates and state legislators across the nation grab headlines by vowing to repeal the standards, and Governor Cuomo’s Common Core Task Force has recommended modifying the standards and associated policies. Does all this mean that the Common Core is going away? And does it even matter? This paper argues that higher education standards do indeed matter to the economic future of our state and our citizens, and lays out seven reasons to think that the Common Core is here to stay.

► Reason #1: The Common Core Standards Represent “the Best of Our Knowledge”

Ever since 1983, when President Ronald Reagan called for state leaders to raise expectations for their education systems, the issue of state standards has been part of the education policy conversation. Over the decades that followed, each state developed its own standards, including New York, which approved “learning standards” in seven content areas in 1996. But this patchwork led to frustration among policymakers, who wanted to be able to compare student data across states in order to determine the relative effectiveness of their schools and education policies. State-by-state variation in standards also meant that American students faced vast differences in educational expectations depending on where they happened to live.⁷ Some states intentionally set low standards, in a so-called “race to the bottom,” so that they could claim that a higher number of their students were achieving proficiency.⁸

“The Common Core has allowed me to embrace higher expectations for my students. These kids who come from the most impoverished areas of the city, and who have often faced a track record of failure in school, are now coming in with more knowledge and confidence since they have been exposed to higher level work.”

Joshua Cornue, 4th grade teacher, Rochester

Thus, in 2009, governors and state education commissioners from 51 states and territories agreed to create shared standards in ELA and math. Teams of content experts, education researchers, teachers, and higher education faculty were assembled to begin the development process. New York contributed more experts to the K-12 standards development teams than any other state; these included certified teachers, representatives of the teachers’ unions, and State University of New York State (SUNY) faculty.⁹ In March 2010, the National Governors Association released a draft for public feedback, and more than 10,000 individual comments were received. New York had more than 570 commenters—including parents, higher

education faculty, and over 300 teachers—far outnumbering the participation in any other state except California. The final standards were released in June 2010, and over the months that followed, individual states further reviewed them and decided whether to adopt them.

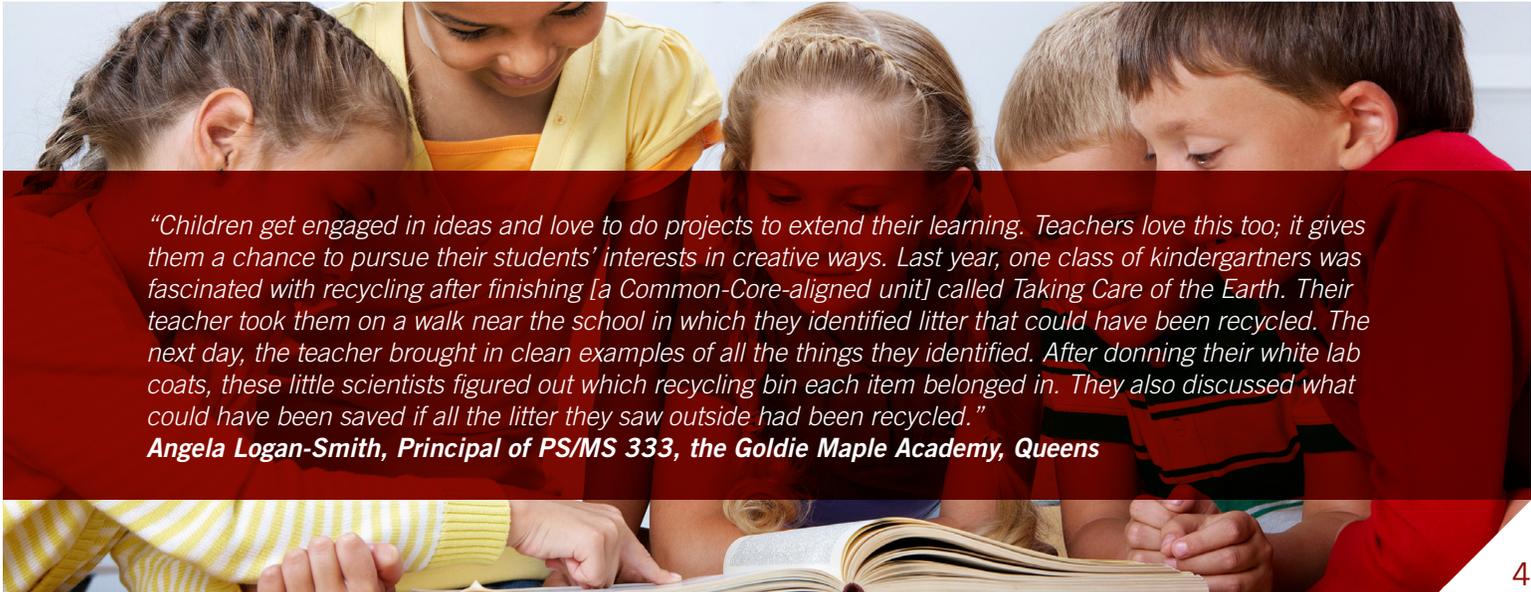
Ultimately, more than 40 states and the District of Columbia adopted the Common Core standards. Because the Common Core standards were developed through a state-led, open and collaborative process that drew on the best available expertise, they can truly be said to embody “the best of our knowledge.” The Thomas B. Fordham Institute, a think tank that specializes in analyzing education standards, describes the features that make the Common Core standards so much better than pre-existing state standards:

- » They are admirably aligned with rigorous research (on early reading instruction, for example); explicit about the quality and complexity of reading and writing that should be expected of students every year; very solid on arithmetic as a clear priority in the elementary grades; ambitious in aiming for college and career readiness by the end of twelfth grade; and relatively jargon-free.¹⁰

Moreover, expectations are now consistent across more than 40 states and are no longer dependent on a student’s zip code.

Yet every passing week seems to bring a news story about another state in which the Common Core is under attack. (For more about the controversy over standards and testing in New York, see Appendix.) Many of these stories are based on bills that were introduced by state legislators but ultimately failed to become law, or lawsuits sponsored by interest groups who misleadingly paint the standards and testing consortia as forcible intrusions by the Obama administration into state and local matters. While it is true that federal Race to the Top grants provided financial incentives that hastened adoption of the standards and financed the testing consortia, state participation in those programs was voluntary. The state-driven common standards movement pre-dates Race to the Top, and most states welcomed the influx of federal funding in support of their efforts.

The Common Core standards are in effect in more than 40 states, including every state that originally adopted them except Oklahoma and South Carolina. In response to political controversy, some states have re-branded the standards by changing the name but have quietly retained the substance. More than a dozen states, including New York, have adapted the standards by adding supplementary language—a move that was anticipated by the original adoption agreement under the so-called “15 percent rule.”¹¹ Numerous states, including New York, have postponed or pulled back from full-scale participation in the Common Core testing consortia, while retaining the standards themselves. Several states, including New York, have launched processes to review the standards and associated tests. All of this has done little to roll back the Common Core standards, and it is arguable that the additional scrutiny and fine-tuning at the state level will ultimately strengthen the standards and improve their implementation.¹²



“Children get engaged in ideas and love to do projects to extend their learning. Teachers love this too; it gives them a chance to pursue their students’ interests in creative ways. Last year, one class of kindergartners was fascinated with recycling after finishing [a Common-Core-aligned unit] called Taking Care of the Earth. Their teacher took them on a walk near the school in which they identified litter that could have been recycled. The next day, the teacher brought in clean examples of all the things they identified. After donning their white lab coats, these little scientists figured out which recycling bin each item belonged in. They also discussed what could have been saved if all the litter they saw outside had been recycled.”

Angela Logan-Smith, Principal of PS/MS 333, the Goldie Maple Academy, Queens

► Reason #2: Early Results Are Promising

While there have been plenty of challenges, the public has not been hearing enough about the positive results that the state is already seeing with the implementation of higher standards. Student outcomes are not going to improve overnight, as Massachusetts learned when it raised standards in the 1990s (see Reason #3, below). But the results of New York’s math tests, which are used to measure students’ mastery of the standards, are encouraging: The percentage of all test takers in grades 3-8 who scored at the proficient level has increased by seven points, from 31 percent in 2013 up to 38 percent in 2015.¹³ (See Sidebar for an explanation of the relationship between standards and testing.) Even more promising, the Common Core movement seems to have tapped a phenomenal burst of energy and creativity among New York’s teachers. **EngageNY.org**, the New York State Education Department’s website containing free curriculum resources for teachers and principals, has received tens of millions of hits. The “Engaged Voices” section of the site is full of ideas, videos, and testimonials by New York teachers and administrators. Quotes from those testimonials are included throughout this paper.¹⁴

► Reason #3: Business and Higher Education Leaders Support College- and Career-Ready Standards to Bridge the Skills Gap and Boost New York’s Economy

To a troubling degree, young adults leave New York’s high schools and colleges lacking the skills and knowledge that employers are looking for.¹⁵ A newly released Public Policy Institute survey of New York employers from across the state finds that the majority face a mismatch between the skills they need and the skills workers possess. More than 60 percent of the employers surveyed report difficulty finding workers with data analysis skills or critical thinking skills (see Figure 1), and more than half have difficulty finding workers skilled at problem-solving, communications, research, or applied mathematics. Indeed, more than 20 percent say it is “very difficult” to find workers with skills in data analysis or applied mathematics. Between one-third and one-half of employers responding to the survey report difficulty finding workers with such skills as time management, reasoning, teamwork, application of core content, or the use of technology.

Standards vs. Curriculum vs. Assessment—What’s the Difference?

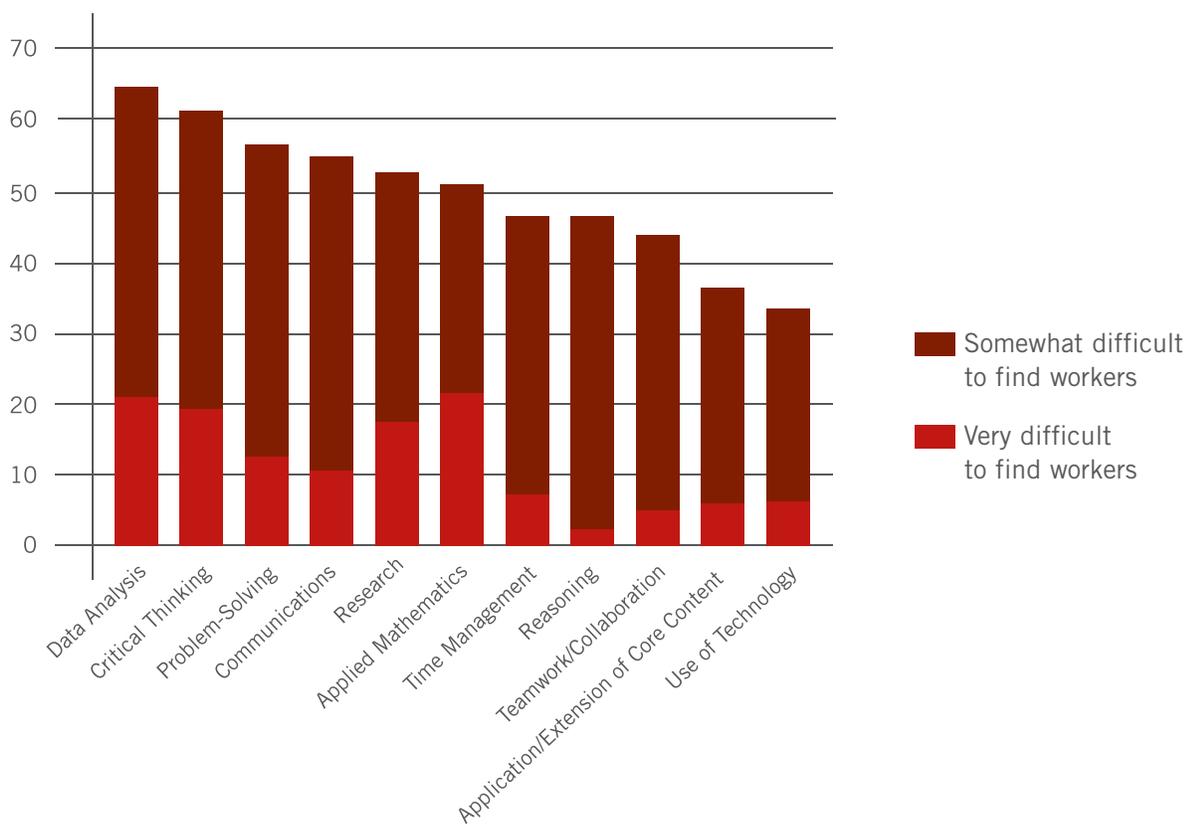
To explain the role and purpose of education standards, an analogy may be helpful.¹⁶ In order to earn your driver’s license, you first must be able to demonstrate the knowledge and skills associated with driving. But the State of New York doesn’t mandate exactly how you learn to drive. So although the state insists that you know how to parallel park, understand traffic signs, are able to merge onto the highway, etc. (those are the *standards*), you have some choices as to how to learn these skills and knowledge. You can choose between a short pre-licensing course or a longer driver’s education course. You have some freedom to decide where and when to practice driving. You might decide to review videos and other instructional materials and take a few practice tests, or you might not. All of those lessons, practice sessions, and materials constitute the *curriculum*. The same principle is behind the Common Core standards: They specify what we expect students to know and be able to do in each grade to progress and, by the end of high school, to be college- and career-ready. How to get students to that point—including decisions about curriculum, training, tools, materials, and textbooks—is up to states, districts, schools, and teachers.

Assessments or tests are the instruments the state uses to measure mastery of a set of standards. States that adopted the Common Core standards were not required to increase the amount of testing. Whenever standards change, however, any tests that are used to measure mastery of those standards need to be modified to accurately reflect the same content as the new standards. Thus, for example, when New York State changes any of the rules of the road that drivers are expected to know (e.g., the “Move Over” Law passed in 2012), it has to update the road test and written test to appropriately address the new material. The degree to which standards, curriculum, and assessments address the same content is called *alignment*.

“As a math teacher for twenty-two years, I witnessed first-hand how American students have slipped further and further behind their global competitors... We, as educators, have been unable to raise student performance in math and have repeatedly found US students near the bottom of the math rankings, despite the disproportionate amount of money spent on educating each child. During these years, I worked hard to design my own classroom lessons to stress understanding and mathematical thinking over a “step by step” process so my students truly comprehended the math behind the algorithm... I was so pleased and surprised to find that the functional changes that we are making to teaching math are reflective of the strategies that I have found to be most successful with my students... I truly believe these standards will result in the curricular and instructional changes that New York students need to become college ready and have an opportunity to participate positively in the global economy they will encounter when entering the workplace. The Common Core Learning Standards will help ensure that students are not hindered by poor qualifications and remediation but rather provide them with the footing they need to have real choices about their education, and careers. Their futures will be in their hands.”

Marylee Liebowitz, math coach, Putnam Northern Westchester BOCES, Mid-Hudson Valley

Figure 1. Percent of New York Employers Reporting Difficulty Finding Workers with Needed Skills

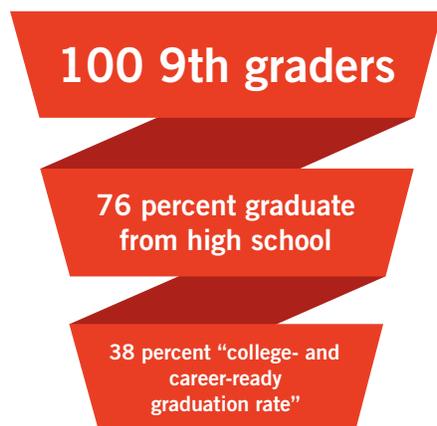


Source: Public Policy Institute of New York State, Inc., Workforce Development Survey conducted June-August 2014.

The origins of this skills gap lie in New York’s education pipeline. Before the Board of Regents voted to adopt the Common Core, New York’s education standards were failing to keep pace with the changing demands of our global economy. Three-quarters of New York students graduate from high school, but statistics released by the New York State Education Department reveal that only 38 percent of high school students graduate with the literacy and math skills they need for college and careers. The “college- and

career-ready graduation rate” shown in Figure 2 refers to the percentage of students graduating with a score of at least 75 on the Regents English and 80 on a math Regents exam, scores that have been shown to correlate with success in first-year college courses.¹⁷ In other words, until the Common Core standards are fully phased in (see Appendix, Figure 8), a student can earn a high school diploma in New York without having mastered fundamental math and literacy skills.

Figure 2. New York State High School Graduation Rate, 2010 Cohort.



Source: NYSED, <http://www.nysed.gov/news/2015/statewide-high-school-graduation-rate-shows-continuing-gains>

Because a high school diploma no longer signifies academic preparedness, large numbers of incoming college students are surprised to discover that they require remedial courses in reading, writing, or mathematics. More than 50 percent of students in New York two-year institutions of higher education, and 20 percent of those entering four-year institutions, take at least one remedial course.¹⁸ In fact, many must take more than one. This is a problem for multiple reasons. First, it is more difficult for students who need remediation to graduate from college—both because they have difficulty meeting the academic challenge, and because it is harder for them to pay for the additional courses. Tightening financial aid eligibility rules and academic progress requirements ensnare remedial students.¹⁹ Second, the remedial education epidemic is a huge waste of taxpayer money. Each year, the state spends over \$70 million on remediation at SUNY community colleges alone. SUNY community college students themselves spend approximately \$93 million in tuition—much of it in the form of government-financed aid—on remedial classes, which cover material they should have learned in high school.²⁰ These shocking figures do not include the millions of additional taxpayer dollars spent on remediation for New York students at the City University of New York and private colleges.

A first step in closing the skills gap and reducing the need for college remediation is to clearly state what skills and knowledge a high school graduate should possess. The Common Core standards are essentially a detailed statement of expectations in math and English language arts/literacy. (Despite widespread misconceptions, they are not a curriculum, nor are they a program of testing. See sidebar, page 5) They consist of “college and career readiness standards,” which state what students are expected to know and be able to do by the time they graduate from high school (the goal); and K-12 standards, which cover the elementary, middle, and high school grades (milestones along the way to that goal). The college and career readiness standards were developed first, drawing on statistical analysis of employment data from the Bureau of Labor Statistics and validated by interviews with managers from industries that employ highly-paid professionals and well-paid, skilled workers.²¹ Furthermore, the standards are internationally benchmarked, to help ensure that our students are globally competitive. For example, the drafters of the Common Core standards identified countries whose students were top performers on the Trends in International Mathematics and Science Study, then studied how those countries teach math, in order to gain insight on “the most effective sequencing of math topics.” Researchers also looked at the language skills that high-performing countries expect of their students, including the types and complexity of texts.²²

Figure 3 contains excerpts from the Common Core standards, to illustrate how the standards address the skills in greatest demand in the Public Policy Institute’s survey. This is only a brief sampling, to give a sense of how the standards are worded and the kinds of skills they cover. Most of these skills are woven throughout the standards (which can be read in full on the Common Core State Standards Initiative website at www.corestandards.org, or on the New York State Education Department’s EngageNY.org site). The Common Core standards are not just about mastering content and concepts. They emphasize modeling, critical thinking, and collaboration, requiring students to use math and literacy skills to analyze real-world situations, construct arguments, make informed decisions, solve problems, and present their findings.²³

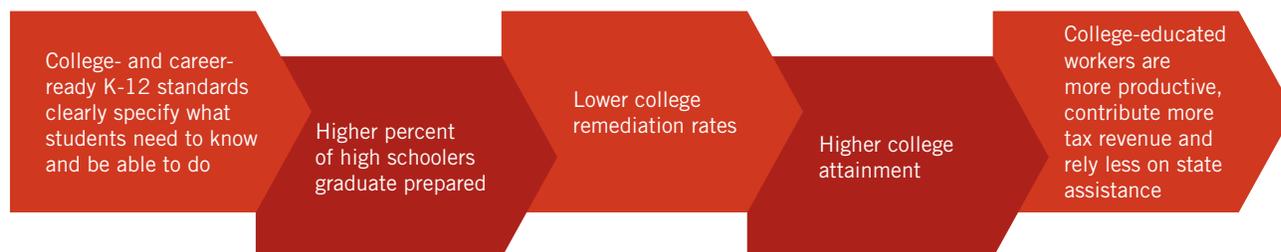
Figure 3. Examples of Skills Covered in the Standards

SKILL	EXCERPT FROM THE COMMON CORE STANDARDS
Use of Data	“Use probability to evaluate outcomes of decisions.”
Critical Thinking	“Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning.”
Problem Solving	“Evaluate hypotheses, data, analysis, and conclusions in a science or technical text, verifying the data when possible and corroborating or challenging conclusions with other sources of information.”
Communications	“Make strategic use of digital media (e.g., textual, graphical, audio, visual and interactive elements) in presentations to enhance understanding of findings, reasoning and evidence and to add interest.”
Research	“Conduct research projects to answer a question or solve a problem.”
Applied Math	“Summarize, represent and interpret data on a single count or measurement variable; summarize, represent and interpret data on two categorical and quantitative variables; and interpret linear models.”
Teamwork/Time Management	“Work with peers to set clear goals and deadlines.”
Reasoning	“Construct viable arguments and critique the reasoning of others.”

Source: Achieve, *Understanding the Skills in the Common Core State Standards*. 2012.

By themselves, new education standards cannot solve New York’s skills gap or remedial education epidemic, but they are an important piece of the puzzle. Figure 4 illustrates the mechanism by which college- and career-ready standards can boost a state’s economy. With clearer standards to guide educators, a higher percentage of high schoolers should graduate with the knowledge and skills they need to succeed in college, and fewer of them should require remedial courses. A reduction in the need for remediation should increase college attainment rates. Economists have shown that higher levels of college attainment lead to a more productive workforce. College-educated workers earn higher wages, which enables them to contribute more in tax revenue and rely less on state assistance programs.²⁴

Figure 4. Theory of Action



New York's neighbor to the east, Massachusetts, provides a case study of how raising standards is an important step to improving educational outcomes and economic productivity. In the early 1990s, a group called the Massachusetts Business Alliance for Education issued a report that became the blueprint for a bipartisan reform bill. The reform package included three main components: (1) More money to urban schools and pre-Kindergarten programs; (2) ambitious academic standards; and (3) a new set of testing requirements, including high school exit exams (analogous to New York's Regents Exams), known collectively as the Massachusetts Comprehensive Assessment System (MCAS). When the MCAS was first administered in 1998, students in urban schools performed terribly. Improvement was so slow at first that researchers thought the reforms had failed, but State Superintendent David Driscoll insisted on staying the course.²⁵

Over the next ten years, Massachusetts became the envy of the nation for its education outcomes. In 2005, Massachusetts scored at the top of all four categories measured by the National Assessment of Educational Progress (4th and 8th grade ELA and math). In 2008, Massachusetts 8th graders tied for first in the world in science on the Trends in International Mathematics and Science Study exam. From 2002 to 2009, NAEP scores for Massachusetts African-Americans and Hispanics in the 4th and 8th grade ELA categories improved faster than those of white students. If Massachusetts were a country, its 2009 Programme for International Student Assessment scores would place it in the top ten, with countries like Singapore, Korea, and Finland. Economic outcomes have improved as well. The share of adults with a college degree has grown more in Massachusetts than in any other state, and worker productivity has grown more quickly in Massachusetts than in all but two other states.²⁶

If our policymakers wish to replicate Massachusetts's outstanding educational trajectory, they will have to resist political opposition to tougher standards and tests, continue to gather high-quality data via standardized tests and other means, and throw their strong support behind policies that have the best chance of improving student outcomes. Understanding this, New York's business and higher education leaders—from IBM's Stanley Litow to SUNY Chancellor Nancy Zimpher—have been vocal supporters of the Common Core standards, vigorously urging their colleagues, policymakers, and the public to see them through to full implementation.

Common Core Means Higher Standards

Excerpt from a Guest Essay by Ursula M. Burns, chairman and CEO of Xerox, that appeared in the Democrat & Chronicle, October 23, 2013

Here in Rochester, less than 10 percent of our kids are graduating high school ready for college and career. We need to raise our standards and our expectations; Common Core does just that...

Common Core promises to hold our schools and our kids—all of our kids, not just the lucky ones—to higher standards, standards that will provide them with a deeper, more durable understanding of science and math, analytical and reasoning skills in the humanities, creative problem solving across the curriculum. Skills they need to succeed as students and to compete in the global economy.

Common Core means change, difficult and messy as that can be. But it's change that's essential for New York.

Common Core is Common Sense for Higher Ed

Excerpt from a Blog by SUNY Chancellor Nancy Zimpher, and co-authored by John Morgan, Chancellor of the Tennessee Board of Regents, and William E. (Brit) Kirwan, Chancellor of the University System of Maryland, that appeared in the Huffington Post, June 4, 2014

To meet the needs of future employers, sustain our economy, and increase college completion, we must ensure that all of our students are prepared for postsecondary success when they graduate high school.

The Common Core can reverse this alarming trend and set our students on the path to success. Students who meet the Common Core standards will be prepared to enter our higher education institutions without the need for remediation. And our data show that students who can clear that bar are far more likely to persist and earn a degree.

But if you listen to the debates playing out in state legislatures around the country, the issues of student preparation and student success are not center stage. Instead we go back and forth about the federal role, whether we're moving too fast or whether there's too much testing in schools. These issues are a distraction from the deeper issue at hand, and in the meantime other countries continue to pass us in the education of their citizenry. If we were truly focused on what's best for our students, the debate would be over and the Common Core would be well on its way to full implementation.

The Common Core standards and new assessments aligned with the standards represent our best hope for driving meaningful improvement across K12 and higher education.



“Instead of lessons that feature a single procedure, teachers are facilitating learning by giving students multiple ways that they can use to come to the answer. Students then discuss both their answer and the process they used, which provides the opportunity for all students to learn from each other and develop a more fluid, conceptual understanding of mathematics.”

Louis Cuglietto, Principal of JFK Magnet Elementary School, Mid-Hudson Valley

Schools Must Stick by New Standards: Higher standards will help students get the Academic Training and Workplace Skills to be College- and Career-Ready

Excerpt from an Op-Ed by Stanley S. Litow, IBM's vice president of corporate citizenship and corporate affairs, and president of the IBM International Foundation, that appeared in Crain's New York Business, August 25, 2013

New York's disappointing showing on the first Common Core Standards test for reading and math touched off a call for retreat from the new standards. That would be a huge mistake.

Supporters knew that the elevated standards would result in a tougher test and a drop in scores, as happens with any new test. But this test was both new and significantly harder, prompting a steeper decline and making comparisons with prior results impossible.

Similar outcomes are expected in every state that tests to these higher standards. Kentucky's scores fell dramatically, but educators, legislators and parents understood why and continued to support Common Core. In New York, we must do the same.

The new, higher standards were written to help students get the academic training and workplace skills to be college- and career-ready. To date, 45 states and the District of Columbia have voluntarily adopted Common Core, which was enthusiastically supported by business and union leaders—especially in New York.

For the state to remain economically competitive, we must work together to ensure our students meet these higher standards. That will enable them to prosper in the 21st-century economy—one that will create nearly 14 million “middle-skill” jobs in the U.S. over the next 10 years. Otherwise, New York's young people face an uncertain future as our global competitiveness erodes.

My company, IBM, has always championed the need for tougher academic standards to reverse America's educational decline. In the late 1990s and early 2000s, IBM worked with governors to organize three National Education Summits. Governors from every state—along with educators, CEOs and two U.S. presidents—put individual interests aside to reach consensus on the need for better academic standards, accountability and instruction. Before that, only 14 states had standards, and they were too low.

The result was a bipartisan effort to develop Common Core—uniform, high English and math standards for grades K-12 providing a clear understanding of what students should master. Education leaders in New York came out early in support. When developed, these standards weren't arbitrary but were based on a significant body of evidence, including international tests in which American 15-year-olds ranked 13th in science and 17th in math among their peers from industrialized nations. Clearly, we have to do better.

Here in New York, IBM worked with the city Department of Education, the City University of New York and the New York City College of Technology (CityTech) to create the Pathways in Technology Early College High School (P-TECH)—the first grades-nine-to-14 school in the city.

[...]

If low scores prompt us to dumb down standards and expect less from students and teachers, we will have made a grave error. Well-designed tests give us information to improve teaching and learning. The current test isn't perfect. No test is. And the preparation for both teachers and students must also improve. But this is a strong initial effort that will only get better over time. It deserves our support.

► Reason #4: The Common Core is Not About Zany Math or Indoctrinating Children. It's About Conceptual Understanding and Critical Thinking in Real-World Contexts (Just Like the New SAT)

You have probably seen the social media posts showing math homework that makes no sense or requires children to do multiple confusing steps to solve a simple addition problem.²⁷ Should we blame the Common Core standards for confusing assignments? The standards rightly specify that students need to

be “fluent” in solving arithmetic problems—in other words, they need to be able to perform arithmetic calculations quickly and without stopping to think. But the standards go farther by demanding that students understand the concepts behind arithmetic and be able to demonstrate that understanding in more than one way. For example, students may use drawings or work with manipulatives to illustrate how arithmetic works.²⁸ This enables children with different learning styles to experiment until they discover a model that makes sense to them. At higher levels, students are expected to “solve math problems rooted in the real world, deciding for themselves which formulas and tools (such as protractors and rulers) to use.”²⁹ Assignments and test questions often require students to complete several steps and draw on the application of multiple skills and concepts. The rapid transition to the Common Core has afforded teachers and curriculum publishers less lead time than they are accustomed to, to develop materials to guide students through these conceptual processes and applications, and so the quality of lessons and assignments has been uneven. These growing pains are dissipating as teachers become more comfortable with the standards, and materials are revised and refined. Moreover, the availability of free video lessons on Khan Academy and elsewhere means that even the most math-phobic parent can find help with Common Core homework.

To help educators and the public understand how the annual ELA and math tests have changed in accordance with what the standards demand, NYSED has released a sample of test questions. To solve the problem shown in Figure 5, for example, students must recall the formula for the volume of a cylinder and apply it to solve a real-world problem. The annotated answer key models how teachers should analyze their students’ work on classroom assignments throughout the year, looking at why students got the wrong answer and determining whether there is any pattern in students’ mistakes that would indicate the need to re-teach part of the unit.



“These new exams are more sophisticated than those given years ago. The stronger emphasis on skills like problem solving and critical thinking focus on building what students need for success... We believe that the tests are one fair measure of how well our students are learning the Common Core standards. The exams become a valuable measure of how well we are doing as a district.”

Tim O. Mains, superintendent, Jamestown Public Schools, Western New York

Figure 5. Sample question from New York State Grade 8 Math Assessment

A water tank is in the shape of a right circular cylinder with a height of 20 feet and a volume of 320π cubic feet. What is the diameter, in feet, of the water tank?

- A 16
- B 10
- C 8
- D 4

Correct Answer: C

Measured CCLS: 8.G.9

Commentary: The item measures 8.G.9 because it measures using the formula for the volume of a cylinder ($V = \pi r^2 h$) to solve real-world problems; it has students solve for the diameter of a cylinder given the volume and height.

Answer Choice A: 16. This response reflects the radius squared of the cylinder. The student likely divided the volume by the height times π , but did not take the square root of the result to determine the radius. A student who selects this response may have limited understanding of how to solve for a variable in a formula.

$$320\pi \div 20\pi = 16$$

Answer Choice B: 10. This response reflects half of the height of the cylinder. A student who selects this response may not understand how to use the formula for the volume of a cylinder or the relationship between the dimensions of the cylinder.

$$20 \div 2 = 10$$

Answer Choice C: 8. The student correctly determined the diameter of the cylinder. The student who selects this response used the formula for the volume of a cylinder to solve for the radius of the cylinder, and then used the radius to find the diameter.

$$V = \pi r^2 h$$

$$320\pi = \pi r^2 (20)$$

$$16 = r^2$$

$$4 = r$$

$$2r = d$$

$$2 \times 4 = 8$$

Answer Choice D: 4. This response reflects the radius of the cylinder. A student who selects this response may understand how to use the formula for the volume of a cylinder, but may not understand the relationship between the radius and diameter of the cylinder or attend to precision when answering the question posed in the problem.

$$V = \pi r^2 h$$

$$320\pi = \pi r^2 (20)$$

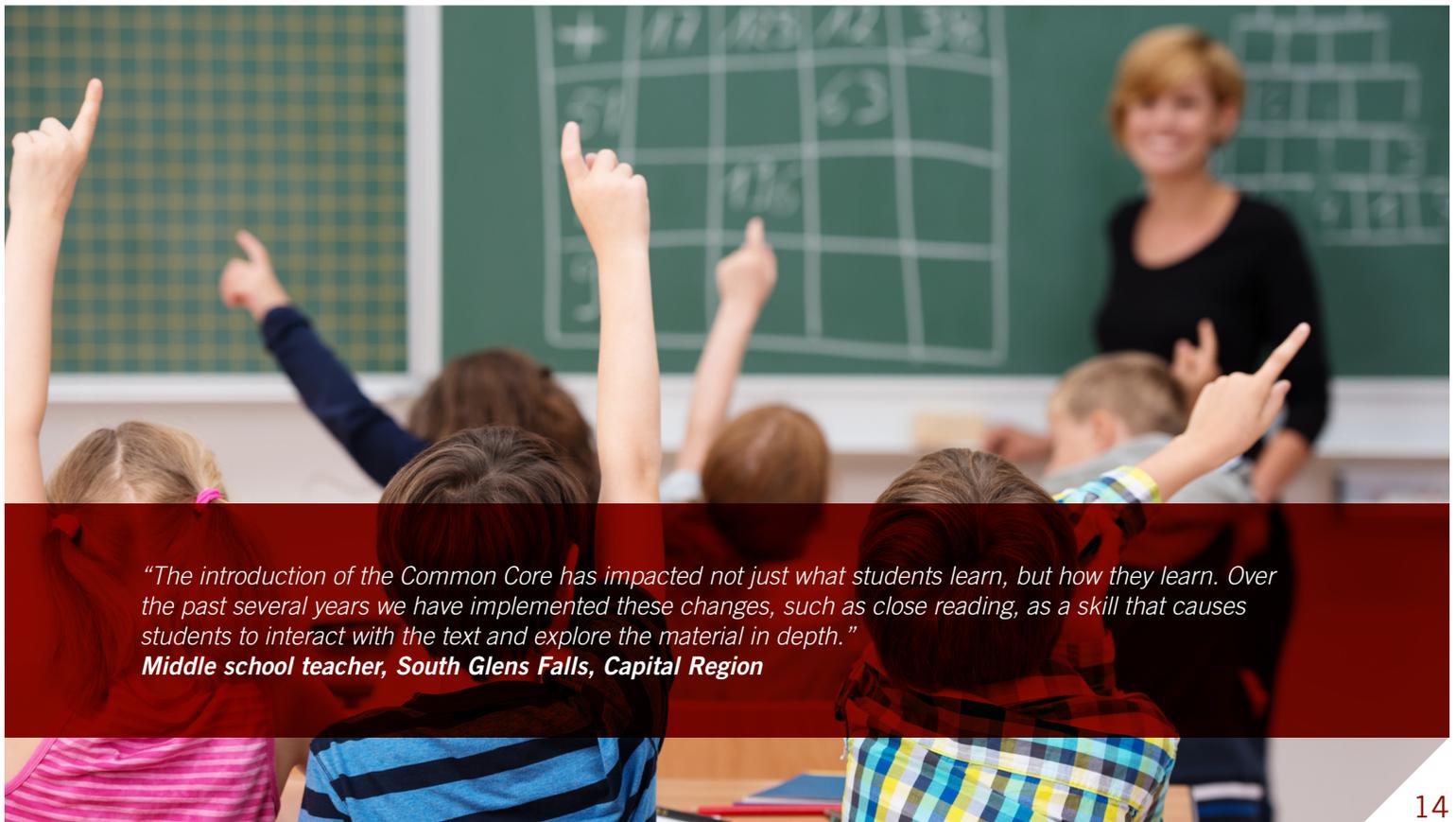
$$16 = r^2$$

$$4 = r$$

Answer options A, B, and D are plausible but incorrect. They represent common student errors made when using the formula of a cylinder to solve real-world and mathematical problems. Answer option C represents the correct process used to solve for the diameter of a cylinder given the volume and height.

What about the Common Core standards in ELA and literacy? Some critics have gone so far as to liken the Common Core initiative to Communism or Nazism, or have said that it is anti-freedom, or even that it will turn children into homosexuals.³⁰ If you read the Common Core standards closely, you will discover a certain irony to such baseless claims. At their heart, the standards ask students to become comfortable reading and analyzing texts drawn from real-world sources, especially non-fiction texts in science and social studies. The example in Figure 6 is an article taken directly from NASA’s website, written by an expert in the history of spaceflight. On its 5th grade ELA assessment, NYSED based six multiple choice questions on this passage to measure various skills, including students’ ability to find the main idea, explain how an author uses reasoning and evidence to support particular points, and draw inferences based on specific information in the text.

Under the Common Core standards, students are asked to do “close reading” and to ground their analyses in information gathered from the assigned texts. The irony, then, is that Common Core opponents will be hard-pressed to find any evidence of Communism, Nazism, or homosexual propaganda in the language of the standards themselves. Because the standards aim to instill critical thinking skills, students will inevitably be asked to study texts with which they or their parents disagree, including texts that espouse a range of social and political viewpoints. The selection of particular reading materials is a local curricular decision. So anti-Common Core activists are probably right when they warn that “[y]our child or grandchild will not be able to escape Common Core materials that are anti-Christian, anti-capitalism, and anti-America, or that are pro-homosexuality, illegal immigration, unions, environmentalism, gun control, feminism, and social justice.”³¹ The Common Core standards are not about “escaping” from texts; they are about grappling with them.



“The introduction of the Common Core has impacted not just what students learn, but how they learn. Over the past several years we have implemented these changes, such as close reading, as a skill that causes students to interact with the text and explore the material in depth.”
Middle school teacher, South Glens Falls, Capital Region

Figure 6. Sample question from New York State Grade 5 English Language Arts Assessment

What Are Wind Tunnels?

by David Hitt

Wind tunnels are large tubes with air moving inside. The tunnels are used to copy the actions of an object in flight. Researchers use wind tunnels to learn more about how an aircraft will fly. NASA uses wind tunnels to test scale models of aircraft and spacecraft. Some wind tunnels are big enough to hold full-size versions of vehicles. The wind tunnel moves air around an object, making it seem like the object is really flying.

How do Wind Tunnels Work?

Most of the time, powerful fans move air through the tube. The object to be tested is fastened in the tunnel so that it will not move. The object can be a small model of a vehicle. It can be just a piece of a vehicle. It can be a full-size aircraft or spacecraft. It can even be a common object like a tennis ball. The air moving around the still object shows what would happen if the object were moving through the air. How the air moves can be studied in different ways. Smoke or dye can be placed in the air and can be seen as it moves. Threads can be attached to the object to show how the air is moving. Special instruments are often used to measure the force of the air on the object.

How Does NASA Use Wind Tunnels for Aircraft?

NASA has more wind tunnels than any other group. The agency uses the wind tunnels in a lot of ways. One of the main ways NASA uses wind tunnels is to learn more about airplanes and how things move through the air. One of NASA's jobs is to improve air transportation. Wind tunnels help NASA test ideas for ways to make aircraft better and safer. Engineers can test new materials or shapes for airplane parts. Then, before flying a new airplane, NASA will test it in a wind tunnel to make sure it will fly as it should. NASA also works with others that need to use wind tunnels. That way, companies that are building new airplanes can test how the planes will fly. By letting these companies use the wind tunnels, NASA helps to make air travel safer.

How Can Wind Tunnels Help Spacecraft?

NASA also uses wind tunnels to test spacecraft and rockets. These vehicles are made to operate in space. Space has no atmosphere. Spacecraft and rockets have to travel through the atmosphere to get to space. Vehicles that take humans into space also must come back through the atmosphere to Earth.

Wind tunnels have been important in making the Ares rockets and Orion spacecraft. Ares and Orion are vehicles that will take astronauts into space. NASA engineers tested ideas for the design of Ares in wind tunnels. They needed to see how well Ares would fly. Engineers tested Orion models. They needed to know what would happen to different designs when the spacecraft came back through the atmosphere.

Long after the first design work is finished, NASA can still use wind tunnels. Wind tunnel tests have helped NASA change the space shuttle to make it safer. Wind tunnels will keep helping make all spacecraft and rockets better.

Wind tunnels can even help engineers design spacecraft to work on other worlds. Mars has a thin atmosphere. It is important to know what the Martian atmosphere will do to vehicles that are landing there. Spacecraft designs and parachutes are tested in wind tunnels set up to be like the Martian atmosphere.

NASA has many different types of wind tunnels. They are located at NASA centers all around the country. The wind tunnels come in a lot of sizes. Some are only a few inches square, and some are large enough to test a full-size airplane. Some wind tunnels test aircraft at very slow speeds. But some wind tunnels are made to test at hypersonic speeds. That is more than 4,000 miles per hour!

The most important feature of a wind tunnel used to test vehicles that can land on Mars is the ability to test how

- A gravity affects vehicles
- B a thin atmosphere affects vehicles
- C high-speed winds affect vehicles
- D freezing temperatures affect vehicles

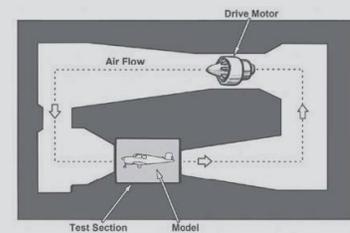
Correct Answer: B

MEASURES CCLS: RI.5.3:

Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text.

HOW THIS QUESTION MEASURES RI.5.3:

This question measures RI.5.3 because it asks students to relate distinct pieces of information in the text: characteristics of Mars and features of wind tunnels. Recognizing the correct choice requires students to track the way the text develops and relates discrete ideas to make larger points.



WHY CHOICE “B” IS CORRECT:

Students who choose “B” are able to connect various ideas in the text. The text states that “Mars has a thin atmosphere” and “It is important to know what the Martian atmosphere will do to vehicles that are landing there.” Since Mars has a thin atmosphere, that is what the wind tunnel would have to replicate.

WHY THE OTHER CHOICES ARE INCORRECT:

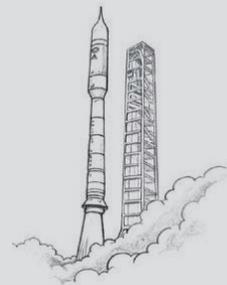
Choice A: Students may have chosen “A” because although the absence of gravity is often a major element of a discussion about space travel, there is no basis for assuming that this is something that is only related to Mars. In addition, gravitational pull is not mentioned as something that is tested in wind tunnels. Consequently, there is no textual support that wind tunnels would be used for testing the effects of gravity on vehicles.

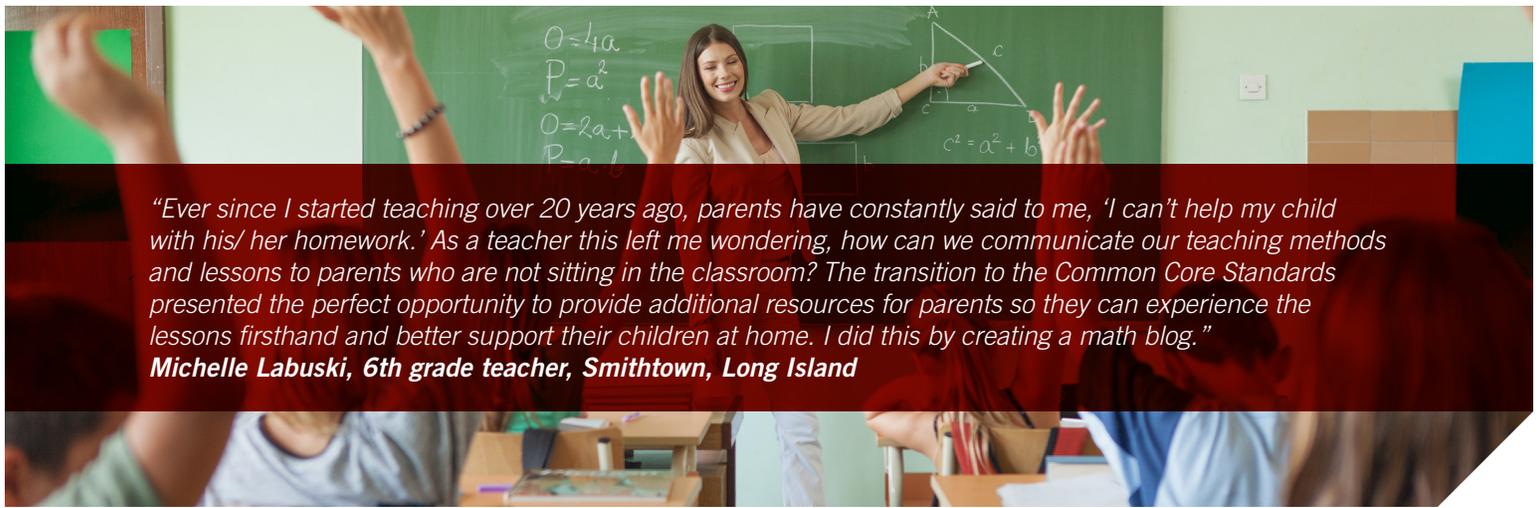
Choice C: Students may have chosen “C” because high speeds are mentioned at the end of the passage with respect to “testing at hypersonic speeds.” The text, however, makes no connection between this information and Mars.

Choice D: Students may have chosen “D” because it mentions the cold temperatures of Mars. Although the temperature on Mars could affect vehicles, the passage does not discuss the temperature in the wind tunnels or any type of testing regarding temperature.

HOW TO HELP STUDENTS MASTER RI.5.3:

This question measures students’ ability to take two pieces of textual information and recognize how the text establishes a relationship between them. Choices “A,” “C,” and “D” connect textual information in ways that are not supported by the passage. Choice “B” correctly expresses the relationship between the unique atmosphere on Mars and the necessity to determine its effect on vehicles with a wind tunnel. To help students succeed with questions like this, instruction could focus on tracking the development of related ideas across a text. Using texts that develop and relate ideas across multiple paragraphs, students can be asked to analyze various textual details and explain how the text develops a relationship between them.





“Ever since I started teaching over 20 years ago, parents have constantly said to me, ‘I can’t help my child with his/ her homework.’ As a teacher this left me wondering, how can we communicate our teaching methods and lessons to parents who are not sitting in the classroom? The transition to the Common Core Standards presented the perfect opportunity to provide additional resources for parents so they can experience the lessons firsthand and better support their children at home. I did this by creating a math blog.”

Michelle Labuski, 6th grade teacher, Smithtown, Long Island

New York’s rigorous Common Core-aligned assessments, though unpopular in many circles, will prove to be excellent preparation for the SAT. One of the lead authors of the Common Core standards, David Coleman, is now head of the College Board, and under his leadership, the SAT has been redesigned in line with the Common Core. The new exam engages students in evidence-based reading and writing, drawing on more non-fiction texts from science and social studies sources. The math portion focuses on the areas of math that are most important for college and career, and asks students “to solve problems in science, social science, and career contexts.”³² The College Board began administering the new SAT in spring 2016. The smart money says that New York policymakers will maintain the state’s momentum in implementing the Common Core, to give our students the best possible preparation for the redesigned SAT.

► **Reason #5: Common Core Opposition Is Largely Based on Misconceptions and Testing Worries; Public Support for High Standards Is Strong**

Common Core polls are in and out of the news, and some reporters say that a majority of the public opposes the Common Core. But a closer look at the polls tells a different story. Whether Americans say they oppose the Common Core depends not only on how the poll questions are worded, but also on how well respondents understand what the standards are and what they are used for. Polls that describe various attributes of the standards without using the name “Common Core” find high levels of support:

- » Seventy-nine percent of voters believe we should create high-quality academic standards or goals in English and math, and allow communities to develop their own curricula. (Center for American Progress)³³
- » Ninety percent agree that the nation should raise academic standards to compete with other countries. (Center for American Progress)³⁴
- » The majority of Americans support adoption of “a set of education standards for English and math that have been set to internationally competitive levels and would be used in every state for students in grades K through 12.” (Wall Street Journal)³⁵
- » Only 16 percent oppose the following statement: “States have been deciding whether or not to use standards... that are the same across states” and that “will be used to hold public schools accountable for their performance.” (Education Next)³⁶

Nationally, most of those who say they are opposed turn out to have misconceptions about the Common Core. According to multiple polls, large percentages of the public mistakenly believe that the Common Core standards were federally mandated; that they were developed by the U.S. Department of Education; and that they prescribe a national curriculum or limit what local teachers are allowed to teach.³⁷ At the state level, the New York Common Core Task Force found that “even vocal opponents of the Common Core have noted that although they may not support the implementation of and assessments related to the Common Core, they are in favor of high standards for students and accountability for schools and districts.”³⁸



“One of the huge benefits of the Common Core is that it gave us someplace to start from and collaborate. Before, we were all just making up our own thing.”³⁹

Katherine Hesla, humanities teacher, Webster, Finger Lakes Region

► Reason #6: The Common Core Standards Have Created Powerful Efficiencies in the Market for Educational Materials

Common Core critics sometimes argue that common standards are “one-size-fits-all,” to the detriment of our children, who are each unique and learn differently. In the case of the Common Core, however, standardization is leading to greater variety in the educational materials available to teachers and students.

Before the Common Core standards, each state had its own set of learning standards and its own definitions of “proficiency” at each grade level. These variations posed challenges for teachers, schools of education, test developers, and textbook companies when they were deciding what material to cover, and for students when they moved from one state to another. Rather than custom-develop materials for each state, publishers of tests and textbooks sought to save on development costs and increase profits by developing generic materials that covered the common elements of multiple states’ standards.⁴⁰ In an attempt to cover multiple states’ standards in a single volume, textbooks often contained more material than could be taught in a single year.⁴¹ Through a series of mergers, the educational publishing industry became increasingly concentrated in the hands of a small number of companies.

The Common Core standards have transformed the market for educational materials. With the adoption of common ELA and math standards in more than 40 states, all the major publishers are competing to create Common-Core-aligned textbooks and tests, and newer/smaller developers are entering the marketplace as well. Groups of states have formed consortia to share the costs of developing standardized tests aligned to the Common Core. During the initial years of implementation, most teachers and districts have struggled to find good materials aligned to the standards,⁴² but over time, the Common Core standards are leading to a greater variety of high-quality materials at lower prices.⁴³ Entities such as NYSED and the non-profit Khan Academy are developing and disseminating free Common Core curriculum materials online, and individual teachers can develop and share their own Common Core-aligned resources with one another via the American Federation of Teachers’ Share My Lesson portal. To aid districts and teachers in choosing among the many options, there are a variety of tools to vet Common Core-aligned curriculum materials, including an organization that provides “free, online, Consumer Reports-style reviews.”⁴⁴ To sum up, with publishers now benefiting from a larger market for each product they develop, and consumers benefiting from a larger selection of better-aligned materials at lower prices, there is tremendous economic momentum behind the Common Core standards.

► Reason #7: You Can Join in Supporting College and Career Readiness in Your Community

New York’s business community is making strategic investments in education. Businesses can send an important signal about their priorities by supporting the Common Core standards. Look at how employers in every industry sector and every region across the state are showing their support for college and career readiness.

Examples of Business – Education Partnerships in New York State

The Orange-Ulster BOCES Career and Technical Education (CTE) Division includes 12 career academies that offer programs in two locations, the Amy Bull Crist Area Education Center and the Regional Education Center at Arden Hill, both located in New York's **Mid-Hudson Region**. All of the CTE curriculum maps are aligned with the **Common Core Standards** as well as business and industry requirements. Every year, the BOCES looks at how to make its Engineering Academy even stronger to support current career options. Beginning this year, they are working with the Nano-Link Center for Nanotechnology Education to integrate nanoscale concepts into their STEM Programs. Local business partners include, **AMSCAN, Chromalloy, Cornerstone Environmental Group, and Spence Engineering**.

A **Tyler Technologies** executive volunteered as a guest speaker at a meeting of Bethlehem Central School District's Parents for Excellence group. He spoke about the skills gap in computer science, then compared the job descriptions of several of the openings in his own corporation with the skills covered in the Common Core standards. The meeting, entitled "Embracing a Higher Standard," brought together district parents to discuss the need for higher academic standards and to come up with strategies parents can use to support the success of the Common Core in the **Capital Region**.

The 2013-14 school year marked the launch of the **Greater Mohawk Valley STEM Hub**, an educational collaborative of education, community organizations, government agencies, and business and industry partners **Exelis, the Griffiss Institute, Indium, King & King Architects, and Siemens Corporation**. The STEM Hub aims to motivate and prepare students to pursue higher education in science, technology, engineering, and math (STEM) fields, with the goal of addressing regional workforce shortages in clean technology, biomedical, nanotechnology, information technologies, cyber security, healthcare, and agriculture. New York's new education standards will give students a stronger foundation in mathematics and science literacy, boosting their chances of success in the program.

"A creative workforce is the key to making our industry and commerce stronger," said Rick Short, director of marketing communications at Indium Corporation. "Indium is very committed to the Greater Mohawk Valley STEM Hub to help drive the region's creative workforce." STEM Hub initiatives include providing project-based instruction to elementary and middle school students, enabling high school students to earn college credit in STEM courses, and providing professional learning opportunities for educators to extend their STEM knowledge and experience.

The flagship P-TECH 9-14 school in **Brooklyn, New York** opened its doors in September 2011, launching an innovative approach to public/private partnerships between the NYC Department of Education, City University of New York, and **IBM**. Students complete a unique 6-year course of study to earn a high school diploma, aligned with the Common Core standards, an AAS degree, and the necessary work-based learning to begin a career in a well-paying job. Six students completed the six-year program in May 2015, after only four years: three chose to attend a competitive college and three accepted positions at IBM with a salary of \$53,000. Five more students completed the program in December 2015, and dozens are in line to complete in May 2016. Focusing on the Common Core standards clearly prepares these students for college and career success.

There are a variety of ways in which local companies support college and career readiness at the Institute of Technology at Syracuse Central P-TECH, via a partnership with the **Manufacturing Association of Central New York**. Businesspeople can act as mentors to students, lead tours of their manufacturing facilities, or visit the school to work with students on manufacturing-related projects and activities. Greg Miller of **Liftech Equipment** said it felt good to get involved in helping the next generation of workers, noting that he was impressed with students' group interaction skills. "This is an easy way for me to get involved in the process of developing the talent pool for our future," he said. "It's a great thing for them to have real-life examples and let them see what they can do in the future."

Orange-Ulster BOCES currently has over 150 contracts with business and industry partners that welcome students into their businesses and share their knowledge, time and experiences with them. Students participate in work-based learning experiences with businesses such as **Healey Brothers Automotive, Toyota, Holiday Inn, Comfort Inn & Suites, Orange Regional Medical Center, and Elant.**

Corning Inc. supports a variety of college- and career-readiness initiatives in the **Southern Tier**. For example, the company:

- provided leadership and funding in the planning and deployment of an inquiry-based, team-centered K-8 science curriculum in the Corning-Painted Post School District;
- provides “Math As A Second Language” summer workshops that give elementary teachers greater confidence in teaching math skills consistent with the **Common Core Standards**;
- awards stipends for local chemistry and physics teachers to attend a 3-week residential program in inquiry-based modeling instruction strategies at Mansfield University; and
- awards scholarships to local high school students to attend Elmira College’s Summer Experience program, where they earn college credit in a STEM course.

Buffalo Public Schools is enhancing a range of CTE programs to focus on sustainability and to adopt the full P-TECH model. BEGREEN moves beyond traditional construction skills to prepare students for emerging middle jobs, requiring an associate degree in one of the skilled trades, including a focus on the green technologies that are the hallmark of 21st century construction.

“P-TECH BEGREEN encourages the development and deployment of sustainable green technology. It also reimagines how our schools educate, train and guide students in emerging industries like solar energy—unlocking the door to tremendous opportunities today and into the future,” said Daniel Montante, president of **Montante Solar**.

Orange-Ulster BOCES works closely with a **CTEC Advisory Council**, a group of local businesspeople who meet several times a year to assist educators in reviewing and refining the CTE Academy programs. The **Health Careers Advisory Committee** includes providers such as **Catskill Regional Medical Center, Wellness Home Care, Valley View Center for Nursing Care and Rehabilitation, Crystal Run Healthcare, St. Luke’s Cornwall Hospital, Orange Regional Medical Center, and MidHudson Regional Hospital of Westchester Medical Center**. The **Trades Advisory Committee** includes business partners such as **Jones Services Company, Hudson Valley Builders & Remodelers Association, Brakewell Steel Fabricators, Armistead Mechanical, Orange County Ironworkers Local 417, and the International Brotherhood of Electrical Workers**. Many students who complete career and technical programs will gain employment with these partners after successfully completing high school.

In July 2015, the **Summer Advanced Manufacturing Experience** celebrated the graduation of its fourth cohort of students. A collaboration of Monroe County, Monroe Community College, Monroe 2-Orleans BOCES, **Finger Lakes Advanced Manufacturers’ Enterprise (FAME)**, and local advanced manufacturing companies, the program is open to 9th and 10th graders who have completed certain math prerequisites. Students work with an engineering and metal fabrication teacher, earn college credit, and gain exposure to career opportunities by touring local advanced manufacturing companies, including **Stefan Sydor Optics, Micro Instrument, OptiPro, Optimax Systems, OGP (Optical Gaging Products), SPX—Lightnin, and Harbec Plastics**.

“I am encouraged that our region understands that the rigor of the Common Core prepares youth for the world of work,” says FAME’s Mike Mandina. “True college and career readiness means that students have the knowledge and skills that lead to employment and true value creation in any occupation.”

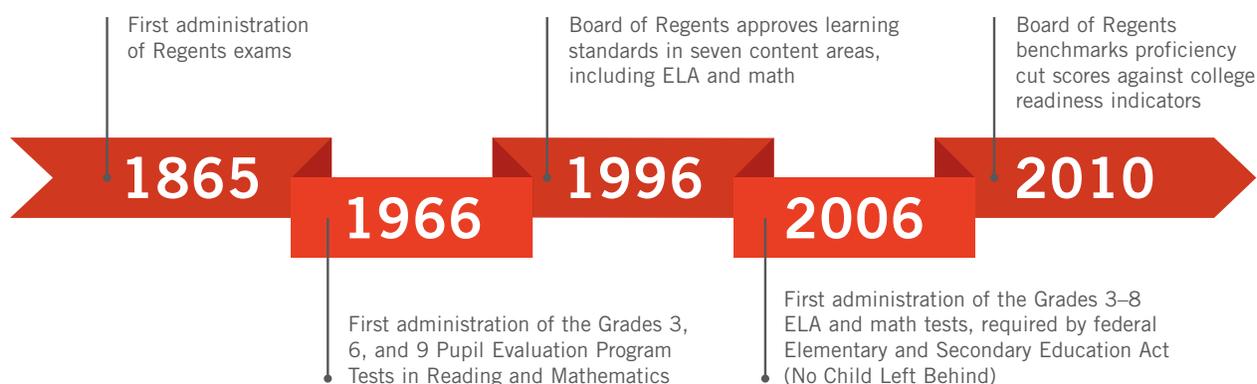
Appendix

Controversy Over Raising Standards in New York

Based on the publicity that the issue has received in recent years, one might think that standards and testing were new to our state, or that the number of tests administered by the state had suddenly increased. But New York has been administering standardized tests for 150 years and has had learning standards since 1996, as shown in Figure 7. The last time the state added a new mandatory test was about a decade ago, when the federal Elementary and Secondary Education Act (No Child Left Behind/ NCLB) began requiring every state to administer ELA and math tests in grades 3 through 8. The number of tests that the state administers has essentially remained the same since then. What has changed is the level of performance that the Board of Regents now expects from students in order for those students to be considered “proficient.” And because a test is used to measure mastery of the standards, the state’s ELA and math tests have been rewritten to “align” with the Common Core standards.

Under NCLB, each state established its own definitions of “proficiency” at each grade level, which is how they set passing scores on those tests. Under the definition of proficiency that New York had in place in 2009, 77 percent of children passed the ELA tests and 85 percent passed the math tests in grades 3-8.⁴⁵ Yet the state’s persistently high rates of college remediation told a different story: fewer than 40 percent of New York’s students were graduating with college- and career-ready ELA and math skills. In other words, the state was telling parents that their children were “proficient” in English and math, yet when those students eventually graduated and enrolled in college, large numbers of them were being labeled in need of remediation and forced to spend their financial aid dollars to re-take high school material.

Figure 7. New York Standards and Testing Milestones



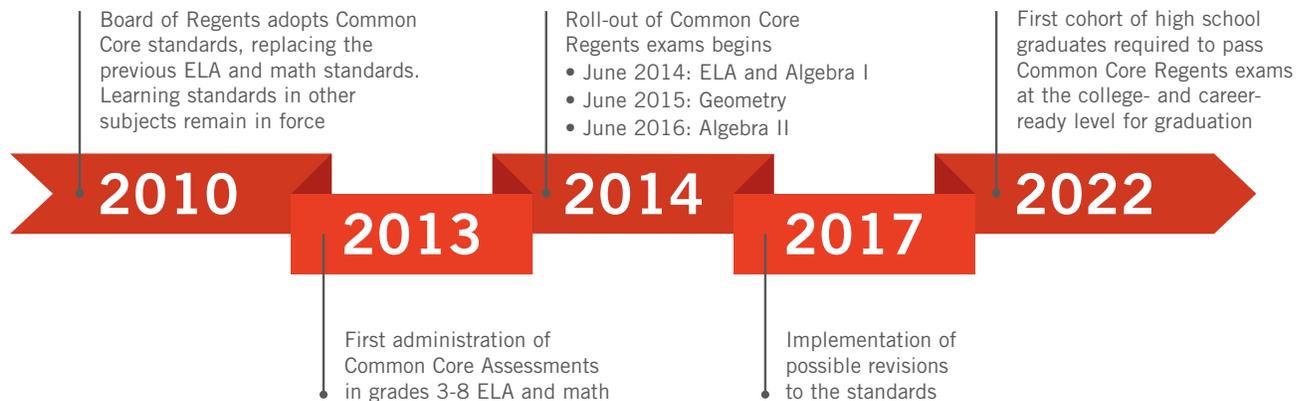
Source: NYSED, <http://www.p12.nysed.gov/assessment/timeline-historyrev.pdf>, <http://www.p12.nysed.gov/ciai/lscorehistory.html>, <http://www.p12.nysed.gov/newsnotes/archive/20100728.html>

In 2010, the Board of Regents made a major first step towards instituting higher standards when they re-set proficiency cut scores against college readiness benchmarks. This means that a student is now rated “proficient” on the grades 3-8 ELA and math tests only if that student is considered on track to graduate from high school and able to enter college without needing remedial courses. The percentage of students scoring “proficient” or above fell sharply, and is now closely in line with college- and career-readiness rates—earning New York top marks from education reform advocates for its transparency: New York has opted to tell the unvarnished truth about whether its students are prepared for the world they will face when they leave school.⁴⁶

Criticism of New York’s move to higher standards has focused on (1) the speed of the rollout, and (2) the use of the Common Core-aligned assessments as the basis for making decisions about individual students or educators. Many parents and educators have argued that New York should have implemented higher

standards gradually, starting with Kindergartners and adding one grade each year thereafter. The state's position is that all students will face higher standards in the world of work, and that New York cannot afford to write off an entire generation while our schools raise education standards at a comfortable pace.

Figure 8. New York is Phasing In the Common Core Standards Over 12 Years



Source: NYSED

Now that the grades 3-8 ELA and math tests reflect higher standards, and far fewer students are labeled “proficient,” it is commonplace to hear complaints about overuse of “high-stakes tests” in our schools. Typically, a test is defined as having “high stakes” if it is used to make important decisions such as whether a student will be promoted to the next grade or awarded a high school diploma.⁴⁷ It is worth reviewing exactly what stakes are attached to New York’s ELA and math tests. For many years (predating the current controversies), New York has required that students pass the Comprehensive English Regents exam and at least one math Regents exam in order to obtain a Regents diploma, so those are indeed high-stakes exams. The ELA and math tests that are administered to all students in grades 3-8 do not carry high stakes for students, however. Per explicit state policy, districts and schools are not encouraged to use the grades 3-8 ELA and math test results as the basis for decisions about placing students in particular courses or promoting them to the next grade. If they do take the test results into consideration, it should be in conjunction with other information, to ensure they are looking at a complete picture of student performance.⁴⁸ The primary way in which schools use individual students’ test results is to identify those who may be struggling and could benefit from extra help (known as “academic intervention services”) in reading or math. In other words, students are identified and offered remedial education early in their school careers, as soon as the need emerges. Many parents and educators object that the state has set expectations above “grade level” and that too many students are therefore being identified as in need of support. In response, the state has given districts some flexibility in deciding which students should receive academic support services.⁴⁹ But the state’s essential position is that the expectations have been set externally, by colleges, employers, and other nations—all of whom were demanding more of high school graduates than our education system had heretofore been delivering—and that New York’s education system must raise standards to keep pace with the changing global economy.

Schools and teachers have numerous methods of determining whether particular students might require academic support, and indeed that is not the primary purpose of the federally mandated annual testing program. Rather, Congress instituted these tests to provide a uniform source of data by which schools, districts, and states can be measured and held accountable for their effectiveness in educating students of different demographic groups. Civil rights groups and advocates for students with disabilities have hailed the importance of the annual ELA and math tests in shining a light on achievement gaps that have, for too many years, left certain student populations behind.

Since 2010, New York has expanded use of the tests from school and district accountability to include teacher and principal accountability as well, and these are the “high stakes” that have generated the bulk of the controversy. As part of its successful bid to win \$700 million under the federal Race to the

Top program, the State Education Department and the New York State United Teachers union negotiated a law that requires districts to conduct thorough annual evaluations of all teachers and principals, and student outcomes are one required component of those evaluations. (The majority of the rating is based on classroom observations by the principal or another trained evaluator.) Teachers are not rated based on the percentage of their students scoring “proficient,” as that would be patently unfair to teachers of needier students. Instead, all teachers of grades 4-8 ELA and math receive a “value-added” score based on how much each student improved on the state test compared with that same student’s performance in previous years. The mathematical model controls for poverty and other factors, and teachers are compared with others who taught similar populations. New York’s new Commissioner of Education, MaryEllen Elia, successfully oversaw a similar system in Hillsborough County, Florida. Hillsborough’s system awarded bonuses to effective teachers and had the support of the local union. But the union backlash in New York has been fierce. All of the NYSUT officers who negotiated the initial law were voted out, and the new leadership organized a campaign urging parents to opt their children out of the grades 3-8 ELA and math tests. A primary rationale behind the opt-out movement is that if too few students take the tests, the data will become useless for evaluation purposes. Of course, the data also become less usable for all other legitimate purposes, including measuring achievement gaps, making policy decisions, and conducting research into educational effectiveness.

In the wake of this campaign, Governor Cuomo convened a Common Core Task Force to study the standards and tests, and the New York State Education Department (NYSED) launched a survey to solicit input on the standards, particularly from parents and teachers. One benefit of such reviews is that they force would-be critics to actually read and become familiar with the standards. According to the Thomas B. Fordham Institute, a think tank that specializes in analyzing education standards, most states that have conducted reviews have found that the Common Core standards are consistent with the research on what skills and knowledge students need to be college- and career-ready, and have therefore ended up making only relatively minor changes to the standards.⁵⁰

The Task Force’s report devotes much attention to describing stakeholders’ frustration surrounding the swift adoption and implementation of the standards, confusion over whether the EngageNY curriculum resources were mandatory (they were not), and complaints about the grades 3-8 ELA and math tests.⁵¹ Congress’s December 2015 reauthorization of the federal Elementary and Secondary Education Act retains the requirement for states to test students annually in ELA and math in grades 3-8, so the tests will remain in place. But in a significant move, the Board of Regents has adopted the Task Force’s recommendation to remove any consequences for teachers’ and principals’ evaluations related to the grades 3-8 ELA and math tests until the 2019-2020 school year.⁵²

“When students know what it means to ‘make a claim’ in their writing they start to write for a purpose and not just because their teacher assigned it. Students have developed as writers. Now feedback and revisions are key and an essential piece to the writing process. The students’ time spent on editing and refining their writing has enabled them to develop a much deeper understanding of content.”

Roberta Faery, high school social studies teacher and curriculum facilitator, Newfane, Western New York

As for the standards themselves, the majority of responses to NYSED’s survey (more than 70 percent) were positive. Moreover, the Task Force explicitly affirmed that New York must “maintain high educational standards” and “build upon the foundation established by the Common Core standards.”⁵³ The aspects of the standards that received the most criticism from survey respondents had to do with the early grades. The Task Force report recommended that NYSED seek input from child development experts to ensure that the standards for the early grades are developmentally appropriate. NYSED has outlined a process whereby committees of educators, parents, students, and--notably--business representatives will recommend revisions to the standards, to be implemented in 2017-18.⁵⁴ The department has pledged to use the feedback it has received “to help us identify where and what changes are needed to make New York’s Common Core ELA and Math Learning Standards stronger.”⁵⁵ Indeed, the best possible outcome of this scrutiny and fine-tuning at the state level would be if it were ultimately to strengthen the Common Core standards and improve their implementation.

Endnotes

¹ New York State Education Department, “Addition of Sections 30-2.14 and 30-3.17 to the Rules of the Board of Regents Relating to Transition Ratings for Teachers and Building Principals During the Transition to Higher Standards through New State Assessments aligned to Revised Learning Standards and a Revised State-Approved Growth Model,” memorandum from Executive Deputy Commissioner Elizabeth R. Berlin to the Board of Regents, December 12, 2015, <http://www.regents.nysed.gov/common/regents/files/1215p12a5.pdf>

² New York Common Core Task Force, *Final Report* (2015), 1, <https://www.ny.gov/programs/common-core-task-force>

³ New York State Education Department, “AIMHighNY,” by Commissioner Mary Ellen Elia (2015), <http://www.nysed.gov/aimhighny>

⁴ New York State Education Department, “State Education Department Releases Spring 2015 Grades 3-8 Assessment Results,” news release, August 12, 2015, <http://www.nysed.gov/news/2015/state-education-department-releases-spring-2015-grades-3-8-assessment-results>

⁵ Noah Berger and Peter Fisher, *A Well-Educated Workforce is Key to State Prosperity*. (Washington, D.C.: Economic Policy Institute, 2013), <http://www.epi.org/publication/states-education-productivity-growth-foundations/>; Patricia Jones, *Are Educated Workers Really More Productive?* (1999), <http://www.cid.harvard.edu/archive/events/cidneudc/papers/jones.pdf>; Joe Cortright, *The City Dividends: How Cities Gain by Making Small Improvements in Metropolitan Performance* (CEOs for Cities, 2008), <https://ceosforcities.org/portfolio/city-dividends/> (The CEOs for Cities network refers to the monetary gains that metropolitan areas can see from increases in college attainment as “the Talent Dividend”).

⁶ Common Core Task Force, *Final Report*, 17.

⁷ Paul E. Peterson and Frederick M. Hess, “Few States Set World-Class Standards,” *Education Next* 8, no. 3 (Summer 2008), <http://educationnext.org/few-states-set-worldclass-standards>

⁸ Paul E. Peterson and Frederick M. Hess, “Keeping an Eye on State Standards: A Race to the Bottom?” *Education Next* 6, no. 3 (Summer 2006): 28-29, <http://educationnext.org/keeping-an-eye-on-state-standards/>

⁹ National Governors Association and Council of Chief State School Officers, “Common Core State Standards Initiative K-12 Standards Development Teams,” 2010, <http://www.nga.org/files/live/sites/NGA/files/pdf/2010COMMONCOREK12TEAM.PDF>

¹⁰ Michael J. Petrilli, “A Common Core Check-Up: Not Dead Yet,” Thomas B. Fordham Institute, December 1, 2015, <http://edexcellence.net/articles/a-common-core-check-up-not-dead-yet>

¹¹ John Kendall, Susan Ryan, Alan Alpert, Amy Richardson, and Amitra Schwols, “State Adoption of the Common Core State Standards: The 15 Percent Rule” (McREL, 2012), <http://files.eric.ed.gov/fulltext/ED544664.pdf>

¹² Petrilli, “Common Core Check-Up.”

¹³ NYSED, “Spring 2015 Grades 3-8 Assessment Results.”

¹⁴ Find these and more quotes from teachers and administrators on NYSED’s “Engaged Voices,” found at <https://www.engageny.org/engagedvoices>

¹⁵ See, e.g., JP Morgan Chase, *Closing the Skills Gap: Preparing New Yorkers for High-Growth, High-Demand, Middle-Skill Jobs* (New York: JP Morgan Chase, 2014), 11, <https://www.jpmorganchase.com/corporate/Corporate-Responsibility/document/54841-JPMC-GAP-REP-AW6.pdf>

¹⁶ My thanks to Jason Weedon and Michael Gilligan of Achieve, who suggested the driver’s license analogy and made many other helpful suggestions on an earlier version of this project.

¹⁷ Howard T. Everson, “Relationship of Regents ELA and Math Scores to College Readiness Indicators,”

memorandum to New York State Commissioner of Education David Steiner, July 1, 2010, http://usny.nysed.gov/scoring_changes/

¹⁸ Common Core Task Force, *Final Report*, 17.

¹⁹ Sally Renfro and Allison Armour-Garb, *Open Admissions and Remedial Education at the City University of New York* (New York: Mayor's Advisory Task Force on the City University of New York, 1999), 76-81, <http://www.nyc.gov/html/records/rwg/cuny/html/admissions.html>

²⁰ Nancy Zimpher, "Opting Out of Our Future," SUNY Big Ideas blog (April 13, 2015), <http://blog.suny.edu/2015/04/opting-out-of-our-future/>

²¹ "Development Process," Common Core State Standards Initiative, <http://www.corestandards.org/about-the-standards/development-process/>; American Diploma Project, *Ready or Not: Creating a High School Diploma That Counts*, 105-107, <http://www.achieve.org/ReadyorNot>

²² David T. Conley, *The Common Core State Standards: Insight into Their Development and Purpose* (Washington, D.C.: Council of Chief State School Officers, 2014), 3, http://www.ccsso.org/Documents/2014/CCSS_Insight_Into_Development_2014.pdf

²³ *Achieve, Understanding the Skills in the Common Core State Standards* (Washington, D.C.: Achieve, 2012), <http://www.achieve.org/publications/understanding-skills-common-core-state-standards>

²⁴ Berger and Fisher, *Well-Educated Workforce*; Jones, *Educated Workers*; Cortright, *City Dividends*.

²⁵ Kenneth Chang, "Expecting the Best Yields Results in Massachusetts," *New York Times*, September 2, 2013, http://www.nytimes.com/2013/09/03/science/expecting-the-best-yields-results-in-massachusetts.html?pagewanted=all&_r=0

²⁶ Berger and Fisher, *Well-Educated Workforce*.

²⁷ E.g., Liana Heitin, "Another Parent's Common Core Math Slam Goes Viral," *Education Week* (Sept. 22, 2015), http://blogs.edweek.org/edweek/curriculum/2015/09/another_parents_common-core_math_slam_goes_viral.html

²⁸ Kathleen Porter-Magee, "Common Core Confusion: It's a Math, Math World," Thomas B. Fordham Institute, May 30, 2014, <http://edexcellence.net/articles/common-core-confusion-it%E2%80%99s-a-math-math-world>

²⁹ New York State Education Department, "Field Memo: Transition to Common Core Assessments," memo from Deputy Commissioner Ken Slentz to superintendents (March 6, 2013), <http://www.engageny.org/resource/field-memo-transition-to-common-core-assessments>

³⁰ Rebecca Klein, "5 of the Most Extreme Claims Made Against Common Core in the Last 5 Years," *Huffington Post* (June 4, 2015), http://www.huffingtonpost.com/2015/06/04/common-core-birthday_n_7506018.html

³¹ Elois Zeanah, "Obama Plans to Indoctrinate Children Through Common Core," <https://www.youtube.com/watch?v=ELqEGx46liw>

³² College Board, "SAT Suite of Assessments: Key Content Changes," <https://collegereadiness.collegeboard.org/about/key-changes>

³³ Center for American Progress, "Goals of the Common Core Are as American as Apple Pie, But Misinformation Remains Widespread, New PPP Poll Reveals," press release (August 18, 2015), <https://www.americanprogress.org/press/release/2015/08/18/119460/release-goals-of-the-common-core-are-as-american-as-apple-pie-but-misinformation-remains-widespread-new-ppp-poll-reveals/>

³⁴ Ibid.

³⁵ Catherine Gewertz, "Poll: Nearly Half of American Adults Haven't Heard of Common-Core Standards," *Education Week Curriculum Matters Blog* (June 18, 2014), http://blogs.edweek.org/edweek/curriculum/2014/06/new_poll_finds_httpsnbcmediam.html?r=2015039737&preview=1

³⁶ Paul E. Peterson, "Comparing Education Next and PDK Polls," *Education Next* (August 21, 2014), <http://educationnext.org/comparing-pdk-education-next-polls/>

- ³⁷ Center for American Progress, “National Survey Results” (Raleigh: Public Policy Polling, 2015), <https://cdn.americanprogress.org/wp-content/uploads/2015/08/17135314/PPP-Common-Core-Poll-Embargoed-August-2015.pdf>
- ³⁸ Common Core Task Force, *Final Report*, 17.
- ³⁹ Leslie Brody, “The Common Core Has Its Supporters,” Wall Street Journal, February 7, 2016, <http://www.wsj.com/articles/the-common-core-has-its-supporters-1454898327>
- ⁴⁰ Allison Armour-Garb, *Intergovernmental Approaches for Strengthening K-12 Accountability Systems* (Albany: Rockefeller Institute, 2007), 120, http://www.rockinst.org/pdf/education/2007-10-29-edited_transcript_intergovernmental_approaches.pdf; Thomas Toch, *Margins of Error: The Education Testing Industry in the No Child Left Behind Era* (Washington, D.C.: Education Sector, 2006), 14-16, https://static.newamerica.org/attachments/9962-margins-of-error/Margins_of_Error.890089fc8aa346028f1a0f6f10d79517.pdf
- ⁴¹ Rudy Crew, Paul Vallas, and Michael Casserly, “The Case for National Standards in American Education,” *Education Week* (March 5, 2007), <http://www.edweek.org/ew/articles/2007/03/05/26crew.h26.html>
- ⁴² Kathleen Porter-Magee and Victoria Sears, “EngageNY’s ELA Curriculum Is Uncommonly Engaging” (Washington, D.C.: Thomas B. Fordham Institute, May 20, 2015) (citing EdReports.org), <http://edexcellence.net/articles/engagenys-ela-curriculum-is-uncommonly-engaging>
- ⁴³ See Joshua Bleiberg and Darrell West, *In Defense of the Common Core Standards* (Washington, D.C.: Brookings, 2014), 7-10 (discussing benefits of standards from economic and innovation perspectives), http://www.brookings.edu/~/media/research/files/papers/2014/03/common-core-state-standards/bleiberg_west_common-core-state-standards.pdf
- ⁴⁴ Magee and Sears, “Uncommonly Engaging” (citing EdReports.org).
- ⁴⁵ Philissa Cramer, “Test Scores Fall Sharply Statewide, But NYC Fares Relatively Well,” *Chalkbeat New York*, August 7, 2013, <http://ny.chalkbeat.org/2013/08/07/test-scores-fall-sharply-statewide-but-nyc-fares-relatively-well/#.VmmSvWSrSt8>
- ⁴⁶ Jessica Poiner, “Are Parents and Taxpayers Being Misled? The Proficiency Illusion Strikes Again,” Thomas B. Fordham Institute, May 14, 2015, <http://edexcellence.net/articles/are-parents-and-taxpayers-being-misled-the-proficiency-illusion-strikes-again>
- ⁴⁷ American Psychological Association, *Appropriate Use of High-Stakes Testing in Our Nation’s Schools* (Washington, D.C.: APA, September 2000), <http://www.apa.org/pubs/info/brochures/testing.aspx>
- ⁴⁸ New York State Education Department, letter from Commissioner John B. King, Jr. to superintendents (March 24, 2014), <http://www.p12.nysed.gov/assessment/ei/2014/lettertosuperintendent-14.pdf>
- ⁴⁹ New York State Education Department, letter from Acting Deputy Commissioner Charles A. Szuberla, Jr. to superintendents (August 28, 2015), <http://www.p12.nysed.gov/sss/documents/AcademicInterventionServicesRequirementsfor2015-16.pdf>
- ⁵⁰ Geoff Decker, “Ahead of State’s Common Core Review, Commissioner Elia Looks Outside New York,” *Chalkbeat New York*, August 6, 2015, <http://ny.chalkbeat.org/2015/08/06/new-york-to-join-long-list-of-states-reviewing-common-core-standards/#.VoDCisArLR0>
- ⁵¹ Common Core Task Force, *Final Report*.
- ⁵² NYSED, “Transition to Higher Standards.”
- ⁵³ Common Core Task Force, *Final Report*, 1.
- ⁵⁴ New York State Education Department, “Revision and Implementation of New English Language Arts (ELA) and Mathematics Standards,” memorandum from Senior Deputy Commissioner Jhone M. Ebert and Deputy Commissioner Angelica Infante-Green to the Board of Regents, February 22, 2016, <http://www.regents.nysed.gov/common/regents/files/216p12d4.pdf>
- ⁵⁵ NYSED, “AIMHighNY”.

Bibliography

- Achieve. *Understanding the Skills in the Common Core State Standards*. Washington, D.C.: Achieve, 2012. <http://www.achieve.org/publications/understanding-skills-common-core-state-standards>
- American Diploma Project. *Ready or Not: Creating a High School Diploma That Counts*. Washington, D.C.: American Diploma Project, 2004. <http://www.achieve.org/ReadyorNot>
- Armour-Garb, Allison. *Intergovernmental Approaches for Strengthening K-12 Accountability Systems*. Albany: Rockefeller Institute of Government, 2007. http://www.rockinst.org/pdf/education/2007-10-29-edited_transcript_intergovernmental_approaches.pdf
- Berger, Noah and Peter Fisher. *A Well-Educated Workforce is Key to State Prosperity*. Washington, D.C.: Economic Policy Institute, 2013. <http://www.epi.org/publication/states-education-productivity-growth-foundations/>
- Bleiberg, Joshua and Darrell West. *In Defense of the Common Core Standards*. Washington, D.C.: Brookings, 2014. http://www.brookings.edu/~media/research/files/papers/2014/03/common-core-state-standards/bleiberg_west_common-core-state-standards.pdf
- Common Core State Standards Initiative website. www.corestandards.org
- Conley, David T. *The Common Core State Standards: Insight into Their Development and Purpose*. Washington, D.C.: Council of Chief State School Officers, 2014. http://www.ccsso.org/Documents/2014/CCSS_Insight_Into_Development_2014.pdf
- Cortright, Joe. *The City Dividends: How Cities Gain by Making Small Improvements in Metropolitan Performance*. CEOs for Cities, 2008. <https://ceosforcities.org/portfolio/city-dividends/>
- Hess, Frederick M. and Whitney Downs. *Partnership is a Two-Way Street: What It Takes for Business to Help Drive School Reform*. U.S. Chamber of Commerce, 2011. <https://www.uschamberfoundation.org/publication/partnership-two-way-street-what-it-takes-business-help-drive-school-reform>
- Jones, Patricia. *Are Educated Workers Really More Productive?* 1999. <http://www.cid.harvard.edu/archive/events/cidneudc/papers/jones.pdf>
- JP Morgan Chase. *Closing the Skills Gap: Preparing New Yorkers for High-Growth, High-Demand, Middle-Skill Jobs*. New York: JP Morgan Chase, 2014. <https://www.jpmorganchase.com/corporate/Corporate-Responsibility/document/54841-JPMC-GAP-REP-AW6.pdf>
- Kendall, John, Susan Ryan, Alan Alpert, Amy Richardson, and Amitra Schwols. *State Adoption of the Common Core State Standards: The 15 Percent Rule*. McREL, 2012. <http://files.eric.ed.gov/fulltext/ED544664.pdf>
- Peterson, Paul E. and Frederick M. Hess. "Few States Set World-Class Standards." *Education Next* 8, no. 3 (Summer 2008). <http://educationnext.org/few-states-set-worldclass-standards>
- "Keeping an Eye on State Standards: A Race to the Bottom?" *Education Next* 6, no. 3 (Summer 2006): 28-29. <http://educationnext.org/keeping-an-eye-on-state-standards/>
- Petrilli, Michael J. "A Common Core Check-Up: Not Dead Yet." Thomas B. Fordham Institute. December 1, 2015. <http://edexcellence.net/articles/a-common-core-check-up-not-dead-yet>
- Public Policy Institute of New York State. "Workforce Development Survey." Albany: Public Policy Institute of New York State, 2014.
- New York Common Core Task Force. *Final Report*. 2015. <https://www.governor.ny.gov/sites/governor.ny.gov/files/atoms/files/NewYorkCommonCoreTaskForceFinalReport2015.pdf>
- New York State Education Department website, <http://www.nysed.gov>
- New York State Education Department, EngageNY website, <http://www.engageny.org/>

Renfro, Sally and Allison Armour-Garb. *Open Admissions and Remedial Education at the City University of New York*. New York: Mayor's Advisory Task Force on the City University of New York, 1999.
<http://www.nyc.gov/html/records/rwg/cuny/html/admissions.html>

Thomas B. Fordham Institute website, <http://edexcellence.net/>

Toch, Thomas. *Margins of Error: The Education Testing Industry in the No Child Left Behind Era*. Washington, D.C.: Education Sector, 2006. https://static.newamerica.org/attachments/9962-margins-of-error/Margins_of_Error.890089fc8aa346028f1a0f6f10d79517.pdf