Center for American Progress

New York State Office of the Governor Common Core Implementation Panel

"Common Core Implementation Best Practices"

February 19, 2014 Carmel Martin Executive Vice President for Policy Center for American Progress

Introduction

I want to thank the governor for inviting me to join you today and for his leadership on education. I would also like to thank the panel members for their willingness to serve.

The Center for American Progress believes that this is the biggest education reform in decades. If done well, it will lead to dramatic improvements in educational opportunities. These opportunities, we believe, are essential to building a strong middle class and creating an economy that works for all, not just those at the top.

But standards are meaningless if they are not translated into effective instruction. New York has been a leader on some aspects of implementation, but efforts have not been consistently rigorous across the state.

There are several areas that we believe the state's leaders must aggressively tackle in order to make that translation from standards to effective instruction:

- 1. Invest in professional development
- 2. Invest in time—time for teachers to collaborate and learn new ways to adjust instruction to meet the challenge of the new standards
- 3. Engage teachers and parents around the value of the standards and the changes needed to implement them—this will require an aggressive campaign
- 4. Invest in tools to enrich instruction

1 Center for American Progress | Common Core Implementation Best Practices

These initiatives will require all of the leaders in this space across the state to come together: the governor, the legislature, the commissioner, the Board of Regents, union leadership, and district leadership. And as you move forward, you must listen closely to the advice of classroom leaders—namely teachers—as well as parents so they can provide students with the supports they need to be successful.

The case for the Common Core

Many of you know the numbers as well or better than I do. Nationwide, too many of today's high school graduates are not ready for college or the workforce. One out of four high school graduates requires remedial education to enroll in college courses.¹

Remedial rates for New York students are also high. More than 25 percent of New York students who enter the state's college system are required to take remedial courses.² At two-year community colleges, more than half of students take remedial courses, which rises to more than 80 percent of students in the highest needs communities.³

Prior to the implementation of the new standards in New York, the majority of students were deemed proficient on state exams,⁴ but performance on national assessments tells a different story. According to state tests, 62 percent of students are proficient in math, but only 32 percent are proficient according to the National Assessment of Educational Progress, or NAEP.⁵ Similarly, 51 percent of students are proficient in English language arts according to state tests but only 35 percent are on NAEP.⁶ And while 74 percent of New York students graduate from high school in four years, only 35 percent graduate with the English and math skills necessary to succeed and enroll in college.⁷

That is why educators nationwide teamed up with the National Governors Association; the Council of Chief State School Officers, or CCSSO; and Michael Cohen's organization, Achieve, to develop the Common Core State Standards, or CCSS—an effort to better prepare our students with the math and reading skills they need for collage and career success.

Forty-five states and the District of Columbia have adopted these achievement standards since 2010 to help raise the bar for student achievement nationwide.⁸

The power of the common core

The Common Core gives students not just the knowledge but also the skills they need for success. Twenty-first century learners need critical thinking skills, the ability to use data to problem solve and make arguments, the capacity to digest complex text, and the ability to understand the why and not just the how of mathematical equations. Standards give parents confidence that the curricula used to teach their children are based on evidence of what they will need to be successful—not just in college but also in their careers and lives.

To be an engaged member of our democracy, children need to learn the skills I mentioned earlier: problem solving, analytical thinking, and the use of data in decision making.

Standards also give teachers the ability to teach these useful skills rather than a dumbeddown curriculum driven by fill-in-the-bubble tests. We also hope the Common Core can allow teachers greater—not less—freedom to determine how best to teach while relying on an evidence-based process for determining what to teach.

The Common Core also provides states and district leaders with the opportunity to take advantage of economies of scale in developing better assessments, better instructional materials, and better technology-based tools to improve instruction.

At CAP, we applaud New York for being at the forefront of this effort. We urge you to move forward with resolve and determination toward effective implementation. Frankly, adoption was easy; implementation is the hard part. But you should march forward and not turn back.

Big change is hard. We are asking a lot of our children, our teachers, and our leaders, but our children are worth it.

For an example, see the progress in Massachusetts, which aggressively increased its standards in the 1990s.⁹ As a former staffer for Sen. Edward Kennedy (D-MA), I may not be the most unbiased judge of that state's efforts, but I believe the numbers back me up when I say that it has led to their success as a top-performing state in providing high-quality education. They experienced many obstacles and pushed forward. We should look to their experience to inform today's implementation efforts.

Teachers are on the frontline of this work. In many places across the country, teachers have expressed support for the Common Core and demonstrated their belief that these standards will benefit students. For instance, polls conducted by the National Education Association, the American Federation of Teachers, and Scholastic all report similar results: Teachers think positively about the Common Core.¹⁰ Specifically in New York, 67 percent of teachers believe that the Common Core standards will improve students' ability to think critically and use reasoning skills.¹¹ This is an important finding because ultimately it is teachers who will make sure that students get the benefit of the Common Core's higher expectations.

There are many examples of where Common Core implementation has been done well and teachers are welcoming the new standards. Just ten miles from Albany in Watervliet, teachers and administrators have embraced the Common Core despite the challenge of teaching new material and report noticeable improvements in their students' academic achievement.¹² In East Moriches, the district's teachers began working on teaching the Common Core standards in 2011 and started by working in teams to understand current teaching practice, decide what the big ideas were, and then create new protocols to teach the more rigorous standards. The new protocols have invigorated both new and veteran teachers to improve instruction, according to the superintendent. As they work through the protocols, teachers are asking for more time for professional development and collaboration, as they let go of old instructional practices and incorporate new ones to help students learn better.¹³

But we are also hearing from around the country—and certainly here in New York that teachers are concerned about the lack of support they have received and the lack of teacher engagement in the implementation process. For example, we hear stories of fifth-grade teachers on Long Island who have been handed a new, scripted 500-page curriculum without any training to adapt or apply to their practice.¹⁴ These concerns have led your teachers association to question moving forward with the new standards.

It is important to acknowledge that implementation of the Common Core comes when states and districts are revamping their teacher evaluation systems and when new, more rigorous Common Core-aligned tests are entering the scene. We appreciate the challenges of doing both well but hope that states and districts will remain steadfast in the implementation of improved educator evaluation systems. Teachers and leaders need the feedback that evaluation systems will yield, even during the implementation of the standards. Evaluation results can help identify opportunities for professional development and inform strategic staffing decisions, such as matching strong teachers with students who need them most. But to get it right, we need to make sure that teachers have the resources and support they need to succeed at their jobs.

The Common Core standards are a massive shift in terms of content and teaching strategies. Teachers need to be able to trust the evaluation system and believe that it is fair.

Recommendations for effective implementation

1. Invest in professional development

A much larger investment in professional development is needed to help teachers prepare and have the resources they need to teach to the Common Core standards.

Some states have already made this critical investment. California budgeted \$1.25 billion in the 2013-14 school year to assist school districts with implementing the Common Core standards, including professional development, instructional materials, and enhancements to technology.¹⁵ Tennessee and Kentucky have also made new investments of this kind.¹⁶

States and districts are investing their professional development dollars in different ways. In Tennessee, for example, the state education department trained 42,000 teachers during the 2012-13 school year and the summer of 2013, which accounts for about two-thirds of the state's teacher workforce.¹⁷ The trainings were led by the state's most effective teachers, who competed to be selected for these leadership roles. The trainings were optional, but the turnout was enormous.

Rhode Island's Common Core Ambassadors team is a group of experienced local educators that will visit communities throughout the state to offer their expertise about how the CCSS will impact teachers and students in Rhode Island schools.¹⁸

In Delaware, the state department of education has created an initiative called Common Ground for the Common Core, which brings school and district representatives from a variety of districts together to work on how to implement the standards in classrooms.¹⁹ New York has provided a similar "training the trainer" initiative through the Network Team Institutes for the past three years.²⁰

Based on our review of efforts in other states, we recommend that New York continue these efforts but ensure that the individuals selected for the program are competitively chosen and given additional support at the district level.

We would also urge you to look at models of effective local-level engagement with teachers from around the country. For example, the Cleveland Metropolitan School District, in partnership with the Cleveland Teachers Union, created a district-wide, centrally located Common Core Training Center, where teachers are trained in a real classroom and school.²¹

The state needs to empower teachers and their representatives in this work. Teacher leaders need to step forward and own implementation of the standards.

In Massachusetts, the state began its work on the Common Core by bringing together teachers and other educators to meld the state standards with the Common Core. Now, these teachers collaborate to create events and resources to help teachers learn about the standards and have support to teach them. One Saturday event last fall, which was hosted by the state university, the state teachers association, and Teach Plus, drew 500 participants to talk about how to turn standards into instruction.²²

The National Education Association, recognizing the importance of supporting teachers and the Common Core, awarded nine first-round grants from its \$60 million Great Public Schools Fund to state and local affiliates working on implementing the standards.²³ The grant awardees included:

- The Maryland State Education Association, which will use its \$100,000 grant to support a cadre of 46 leaders in delivering professional development and engagement activities around the Common Core²⁴
- The state education association in Illinois, which received \$222,000 to lead a trainthe-trainer program for 20 union members in five locations around the state who can support educators in their efforts to implement the Common Core²⁵

2. Invest in time

Teachers also need more time for professional development and collaboration with their peers. Linda Darling-Hammond—one of the members of this panel—writes in her book, *The Flat World and Education*, that American teachers typically have little to no time to work with colleagues during the school day, and they generally receive only three to five hours weekly to use for independent planning.²⁶

If we compare the use of teachers' time across countries with high-performing education systems, we can draw some useful conclusions. For example, the number of weeks and days that U.S. teachers work do not differ wildly from other high-performing nations.²⁷ However, U.S. teachers spend more time teaching in front of the classroom compared to high-performing countries—over 1,000 hours per school year in the United States compared to Finland's 550 to 700 hours.²⁸ For teachers in many European and Asian countries, instruction generally takes up less than half of their working day, while the remaining time—typically about 15 to 20 hours per week—is spent on tasks related to teaching, such as collaboration with colleagues and meeting with students and parents.²⁹

CAP and the National Center on Time and Learning released a report last month highlighting how more and better learning time can support effective implementation of the Common Core by providing not only more time for students but also more time for teachers' professional development, collaboration, and planning.³⁰

In a study of 30 high-achieving, high-poverty schools with longer school days and years, more than one-third reported scheduling 15 or more professional development and planning days, whereas the local schools in surrounding districts rarely exceeded five or six professional development and planning days.³¹

Orchard Gardens K-8 Pilot School in Boston, Massachusetts, has increased learning time for students and incorporated 100-minute highly structured teacher collaboration meetings that allow teachers to plan lessons and share best practices as they implement the new standards.³²

Again, this is an area where New York has already made progress. Focused on its lowest performing schools, the New York State Education Department has required priority schools to expand the learning day by at least 25 percent for all students in a school building.³³ In January 2013, Gov. Cuomo proposed to expand the school day by creating a competitive grant program for schools that develop approved plans to improve student achievement that includes extending the school day or year by at least 25 percent. The New York Legislature funded that \$20 million grant program in March 2013 and released a request for proposals. The first grantees will be announced early this year. Additional time for teacher collaboration and professional development is an important component that grantees must address.³⁴

Additional time for students to catch up to more rigorous content is particularly important in low-performing schools. But especially during this time of transition, additional time for teachers in all schools is also needed as they learn new content and revamp their instructional techniques to teach their students new skills that require inquiry-based learning.

We strongly support the extended learning time approach. But there are other strategies for increasing teachers' time for development and collaboration, including paying teachers during the summer or after school or giving them lower course loads.

3. Engage parents and teachers

Parents and communities need to better understand the importance of the high expectations that the Common Core standards has for students.

Kentucky developed a detailed plan to implement the standards that involved creating a communications strategy, building educator support, and bringing together a network of partners. This plan highlighted the state's leadership and long history of state-mandated assessment and accountability, which preceded No Child Left Behind. Kentucky then developed a website about the state's new law that overhauled the assessment and accountability system and used webcasts, blogs, email communications with teachers, online publications and editorials, parent-friendly brochures, and question-and-answer compilations to communicate the standards to the public. The state also partnered with many education organizations, nonprofits, and business leaders—such as the Kentucky Chamber of Commerce—and had robust teacher engagement, including a teacher effectiveness steering committee, teacher workgroups, professional learning communities, and regional leadership networks.³⁵

Kentucky also developed a repository in which teachers could access the Common Core standards, resources, professional learning aligned with the standards, digital textbooks, and assessment items. They also provided online one-on-one training and collaboration through Common Core 360.³⁶

In partnership with the Tennessee State Collaborative on Reforming Education, or SCORE, Tennessee formed a Common Core Leadership Council to give districts a voice in the transition to the new standards. The council is tasked with advising the state department of education on assessment, creating professional development resources, shaping CCSS pilot programs, and becoming regional experts and leaders.³⁷

4. Invest in tools

The development of curricula and instructional tools is also necessary. New York has already done some excellent work on this front, but more is needed. In comparison to other states, New York has invested significant time and resources in the quality, rigor, and availability of comprehensive tools and resources.

The EngageNY website, for example, has a rich collection of materials and lessons for teachers to use, plus professional development modules, all designed around the Common Core. New York has also invested significant resources in providing optional "module curricula" for teachers in English language arts and math. We applaud New York for developing these resources and making them open and publicly available. Other districts and states across the nation use EngageNY as a resource for their transition to the Common Core.³⁸

However, there is still room for improvement. EngageNY could include a better system to judge the quality and grade appropriateness of materials. The site in general could also be more user friendly.

There are many other examples of leveraging economies of scale and developing instructional tools from around the country. The Literacy Design Collaborative, for example, is a web-based library of modules, lessons, videos, assessments, and other materials, organized and designed so that any teacher using the Common Core can find support for instruction in any standard.³⁹

Inside Mathematics is another website that collects the best work of various mathematics initiatives into groups of tasks, materials, and assessments aligned with the Common Core by grade and by standard.⁴⁰ In a report for the Center for American Progress, Linda Darling-Hammond pointed to teachers' use of the formative assessment for students available at this site as an important resource for professional learning.⁴¹

As the state moves forward with instructional tool development, you cannot ignore the power of technology in creating next-generation blended learning opportunities.

Districts and schools need the state's support to further develop their technological capacity to support the new computer-based Common Core assessments. Gov. Cuomo's \$2 billion bond proposal, if approved by voters in November, will help make schools wireless, fund tablets and wired whiteboards, and expand programs that allow students to use technology at their own pace.⁴² We support President Barack Obama's proposal to provide additional federal funds through the Federal Communications Commission, or FCC.⁴³

States have also made a substantial investment in their technological infrastructure. Rhode Island, for example, is using a \$20 million technology infrastructure bond to expand wireless access to classrooms across the state during the next several years.⁴⁴

Other states are leveraging economies of scale to save districts money on infrastructure and technology. Spearheaded by the Bloomington Public School District, the Illini Cloud is an initiative that allows participating schools and districts in Illinois to save 30 percent to 60 percent in costs by sharing hardware, applications, data storage, and IT support.⁴⁵ Over 200 Illinois districts have also teamed up to share software and technology in a nonprofit cloud-computing consortium for schools.⁴⁶

There are challenges that the state must address that come with new technology. Teachers need to feel prepared to work with new technologies and help administer the computerbased assessments. Concerns about data privacy should also be addressed. The Family Educational Rights and Privacy Act, or FERPA, is an outdated law; we need to protect student privacy but also appreciate that it was drafted before the advent of computers.⁴⁷

The transition to the Common Core should also lead to better, fewer, and fairer tests. The new Common Core-aligned tests move beyond traditional multiple-choice tests. They are performance based and will require students to use their critical thinking, problem-solving, and writing skills.

The promise of these new tests should encourage states and districts to roll back other unnecessary tests. Students are subject to a multitude of tests; state and federal law require some of them but not many.

District-level testing, which is often self-inflicted, can add hours of testing time. The average seventh-grade student in Denver, Colorado, for example will spend 14 hours on district-level assessments in addition to the state test.⁴⁸ Compare this to Baltimore, Maryland, where seventh graders are likely to spend only 1.5 hours on district tests.⁴⁹ While some districts are taking the initiative to reduce unnecessary tests, few states have any comprehensive efforts underway.

New York, however, applied and was approved for a double-testing waiver from the U.S. Department of Education, which would allow the state to administer only the pilot test of the new Partnership for Assessment of Readiness for College and Careers, or PARCC assessments, instead of both the pilot test and the state's current assessment.⁵⁰

New York is also awarding "Teaching is the Core" grants to school districts that review their local assessment practices to ensure that local tests help inform instruction and eliminate those that do not.⁵¹ And the Board of Regents took steps last week to eliminate traditional standardized tests for kindergarten through second grade; it also established a one percent cap on time for locally selected standardized testing.⁵²

These are important steps that should be recognized.

Conclusion

In closing, I would like to thank the commissioners for their attention today and want to let you know that the Center for American Progress is happy to help in any way we can as you move forward with your work.

There are many things that must happen in order to effectively implement the standards but we believe that professional development, time for teachers, parent engagement, and development of instructional tools are four of the most important areas.

The work is challenging but most efforts worth doing are a challenge. It is appropriate to expect more of our children and our educators. But we must also expect more from policy leaders: They must deliver the resources and supports needed to translate standards into instruction. Just as importantly, we must help parents understand the goals behind the standards and engage them in the efforts to support students and teachers.

Endnotes

- ACT, "The Condition of College & Career Readiness" (2012), available at http://media.act.org/documents/CCCR12-NationalReadinessRpt.pdf.
- 2 New York State Education Department, "The Path Forward: Common Core Learning Standards, Assessments, and Teacher & Principal Evaluation in New York State" (2014), available at http://www.regents.nysed.gov/meetings/2014/ February2014/214p12hea3.pdf.

3 Ibid.

- 4 The New York Times, "The Common Core in New York," February 14, 2014, available at http://www.nytimes. com/2014/02/15/opinion/the-common-core-in-new-york. html?_r=0.
- 5 National Center for Education Statistics, A First Look: 2013 Mathematics and Reading (U.S. Department of Education, 2013), available at http://nces.ed.gov/nationsreportcard/ subject/publications/main2013/pdf/2014451.pdf; U.S. Department of Education, "ED Data Express: New York State Snapshot," available at http://eddataexpress.ed.gov/statereport.cfm/state/NY/ (last accessed February 2014).
- 6 National Center for Education Statistics, A First Look; U.S. Department of Education, "ED Data Express: New York State Snapshot."
- 7 New York State Education Department, "The Path Forward."
- 8 Common Core State Standards Initiative, "In the States," available at http://www.corestandards.org/in-the-states (last accessed February 2014).
- 9 Neera Tanden and Paul Reville, "Taking a Page from the Bay State's Education Playbook," U.S. News and World Report, December 4, 2013, available at http://www.usnews.com/ opinion/articles/2013/12/04/massachusetts-proves-thecommon-core-education-standards-can-work.
- 10 American Federation of Teachers, "AFT Poll of 800 Teachers Finds Strong Support for Common Core Standards and a Moratorium on Stakes for New Assessments Until Everything Is Aligned," Press release, May 3, 2013, available at http://www.aft.org/newspubs/press/2013/050313.cfm; National Education Association, "Poll: Three out of Four Teaches Support Common Core State Standards," Press release, September 12, 2013, available at http://www.nea.org/home/56687.htm; Greg Toppo, "Teachers praise new standards for classroom learning," USA Today, October 4, 2013, available at http://www.sation/2013/10/04/teachers-common-core-gates/2911923/.
- 11 Scholastic, "Primary Sources 2013 Preview: New York," available at http://www.scholastic.com/ primarysources/2013pre-view/state-ny.htm (last accessed November 2013).
- 12 Kristen Brown, "Finding a way to work it out," *The Times Union*, December 14, 2013, available at http://www.timesunion.com/local/article/Finding-a-way-to-work-it-out-5065262.php.
- 13 Charles T. Russo and Emily Peterson, "Building a Learning Lab around the New York State Common Core Curriculum: Adopting not Adapting," EngageNY, December 10, 2013, available at http://www.engageny.org/resource/buildinga-learning-lab-around-the-new-york-state-common-corecurriculum-adopting-not.
- 14 Randi Weingarten, "Will States Fail the Common Core," available at http://www.aft.org/newspubs/press/nytimes/ column110313.cfm (last accessed February 2014).
- 15 John Fensterwald, "Districts to get \$1.25 billion this fall to implement Common Core," EdSource, June 23, 2013, available at http://edsource.org/today/2013/districts-to-get1-25-billion-this-fall-to-implement-common-core/34042#. UwgXHYWtKSM.

- 16 State Collaborative on Reforming Education, "2013-2014 State of Education in Tennessee: The Volunteer State at a Crossroads," (2014), available at http://www.maryvilleschools.org/cms/lib07/TN01916237/Centricity/Domain/62/ TN%20SCORE%20State%200f%20Education%202013-14. pdf; Barnett Berry and others, "Transforming Professional Learning in Kentucky: Meeting the Demands of the Common Core State Standards" (2012), available at http:// learningforward.org/docs/commoncore/transformingprofessionallearning inkentucky.pdf.
- 17 State Collaborative on Reforming Education, "2013-2014 State of Education in Tennessee."
- 18 Rhode Island Department of Education, "Ready, Set, Go! Common Core Ambassadors Project," available at https:// www.ride.ri.gov/Portals/0/Uploads/Documents/Instructionand-Assessment-World-Class-Standards/Transition/Presentation_Request-Protocol.pdf (last accessed February 2014).
- 19 The Delaware Educator, "Bringing Common Core Standards to Life," Summer 2013, available at http://www.doe.k12. de.us/news/de/DelawareEducator_Summer2013-8-12email.pdf.
- 20 EngageNY, "Professional Development and Network Teams," available at http://www.engageny.org/network-teams (last accessed February 2014)
- 21 Mark Baumgartner, "Introducing the Common Core State Standards in Cleveland," ¡Colorín colorado!, 2012, available at http://www.colorincolorado.org/article/49440/.
- 22 Teach Plus, "Core in the Classroom: From Standards to Practice," available at http://www.teachplus.org/page/corein-the-classroom-from-standards-to-practice---september-28-2013-234.html (last accessed February 2014).
- 23 Tim Walker and Celeste Busser, "NEA Announces \$60 Million Fund to Invest in Educators' Best Ideas," NEA Today, January 23, 2014, available at http://neatoday.org/2014/01/23/neaannounces-60-million-fund-to-invest-in-educators-bestideas/.
- 24 National Education Association, "Great Public Schools Grants," available at http://www.nea.org/RYHGrants (last accessed February 2014).

25 Ibid.

- 26 Linda Darling-Hammond, The Flat World and Education: How America's Commitment to Equity Will Determine Our Future (New York: Teachers College Press, 2010).
- 27 Jessica Edwards and Jennifer Davis, "International Perspectives on the Use of Learning Time in High-Performing and Rapidly Improving Education Systems." Working Paper (National Center on Time & Learning, 2012).
- 28 Ibid
- 29 Ibid.
- 30 David A. Farbman, David J. Goldberg, and Tiffany D. Miller, "Redesigning and Expanding School Time to Support Common Core Implementation" (Washington: Center for American Progress, 2014), available at http://www. americanprogress.org/wp-content/uploads/2014/01/ CommonCore-reprint.pdf.
- 31 Claire Kaplan and Roy Chan, "Time Well Spent: Eight Powerful Practices of Successful, Expanded-Time Schools" (Boston: National Center on Time & Learning, 2011) available at http://www.timeandlearning.org/?q=time-well-spent-eightpowerful-practices-successful-expanded-time-schools.
- 32 Roy Chan, "Transforming Schools through Expanded Learning Time: Orchard Gardens K-8 Pilot School, Update 2013" (Boston: National Center on Time & Learning, 2013) available at http://www.timeandlearning. org/?q=orchardgardens.

.....

- 33 New York State Education Department, "Flexibility under ESEA for New York State," available at http://www.p12. nysed.gov/accountability/ESEAFlexibilityWaiver.html (last accessed February 2014).
- 34 New York State Education Department, "Extended Learning Time Grant Program," available at http://www.pl2.nysed. gov/funding/extended-learning-time-grant-program/ home.html (last accessed February 2014)
- 35 Kentucky Department of Education, "Unbridled Learning—Communications and Collaboration" (2012), available at http://education.ky.gov/comm/UL/Documents/UN-BRIDLED%20LEARNING.pdf.
- 36 Jared Heath, "How Kentucky Plans to Integrate Common Core Training," School Improvement Network, available at http://www.schoolimprovement.com/common-core-360/ blog/How-Kentucky-Plans-to-Integrate-Common-Core-Training/ (last accessed February 2014).
- 37 Tennessee Department of Education, "Tennessee Announces Common Core Leadership Council," Press release, February 15, 2012, available at https://news.tn.gov/node/8421.
- 38 EngageNY, "Common Core Curriculum," available at http:// www.engageny.org/common-core-curriculum (last accessed February 2014).
- 39 Literacy Design Collaborative, "Overview," available at http:// www.ldc.org/how-ldc-works/overview (last accessed February 2014).
- 40 Inside Mathematics, "About Inside Mathematics," available at http://www.insidemathematics.org/index.php/aboutinside-mathematics (accessed February 2014).
- 41 Linda Darling-Hammond and Beverly Falk, "Teacher Learning Through Assessment" (Washington: Center for American Progress, 2013), available at http://www.americanprogress. org/wp-content/uploads/2013/09/TeacherLearning.pdf.
- 42 Michelle R. Davis, "Gov. Cuomo Wants \$2 Billion Tech Upgrade for New York Schools," Education Week Digital Education Blog, January 14, 2014, available at http://blogs. edweek.org/edweek/DigitalEducation/2014/01/new_york_ state_looks_to_upgrad.html.

- 43 The White House, "ConnectED: President Obama's Plan for Connecting All Schools to the Digital Age," available at http://www.whitehouse.gov/sites/default/files/docs/connected_fact_sheet.pdf (last accessed February 2014).
- 44 Rhode Island Department of Education, "Wireless Classroom Initiative," available at https://www.ride.ri.gov/FundingFinance/SchoolDistrictFinancialData/WirelessClassroomInitiative.aspx (last accessed February 2014).
- 45 Illini Cloud, "About," available at http://www.illinicloud.org/ about-2/ (last accessed February 2014).
- 46 Vicki Dewitt, Melinda Fiscus, and Kathleen Barnhart, "Vender Neutral Standards Based, District Owned: The IlliniCloud," *Principal Leadership*, 2012, available at http://www.setda. org/wp-content/uploads/2013/12/PLFeb12_techtips.pdf.
- 47 Data Quality Campaign, "Interview with FERPA and Privacy Attorney Steve Winnick," The Flashlight, June 4, 2013, available at http://dataqualitycampaign.org/blog/2013/06/ interview-with-ferpa-and-privacy-attorney-steve-winnick/.
- 48 Mark Teoh and others, "The Student & the Stopwatch: How much time do American students spend on testing?" (Washington: Teach Plus, 2014) available at http://www.teachplus. org/uploads/Documents/1391446664_The%20Student%20 and%20the%20Stopwatch.pdf.
- 49 Ibid.
- 50 New York State Education Department, "New York Granted Federal Waiver to Eliminate Double-Testing in Math," Press release, January 2, 2014, available at http://www.oms.nysed. gov/press/waiver-to-eliminate-double-testing.html.
- 51 Letter from John B. King Jr., October 24, 2013, available at http://usny.nysed.gov/docs/teaching-is-the-core.pdf.
- 52 New York State Education Department, "The Path Forward." 2

.....