

# **Engineering Solutions to the National Crisis in Literacy:** How to Make Good on the Promise of the Common Core State Standards

The United States faces unprecedented challenges to its economic dominance. In order for the country to maintain its position at the top, dramatic improvements will be needed to improve the literacy skills of middle and high school students. The phenomenal expansion in information and knowledge is having a profound impact on the competencies young Americans need to gain entry into the modern global workplace. An analysis of workforce trends by Georgetown University economist Anthony Carnevale and his colleagues found that nearly 60 percent of all job openings in 2007 required some postsecondary education or training, compared to just 28 percent in 1973.<sup>1</sup> Postsecondary success depends on the ability of graduates to read and comprehend challenging content and apply what they have read to solve problems.

Yet national and international test data show that secondary-level students in the United States lack these advanced literacy skills. Although students in grade four score among the best in the world, by grade ten U.S. students place close to the bottom among developed nations.<sup>2</sup> American fifteen-year-olds rank fourteenth among developed nations in reading, lagging behind such countries as Poland, Estonia, and Iceland.<sup>3</sup> In fact, over the past four decades the literacy performance of thirteen- and seventeen-year-olds on the National Assessment of Education Progress (NAEP) has remained stunningly low, seriously compromising the nation's capacity to compete in a knowledge-based economy.<sup>4</sup>

Young adults who lack reading and writing proficiency likely will be relegated to the ranks of unskilled workers in a world where literacy is an absolute precondition for success. The consequences for the individual and the costs to the nation are staggering in terms of lost wages and earnings over a lifetime. Estimates for dropouts, who typically have low literacy skills, are on the order of about \$335 billion per year.<sup>5</sup> For those who gain entry into the workplace, private industry spends an estimated \$3.1 billion annually to bolster the literacy skills of entry-level workers.<sup>6</sup> In a similar vein, while increasing numbers of students must take remedial coursework upon entering college, the results are not promising—students who take one or more remedial development courses of any kind are less likely to eventually earn a degree or certificate.<sup>7</sup> Additionally, students who enroll in a remedial reading course are more than three times less likely to earn a bachelor's degree within eight years than students who take no remedial education courses.<sup>8</sup>

## **Common Core State Standards in English Language Arts**

In the face of this literacy crisis, the majority of states have agreed to dramatically improve reading and writing instruction across all grade levels by adopting the English language arts common core state standards, developed under the direction of the Council of Chief State School Officers and the National Governors Association. The common core state standards are a breakthrough based on the best state work

to date. Firmly grounded in evidence, their design addresses the serious shortcomings in how standards have been defined in many states. These internationally benchmarked standards provide a much-needed shared understanding of the essential literacy skills graduates need to succeed in college and the twenty-first-century workplace. Together, these standards and aligned common assessments can serve as a bold first step to raise the level of achievement for all students in the United States.

# The Rise in Text Complexity

Over the past fifty years, the expectations for what students read in school and what they do with what they read have continued to decline. Many secondary schools have tended to reduce cognitive demands in courses because of the broad range of their students' learning abilities and reading and writing skills. A number of studies have shown a steady downward trend across grades in the complexity of reading texts since 1962.<sup>9</sup> Students are asked to read very few informational texts: these texts comprise about 7 percent of reading assignments in elementary school and 15 percent in middle school.<sup>10</sup>

## Programme for International Student Assessment in Reading

The 2009 Programme for International Student Assessment (PISA) in reading is administered to fifteen-year-olds in thirtyfour nations of the Organisation for Economic Co-operation and Development (OECD).<sup>11</sup> PISA focuses on reading to learn and seeks to measure the individual's capacity to "understand, use, reflect on and engage with written texts in order to achieve higher goals, to develop his/her knowledge and potential, and to participate in society."<sup>12</sup> These kinds of reading skills are more reliable predictors of economic and social well-being than the number of years spent in school or in post-formal education. A major study by the OECD followed 30,000 Canadian students who took part in PISA starting in 2000 for six years, and found that students at the top level in reading, Level 5, were twenty times more likely to go to university than students in the lowest level.<sup>13</sup>

In addition to tracking overall performance, the OECD examines the policy reforms of education systems in relation to the outcomes they produce. For example, socioeconomic disadvantage has a "particularly strong" impact on student performance in the United States. Seventeen percent of the variation in the performance of American fifteen-year-olds—ranked fourteenth among developed nations in reading—is explained by students' socioeconomic background, compared to only 9 percent in Canada or Japan, ranked sixth and eighth, respectively.<sup>14</sup>

The OECD also compared the 2000 and 2009 PISA reading exams to track the progress of those countries with comparable results in both assessments in improving reading performance.<sup>15</sup> Thirteen countries from a variety of starting points and with different cultural contexts improved overall reading exam performance during this period.<sup>16</sup> Most of these countries can attribute those gains to large improvements among their lowest-performing students—significantly reducing the number of students scoring below the PISA baseline reading proficiency, Level 2, in 2000.<sup>17</sup>

These results underline that poor literacy skills are not an inevitable consequence of low income. Policy changes such as those made in Chile, Portugal, Poland, and Germany targeted disadvantaged students and helped to raise performance levels among low achievers. PISA results suggest that the countries that improved the most or that are among the top performers share common educational reform policies. High-performing education systems stand out with clear and ambitious standards aligned with curricula and instructional systems that focus on the acquisition of complex, higher-order thinking skills. Systems closely monitor student performance, grant greater autonomy to individual schools, support low-performing schools and students, and invest in teacher preparation and development. Eric Hanushek and Ludger Woessmann authored a 2010 study for the OECD on the impact of a nation's economic growth resulting from increases in its performance on PISA.<sup>18</sup> For the United States, simply raising its PISA scores twenty-five points over twenty years would result in a \$41 trillion increase in GDP in eighty years. Since Poland accomplished the same PISA increase in only six years, clearly this is an attainable goal and demonstrates the return on investment when secondary students attain high-end literacy skills.



Yet, as it turns out, students' ability to read and comprehend challenging text predicts graduates' postsecondary success. In *Reading Between the Lines*, ACT found that students with greater literacy skills in high school had better achievement in math, science, and social studies on measures of college readiness.<sup>19</sup> In addition, regardless of gender, racial group, or income status, the complexity of what students read turns out to be a major factor in their ability to handle credit-bearing courses in college.<sup>20</sup> Students achieving the benchmark score or higher in reading on the ACT college admissions test were more likely to earn a C or better in an introductory, credit-bearing course in U.S. history or psychology. Only about 67 percent of test takers graduating in 2009 met this benchmark for reading.<sup>21</sup>

The clearest differentiator in students' postsecondary achievement was in the complexity of the text rather than the possession of one reading skill over another. The most important implication of the ACT study was that instruction that focused only on higher-order or critical thinking was insufficient to ensure that students achieved college- and career-readiness skills.<sup>22</sup> Instead, students entering college or the workplace are expected to read complex texts with substantially greater independence and write coherent and persuasive arguments based on evidence.

Major discrepancies in task demands, coupled with the vast gap in text complexity, may help to explain the stagnant literacy achievement of the majority of young people in the United States. David Coleman, founder of Student Achievement Partners, writes,

Being able to read complex text independently, fluently and proficiently is essential for high achievement in college and in the workplace and important in numerous life tasks. Moreover, current trends suggest students do not develop the skill and stamina to read challenging texts with understanding. Because knowledge is intimately linked with reading comprehension and an understanding of ideas, this circumstance will lead to a general impoverishment of knowledge. This bodes ill for the ability of Americans to meet the demands placed upon them by citizenship in a democratic republic and the challenges of a highly competitive global marketplace of goods, services, and ideas.<sup>23</sup>

## **Creating a Staircase of Literacy Demands**

To reverse the decline in what students have been expected to read since the 1960s, the English language arts common core state standards establishes a "staircase" of increasing complexity in what students must be able to read and comprehend.<sup>24</sup> These standards are designed to foster the progressive development of reading comprehension through extended exposure to challenging literacy and informational texts. Students must be able to show a steady increase in their ability to use sufficiently complex text to develop sophisticated understandings and well-reasoned oral and written arguments. The standards define the range and content of increasingly challenging literacy and informational texts in successive years of schooling and call for curriculum that is intentionally and coherently structured to develop rich content knowledge within and across grades. The standards specify multiple factors for determining how easy or difficult a particular text is to read, such as sentence length, word frequency, levels of meaning, text structure, single or multiple themes, use of conventional or specialized language, and requirements for background knowledge.

In addition, the standards set the requirements for reading, writing, speaking, listening, and language as part of grade 6-12 standards for literacy in history, social studies, and science.<sup>25</sup> The standards focus on cultivating students' abilities to answer text-dependent questions and write informative and explanatory pieces, drawing evidence from source material within the specific discipline. These aspects of high



literacy, which integrate reading and writing into the fabric of content-area learning, can powerfully affect the quality of secondary education. Schools will need to provide extended literacy instruction in all content-area classes throughout the grades; subject-area teachers will need to become more skilled in the kinds of reading and writing that are essential to their own academic discipline.

Adoption of these internationally benchmarked, college- and career-readiness standards by so many states is a major accomplishment. The challenge presented in their implementation, however, cannot be overstated. States will need to establish consistent policies to ensure that students, no matter where they live, develop the necessary literacy skills to graduate from high school ready for college and the modern workplace.

## Gaps in Literacy Achievement Based on Race, Ethnicity, and Income

Unfortunately, long-standing shortcomings in educational systems and practices in the United States have contributed to the persistent gaps in literacy achievement among students from different economic and cultural backgrounds. According to the NAEP, 70 percent of middle and high school students score below the "proficient" level in reading achievement.<sup>26</sup> For minority and low-income students the figures are even more disturbing: only 14 percent of African American, 17 percent of Hispanic, and 21 percent of Native American eighth graders scored at or above the proficient level.<sup>27</sup> The vast majority of urban public education systems have been unable to bring even half their students to the level of literacy proficiency essential for college and careers. Fewer than 50 percent of incoming ninth graders read at grade level. This is happening in schools and districts across the country.<sup>28</sup>

Even if a state performs well on the NAEP overall, a difference of nearly 25 percentage points exists between the percentage of white eighth graders and that of eighth graders in the state's largest minority group scoring at the basic level. For instance, in Virginia—one of the states with a score above the national average—15 percent of white students scored "below basic," the lowest category, compared to 39 percent of African American students. In Colorado, another of the higher-scoring states, 13 percent of white students scored below basic, while nearly 39 percent of Hispanic students scored at that level.<sup>29</sup>

These figures point out the complexity of the adolescent literacy problem. The data overall are disconcerting enough, but the truly disastrous outcomes for portions of the student population by race, ethnicity, and income level reverberate throughout the nation's educational system. Minorities now account for about half of all births in the United States, and by 2050 the U.S. is expected to become "majority-minority"—that is, more than half the population will be made up of people of color, compared with 35 percent in 2010.<sup>30</sup> Furthermore, it is estimated that half of all public school students will have non-English-speaking backgrounds by 2020.<sup>31</sup>

Low reading achievement does not equally affect all students; those arriving at school from less-educated and poorer families are disproportionately represented. At the school district level, Robert Balfanz and his colleagues from the Center for Social Organization of Schools at Johns Hopkins University found striking differences in achievement levels obtained by students from high- and low-poverty districts; they found that typical students entering a nonselective, high-poverty high school in a city like Baltimore, New Orleans, or St. Louis score three to four years below grade level in reading achievement.<sup>32</sup>

The disparities in the achievement of different income and racial groups of students pose a considerable challenge to schools and districts in reaching national goals for college and career readiness. Even more



worrisome, the average reading performance as measured by the NAEP for grade twelve does not reflect the low achievement rates of the students who have already dropped out of school.

Unless the nation makes a consistent investment toward delivering comprehensive reading and writing instruction throughout the pre-K-12 grade span, a large proportion of low-income students and students of color will remain sidelined from full participation in the modern workplace.

## **Uneven Literacy Expectations, Assessments, and Instruction**

What accounts for the enormous variation in student literacy levels? In part, the discrepancy rests in how states have developed and implemented standards, reading assessments, and the criteria for proficiency under the current federal authorization of the Elementary and Secondary Education Act, otherwise known as the No Child Left Behind Act (NCLB). The difference in the relative rigor of state standards shows up in comparisons between the proportion of students who reach the proficient level on state tests and the proportion who achieve the proficient level on the nationally administered NAEP.<sup>33</sup> The comparisons between the stringency of state tests and the NAEP have conclusively shown that state expectations for proficiency in reading lie far below those of the NAEP.<sup>34</sup> For example, in Idaho 94 percent of eighth graders are proficient on the state test in reading, while only 33 percent are proficient on the NAEP in reading. In Vermont, 69 percent of eighth graders are proficient on the NAEP.<sup>35</sup> Across all states, the average gap between a state's performance in reading on the state assessment versus their NAEP performance is 41 percentile points.<sup>36</sup>

Researchers from the National Center for Education Statistics (NCES), a federal agency, found that most of the variation in the percentage of students scoring at the proficient level from state to state—about 70 percent—could be attributed to how each state defines the term "proficient"—students with exactly the same achievement levels might be considered proficient in one state but not in another.<sup>37</sup> The NCES study also found that between 2005 and 2007 seven states actually *lowered* their performance standards for proficiency for eighth-grade reading.

## **Literacy Instruction Ends at Grade Three**

Disparities in what students bring to school from an early age are exacerbated by the lack of systematic literacy instruction after grade three. Policymakers who recall the "reading wars" of the 1990s may be surprised to learn that there has been a remarkable convergence among researchers about what constitutes effective reading instruction. With the publication of the National Reading Panel report, states were called upon to focus on early literacy in accordance with the enactment of NCLB in 2001.<sup>38</sup> This federal law signaled major investments in pre-K–3 reading and led to steady improvements in fourth-grade reading scores along with the narrowing of racial achievement gaps in many states. The long-term NAEP data from 2004 include many students who would have participated in Reading First or its predecessor program, Reading Excellence, and the results show the highest achievement in reading for fourth-grade students in thirty-three years.<sup>39</sup>

These results demonstrate that a concerted and well-funded national effort can make substantial improvements in literacy achievement. Despite the success of early literacy, however, many students do not receive literacy instruction beyond grade three even though they face considerable challenges in reading and comprehending material replete with technical vocabulary and concepts unique to specific content areas.<sup>40</sup> As a result, literacy improvements at the upper-elementary and secondary levels have



stalled. While the evidence is clear that early literacy instruction is necessary, it is not sufficient to inoculate against failure later on.

## Effective Instructional Strategies to Improve Reading and Writing Achievement

Specific instructional practices have been demonstrated by rigorous research and evaluation to increase student performance on standardized reading and writing tests.<sup>41</sup> Examples of such practices include:

- Generating and answering questions. Actively processing text to form questions has been shown to yield a 23 percentile-point gain on standardized reading tests.
- Summarizing and note taking. Intentionally instructing students in how to differentiate between the main idea of the text and peripheral information has been shown to yield a 34 percentile-point gain on standardized reading tests.
- Identifying similarities and differences. Students who are taught to compare, classify, and analyze information using metaphors and analogies score 45 percentile points higher than their peers without this strategy.
- Sentence combining. Teaching students to construct more complex and sophisticated sentences by combining two or more basic sentences has been shown to yield a 19 percentile-point gain on standardized writing and reading tests.

For more information, see the Alliance for Excellent Education reports on reading and writing instruction produced in partnership with Carnegie Corporation of New York:

- <u>Reading Next: A Vision for Action and Research in Middle and High School Literacy</u>. Combines the best research with well-crafted strategies for turning that research into practice.
- <u>Writing Next: Effective Strategies to Improve Writing of Adolescents in Middle and High Schools</u>. Describes eleven specific teaching techniques that research suggests will help improve the writing abilities of students in the upper grades.
- <u>Writing to Read: Evidence for How Writing Can Improve Reading</u>. Identifies instructional practices in writing shown to improve students' reading abilities and recommends ways that teachers can improve students' reading skills through the teaching of writing.

On the other hand, years of research and evaluation demonstrate what it takes to strengthen reading and writing. Translating this research into practice as part of content-area learning is essential to increasing all students' literacy achievement. Yet most middle and high school students do not receive explicit, strategic instruction in content-based reading and writing tasks that follow a structured progression toward greater mastery and competence. Modeling and prompting specific strategies such as questioning and summarizing enable students to become more self-directed and independent in reading for understanding. Carefully "scaffolding" content-based literacy tasks allows students to actively bring meaning to the written word and helps them learn to monitor their own learning and thinking.<sup>42</sup> Students at all levels need quality instruction and supports as they encounter challenges presented in literature and in history, social studies, science, and technical texts. Catherine Snow, the Patricia Albjerg Graham Professor of Education at the Harvard Graduate School of Education, says, "[W]e should be thinking of reading as weight lifting; you need to *keep at it*. That's why there are all these kids who can read well at third grade but are baffled at fifth grade."<sup>43</sup>



## **Inadequate Teacher Development and Support**

For more than fifty years the realities of student reading difficulties and secondary school teachers' lack of preparation to address them have been well documented.<sup>44</sup> The majority of middle and high school subject-area teachers do not have the knowledge and skills to interact with students in ways that deepen their understanding of a discipline through strategic reading of texts in mathematics, social studies, and science. Snow also notes, "Fifty years ago kids who figured it out graduated, while the others went to work for GM. Now we actually do have to teach everyone. We don't have a magic wand to make a change in teacher capacity or to ensure that teachers are able to lead productive discussions."<sup>45</sup>

Despite enormous increases in the number of English learners and students from diverse cultural backgrounds, current research shows that few teachers have access to high-quality, intensive professional development; more than two thirds of U.S. teachers responding to the Schools and Staffing Survey reported that they had not had even one day of training in supporting the learning of special education or limited-English-proficiency students during the previous three years.<sup>46</sup> Learning gaps worsen when met with entrenched approaches to teaching subject matter, low-level task assignments, and inconsequential teacher-student interactions.<sup>47</sup> As a result, much of what teachers do to improve literacy skills is ineffective and highly idiosyncratic from classroom to classroom, even within the same school.

## **Reciprocal Teaching**

Students, particularly in the upper grades, must learn how to learn in order to develop the critical attitudes and habits to develop strong mastery of core academic content. Research has demonstrated that students can be taught reading comprehension strategies to monitor their own understanding, including the ability to predict outcomes, explain to oneself in order to process text more thoroughly, note failures to comprehend, and activate background knowledge.<sup>48</sup>

Reciprocal teaching is a scaffolded approach to teaching four strategies—questioning, clarifying, summarizing, and predicting.<sup>49</sup> The teacher models and supports students' use of these strategies by leading a dialogue with them as they attempt to understand what they read. Students gradually take on more responsibility for implementing the strategies by taking turns being the "teacher" in leading a dialogue concerning sections of a text. Students check their own understanding of the material they have encountered by framing questions, clarifying words and concepts, and summarizing the central concepts and ideas. These facilitated discussions support skill development, with a goal of independence and self-regulation.<sup>50</sup>

Multiple studies have shown that reciprocal teaching produces a strong effect on reading comprehension—the effect size is .74, or an increase of 27 percentile points. These gains are evident regardless of who delivered the instruction, the grade level, the size of the instructional group, or the number of literacy strategies taught.<sup>51</sup> The effects are greatest when the teacher first provides explicit modeling of the strategies before the reciprocal teaching dialogue. He or she follows by giving students opportunities to deliberately practice using the strategies to derive meaning from the content of a particular text. Moreover, the teaching of these strategies must be incorporated into the subject matter that students are learning. The strategies are most likely to transfer to new material when they are taught within a specific domain such as social studies or science.

The hallmark of content-area literacy instruction is an emphasis on close reading of text to comprehend and deepen understanding of subject matter. Good teachers connect students with challenging subject matter, search for and recognize significant elements of student thinking, and respond with carefully chosen instructional strategies to assist students in taking the next steps in learning.<sup>52</sup> The problem is that many teachers lack knowledge about how to use strategic reading of social studies and science texts. Teachers must understand how students' learning develops within a subject area, the nature of gaps in



students' understanding that may arise, and the strategies that can address students' evolving needs. They also need to understand how to use data and formative assessments to evaluate individual student learning. These embedded classroom measures permit the teacher to determine how much students know and can do as well as where and why they might be struggling—and to design instruction accordingly.

At best, teacher preparation programs generally require teacher candidates to take only a single course to meet preservice requirements and do not provide adequate clinical practice on how to adjust instruction in response to student learning. Policy leaders must ensure that secondary schools have highly effective teachers who have expertise in a discipline and knowledge about teaching strategies in order to improve reading and writing within their subject area.

## **State Comprehensive Literacy Initiatives**

There is widespread recognition of the significant role states must play to ensure that all students attain advanced literacy skills. However, researchers and literacy experts stress that simply mandating standards will not guarantee success. In order to raise the graduation rate, close achievement gaps, and ensure that high school students are college and career ready, state leaders must develop a comprehensive, birththrough-grade-twelve literacy initiative that conjoins the new English language arts common core state standards with a systemic approach, equitable resources, and strong teacher training.

Major commitments from the federal, state, and local levels are essential to catalyzing nationwide improvements in literacy achievement. Achieving full implementation of these new standards will require retooling curriculum, teaching practice, assessments, and data systems. To ensure that all students graduate with the requisite literacy skills, states should set a goal of strengthening literacy achievement that is anchored in an integrated system of rigorous standards, meaningful assessments, and evidence-based instruction.

There is a great deal of work to do. Most current state assessments neither adequately measure student growth in literacy achievement nor provide timely or useful information for teachers to monitor and improve content-based reading and writing skills. New, aligned assessments must be developed that truly measure mastery of core content and high-level reading and writing skills. Districts and schools will need to provide extended literacy instruction into middle and high schools, ensure that reading and writing instruction is discipline specific and based on evidence of effective practice, and continually monitor students' progress toward performance standards. Ensuring students' literacy achievement depends on using frequent classroom measures to gauge students' progress and adjust instruction and curricula based on the results. Equally important to the standards' success will be the ability of schools and districts to use proven strategies and interventions to accelerate the progress of students who struggle to read and write. Solutions must address the inconsistencies in what students are expected to achieve across states and districts and in the knowledge and competencies teachers must bring to bear to ensure their success. Without question, implementation of new standards and assessments must be accompanied by bold action at the federal, state, and local levels to ensure evidence-based, coherent, and consistent literacy instruction throughout schooling.

The majority of states have begun working with literacy teams to identify the policy levers to scale and sustain literacy improvements as part of comprehensive education reform. State and district approaches to improving adolescent literacy must ensure that *all* students have access to the teachers, learning opportunities, and various types of academic support they need. To fundamentally transform what is taught and how it is taught, consideration must be given to multiple elements such as



- charging school leaders with making literacy central to school improvement and developing a sense of shared responsibility for ensuring that all students can read, write, and think proficiently;
- building capacity of middle and high school teachers to provide evidence-based literacy instruction within content areas;
- using data systems and a range of formative and diagnostic measures to assess individual student progress and inform how to improve students' literacy performance; and
- providing students struggling to read and write with a continuum of evidence-based supports and interventions.

#### **Scaffolded Apprenticeship Model**

The Scaffolded Apprenticeship Model (SAM) was implemented in twelve New York City high schools and focused on closing reading or writing skill gaps that impacted students' performance in all content areas and on the New York Regents exams. A Stanford University report on SAM implementation over a four-year period in these twelve small high schools offers strong evidence for SAM's impact on students' reading and writing achievement.<sup>53</sup> Initial differences between the SAM schools and the sixty-two non-SAM schools showed that, on average, the SAM schools had a larger proportion of students who scored below basic on the eighth-grade English language arts state assessments.

Higher proportions of ninth graders were on track at the end of their first year—37 percent versus 27 percent in non-SAM schools. The increase in the percentage of students on track between ninth and eleventh grade was substantially larger—31 percent for SAM schools versus 17 percent for non-SAM schools. On average, students who were off track to graduation declined from 42 percent among ninth graders to 13 percent among eleventh graders. The percentage of on-track students jumped from 37 to 68 between ninth and eleventh grade.

Launched in partnership with Baruch College and New Visions for New Schools, SAM is a model for adult learning that integrates leader development with the implementation of collaborative, evidence-based teaching practice in high-poverty urban schools. Leaders work with teachers—the "apprentices"—in progressively shaping or scaffolding their collective practice to improve the achievement of struggling learners who entered below proficient on the English language arts state assessment.

Using survey data to assess changes in leadership and school culture, the researchers reported that the greatest impact on on-track graduation rates depended on mutually reinforcing system elements. The findings show that the model improved students' achievement by

- creating a culture of assessment use to detect specific student gaps in reading and writing skills and to design or identify effective instructional interventions;
- developing leaders' capacity to work effectively through school teams that use evidence to continually improve literacy achievement; and
- focusing on teachers' practice in diagnosing and addressing learning needs of students who fall below grade level or struggle with reading and writing.

The core principles involved creating a culture of assessment use, in which teaching staff collectively moved toward using more detailed learning measures to identify and hone in on the skill gaps of a number of struggling students. Lead teachers helped their colleagues analyze and improve their content-based literacy instruction by examining curricula and observing classroom teaching. An important purpose was to ascertain whether or not students identified as lacking particular skills had ever had the opportunity to acquire the critical reading and writing skills needed to succeed in high school and beyond.



New approaches are needed to lift bureaucratic barriers, maximize scarce resources, and create wellcoordinated initiatives to scale literacy improvements statewide. Through federal grant programs, states are beginning to shape promising initiatives. Kentucky, for example, created a comprehensive set of state actions and implementation indicators to embed literacy learning as part of school improvement planning that will ensure effective implementation of the Kentucky Core Academic Standards. Louisiana developed a comprehensive plan to ensure that students meet the literacy expectations that will prepare them to enter college and the workforce ready to succeed. The state passed legislation, Act 54,<sup>54</sup> to ensure that effective teachers and leaders serve in every classroom and school. The measure calls for monitoring and improving teacher quality and teacher preparation and incorporates research-based practices related to reading and writing instruction.

# **Federal Policy Recommendations**

It is time for the federal government to partner with states in fully investing in comprehensive literacy plans to ensure that all students leave high school with the advanced skills necessary for postsecondary success. The pending reauthorization of the federal Elementary and Secondary Education Act (ESEA) offers an opportunity to dramatically improve achievement, including pre-literacy skills, reading, and writing, for students from birth through grade twelve as well as for limited-English-proficient students and students with disabilities. Federal policymakers should

# Support the adoption of college- and career-ready English language arts standards and aligned assessments.

Educators, policymakers, and researchers need to be on the same page regarding what students need to know and be able to do. As part of this process, federal policymakers should provide incentives for the state-led effort to implement common core state standards and aligned assessments. As part of this effort, literacy standards including specific comprehension skills for each subject area should be embedded throughout the curriculum.

#### Enhance the role of states in improving literacy instruction.

Enhance the role of states in improving literacy instruction by supporting the continued vitality of state literacy leadership teams comprised of literacy experts and relevant stakeholders tasked with developing a comprehensive state literacy plan that builds upon promising research and practices. The federal government should strengthen the communication and reading skills for all students by investing in improving instruction and supports for children from birth through grade twelve. While historically there has been a discontinuity in funding across the age span, the federal government should ensure that there is an equitable investment for middle and high school students, targeted toward those students who are several years behind grade level, as well as whole-school initiatives to support explicit literacy instruction across the content areas.

#### Support and invest in increasing the quality of teacher education and professional development.

Support and invest in increasing the quality of teacher education and professional development to ensure that teachers acquire competencies in literacy instruction. Federal grant making and regulation should encourage states to create systems to develop teacher and leader effectiveness to ensure that all students have access to evidence-based reading and writing instruction and supports throughout the grade spans.



Policies should target ongoing high-quality professional development and regular evaluations based on clear teacher standards for effective practice and student achievement growth. Teacher education and professional development providers should be held accountable for the competency of teachers in providing standards-based literacy instruction within content-area learning.

#### Invest in ongoing research and evaluation.

Invest in ongoing research and evaluation to build on the knowledge base about what literacy strategies can produce significant improvement in adolescents' reading and writing performance. More research is needed in order to determine the most efficient assessment of learners and how to intervene based on the nature and severity of skill deficits. Federal policymakers could support a research agenda to promote better understanding of adolescent literacy and the corresponding pedagogical approaches to improve adolescents' achievement. In particular, the number of studies on literacy and adolescent language of minority students is limited. The Institute for Education Sciences could conduct studies to provide more definitive guidance on programs for English learners, identify evidence-based instructional strategies, and evaluate approaches for improving teaching effectiveness.

## **Conclusion**

The federal government has joined with states to begin addressing the urgent need to dramatically improve the literacy achievement for all children and young adults in the United States. More than ever it is time to build on these initial efforts toward the goal of developing statewide comprehensive literacy initiatives aligned to college and career standards. Higher standards and students' ability to meet them will depend on effective literacy instruction across the curriculum. The development of strong literacy skills as a continuum of teaching and learning from birth through grade twelve is essential to ensuring that all young people graduate with the advanced skills essential for success in the modern world.

This brief was written by Mariana Haynes, PhD, a senior policy fellow at the Alliance for Excellent Education.

This brief was made possible, in part, by a grant from Carnegie Corporation of New York. The statements made and views expressed are solely the responsibility of the author.



#### Endnotes

<sup>1</sup> A. Carnevale et al., "Center on Education and the Workforce Forecasts of Education Demand to 2018" (Washington, DC: Georgetown Center on Education and the Workforce, 2010), available at

http://www9.georgetown.edu/grad/gppi/hpi/cew/pdfs/CEW\_press\_conference\_ppt.pdf (accessed March 16, 2011).

<sup>2</sup> Organisation for Economic Co-operation and Development (OECD), *Education at a Glance 2006: Briefing Note for the United States* (Paris: Author, 2006).

<sup>3</sup> See http://www.oecd.org/dataoecd/54/12/46643496.pdf (accessed March 18, 2011).

<sup>4</sup> Carnegie Council on Advancing Literacy, *Time to Act: An Agenda for Advancing Adolescent Literacy for College and Career Success* (New York: Carnegie Corporation of New York, 2010); Alliance for Excellent Education analysis of U.S. Department of Education, National Center for Education Statistics, *The Nation's Report Card: Reading 2009* (NCES 2010-458)

(Washington, DC: Government Printing Office, 2010), and the NCES Common Core of Data for the 2008–09 school year. <sup>5</sup> Alliance for Excellent Education, "The High Cost of High School Dropouts: What the Nation Pays for Inadequate High Schools" (Washington, DC: Author, August 2009).

<sup>6</sup> National Commission on Writing, *Writing: A Ticket to Work ... Or a Ticket Out, a Survey of Business Leaders* (New York, NY: College Entrance Examination Board, 2004).

<sup>7</sup> U.S. Department of Education, National Center for Education Statistics, *The Condition of Education 2004* (NCES 2004-077) (Washington, DC: Government Printing Office, 2004).

<sup>8</sup> Alliance for Excellent Education, "Paying Double: Inadequate High Schools and Community College Remediation" (Washington, DC: Author, August 2006).

<sup>9</sup> National Governors Association Center for Best Practices and Council of Chief State School Officers, *Common Core State Standards for English Language Arts and Literacy in History/Social Studies, and Science, Appendix A: Research Supporting Key Elements of the Standards* (Washington, DC: Author, 2010).

<sup>10</sup> Ibid.

<sup>11</sup> Organisation for Economic Co-operation and Development (OECD), *Strong Performers and Successful Reformers in Education: Lessons from PISA for the United States* (Washington, DC: OECD Publications, 2010).

<sup>12</sup> Ibid., p. 23.

<sup>13</sup> Organisation for Economic Co-operation and Development (OECD), *Pathways to Success: How Knowledge and Skills at Age 15 Shape Future Lives in Canada* (Paris: OECD, 2010).

<sup>14</sup> OECD, Strong Performers and Successful Reformers in Education.

<sup>15</sup> Organisation for Economic Co-operation and Development (OECD), "Improving Performance: Leading from the Bottom," PISA in Focus, 2011/2 (Washington, DC: OECD Publications, March 2011).

<sup>16</sup> Ibid.; OECD countries that improved reading performance from PISA 2000 to PISA 2009 include Chile, Germany, Hungary, Israel, Korea, Poland, Portugal, and the partner countries Albania, Brazil, Indonesia, Latvia, Liechtenstein, and Peru.
<sup>17</sup> Ibid.

<sup>18</sup> E. A. Hanushek and L. Woessmann, "How Much Do Educational Outcomes Matter in OECD Countries?," paper prepared for the 52nd Panel Meeting of *Economic Policy* in Rome, September 9, 2010.

<sup>19</sup> ACT, *Reading Between the Lines: What the ACT Reveals About College Readiness in Reading* (Iowa City, IA: Author, 2006).

<sup>20</sup> Ibid.

<sup>21</sup> ACT, "ACT Profile Report—National Graduating Class 2009," available at www.act.org/news/data/09/pdf/National2009.pdf (accessed March 18, 2011).

<sup>22</sup> National Governors Association Center for Best Practices and Council of Chief State School Officers, *Common Core State Standards*.

<sup>23</sup> David Coleman, personal communication, February 28, 2011.

<sup>24</sup> National Governors Association Center for Best Practices and Council of Chief State School Officers, *Common Core State Standards*.

<sup>25</sup> Ibid.

<sup>26</sup> U.S. Department of Education, National Center for Education Statistics, *The Nation's Report Card: Reading 2009*; U.S. Department of Education, National Center for Education Statistics, *The Nation's Report Card: 12th-Grade Reading and Mathematics 2005* (NCES 2007-468) (Washington, DC: U.S. Government Printing Office, 2007).

<sup>27</sup> U.S. Department of Education, National Center for Education Statistics, *The Nation's Report Card: Reading 2009*.



<sup>28</sup> Carnegie Corporation of New York, *Advancing Adolescent Literacy: The Cornerstone of School Reform* (New York, NY: Author, 2010).

<sup>29</sup> U.S. Department of Education, National Center for Education Statistics, *The Nation's Report Card: Reading 2009*.
 <sup>30</sup> Kelvin Pollard and Mark Mather, "10 Percent of US Counties Now 'Majority-Minority'" (Washington, DC: Population Reference Bureau, 2008), available at http://www.prb.org/articles/2008/majority-minority.aspx (accessed February 28, 2011).

<sup>31</sup> D. C. Berliner and B. J. Biddle, *The Manufactured Crisis: Myths, Fraud, and the Attack on America's Public Schools* (Cambridge, MA: Perseus Publishing, 1995).

<sup>32</sup> R. Balfanz, J. M. McPartland, and A. Shaw, *Reconceptualizing Extra Help for High School Students in a High Standards Era* (Baltimore, MD: Center for Social Organization of Schools, John Hopkins University, 2002).

<sup>33</sup> V. Bandeira de Mello, C. Blankenship, and D. H. McLaughlin, *Mapping State Proficiency Standards onto NAEP Scales:* 2005–2007 (NCES 2010-456) (Washington, DC: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education, 2009).

<sup>34</sup> Ibid.

<sup>35</sup> U.S. Department of Education, National Center for Education Statistics, *The Nation's Report Card: Reading 2009*; U.S. Department of Education, *Summer 2010 EDFacts State Profiles*, available at http://www2.ed.gov/about/inits/ed/edfacts/state-profiles/index.html (accessed August 24, 2010).

<sup>36</sup> Ibid.

<sup>37</sup> Bandeira de Mello, Blankenship, and McLaughlin, *Mapping State Proficiency Standards*.

<sup>38</sup> National Institute of Child Health and Human Development, *Report of the National Reading Panel—Teaching Children to Read: An Evidence-Based Assessment of the Scientific Research Literature on Reading and Its Implications for Reading Instruction*, NIH Publication No. 00-4769 (Washington, DC: U.S. Government Printing Office, 2000).

<sup>39</sup> Carnegie Council on Advancing Literacy, *Time to Act*.

<sup>40</sup> J. S. Chall and V. A. Jacobs, "The Classic Study on Poor Children's Fourth-Grade Slump," *American Educator* (spring 2003).

<sup>41</sup> R. Marzano, *What Works in Schools: Translating Research into Action* (Alexandria, VA: Association for Supervision and Curriculum Development, 2003); S. Graham and D. Perin, *Writing Next: Effective Strategies to Improve Writing of Adolescents in Middle and High Schools*, a report to Carnegie Corporation of New York (Washington, DC: Alliance for Excellent Education, 2007); J. Hattie, *Visible Learning: A Synthesis of Over 800 Meta-analyses Relating to Achievement* (New York, NY: Routledge, 2009).

<sup>42</sup> Hattie, Visible Learning.

<sup>43</sup> Carnegie Corporation of New York, Advancing Adolescent Literacy, p. 7.

<sup>44</sup> M. Kamil et al., *Improving Adolescent Literacy: Effective Classroom and Intervention Practices* (Washington, DC: U.S. Department of Education, Institute of Education Sciences, 2008).

<sup>45</sup> Carnegie Corporation of New York, Advancing Adolescent Literacy, p. 7.

<sup>46</sup> L. Darling-Hammond et al., *Professional Learning in the Learning Profession: A Status Report on Teacher Development in the United States and Abroad* (Palo Alto, CA: National Staff Development Council and the School Redesign Network at Stanford University, 2009).

<sup>47</sup> K. Haycock, "Good Teaching Matters: How Well-Qualified Teachers Can Close The Gap," *Thinking K–16* 3, no. 2 (1998).
 <sup>48</sup> J. Bransford, A. Brown, and R. Cocking, eds., *How People Learn: Brain, Mind, Experience, and School* (Washington, DC: National Academy Press, 1999).

<sup>49</sup> A. Palincsar and L. Herrenkohl, "Designing Collaborative Learning Contexts," in *Theory Into Practice*, ed. A. Hoy, 41, 26–32 (Columbus, OH: Ohio State University, 2002); Hattie, *Visible Learning*.

<sup>50</sup> Bransford, Brown, and Cocking, *How People Learn*.

<sup>51</sup> B. Rosenshine and C. Meister, "Reciprocal Teaching: A Review of the Research," in *Review of Educational Research* (Washington, DC: American Educational Research Association, 1994); Hattie, *Visible Learning*.

<sup>52</sup> Marcy Singer-Gabella, personal communication, December 21, 2010.

<sup>53</sup> J. Talbert et al., *Leadership Development and School Reform Through the Scaffolded Apprenticeship Model (SAM)* (Stanford, CA: Center for Research on the Context of Teaching, Stanford University, 2009); J. Talbert, N. Scharff, and W. Lin, *Leading School Improvement with Data: A Theory of Action to Extend the Sphere of Student Success* (Stanford, CA: Center for Research on the Context of Teaching, Stanford University, 2008).

<sup>54</sup> For more information, visit http://www.act54.org.

