



*Carnegie*  
REVIEW

**Advancing Adolescent Literacy:**  
The Cornerstone of School Reform

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CARNEGIE CORPORATION OF NEW YORK



The pursuit of universal literacy has been woven into Carnegie Corporation's mission from the foundation's very beginnings. Through his personal philanthropy and later, through Carnegie Corporation, the philanthropic institution he created in 1911, Andrew Carnegie established over 2,500 free public libraries in the U.S. and abroad. A poor boy and an immigrant whose formal schooling ended at the age of 12, Andrew Carnegie was fortunate to have been given access to the private library of a wealthy man, which he always said was the turning point in his life. Books and reading provided him with the education he would otherwise have been denied. They opened

doors to ideas and information and provided the tools for him to become a lifelong learner and a man of great accomplishments in business but also in the realm of doing the "real and permanent good in this world" that he deeply believed in. Not only was he an icon of industry, Andrew Carnegie was also a prolific writer and the creator of more than twenty organizations and institutions that continue their work of helping to advance society in the U.S. and abroad. His lasting legacy of philanthropy continues to have an impact today.

As Carnegie Corporation approaches its Centennial, we remain committed to our founder's belief that reading is the key to progress for men and women in our nation and around the world. Indeed, reading is one of the great democratizing forces because it is the great equalizer. Reading provides knowledge to all who open a book, a magazine or any other publication. And books—be they printed on paper or digitized as e-books—do not discriminate. They welcome all readers. They speak to us all and they teach us all.

This is of critical importance because, in the decades ahead, our democracy and our society will be facing a major challenge. Many in our society will have access to information, to knowledge, and hence to power: power of autonomy, of enlightenment, of self-improvement and self-assertion, power over their lives and their families' future, and there will be others who will have much more limited access to information and therefore, to knowledge. Such a cleavage between those who have access to books and education and those who do not has the potential to fracture our society and adds to the widening social and economic gaps that already threaten the American dream.

It is in education, in schooling, and in reading to learn that the transformative promise of the American dream has the potential to become a reality. That is why efforts to help bring the power of reading, and more, the power of comprehending the deep meaning of words and content, to all students, in all schools, should be high on the nation's agenda. We owe today's students and the generations who will follow after them no less.

**Vartan Gregorian**  
**President, Carnegie Corporation of New York**

Carnegie Review is a publication series that generally focuses on program areas as they come to their natural conclusion. Its aim is to assess a cluster of grants, providing insight into how a particular program area developed, the grantmaking and people involved and the lessons learned.

# Advancing Adolescent Literacy: The Cornerstone of School Reform

During the last twenty years, the United States educational system has scored some extraordinary successes, especially in improving the reading and writing skills of young children in grades K–3. Yet the pace of literacy improvement has not kept up with the pace of growth in the global economy, nor have literacy gains been extended to adolescents in the secondary grades. Generally speaking, the nation’s schools are failing to create college-ready young adults with literacy skill sets necessary for employment in the new global knowledge economy.

To address this problem, Carnegie Corporation established an initiative focused on adolescent literacy as part of its greater effort to help the country’s students, including historically underserved populations and immigrants, to achieve academic success. “Our goals were to increase the knowledge base through research, engage and educate policymakers and increase the supply of highly qualified literacy personnel in middle and high schools,” says Andrés Henríquez, program officer, Urban Education, National Program. “We also aimed to engage state organizations into expanding literacy at state levels, building up a whole infrastructure for adolescent literacy.”

National and international test data have not only revealed U.S. students’ inability to compete, but have also shown that their promising early per-

formance in reading achievement often dissipates by the upper grades. The most recent data show that although U.S. students in grade four score among the best in the world, those in grade eight score much lower. *And by grade ten, U.S. students score among the lowest in the world.* In response to this problem, in 2009 the U.S. Department of Education set up the \$4.3 billion Race to the Top. States were challenged to compete for these federal funds by instituting a series of education reforms leading to improved student performance. A critical area of the program requires the adoption of uniform, internationally benchmarked, common core state standards and high-quality assessments plus data systems to track student progress and teacher performance. In addition, the Elementary and Secondary Education Act (ESEA), which the administration seeks to revise and have reauthorized by Congress, would similarly ask states to adopt college- and career-ready standards and reward schools for producing dramatic gains in student achievement.

These reforms are needed urgently. Today’s high school graduates are expected to judge the credibility of sources, evaluate arguments, and understand and convey complex information in the college classroom, in the workplace and exercising their rights as citizens. But many of them are not prepared for college-level coursework, forcing

most colleges and universities to introduce remedial reading programs for the large numbers of freshmen who can't cope with their assignments. Private industry now spends an estimated \$3.1 billion annually to bolster the writing skills of entry-level workers. The skills required to earn a decent income have changed radically, but skills taught in most U.S. schools have not. In other words, our adolescents are not being adequately prepared for the demands of higher education, employment and citizenship in the 21<sup>st</sup> century.

Support from Carnegie Corporation has paved the way for broad societal investment in early childhood education, influencing other foundations and government agencies to recognize the value of this work and to expand it into early learning programs. However, it's now become clear that maintaining momentum beyond third grade has been elusive, and this weakness is causing the country to fall behind.

While good early literacy instruction, "learning to read," is the necessary foundation for later learning, we know it does not inoculate students against later failure. This is particularly true in math and science, where technical content poses special challenges to inexperienced and struggling readers. An adolescent student is unlikely to fully comprehend such texts using the basic decoding tools acquired in "learning to read." Recognizing these troubling facts, in 2002 Carnegie Corporation commissioned a report (from RAND Corporation) assessing the available research on the teaching of reading.

A task force of scholars and policy analysts collaborated on the project, identifying a number of relevant topics that merited further exploration. At the time, the importance of specialized literacy skills for middle and high school students was beginning to be recognized, but knowledge on this subject was sparse. In general, school instruction relied more on intuition than solid evidence, and proven best practices and expert recommendations still focused on

literacy instruction in the primary grades in the belief that early efforts could prevent problems later on.

Clearly, more knowledge on the subject would be needed to turn the tide. So the Corporation commissioned a number of additional reports focused on a range of relevant topics such as comprehension assessment, out-of-school learning, writing in adolescence, literacy coaching standards, instructional needs of second language learners and literacy in the content areas. These findings would begin to build the case for school leaders and policymakers to focus on improving literacy instruction in grades four through twelve.

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## The High Cost of Low Literacy

Education research, some sponsored by the Corporation, has made it abundantly clear that good school reform and knowledge of adolescent development are not mutually exclusive; they go hand-in-hand. To engage adolescents, literacy lessons must address their questions about the world and their place in it. From middle school on, readers must be able to interact with challenging content while strengthening their ability to derive meaning from texts. Approaches based on what works with younger children won't engage young adults. New approaches are needed to prepare them for the demands of post high school learning, when content-area knowledge and critical thinking become essential. Consequently, aligning school systems with data-driven knowledge of how young people of all backgrounds learn in all disciplines is the only possible path to success. The United States has a long way to go to achieve this necessary alignment.

Despite all that has been learned in the many years of research in the education field, a definitive cause of the weakness in literacy in upper elementary through high school has yet to be pinpointed

## Andrés Henríquez



**Program Officer,  
Urban Education  
National Program**

When I joined Carnegie Corporation in 2001, it was to help establish a program with very broad emphasis around literacy, in both early and later grades, in conjunction with Schools for a New Society (SNS), a Corporation program supporting comprehensive high school reform through effective leadership, creation of small schools and revamped curricula. This work was suffering from lack of literacy skills in ninth grade, and incoming students were ill prepared to benefit from the new school designs. We realized something the academic world had been becoming increasingly aware of for years: that “just reading” is not the same as reading in content areas.

I started to look into this problem. I read a whole lot of academic papers and spoke to many people in the literacy field, especially members of the RAND Reading Study Group, who published “Reading for Understanding: Toward an R&D Program for Comprehension,”\* and Catherine Snow at Harvard. What aren’t we getting, I wanted to know. Why aren’t we making gains? A number of things had converged to reveal the answer to my questions. The introduction of No Child Left Behind (NCLB), which required extensive testing of students, allowed a bigger problem to be revealed. Disaggregation of data was needed to assess not just schools but kids from various population groups. It was seen as a civil rights issue once it was clear who wasn’t doing well—and we felt we could do something about it.

At the same time, the National Reading Panel produced a report on what we know and don’t know

about teaching children to read. It was an exciting study that drove formulation of NCLB reading legislation and a big allocation for early reading, as well as countrywide concern with reading. The data showed that reading in the United States was a disgrace. President Bush and the First Lady were very committed to this issue, both politically and personally. Their family dedication to improved reading was important, and as a consequence interest and funding surged. It was an issue that everyone could rally around.

At Carnegie Corporation we wanted to be sure that kids would be tested in grades three through eight, but NCLB was focused on kindergarten through third grade: that was the law. We realized that we have to start somewhere, because the reading problems in ninth grade persist. Research and policies existed for K through three but nothing (or little) after grade four. The core of No Child Left Behind, Reading First, promoted scientifically based research as the foundation for K–3 reading instruction. We had identified a huge knowledge gap. In addition, the country was focused on *learning to read*; we wanted to underscore *reading to learn*. And we wanted to invest in research, policy and practice to fill that gap.

Carnegie Corporation’s program Schools for a New Society was aimed at having a lot more young people graduate high school. This meant demands on student performance were increasing, yet reading levels were static. It was clear after a while that we needed change on both fronts. The data were glaring at us: less than 50 percent of incoming ninth graders were reading on grade level, and the average ninth grader was actually reading at a third- to fourth-grade level. While this was a problem that was exacerbated in poor urban areas, it also existed in suburbs and exurbs. All our kids were affected. It was an important message: This is an issue that is happening in *all of our* schools and districts. We also faced the problem that funding for literacy was clustered in the early grades. And there were infrastructure issues: High school teachers didn’t consider themselves

\* Snow, Catherine; *Reading for Understanding: Toward an R&D Program in Reading Comprehension*; Rand Corporation. [http://www.rand.org/pubs/monograph\\_reports/MR1465/index.html](http://www.rand.org/pubs/monograph_reports/MR1465/index.html)

reading teachers. We had to find a way to show teachers how important reading is to learning content. That's a big challenge we were determined to take on.

When we started talking to teachers their response was "of course;" they had known about student's lack of comprehension for years. But teachers have little voice in this issue, and many didn't know what to do or how to advocate for change. There were several researchers working on the issue but the work was mostly on the margins and not in the mainstream. And once an analysis is done, there's the problem of convincing schools about implementation. It's perceived as yet another add-on to a school's already overloaded agenda.

Policy makers were the most stunned by this information. It was an embarrassment to the states what the data revealed, specifically results from the National Assessments of Education Progress (NAEP), also called the nation's report card, which were dismal compared with results from state tests on which students scored markedly higher. It was a hard pill to swallow. But when faced with the undeniable information it was almost striking how they embraced it.

While our data was powerfully convincing, people also needed a glimmer of hope. "What can we do to fix this?" we wondered. Things get harder for a foundation at this point. People wanted funding but the infrastructure wasn't there yet. There were so many demands, and we mapped the work every year with a group called the Adolescent Literacy Funders Forum that was comprised of public and private foundations investigating who was doing what in research, practice and in state activities. This information gave us leverage and a sense that we could employ our network to help people get support. It was enormously important.

Meanwhile, we started to produce a series of pub-

lications for various audiences that would help people in the field in the short term. We convened some of the best researchers available and produced *Reading Next* in 2004. Even without funding at a major level these publications acted as a guide or stopgap. When we received 1.5 million requests for this initial publication, it was obvious there was a desperate need for ideas and materials.

A couple of years later we started the Adolescent Literacy Council, made up of terrific people and chaired by Catherine Snow, to provide a combination of research, policy and practice guidance for the program. It turned out to be tremendously helpful and strategic, especially in the infancy of a field that needed to be propagated. How do states really think? What happens in classrooms? They wrote many white papers and did work that was critical to forming the field. Members of the Council could also attend conferences and explain what Carnegie Corporation was doing.

Frankly, we were surprised at how hot the program became. As fast as we were working, we couldn't work fast enough. People quickly began seeing this as an urgent need. The dropout problem, poor literacy rates—it all added up to huge demand. Admittedly, we're just beginning to go down the road to figuring this out. Implementation and engineering in schools still require work. It's an enormous enterprise that still needs several years of attention. Often, as a program officer you're not prepared for how long it takes to get things going. Progress is often slow and painful, and it's not under your control. On the up side, work that's presently going on with Common Core Standards will definitely help progress the issue of adolescent literacy. This means the work we've done is counting in a different and lasting way.

and put right. Many of these problems can be traced directly back to the limitations of the U.S. education system, which typically fails to support

readers after age eight. From kindergarten to third grade most children receive adequate instruction in literacy. But in grades four and beyond there's

a lack of consensus on what constitutes effective reading strategy. As a result the country as a whole is failing to produce the highly literate, college-ready adults with literacy skill sets that qualify them for employment in the new global knowledge economy—a situation still evident when comparing the performance data of U.S. students today with that of many other nations. The reasons are elusive, but the facts are undeniable: Lack of literacy skills renders students unable to understand, evaluate and judge the information they hear and read, or to convey complex ideas, whether in the college classroom or the workplace—all of which acts as a barrier to finding employment and exercising their full rights as citizens.

Because so many high school graduates are not prepared for college-level coursework, most colleges and universities now must offer costly remedial reading programs. At the same time, private industry spends billions annually to bolster the literacy skills of entry-level workers—further proof that America’s adolescents are not being adequately prepared for life after high school. In this knowledge-based economy, only the well educated, highly literate and technologically fluent worker reaps optimum rewards. Young people are increasingly likely to be unemployed or underemployed, and to suffer the consequences of lifelong lower income.

The Corporation is addressing this problem by helping to build the nation’s capacity to teach

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and strengthen reading comprehension skills, with a special focus on intermediate and adolescent literacy—grades four through twelve or ages nine through seventeen. We begin with a comparative advantage, having already established a knowledge base of theory and effective practice in early learning and education systems reform that has helped the field and the nation learn a great deal about children in their early, middle and adolescent years of development, as well as about teaching and learning and the complexity of school reform.

Another advantage is the network of education experts the Corporation has turned to through a long history of work in this area, with a growing team of leaders in the literacy field becoming part of the initiative. In 2003, Catherine Snow and Gina Biancarosa, then a doctoral candidate from the Harvard Graduate School of Education (now an assistant professor at the University of Oregon), produced a groundbreaking report: *Adolescent Literacy and the Achievement Gap: What Do We Know and Where Do We Go From Here?* Based

on the review of research on adolescent literacy that came out of a meeting at the Corporation with foundations and other literacy stakeholders, it concluded that a coordinated effort was vital in order to jumpstart the focus on adolescent literacy. The group identified a pressing need to coordinate research and evaluation in order to help educators make progress in closing the adolescent and pre-adolescent literacy achievement gap. By joining forces they hoped to provide a breeding ground for ideas on how best to meet the needs of the most underserved populations of adolescents, those whose academic achievement is most at risk: African-American, Latino, English language learners and low-income children.

Snow contends that no silver bullet for advancing adolescent literacy has yet been found, by the Council or by other means. “There are so many components,” she says, “which makes it harder to say what the right next steps would be.” Snow has been a staunch leader of the literacy field for over a decade.

## Catherine Snow



**Patricia Albjerg**  
Graham Professor  
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Initially I had no interest in the adolescent literacy field. But it was one of the emerging topics within reading comprehension, which has a long research history. The re-branding of the topic as Adolescent Literacy is an effort to bring in what we have learned about the complexity of kids’ lives, and an effort to bring about engagement and connection. A real school issue is learning in content areas via linking to the literacy of students’ lives

from other sources. The basis of the interaction is the pieces of real life that we’re trying to incorporate into a larger social agenda.

The issue is not just that adolescents are facing these tasks; they’re doing so in schools that are designed to be dysfunctional. Middle schools are organized like high schools, with teachers teaching particular subjects, which forces kids to make a transition from “teachers of kids” to “teachers of content areas.” As a result no one connects with the kids personally. Transitions are hard and this is a very vulnerable point for kids. Academic tasks are getting harder; their autonomy is growing and it’s a less supportive environment. Adolescent literacy is a way to understand what’s hard to understand from ages 11 to 25.

Prescient or not, I was doing a round of briefings and sent a memo to the Department of Education that was ignored. But its point was very important: Simply

emphasizing K–3 could not solve the reading problem. It's just a good start. What Reading First did was to treat third grade as an end in itself.

Instead we should be thinking of reading as weightlifting; you need to *keep at it*. That's why there are all these kids who can read well at third-grade level, but are baffled at fifth grade. At the same time there's been a decrease in activities that could build background knowledge, so there's no context: science, current events, being read to—these are critical formative activities. And these missing factors are exacerbated by social disparity.

Early literacy instructional materials include much more content rather than context. They may or may not be engaging, but they are not designed to build on. A very good example of what we should be using is *Seeds of Science/Roots of Reading*, an elementary curriculum that teaches science and literacy together.\* Other valuable reading programs give students books to read and discuss that are about topics related to social justice and the social sciences. Kids should be reading newspapers, for example, and they should be read to from what they cannot read themselves.

There are huge new challenges being presented to teachers. Fifty years ago kids who figured it out graduated, while others went to work for GM. Now we ac-

\* <http://lawrencehallofscience.org/seeds/index.html>

tually 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. There's increasing evidence that good, thoughtful discussion that engages kids in a topic forces them to form a persuasive argument, listen and counter...that these capacities add up to better reading. It's a complex pathway. It involves learning to take your opponent's perspective and follow a line of reasoning. These are crucial skills that are required for serious debate that synthesizes in one activity a lot of the skills necessary for reading, beyond simply following plot.

This kind of discussion is scary for teachers to do. It cedes control and shares air time; kids say unexpected things and show passion. You have to step back and let them argue with each other about what's really going on here. What does the author think? But I maintain the best topics *are* scary. I recommend them. I try to teach graduate students at Harvard this way myself and can't always do it.

In addition to the Literacy Council I've been amazed at other parallel activities Andrés Henríquez had going that were very worthwhile. I regret we did not think of Adolescent Literacy Fellowships sooner to create more of them. We only produced two cohorts in three years. Still it was very valuable to do that. Of those we funded, four or five individuals will become true leaders in the field.

According to Snow and Biancarosa's report, not only was there a minority achievement gap, there was a second gap between what *was* known and being done to improve the literacy levels of adolescents and what *needed* to be known and done to address this pressing social problem. Interest in adolescent literacy was building, the report said, constituting a shift in attention notable among many prominent researchers and organizations. What had once been dubbed the "fourth-grade slump" was now renamed the "fourth-grade plunge" to indicate

the alarming degree of underperformance in this age group and the growing sense of urgency about it. The Corporation's work was helping to define the multiple issues associated with reading comprehension and the myriad literacy challenges for students as they proceed through school grade by grade. There was now general agreement on what problems would most benefit from intervention:

- A shortage of qualified experts to coach and teach best literacy practices for students and teachers in the middle grades;

- A lack of capacity, time and will for middle and high school teachers to teach literacy within their content areas;
  - Inadequate reinforcement of comprehension of “informational text” in early reading;
  - Few strategies provided pupils at the end of the third grade for dealing with a rapid shift from narrative to expository text;
  - Absence of systemic thinking in schools about literacy beyond age eight;
  - Decrease in students’ motivation to read as they progress from fourth through twelfth grade;
  - Middle and high school designs with insufficient capacity to identify and target students requiring literacy assistance;
  - Little awareness by parents and community groups that literacy instruction needs to continue after children have acquired basic decoding skills.
- The meeting also reached a consensus on the broader changes that would be needed to bridge these gaps, and produced an initial to-do list, which included the following steps:
- Districts need to focus on increasing capacity (particularly training teachers) to adopt literacy practices within the school day, especially to embed literacy practices within content areas.
  - Attention should be devoted to special challenges of English language learners.
  - Reform efforts need to make literacy a central concern and to build ideas for advancing literacy into school redesign.

## Literacy for English Language Learners

From the 1991–1992 through 2001–2002 school year, total public school enrollment increased only 12 percent, while the number of students with limited English proficiency grew by 95 percent. An important strategy of the Advancing Literacy program was to ensure the development of appropriate and well-validated work for secondary English-language learners (ELLs), an area where demand was clearly growing but awareness and resources were not keeping pace. Two grantees helped the program get ahead of the curve. In 2003, funding was provided to a program established by the Center for Applied Linguistics (CAL) in Washington, D.C. that was among the first to deal with the challenge posed by the growing number of students in this category, which was compounded by the shortage of qualified English-as-a-second language and bilingual education teachers.

The difficulty for English-language learners is that they must master vocabulary and grammar and comprehend content and word usage in core classes that

are taught in English. Students are expected to acquire the academic language related to the topics, learn the content concepts that are linked to the curriculum objectives and perform the tasks associated with the subject area—essentially doing double the work. To address this issue, some schools have implemented so-called sheltered instruction courses in which students receive subject matter instruction in English, but modified to be more accessible at their levels of proficiency. This approach makes the content comprehensible while promoting the students’ academic English-language development. Sheltered Instruction for Observation Protocol (SIOP), a program of this type, was created by the Center as part of a research and professional development project, which allowed CAL to test the model and look at student achievement outcomes in a rigorous research setting.

The project tracked and evaluated implementation over time and the effects on student performance, with data gathered in the first year serving to shape

- Family and community supports need to be engaged with literacy efforts at the school level.
- Local, state and federal policies need to expand to ensure literacy practices are financed beyond third grade.

This increased pressure was puzzling to those focused only on the mechanics of reading and writing, and to adults in general for whom these were already automatic processes. As the report explained, for the proficient reader, comprehension just seems to happen naturally, and most people would think that with a solid foundation, the rest is simply a matter of improving content knowledge. In fact, a good start is critical, but not sufficient to produce proficient, flexible adolescent readers. “Notwithstanding the laudable

efforts by the U.S. Department of Education to bring all children to similar levels of reading skill by end of third grade through Reading First funding to states, it would be foolhardy to think that these efforts, even if wildly successful, will by themselves eliminate reading failure or the achievement gap in the middle and high school years,” the authors maintained.

Adolescent readers quickly discover as content demands increase, literacy demands also increase. From fourth grade on students are expected to read and write across a wide variety of disciplines, genres and materials with increasing skill, flexibility and insight. Readers must be fluent in recognizing words, and their vocabulary and knowledge need to expand along with their

professional development activities and guide later refinements. Begun as an instrument for researchers to determine how well teachers were incorporating sheltered instruction into their lessons, as a result of teacher feedback it evolved into a lesson planning and delivery approach known as the SIOP Model.

Johns Hopkins University in Baltimore, Maryland received funding for their ELL program beginning in 2004. Citing Pew Hispanic Center data, they projected the number of second-generation Latinos 5 to 19 years old would more than double over the coming 20 years, going from 4.4 million to 9 million. Up to that point, many of the programs for ELL students had been clustered in early elementary grades and adult literacy classes, where students learned only the most basic English skills. Few interventions had been developed for secondary-school students, where academic language proficiency requires knowledge of less familiar vocabulary as well as the ability to interpret and produce increasingly complex written language.

Hopkins staff saw a huge challenge in helping secondary English language learners succeed academically, given the requirement in most states for all students to meet standards in core subject areas and pass certain tests for graduation.

Researchers from the University’s Center for Research on the Education of Students Placed at Risk (CRESPAR) took on the task of creating a professional development program for middle and high school teachers in English, science and social studies, whose classrooms typically have large numbers of ELLs. The program, Expedited Comprehension for English Language Learners (ExCELL) was piloted and evaluated in seventh, ninth and eleventh grades in El Paso, Texas; Kauai, Hawaii; and Waterbury, Connecticut between 2004 and 2005. Aiming to create a powerful framework for integrating ELL literacy instruction into some of the other adolescent literacy models, the staff worked to forge collaborative partnerships with other rigorous literacy programs.

ability to think critically and broadly. What's more, readers must also develop and maintain a motivation to read and learn—a characteristic known to decline precipitously during the middle grades. They need strategies to monitor and correct their own comprehension during the act of reading and the flexibility to read for a wide variety of purposes and in a wide variety of media. All this skill-building must happen while youngsters are developing their identities not only as readers but as members of particular social and cultural groups. A student from a minority or marginalized social, cultural or linguistic group, or a newcomer to the United States, or both, may struggle in any or all of these areas.

Readers often vary in their ability depending on text and context, Snow and Biancarosa's report pointed out. Differences include depth and breadth of domain knowledge, discourse skills and linguistic proficiency as well as cognitive faculties such as working memory, capacity and processing speed. Some of these factors also vary *within* readers as a function of what is being read and in what context. For instance, the same reader may perform quite differently when reading a history text assigned by the teacher and when reading a popular novel. Motivation to read, relevant background knowledge, and degree of personal connection to the text differentiate these reading tasks, and can influence outcomes. The struggling adolescent

## Michael L. Kamil



### Professor of Education Stanford University

I was studying to be an experimental psychologist in language learning when I got the opportunity to be a research associate on a reading project. It was then I realized that learning to read encompassed my interests in both language and learning. It was wonderful to investigate theoretical ideas in a practical way.

Failure to learn to read is actually a public health issue. It's the most serious thing that can happen. If you don't learn on schedule things become more and more difficult. Not learning to read is the beginning of the end; it's impossible to recover from. Nothing else that happens can correct it. Reading is the foundation for everything. It predicts how you do everything, including math and science.

For many years we ignored adolescent literacy. It was an old saw: *learn to read and then you'll read to*

*learn.* In fact, we've known for a long time that it's not that simple. You're always learning to read (in a given subject) and always reading to learn, even early on.

For a long time we ignored fourth grade and above. Reading First was the major federal initiative for a decade and it didn't do much for high school. Then came Striving Readers, which aims to raise middle and high school students' literacy levels but leaves out fourth grade. This grade is when kids take different subjects from different teachers and you have the resulting slump. This age group was quite neglected until the last few years.

If we are going to prepare kids to succeed we need to teach them how to read complex, decontextualized material, by which we mean reading with no direct relationship to everyday experience. Biology is one example, or chemistry or physics. These subjects have become critically important; we really need to teach these skills and haven't for a very long time. We are moving that way. It's a matter of how we package it.

I can't make a strong enough statement about what Carnegie Corporation's influence has been, in breadth and depth. The Initiative has had a positive national

reader, so familiar to teachers, very often shows a high degree of variation in reading ability, doing quite well with some materials but particularly badly with content area texts.

Tackling the many interlinked factors affecting students' reading abilities required a wide range of expertise, particularly deep knowledge of how children learn. Stanford professor Michael Kamil, who has been doing research in this field since the 1970s, was one of the first experts to join the Corporation's literacy team in 2002. He is a member of the Psychological Studies in Education Committee and the faculty of the Learning Sciences Technology Design Program at Stanford University.

effect on much of what's going on in the country. With the Corporation's efforts lots of projects were funded and supervised that have kept adolescent literacy on the front burner and led to the progress we're seeing today, including work on the common core standards. There's a wealth of publications and information that's been produced that people use all the time. The Advisory Council has served to organize the field and move forward. We're seeing that. It's hard to tell federal policy impact right at this moment, but we are on track to take on the problem.

There's a real need for reinventing teacher education. Generally, we're not delivering the solutions that we already know about. Content area teachers don't know anything about teaching reading. English language arts teachers are the only ones related to reading. Obviously we need a delivery system for knowledge we already have. People have responded and are beginning to get these things out into the world. We've made great inroads, with literacy coaches, for instance. Also, work done on the Common Core Standards has made clear that the requirements are very similar between work and college. Literacy education can prepare students for both.

## Seeding the Field

The early days of the Corporation's work in adolescent literacy were critical for investigating and preparing the field while setting the direction for a potentially bold initiative. Armed with evidence proving schools that *do* focus on literacy can improve students' academic performance, the Initiative sought to bring this fact to national attention by coalescing the field's most talented researchers and innovators. Toward that end, support for the Council on Advancing Adolescent Literacy (originally called the Advisory Council on Reading to Learn) was first provided in 2003 to begin to define the challenges and promote best practices. Made up of scholars, practitioners and public representatives, the council was intended to advise Carnegie's program staff (Andrés Henríquez) in the key areas of research, policy and practice. The program's goals were to increase demand for literacy work in the later grades, expand the supply of qualified literacy personnel in schools, build community support for this area of work, promote state and national organizations developing policies regarding literacy work and stimulate investment in the field.

Several influential organizations received Corporation support in the first round of grantmaking, often for work that would have strong implications for future literacy endeavors. A central grantee was the Alliance for Excellent Education. Established in 2001, this Washington, D.C.-based nonprofit is dedicated primarily to policy and research aimed at helping middle and high school students achieve high standards and graduate prepared for college and later success in life. The Alliance received an early grant to help establish a national effort to encourage support for adolescent literacy at the federal level.

## Carnegie Corporation of New York's Advancing Literacy Initiative: Works and Commissioned Papers

Most available at: [www.carnegie.org/literacy](http://www.carnegie.org/literacy)

### Chronology

#### 2010



Carnegie Council on Advancing Adolescent Literacy. (2010). *Time To Act: An Agenda for Advancing Adolescent Literacy for College and Career Success*. New York, NY: Carnegie Corporation of New York.

<http://www.carnegie.org/literacy>



Graham, Steve and Hebert, Michael. (2010). *Writing to Read: Evidence for How Writing Can Improve Reading*. New York, NY: Carnegie Corporation of New York.

<http://www.carnegie.org/literacy>

Irvin, Judith L., Meltzer, Julie, Dean, Nancy, & Mickler, Martha, J. (2010). *Taking the Lead on Adolescent Literacy: Action Steps for School and District Leaders*. Thousand Oaks, CA: Corwin Press.

Kamil, Michael. (2010). *Adolescent Literacy and Textbooks: An Annotated Bibliography*. New York, NY: Carnegie Corporation of New York.

Lee, Carol D., and Spratley, Anika. (2010). *Reading in the Disciplines: The Challenges of Adolescent Literacy*. New York, NY: Carnegie Corporation of New York.

Levin, Henry M., Catlin, Doran, and Elson, Alex. (2010). *Adolescent Literacy Programs: Costs of Implementation*. New York, NY: Carnegie Corporation of New York.

Moje, Elizabeth Birr, and Tysvaer, Nicole. (2010). *Adolescent Literacy Development in Out-of-School Time*. New York, NY: Carnegie Corporation of New York.

Morsy, Leila, Kieffer, Michael, and Snow, Catherine. (2010). *Measure for Measure: A Critical Consumers' Guide to Reading Comprehension Assessments for Adolescents*. New York, NY: Carnegie Corporation of New York.

#### 2009

Haynes, Mariana. (2009). *Issues in Brief: State Actions to Improve Adolescent Literacy, Results from NASBE's State Adolescent Literacy Network*. Arlington, VA: National Association of State Boards of Education. <http://nasbe.org>.

Irvin, Judith L., Meltzer, Julie, Mickler, Martha J., Phillips, Melvina P., & Dean, Nancy. (2009). *Meeting the Challenge of Adolescent Literacy: Action Steps for Literacy Leaders*. Newark, DE: International Reading Association. <http://www.reading.org>

#### 2008

Cobb, Velma, Meltzer, Julie, and William, Martha. (2008). *Mobilizing Communities to Support the Literacy Development of Urban*

*Youth: A Conceptual Framework and Strategic Planning Model*. New York, NY: National Urban League and Center for Resource Management. <http://www.nul.org>.



Harvard University. (2008). *Adolescent Literacy*. Cambridge, MA: Harvard Educational Review, 78, 1.

<http://www.hepg.org>.

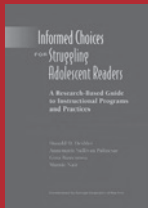
Marsh, Julie A., Sloan McCombs, Jennifer, Lockwood, J.R., Martorell, Francisco, Gershwin, Daniel, Naftel, Scott, Le, Vi-Nhuan, Shea, Molly, Barney, Heather, and Crego, Al. (2008). *Supporting Literacy Across the Sunshine State: A Study of Florida Middle School Reading Coaches*. Santa Monica, CA: RAND.

<http://www.rand.org>.

#### 2007

Batalova, Jeanne, Fix, Michael, and Murray, Julie. (2007). *Measures for Change: The Demography and Literacy of Adolescent English Learners*. Washington, DC: Migration Policy Institute. <http://www.migrationpolicy.org>.

Calderón, Margarita. (2007). *Teaching Reading to English Language Learners, Grades 6-12: A Framework for Improving Achievement in the Content Areas*. Thousand Oaks, CA: Corwin Press



Deshler, Donald D., Palincsar, Annemarie Sullivan, Biancarosa, Gina, and Nair, Marnie. (2007) *Informed*

*Choices for Struggling Adolescent Readers: A Research-based Guide to Instructional Programs and Practices*, Commissioned by Carnegie Corporation of New York. Newark, DE: International Reading Association. <http://www.reading.org>.



Graham, Steven, and Perin, Dolores. (2007). *Writing Next: Effective Strategies to Improve Writing of*

*Adolescents in Middle and High Schools*. Washington, DC: Alliance for Excellent Education. <http://www.all4ed.org>.

Heller, Rafael, and Greenleaf, Cynthia L. (2007). *Literacy Instruction in the Content Areas: Getting to the Core of Middle and High School Improvement*. Washington, DC: Alliance for Excellent Education. <http://www.all4ed.org>.

Irvin, Judith L., Meltzer, Julie, and Dukes, Melinda S. (2007). *Taking Action on Adolescent Literacy: An Implementation Guide for School Leaders*. Alexandria, VA: Association for Supervision and Curriculum Development. <http://www.ascd.org>.



Short, Deborah, and Fitzsimmons, Shannon. (2007). *Double the Work: Language Acquisition and Academic Literacy for Adolescent English Language*

*Learners*. Washington, DC: Center for Applied Linguistics. <http://www.cal.org>.

*Learners*. Washington, DC: Center for Applied Linguistics. <http://www.cal.org>.

## 2006

International Reading Association in Collaboration with National Council of Teachers of English, National Council of Teachers of Mathematics, National Science Teachers Association, National Council for the Social Studies. (2006). *Standards for Middle and High School Literacy Coaches*. Newark, DE: Author. <http://www.reading.org>

Salinger, Terry, and Bacevich, Amy. (2006). *Lessons & Recommendations from the Alabama Reading Initiative: Sustaining Focus on Secondary Reading*. Washington, DC: American Institutes for Research. <http://www.air.org>.

National Association of State Boards of Education. (2006). *Reading at Risk: The State Response to the Crisis in Adolescent Literacy*. Alexandria, VA: <http://www.nasbe.org>

## 2005



Berman, Ilene, and Biancarosa, Gina. (2005). *Reading to Achieve: A Governor's Guide to Adolescent*

*Literacy*. Washington, DC: National Governors Association. <http://www.nga.org>

Grosso de León, Anne. (2005). *America's Literacy Challenge: Teaching Adolescents to Read to Learn*. *Carnegie Results*, Summer 2005. New York, NY: Carnegie Corporation of New York. <http://www.carnegie.org>.

Henríquez, Andrés. (2005). The Evolution of an Adolescent Literacy Program: A Foundation's Journey. *Reading Research Quarterly*, 40, 376-380.

McCombs, Jennifer Sloan, Nataraj Kirby, Sheila, Barney Heather, Darilek, Hilary, and Magee, Scarlett. (2005). *Achieving State and National Literacy Goals: A Long Uphill Road: A Report to Carnegie Corporation of New York*. Santa Monica, CA: RAND. <http://www.rand.org>.

National Association of Secondary School Principals. (2005). *Creating a Culture of Literacy: A Guide for Middle and High School Principals*. Reston, VA: <http://www.nassp.org>.

## 2004



Biancarosa, Gina, and Snow, Catherine, E. (2004). *Reading Next: A Vision for Action and Research in*

*Middle and High School Literacy, A Report to Carnegie Corporation of New York*. Washington, DC: Alliance for Excellent Education. <http://www.all4ed.org>

## 2003

Kamil, Michael L. (2003). *Adolescents and Literacy: Reading for the 21st Century*. Washington, DC: Alliance for Excellent Education. <http://www.all4ed.org>

Sturtevant, Elizabeth. (2003). *The Literacy Coach: A Key to Improving Teaching and Learning in Secondary Schools*. Washington, DC: Alliance for Excellent Education. <http://www.all4ed.org>

Two decades after *A Nation at Risk* warned that a “rising tide of mediocrity” threatened the well being of the country, the Alliance leadership was alarmed that literacy achievement levels remained stagnant,

particularly with upper elementary and secondary school students. They also recognized that decoding skills unconnected to the content and context of reading led to large gaps in comprehension in the in-

## Technology Strategies

In 2003, a key grant went to the Massachusetts-based Center for Applied Special Technology (CAST), a not-for-profit organization dedicated to expanding educational opportunities through the innovative uses of assistive technology. CAST determined that access to books, magazines and periodicals would be altered drastically by the way we access information on the World Wide Web. “Comprehension of informational text on the Web is central to securing a place for advanced schooling and employment in a knowledge-based economy,” they maintained, “however, when students encounter complex informational text it is not likely they have been taught appropriate comprehension strategies.”

Skilled readers actively construct meaning as they read, connecting the text to prior knowledge to build new understanding. Skilled readers are also strategic—able to adapt and apply a host of strategies to suit the reading purpose and the type of text. Less skilled readers do not monitor their comprehension and often read passively, as words to be read to satisfy an assignment. The computer strategy tool developed by CAST presented opportunities for students to practice and receive feedback for comprehension, while at the same time providing the necessary support for teachers to learn how to embed comprehension strategy instruction into their curricula.

The strategy tool was offered free of charge to any user with a computer, Internet connection and advanced Web browser. In schools where the prototype was piloted, students who used the computer-supported reading model demonstrated greater gains in comprehension tests than peers who read and applied reading strategies using print versions of the same material. Stu-

dents who used the electronic tool were able to transfer newly learned strategies to print-based text and teachers were able to use the tool to practice integrating comprehension strategy instruction throughout lesson planning. A beta version of the tools can be seen at the CAST Web site (<http://udleditions.cast.org/>)

In 2004, a program at the Center for Research on Learning of the University of Kansas zeroed in on an area of growing importance: computer adaptive tests for assessing reading comprehension. The RAND Reading Study Group report had revealed that understanding how to improve reading comprehension outcomes for all students entails identifying three interrelated core elements: the reader who is doing the comprehending; the text that is to be comprehended; and the activity of which comprehension is a part.

Despite the pressing need for ways to measure progress in these areas, data were unavailable because assessments were inadequate or nonexistent, particularly in secondary schools. At the same time, districts and states were calling for reliable and valid assessments reflecting progress toward established benchmarks. The University of Kansas’s Center for Research on Learning in partnership with the university’s Center for Educational Testing and Evaluation, designed a computer adaptive test to enable teachers to make reliable and valid assessments, closely tied to curricula, about which students are succeeding with which texts in which activities, and which students need further help. After a tryout period involving several thousand students, the tests were evaluated with input from an expert advisory board. An overview of the work can be seen at the Web site of the CETE. (<http://www.cete.us/>)

intermediate and middle grades. Students who receive intensive literacy instruction could become successful readers and overcome many of the education barriers they face in secondary school—but, the Alliance asserted, this happens only when there is intervention with sufficient resources and expertise.

The Alliance had already released the report, *Every Child a Graduate: A Framework for an Excellent Education for All Middle and High School Students*, featuring several policy recommendations for adolescent literacy: (1) that every high-needs middle and high school have a literacy specialist to provide all students with reading strategies and practice in improving reading and writing skills; (2) that teachers need to learn to identify reading difficulties early in order to ensure students receive the extra help necessary to succeed in middle and high school; (3) that additional federal funding be made available to pay for diagnostic assessments,

research-based curricula and time for teachers to participate in professional development.

Because few secondary school teachers see themselves as literacy experts in their content area, they need opportunities to learn appropriate strategies, develop curriculum, meet collaboratively to improve practice and mentor one another. The Alliance proposed a number of ways to inform the policymaking community and other key decision makers about the importance of adolescent literacy, and to develop financing strategies to implement effective literacy practices, from issuing reports and briefs to holding briefings on Capitol Hill for members of Congress.

Bob Wise, who has headed the Alliance since 2005, also serves as chair of the National Board for Professional Teaching Standards and wrote the book *Raising the Grade: How High School Reform Can Save Our Youth and Our Nation*.

## Bob Wise



**President, Alliance for  
Excellent Education**  
**Former Governor of West  
Virginia**

I've been working on literacy for five years, ever since joining the Alliance for Excellent Education. Literacy is critical to education reform and the Alliance recognized early on that it was an undeveloped area at both the federal and state level.

Here's what we know: Below basic scores in any state on the National Assessment of Educational Progress (NAEP) directly correlate to the state's dropout rate; it's a one-to-one effect. Our first report on this issue was produced back in 2002. This information influenced our mission, "All children should graduate."

Because that's the policy we need in order to transform education.

It's also a very effective door opener. You really grab people's attention when you talk about linking the dropout rate and NAEP scores, or how the inability of children to read and comprehend as they enter high school has a direct effect on their likelihood of graduation. Nationally, 70 percent of students test at the proficient level and 30 percent are below. Of students with low NAEP scores in the eighth grade, two-thirds are likely to drop out in the ninth and tenth grades. This is a valuable messaging device for convincing policymakers. Even if the academic community already knows, ten Ph.D.s are trumped by one legislator. There's a need to translate this issue for people who don't work in the field every day, so I'm the "bumper sticker" in the organization. We need to hone our message to reach a wide range of audiences to build support.

Success in the adolescent literacy field is greatly due to Carnegie Corporation. In 2006 the Corpora-

tion recommended that most states in the National Governors Association needed to develop a literacy policy. With Corporation backing, the NGA conducted a pilot program in eight states that proved simply teaching literacy in the early grades is not enough. As a result of this program many states began looking more closely at adolescent literacy

Carnegie Corporation's series of literacy publications articulated what the new framework needs to look like. *Reading Next* has had so much traction with practitioners in the four or five years since its publication; it's helped millions of people figure out how to do this. And there's been a policy response. Prior to the Corporation's work beginning in 2002, all efforts stopped at third grade. Carnegie Corporation influenced the creation of *Striving Readers*, which directed federal funding to states for middle and high schools. Those eight state pilot projects persuaded the Obama administration to expand funding to every state. Now there's recognition that literacy strategy needs to apply in every grade, not just K-3.

In many ways we also have No Child Left Behind (NCLB) to thank. Before, the only indicator [of student progress] we had was NAEP and it was not required. No international benchmarks existed. With NCLB states got to define proficiency, but they had to administer NAEP in grades four, eight and twelve in reading in all 50 states. Starting then we could see how students were doing nationally and in states. We saw how eighth graders flatline. We saw that where you make the effort is where you get the gains. Now we're seeing rises in fourth grade scores. Reading First is a strong foundation. Then in grades four to eight, scores level off. Twelfth grade scores are the same as they were 30 years ago,

but slacking off equals regression. It means we're standing still while the rest of the world moves ahead.

The Alliance has conducted events in many states to strengthen literacy. We act as a spearhead and give out information and invite members of Congress. Alabama had an event in Washington, D.C. because they wanted people from the rest of the country to see what was working and why it should be expanded. The governor and both Alabama senators came to the event. One senator was so enthused he became a leading sponsor on the bill. Because of that one positive experience he became an ardent literacy champion.

If we can demonstrate what's working for 10,000 students and learn how to scale up to six million we'd get rid of the bottom quartile of NAEP scores. The bottom quartile of lowest performers are twenty times more likely to drop out than the top quartile, while for students who are above to proficient in comprehension at grade level there's a direct correlation to entering college without remediation. Reading between the lines, the ability to comprehend complex text *is* college preparedness. It's amazing how predictable that is.

Here's the surprise: reading comprehension in high school translates directly to success in science and math. Everyone is focused on STEM (science, technology, engineering and math), for which literacy is crucial. Reading and comprehension lead to conclusions; it's that simple. The problem still is that subject matter teachers do not understand the value of content literacy. In the near future with the rolling out of the Common Core standards it will become even more important to integrate content and pedagogy. Carnegie Corporation has taken the lead in this work.

## A Parallel Effort

By 2007, after four years of intense activity, the Corporation's Advancing Literacy work had an

established presence in the educational community and a defined set of goals for going forward. Program staff had initiated two parallel strategies for the work jointly driving the agenda in theoretical and practical ways: one encompassed a series of

grants to organizations around the country to seed and strengthen the field (see the complete list on pages 24 and 25); another focused on the Council for Advancing Adolescent Literacy (funded since 2003), which had seen a number of priorities laid out and preliminary objectives accomplished, helping to frame and build support for this issue in the wider policy arena. Working concurrently, the two complementary work streams made it possible to build a field in a relatively short time and with limited resources.

Throughout the process, the Council's work in research and knowledge development was essential to informing the staff and other influential members of the field. Most notably, the *Reading Next* report was published in 2004 and widely distributed (see pages 12 and 13 for all Carnegie Corporation Adolescent Literacy publications) and a preservice initiative was put in place to improve the way teacher education institutions approached adolescent literacy.

The work of the Council on Advancing Adolescent Literacy was woven into almost all of the program's far-reaching efforts. Working with program staff and senior officers and under Catherine Snow's leadership, the Council's brief was to improve the public's and the average educator's understanding of what literacy for adolescents means, in terms of both the challenge to students and the challenge to schools. They were to investigate the distribution of students with reading difficulties to determine what subgroups were most at risk, to design a database about program effectiveness and explore effective ways of communicating the real problems of adolescent literacy as revealed by further research. The Council would seek out ideal teacher preparation programs for fourth through twelfth grade teachers, from preservice training to professional development activities, and promote favorable policies toward literacy coaches and specialists.

Council members determined what content-area teachers need in order to improve literacy development among students, including assessments, curricular materials and high-interest, low-reading-level texts. They also recommended information on standards and assessments that was usable, rapidly available, productive and tied to well-specified instructional implications. They sought programs on a district, school and/or classroom level exhibiting proof of excellent practice as evidence that it is not impossible. The Council acted as a conduit for bringing developments in the field to the program staff and identifying potentially high-return research for the Corporation and other funders to support. They compiled a national inventory of adolescent literacy programs, analyzing the most productive forms of intervention while looking closely at where most students were performing well and why. Models of after-school programs were also investigated in order to judge the impact of incorporating richer literacy activities.

The Council completed a cost-benefit analysis for school, district and state leaders; conducted meetings on disciplinary literacy with major national organizations; further developed the preservice program and produced a literature review aimed at locating and correcting misunderstandings in adolescents' reading of texts and textbooks. A Web site was launched as a repository for articles the Council produced as well as for information on promising practices in the field, and it quickly attracted millions of visitors.

As work progressed in the field of adolescent literacy, it became clear that teachers were the most critical piece in the literacy puzzle, yet a majority of secondary school teachers were unaware of their students' literacy needs. In classrooms where reading comprehension is taken seriously, teachers would strive to provide adequate background

## Strengthening the Field

By 2007 adolescent literacy was clearly more than an emerging field: it had matured. Yet there were still far fewer researchers and teacher educators than in the early literacy sphere—and even that number was dwindling due to retirement. A pipeline was needed to meet the rapidly growing demand for professionals.

A predoctoral fellowship program was one solution, and Carnegie Corporation invited the National Academy of Education (NAEd) to design one for students pursuing research on improving literacy outcomes for middle and secondary school students. A similar program had been successfully established in the 1980s in the special education field, offering a model the literacy profession could adopt. NAEd was a natural choice, having been founded in 1965 on the initiative of John Gardner, then President of the Corporation, and James Conant, former president of Harvard University, to “promote scholarly inquiry and discussion concerning the ends and means of education....” The long-term goal of the fellowship program was to strengthen and stimulate the adolescent literacy field by infusing it with talented, well-trained new teacher educators and researchers.

The proposed predoctoral program aimed to encourage young scholars from schools of education as well as psychology departments and other relevant disciplines to become adolescent literacy fellows and conduct dissertation research on educational effectiveness in the field. Support for fellows took a variety of forms, including assistance with dissertations, access to mentors and networking opportunities. In addition, graduate faculty were made aware of the new program so they could steer promising doctoral candidates in this direction. The program offered such benefits as predoctoral stipends, mentoring/professional development and a scholars’ network. Additional resources were also provided to enable the fellows to undertake more ambitious studies than would otherwise be feasible.

In a separate but complementary effort to strengthen the field, in this case by building the capacity of upper grade classroom teachers, the Corporation engaged the National Writing Project to institute the National Reading Initiative (NRI). This grant’s primary objective was to design new professional development services for content area teachers in grades four through twelve. Founded in 1973 at the University of California, Berkeley, the National Writing Project provides professional development to improve the teaching of writing for teachers from kindergarten through college level. With 197 project sites throughout the United States, the work of the National Reading Initiative was meant to leverage the organization’s network and eventually fill the gap in reading comprehension expertise (<http://www.nwp.org/cs/public/print/programs/nri>).

By launching a national effort to bring the NRI work to scale, the National Writing Project accomplished a network-wide vision for adolescent literacy across the curriculum. Partnering with the Strategic Research Education Partnership (SERP), NRI took a four-prong approach to the challenge by (1) expanding leadership and involvement of content-area teachers in local writing project sites and in the national network by boosting funding and recruitment; (2) increasing the number of writing project sites and installing a two-year program including summer learning; (3) reviewing, analyzing and assessing a range of approaches to adolescent literacy development across content areas and offering the best options to local schools and districts; (4) spotlighting and supporting adolescent literacy across the curriculum as an element of the core knowledge base at all writing project sites.

## What Do Teachers Think?

Education reform efforts have a far greater chance of success when school leaders understand what teachers think and know. To bring teachers' voices into reform discussions, in 2005 the Corporation gave a grant to the Strategic Education Research Partnership (SERP), a nonprofit formed by leaders in business, education and public policy at the National Academy of Sciences, with the mission of educational research into policy and practice. SERP was enlisted to design, administer, and score two surveys—one for teachers and one for students—that would help inform school administrators and guide research and development on improved literacy instruction. The surveys were administered to teachers and students in urban school districts in Detroit, Boston and Austin.

The teacher survey examined teachers' opinions on students' literacy skills and on the information and resources needed to teach literacy within specified content areas. The survey took into account individual variables such as age, education and years of teaching experience as well as organizational variables re-

lated to the school and its leaders. The student surveys asked young people to report on their literacy practices in and out of school as well as their future goals and aspirations. It also correlated their actual practices with these goals.

The results of this survey were widely disseminated and influenced the work of other key grantees of the Adolescent Literacy Initiative. This project has provided school leaders with access to detailed information about how to address literacy within their individual schools as well as improvements that could be made in teachers' understanding of student literacy achievement. The outcome has been the emergence of a sense of shared responsibility for promoting literacy along with access to appropriately targeted professional development and support. One of the products, Word Generation, is designed to create a coherent school-wide effort that gives students the sustained exposure to academic language they need for success in school. (<http://wordgeneration.org/>)

knowledge and active learning that would prepare students. Many secondary school teachers, however, would argue that they are teachers of content and not teachers of reading.

How well teachers understand their students' literacy situation matters significantly, according to Elizabeth Birr Moje, a member of Carnegie Corporation's Adolescent Literacy Advisory Council, who made this discovery early in her career as a high school history and biology teacher. "In the process of trying to do scientific investigation I really struggled to find ways to build their knowledge. We tried the inquiry approach with no

success. I simply didn't know how to help my students. Who hadn't taught them? Why were they so lazy? I knew they worked in other contexts. They could read well and were engaged, but not in bio. I wondered what could change to 'invite them in' to the course."

Now a college professor, Moje teaches courses in adolescent literacy, among other subjects, and conducts research focused on the intersection between the literacies and texts youth are asked to learn in the disciplines (particularly in science and social studies) and the literacies and texts they experience outside of school.

## Elizabeth Birr Moje



**Arthur F. Thurnau Professor  
of Literacy, Language, and  
Culture in Educational Studies  
University of Michigan,  
Ann Arbor**

I follow young people throughout their daily lives. I trained as an ethnographer, a background I use to study how literacy works in their lives. As a young teacher and drama director, I saw clearly that kids were comprehending. I looked at how and why and when they use literacy *outside* of school to use as leverage *within* the classroom or to teach teachers.

Now I work with kids in Detroit on the science curriculum. For 13 years I've been in a Latino community doing research for NSF. I follow the kids and look at literacy and science-related practices. So many of them have interesting experiences that could make an immediate connection to the course. One girl would go digging around in local parks and get found objects and decode them. She had curiosity and wanted to know. Another group of kids got involved in protests related to environmental issues when a playground was planned on a Superfund site. Again, this was completely relevant to the curriculum. But kids typically won't see how what they do is related to what they are studying.

There's also some evidence that their experience isn't valued. Kids often make an important comment as a whispered aside. Masterful teachers can hear that comment and incorporate it into instruction. But most teachers don't hear it, or will consider it irrelevant, so the opportunity falls flat. The strategic teaching we're trying to promote is to help kids connect the knowledge and interest they already have with what we want them to have. The raw material can be political cartoons, video games, rap songs or whatever connects the classroom and the culture outside.

The state of literacy today depends on how you're defining what literacy is. Standard tests give us some cause for alarm. Are tests really a reflection of skill? Or are students playing the game of taking tests?

Multiple measures give us more hope and push us to think about engagement, motivation. Testing shows many kids don't have the skills to read critically and deeply in upper grades. But when kids are highly interested—as in a text of their choosing—we get to see them engaging with that text strategically. There's value in being a strategic reader, and kids need to learn these things. We need to look more closely at what we're asking kids to read and write in school. We need to support them and provide them with the opportunity to engage in meaningful work.

There's a great range of reading issues out there. One challenge is that nuance is hard to make policy for. A lot of people don't want to hear about it. Another problem is that we rush to identify kids as types of readers—struggling vs. proficient—and a majority of kids we survey don't identify as readers at all. They don't enjoy it. The concern comes when kids are identified as strugglers, which affects their self concept regarding their abilities. We ask "How good are you at reading?" In every domain, kids who think they're good at it do well. How we are labeled has strong implications for how we achieve.

When I work with kids in Detroit I think about opportunities. One thing to stress is the idea that it's not just about remediating early literacy skills. Text demands at upper grades ramp up dramatically because of abstract concepts. Kids might previously be learning about animals, and suddenly in the ninth grade they have to learn about cells—something they can't see. It becomes an enormous abstraction. Texts that represent these concepts are a lot harder. When I teach preservice teachers I ask, "What would it be like to be 14 and have no idea what this is?" Pushing the agenda beyond remediation is really about reading (and writing) in multiple domains. This is a new kind of aware-

ness. It involves what you're doing when you say you're engaging literacy.

The Adolescent Literacy Council is important. And without Andrés Henríquez there could not have even been a Council. He's been single-minded in pursuit of this agenda. Andrés has been a force in Adolescent Literacy and without him we wouldn't have any of these accomplishments. It's been his focus on setting the agenda and following through.

## Getting on the Governors' Radar

While the Corporation's adolescent literacy work was taking shape, reading comprehension issues were also starting to play a bigger role in secondary school reform, with state policies focusing more of their attention on high schools—particularly dropouts. Research was showing students in the lowest quartile of reading achievement were several times more likely to drop out of school than students in the next highest quartile of achievement, and *twenty* times more likely to drop out than top-performing students. Clearly, states needed to operationalize this evidence on the literacy crisis and take serious steps to prevent youngsters from reaching high school without basic skills.

“The reason there's been a growing awareness of this issue is really due to Carnegie Corporation's work in adolescent literacy,” says Ilene Berman, program director of education of the National Governor's Association (NGA). “Governors understood early literacy but with the existence of more research, adolescent literacy is now much more on their radar.” Berman refers to a previous joint project of the NGA and Harvard (sponsored by the Corporation), which looked at early literacy and how to develop and shape policy. “This partnership resulted in the publishing of *Reading to Achieve: A*

*Governors Guide to Adolescent Literacy*, in 2005,” she says. “It asked, ‘what can state leaders do to promote literacy at fourth grade and above?’ So this is work we've been doing at least since then. Now the notion of adolescent literacy has gotten into the fabric of educational reform—particularly high school reform.”

According to Berman, literacy is something that needs to be thought about all through the K–12 experience. “In order for students to have a good grounding in a subject area, they need literacy skills for that subject area. How do you read a science journal article, for example?” she asks. “How does a teacher teach that? Or what's the difference between reading the newspaper versus reading a short story?”

Gubernatorial leadership is essential for meeting major state education goals like improved adolescent literacy—it's a requirement for closing the achievement gap, turning around low-performing schools, increasing high school graduation rates, lowering juvenile detention and incarceration rates and preparing more students for the knowledge-based economy's increased literacy demands. To engage this cohort, in the fall of 2005 Carnegie Corporation provided a grant to the National Governors' Association Center for Best Practices in Washington, D.C., for its State Policies to Support Adolescent Literacy project. (The National Governors Association [NGA] facilitates the nation's governors' collective influence on national policy and the NGA Center for Best Practices is its dedicated consulting firm.)

Eight states—Arizona, Delaware, Florida, Idaho, Massachusetts, Mississippi, New Jersey and North Carolina—received funding through the NGA adolescent literacy project to develop statewide plans and policies dealing with adolescent literacy. The NGA worked with these states on development and implementation, providing

workshops for education leaders and state staff, offering advice on directing state and federal funding sources, disseminating updates and hosting learning labs and conference calls with policymakers as well as producing campaigns to build public will for the proposed policy changes.

“It was interesting how different states took different approaches,” Berman says. “Some addressed school infrastructure, others revised standards and assessments or worked on teacher training or on making people aware.” Many of these activities were also extended beyond the original eight awardees, which she says increased the program’s impact and helped put adolescent literacy at the forefront in a majority of states.

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## Looking Ahead

The 2009 Advancing Literacy Initiative’s final report, *Time To Act: An Agenda for Advancing Adolescent Literacy for College and Career Success*, summarizes the program’s far-reaching grant work including the concerted efforts of the Adolescent Literacy Council, and defines adolescent literacy as a cornerstone of the current education reform movement. Taking readers from “The Vision: Literacy for All” to “A Call to Action: Where to Begin,” the report concludes with critical next steps for leaders at the school, district, state and federal level. *Time to Act* gives concrete examples of how to redesign schools and promote excellence in all content areas through a renewed focus on literacy. Specifically, it recommends that the nation: (1) give teachers literacy-focused instructional tools and formative assessments; (2) encourage schools and districts to collect and use information about student literacy performance more efficiently; and (3) call upon state-level leaders to maximize the use of limited resources for literacy efforts in a strategic way.

One major effort by state-level leaders is the Common Core State Standards Initiative, coordinated by the National Governors Association Center for Best Practices and the Council of Chief State School Officers (CCSSO). These standards, which were developed in collaboration with teachers, school administrators and experts, provide a consistent, clear understanding of what students are expected to learn. They are designed to be relevant to the real world, and to reflect the knowledge and skills young people need for success after high school. The reading standards, for example, establish a “staircase” of increasing complexity in what students must be able to read to be prepared for the demands of college- and career-level work.

Many of the country’s most prominent education leaders have gotten behind these standards, believing they are the most likely guarantee that all children across the country are given the tools they need to succeed. High standards that are consistent across states provide teachers, parents and students with a set of clear expectations that everyone can work toward together, which will ensure that we maintain America’s competitive edge, so that all of our students are well prepared with the skills and knowledge necessary to compete with not only their peers here at home, but with students from around the world.

A strong supporter of the Standards is innovator and education leader David Coleman. He’s the founder of Student Achievement Partners, an organization that serves foundations and school districts by bringing together leading thinkers and researchers to focus on improving the most significant outcomes for students. According to Coleman, Carnegie Corporation’s Adolescent Literacy Initiative helped galvanize the goal of the standards effort and created a shared sense of urgency that led others to support it.

## David Coleman



### Founder and CEO Student Achievement Partners

It would be hard to exaggerate the importance of Carnegie Corporation's literacy work. It was way ahead before the rest of the world saw it. It's a wonderful story of foundation research, which often gets neglected; a very good and unusual story of a bet taken by a foundation that really, really paid off.

There are several important ways the literacy work informed the Common Core Standards: First, research by the Corporation was crucially important to establishing the urgency of the goal, making clear there was indeed a crisis in later literacy. It showed there was a profound problem that had to be addressed, which created a platform for the standards. It readied the country to make a transition to uniform standards, which provide a more serious approach to reading in later years. Carnegie led the way in analyzing and explaining the crisis, and in beginning to end that crisis. There was already a great deal of work on *early* reading, but there was now demand for *later* work. We could see that the eighth grade National Assessment of Educational Progress (NAEP) scores were unchanged in 40 years, for example. It showed that there's much more to do.

Next, they made the problem urgent and clear. The Initiative assembled research that went beyond English Language Arts and into social science and technical disciplines. These were crucial findings that shaped the common core standards, right up to the actual name: *Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects*. It was Carnegie Corporation research that extended the demands for literacy in the

content areas that is incredibly important for college and career.

In addition, they enabled us to learn more about what comprehension means in a way that had not been defined before. They provided a superior map than we'd ever had: What does comprehension look like over time? What is the map? What happens to a reader over time in grades four through twelve? They kept researching it. Finally, they assembled a high-quality community of experts to offer technical assistance to others in the field. Without this cohort there might not have been a field. With this quality of work the reception was substantially improved. It laid the groundwork to make people more concerned where once they might have said "Why bother?" Now the country was focused. Carnegie Corporation had made the research known. No one else had pushed the standards down into high school. This work has enabled us to look at collegiate demands and move them down into the lower grades. As a result we have not just high standards, but more focused standards.

Excellent reading comprehension of sufficiently complex texts—a range of texts—is the only reliable indicator of college readiness. And you demonstrate it by writing, reading's sister art, as well as by speaking and listening. Students must use evidence from texts over and over; it's focused and intentional practice. Text must be central to discussion; engaged discussion is not just talking. This goal is very ambitious. If you're serious you have to practice over many years. There are only ten standards in reading, and students practice them every year. They depend on getting evidence from text and keeping on that idea time after time. It takes discipline.

Standards make clear what you need to practice. It's about hard work and reinforcement. The idea is to get everyone working on the same set of standards and forming common habits. Research shows there's a direct relationship to career and college.

“We must re-engineer our schools to ensure that literacy instruction extends to middle and high school students,” Andrés Henríquez stressed in testimony before the House Subcommittee on Early Childhood, Elementary and Secondary Education late that same year. One of the primary challenges is to connect reading and writing instruction to the rest of the secondary reform agenda, he said.

As the final grants of the Advancing Literacy Initiative reach their conclusion, the Corporation’s National Program is incorporating literacy issues into its school reform agenda. In order to have “literacy for all” the nation must have a comprehensive agenda for reforming schools to better support adolescent learners. New school designs must feature a school culture organized for learning, data-driven decision making, wise allocation of

resources, strong instructional leadership, committed and professional faculty, targeted interventions to help struggling readers and writers and content area classes permeated by a strong literacy focus.

As Henríquez sums it up, “Addressing the literacy gap that emerges in middle school is a key element in driving forward national education reform efforts. This requires schools to provide improved literacy instruction in all content areas, particularly to those who struggle, as well as continual assessments of needs and progress. Thanks to our research base and network of experts, other funders, universities and centers of literacy moving the ideas forward, much has been accomplished. But even more remains to be done.”

*Written by Karen Theroux*

Organization	Number of Grants	Beginning Date	Total Funding
<b>Adolescent Literacy Preservice Initiative Grants</b>			
University of California, Santa Cruz	1	2005	\$ 25,000
University of Connecticut, Storrs, CT	1	2005	\$ 100,000
Florida State University Research Foundation, Inc.	1	2007	\$ 100,000
University of Georgia Research Foundation, Inc.	1	2006	\$ 100,000
University of Illinois, Chicago	1	2005	\$ 100,000
University of Kansas, Center for Research, Inc.	1	2005	\$ 100,000
The Regents of the University of Michigan	1	2005	\$ 99,900
Michigan State University	1	2005	\$ 100,000
Portland State University	1	2006	\$ 100,000
Teachers College, Columbia University	1	2005	\$ 100,000
<b>Adolescent Literacy Grants</b>			
Alliance for Excellent Education	3	2003	\$ 950,000
American Institutes for Research in the Behavioral Sciences	1	2003	\$ 300,700
Boys & Girls Clubs of America	1	2005	\$ 25,000
Brown University	1	2006	\$ 50,000
University of California, Los Angeles	1	2008	\$ 332,000
CAST Resources, Inc.	4	2003	\$ 1,602,800
Center for Applied Linguistics	3	2003	\$ 941,300
University of Chicago	2	2008	\$ 79,100

<b>Organization</b>	<b>Number of Grants</b>	<b>Beginning Date</b>	<b>Total Funding</b>
Education Development Center, Inc.	1	2006	\$ 543,500
Florida State University Research Foundation, Inc.	1	2005	\$ 460,500
George Lucas Educational Foundation	1	2005	\$ 49,800
The University of Georgia Research Foundation, Inc.	1	2001	\$ 48,600
Greater Washington Educational Telecommunications Association, Inc.	3	2004	\$ 595,000
Harvard University	3	2003	\$ 1,512,600
University of Illinois, Chicago	1	2004	\$ 100,000
International Reading Association	2	2004	\$ 49,000
Johns Hopkins University	4	2004	\$ 1,146,900
University of Kansas, Center for Research, Inc.	2	2003	\$ 539,500
Lake Forest College	1	2004	\$ 23,600
Mayor's Fund to Advance New York City	1	2007	\$ 248,700
University of Miami, Coral Gables	2	2008	\$ 99,700
The Regents of the University of Michigan	3	2004	\$ 580,300
Michigan State University	1	2004	\$ 169,500
Migration Policy Institute	3	2007	\$ 78,500
National Academy Foundation	1	2007	\$ 250,000
National Academy of Education	1	2007	\$ 956,300
National Association of Secondary School Principals	1	2004	\$ 25,000
National Association of State Boards of Education	2	2005	\$ 221,000
National Center for Family Literacy, Inc.	1	2004	\$ 45,800
National Governors' Association Center for Best Practices	2	2005	\$ 602,500
National School Boards Association	1	2005	\$ 50,000
National Urban League, Inc.	2	2003	\$ 200,000
National Writing Project	2	2003	\$ 1,373,000
The NEA Foundation for the Improvement of Education	1	2006	\$ 50,000
New York Institute for Special Education	1	2003	\$ 50,000
University of Pittsburg	1	2004	\$ 552,200
RAND Corporation	1	2006	\$ 681,200
Rutgers, The State University of New Jersey	1	2003	\$ 49,400
Strategic Education Research Partnership Institute	2	2005	\$ 450,200
Teachers College, Columbia University	1	2009	\$ 25,000
University of Texas at Austin	1	2008	\$ 2,592,100
University of Washington, Seattle	1	2005	\$ 35,100
WestEd	1	2003	\$ 400,000
University of Wisconsin, Madison	1	2008	\$ 1,605,600

**Total Grants:**

**\$ 21,665,900**

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