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R E P O R T

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# Achieving State and National Literacy Goals, a Long Uphill Road

A Report to Carnegie Corporation  
of New York

Jennifer Sloan McCombs, Sheila Nataraj Kirby,  
Heather Barney, Hilary Darilek, Scarlett Magee

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## Summary

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Recent reform efforts in education have yielded positive results in improving reading achievement for the nation's children in the primary grades, but many children are not moving beyond basic decoding skills to fluency and comprehension, even as they advance to the fourth grade and classes in history, mathematics, and science. This lack of progress is especially troubling because adolescents are facing a post-secondary job market that demands high literacy skills.

In an effort to focus national attention on the problem of adolescent literacy, Carnegie Corporation of New York launched a new initiative, *Advancing Literacy*. Carnegie's objective is to advance adolescent literacy, which encompasses reading and writing in grades 4–12, by promoting policy, practice, and research in this field. As a first step, Carnegie asked the RAND Corporation to convene a small study group for one year to lay the foundation for the work of a larger Advisory Council and to undertake a study examining the state of adolescent achievement in literacy in the nation.

Our analysis focused on three research questions:

1. To what extent are *adolescents* (defined as students in the 4th through 12th grades) meeting state literacy goals, as measured by state assessments?
2. To what extent are adolescents meeting national literacy goals, as measured by the National Assessment of Educational Progress (NAEP)?
3. To what extent are the results from state assessments and the NAEP consistent with one another?

To answer these questions and to understand how states define and measure adolescent literacy and how students fare on assessments of those measures, we examined the state assessment systems adopted by the 50 states and the District of Columbia.<sup>1</sup> For each state, we sought to briefly describe the assessments that are being used to measure literacy levels among adolescents, including how they are linked to content standards, the content and format of the assessments, and student performance on those assessments. We also describe how students are performing relative to national goals, as measured by the National Assessment of Education Progress (NAEP). We describe the NAEP reading and writing assessment, including the content and format, and student performance on that assessment. Our

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<sup>1</sup> The District of Columbia, being a large urban district, is quite different in nature from the states in terms of demographics, population, and educational governance. It offers a look at how students in a high-poverty, urban district perform and some of the challenges such districts face in trying to meet the No Child Left Behind (*NCLB*) goals.

timeline did not allow for detailed analyses of these assessment or the results: Our purpose was simply to report publicly available data.

This report documents the results of RAND's research effort and provides a portrait of where the nation's adolescents stand relative to state and national literacy goals and how far we need to go to help our children achieve those goals.

## **Under No Child Left Behind, All Students Should Become Proficient by 2014**

It is important to place the research in the context of the No Child Left Behind Act (NCLB), which requires states to adopt standards-based accountability systems that set challenging content and performance standards for all students. To ensure that students are meeting these standards, by 2005–2006, states must annually test all children in reading and math, in grades 3, 4, 5, 6, 7, 8, and at one grade in high school. By 2007–2008, states must test students in science at least once in grades 3–5, 6–9, and 10–12. States must establish goals for performance on the assessment and track performance for all students and subgroups of students (e.g., racial/ethnic groups, students with disabilities, migrant students). By the end of 12 years, all schools should have reached 100-percent proficiency—that is, all children in the school must pass the state test.

To meet these federal requirements, states are currently changing and expanding state testing programs, which will be used to hold schools accountable under the federal law. Schools that fail to make adequate yearly progress face escalating sanctions over time, such as being required to offer school choice or supplemental services and may include, among others, decreased decisionmaking; reconstituting the school staff; instituting a new curriculum based on scientifically based research; extending the school year or school day; and appointing an outside expert to advise the school. In addition, a growing number of states are holding students accountable by requiring that students pass high school assessments before they can graduate or to pass a given grade assessment to be promoted to the next grade.

## **States Have a Long Way to Go to Meet State and National Literacy Goals**

We include data both from the NAEP and the state assessments to provide multiple indicators of student performance in the states and to show how students are faring with respect to national and state literacy goals. Note that, because of the differences in the tests themselves and the definitions of *proficiency levels* in the NAEP and state performance standards, these data are not directly comparable. While one could argue that state and national literacy goals should be reasonably similar, in reality there is debate regarding at what level standards should be set. For instance, there is debate about whether NAEP achievement standards are too ambitious and challenging (Linn, 2003). If NAEP achievement standards are indeed more rigorous and challenging than many state standards, then one would expect differences: Students would perform worse on the NAEP than on state assessments, and such differences would not imply that the data from state assessments are wrong or unreliable. Our purpose here is not to draw such inferences but simply to offer two different data points on adolescent literacy achievement measured against state and (arguably, more stringent) national literacy standards. We believe that it is important for state policymakers, practitioners, and parents to examine both sources of data and to make their own judgments regarding the rela-

tive performance of their students against both sets of standards. In addition, under NCLB, states are now required to participate in the NAEP in order to help verify state results using a common measure; therefore, states need to become familiar with the NAEP, what it measures, and how this differs from their own assessments.

Our findings suggest some major concerns about the ability of states to meet the ambitious goal set by NCLB of 100-percent proficiency for all students.

First, in several states, fewer than half the students meet the state proficiency standards, and in no state do even half the students meet the NAEP national literacy standard of proficiency:

- The pass rates on the elementary-school state assessments (4th- or 5th-grade assessments) differed widely across states, ranging from 28 to 87 percent. In seven states, less than half of the students passed at the elementary level.
- Fourth-grade state proficiency rates on the 2003 NAEP Reading Assessment ranged from 10 to 43 percent, and the average state proficiency rate on the NAEP was 30 percent. Three states had proficiency rates of less than 20 percent; 15 states had proficiency rates of 20–29 percent; 30 states had proficiency rates of 30–39 percent. In only three states—Massachusetts, New Hampshire, and Connecticut—did the proportion of students scoring at the proficient level reach 40 percent and above.
- The pass rates on the middle-school state assessments ranged from 21 to 88 percent. Three states had pass rates of less than 30 percent. In 12 states, less than half of the students passed the reading assessment.
- Overall, between 10 and 43 percent of 8th-graders scored at the proficient level on the 2003 NAEP Reading Assessment. DC was the only jurisdiction to have a proficiency rate of less than 20 percent; New Hampshire and Massachusetts were the only states to have proficiency rates of 40 percent or higher. In 17 states, 20–29 percent of students scored proficient and above; in 31 states, 30–39 percent scored proficient and above. The average state proficiency rate of 8th-graders was 32 percent.
- Pass rates on the state and the NAEP writing assessments tended to be somewhat lower than on the reading assessments.

Second, the wide disparity in the achievement of subgroups of students makes reaching the 100-percent proficiency goal for all students a more challenging task for certain schools and districts. The NAEP and state assessments show large achievement gaps between subgroups of students disaggregated by race/ethnicity and poverty status (Table S.1). For example:

- At the 4th-grade level in reading, national and state assessments show, on average, a difference of 27 percentage points between the proficiency rates of white and African American students; 24–27 percentage points between white and Hispanic students; and 23–25 percentage points between economically advantaged and economically disadvantaged students.
- This is true at the 8th-grade level in reading as well, where we see a difference of 26–28 percentage points between the proficiency rates of white and African

**Table S.1**  
**Average Differences in Proficiency Rates of 4th- and 8th-Grade Students, Disaggregated by Race/Ethnicity and Poverty Status: State Reading Assessments and National Assessment of Educational Progress 2003 Reading Assessment**

Subgroups of Students	Average Difference in Proficiency Rates (percentage points)	
	State Assessments	NAEP
4th Grade		
White and African American students	27	27
White and Hispanic Students	27	24
Economically Advantaged and Economically Disadvantaged Students	23	25
8th Grade		
White and African American students	28	26
White and Hispanic Students	26	22
Economically Advantaged and Economically Disadvantaged Students	24	22

American students; 22–26 percentage points between white and Hispanic students; and 22–24 percentage points between economically advantaged and economically disadvantaged students.

- At all levels, students with limited English proficiency and students with disabilities trailed well behind their peers.

### Multiple Sources of Data Regarding Literacy Achievement Help Provide a More Complete Picture

It is clear that while states are operating under a common mandate for proficiency, there are large differences in the rigor of the assessment and in performance levels that states consider “proficient” under NCLB—proficiency cut-scores—leading to quite disparate outcomes. Compare, for instance, South Carolina, Wyoming, North Carolina, and Texas. At the 8th-grade level, 21 percent of students in South Carolina and 39 percent of students in Wyoming passed the state assessment, compared with 86–88 percent of 8th-graders in North Carolina and Texas. However, when one looks at the 8th-grade NAEP scores, 24 percent of students in South Carolina and 34 percent of students in Wyoming scored at the proficient level, compared with 26 percent of students in Texas and 29 percent of students in North Carolina. Clearly, even if each state were to meet its 100-percent proficiency goal for reading, students in those states would likely have quite disparate abilities, knowledge, and skills.

Further, simply looking at proficiency rates on state assessments may not provide the public and parents with all the information they might want about student achievement. For example, in an examination of individual states, we see both similarities and marked differences in some states regarding what state assessments show about the relative performance of subgroups and what the NAEP shows. If state assessments show small performance gaps among these groups of students while the NAEP, arguably using a more challenging standard of literacy, shows large performance gaps, it is important for state policymakers and parents to reflect on what this disparity might imply for the likely future employment and education opportunities for these students. If we fail to give due attention to multiple sources of

information regarding literacy achievement, we may fail to miss important problem areas and may end up shortchanging those most in need of assistance.

Overall, the data show that our nation faces a tremendous challenge to raise the literacy skills of our nation's adolescents. It is clear that simply mandating standards and assessments is not going to guarantee success. Unless we, as a nation, are prepared to focus attention and resources on this issue, our schools are likely to continue producing students who lack skills and are ill-prepared to deal with the demands of post-secondary education and the workplace. Policymakers, schools, and teachers need to step up and accept the "orphaned responsibility" of teaching students to read to learn. The costs of inattention are very high, both in personal and economic terms.