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**Headquarters Campus**  
 1776 Main Street  
 P.O. Box 2138  
 Santa Monica, California  
 90407-2138  
 TEL 310.393.0411  
 FAX 310.393.4818

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## Implementing No Child Left Behind in Three States

The No Child Left Behind Act of 2001 (NCLB) requires each state to create a standards-based accountability (SBA) system that includes academic standards, assessments to measure student mastery of them, and incentives to improve performance. The law gives educators flexibility in how they reach its goals. The success of NCLB therefore depends partly on the policies and strategies that schools implement to improve student achievement.

To assess these, RAND researchers collected survey and interview data from schools, administrators, and teachers in California, Georgia, and Pennsylvania from 2004 through 2006. They selected these states because of their variation in geography, demography, and their approaches to implementing NCLB provisions.

The states differed in the context in which they implemented the legislation. Before NCLB, California had the most diverse student population, the most complete school-based accountability system, and relatively rigorous standards as mapped to the National Assessment of Educational Progress (NAEP). Georgia had less rigorous standards as mapped to the NAEP but also had annual testing in place for most grades and had started to implement an SBA system, allowing a smooth transition to compliance with the legislation. Pennsylvania did not participate in state NAEP testing and had the least diverse student population, only limited statewide testing, and a strong tradition of local control, so it had to work the most to comply with the legislation.

RAND researchers examined NCLB implementation in two subjects: mathematics and science. They sought to address four questions regarding implementation: how schools and teachers responded to state accountability efforts, what improvement strategies they used, the impact of accountability on curriculum and practice, and conditions that hindered improvement efforts. They found similarities and differences

### Key findings:

- Educators agree that standards-based accountability is useful, particularly for school and classroom decisionmaking.
- Many report that the system does not serve all students equally well.
- Variation in implementation may result from differing standards for “proficiency” and traditions of local control.
- States have used the flexibility of the legislation to adapt it to local conditions; future policies might strive to make standards more uniform while preserving local adaptation to respond to low performance.

across the states and between elementary and middle schools, as well as changes over time.

### Similarities Across States

The researchers found that states and schools adapted their policies and practices to support implementation of NCLB. By 2006, all three states had constructed most of the infrastructure for SBA. Educators were familiar with federal rules as implemented in their state and appeared to understand the reforms.

Educators at all levels of the system in all three states sought to ensure alignment among the standards, assessments, curriculum, and instruction, and they had generally but not uniformly positive reactions to the reforms in their state. For example, in 2006, 40 to 60 percent of math teachers (the range reflects differences among states and between elementary and middle schools) reported that test results provide a good measure of student mastery, with 60 to 80 percent of math teachers also reporting that the

information they obtain from student tests is useful for identifying and correcting gaps in curriculum and instruction. Yet while more than 80 percent of teachers found the standards useful for planning lessons, a majority also felt that the standards included more content than could be adequately covered in a school year. Many teachers were concerned that the system was not serving all students equally well.

Fewer teachers (40–60 percent) than administrators (50–80 percent) thought the math tests were a good measure of student performance. About one-half of the teachers in California, one-third of the teachers in Georgia, and one-half of the teachers in Pennsylvania reported that the math tests were too difficult for their students. Teachers were also less likely (30–50 percent) than administrators (60–80 percent) to view the accountability system as beneficial for students. One reason for this difference may be the greater familiarity teachers have with students.

There were some small but notable differences in implementation between elementary and middle schools in all three states. For example, elementary teachers were more likely than middle school teachers to implement interim or progress tests in math, and they were more likely to receive professional development regarding the use of the test results. Some of these differences may be attributable to the greater flexibility of elementary school schedules.

There were also differences in implementation of standards by subject. Federal guidelines require earlier implementation of mathematics and reading standards, as well as science testing at fewer grade levels, and they do not include science results in determining adequate yearly progress for a school. As a result, schools focus more on implementing SBA in mathematics than in science.

The majority of administrators in all three states also reported that inadequate funding was an obstacle to improvement. Two-thirds or more of teachers cited widely ranging student abilities and inadequate support from parents as obstacles to student improvement.

## Changes over Time

Despite concerns about resources and utility of the program, growing proportions of administrators and teachers reported that state assessment and reporting systems were providing information in a timely manner or in diverse ways. The use of progress tests is growing in all three states, as are efforts to

use test results for instructional decisionmaking, although the researchers did not gather evidence about the success of such testing in helping schools reach achievement targets.

On the whole, educators are becoming more positive about accountability policies. Growing numbers of elementary teachers have reported that their teaching improved as a result of accountability, although there were no changes over time in specific reported teaching practices. Educators remain concerned about the effects of accountability on teacher morale, but these concerns have decreased over time.

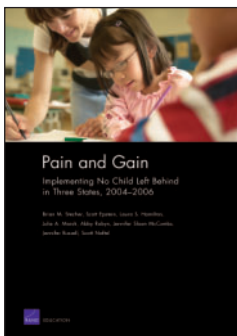
## Differences Among States

The researchers found differences in implementation in several areas. Fewer educators in Pennsylvania reported receiving technical assistance or other information in a timely manner. Georgia had science assessments in place for grades three through eight before the passage of NCLB; perhaps as a result, more schools were implementing progress testing in science. California had guidelines in place limiting certain forms of test preparation; as a result, teachers there were less likely to report test-focused classroom practices. The more heterogeneous population in California may make meeting targets more difficult there, given not only overall program targets but targets for specific subpopulations as well.

## Future Directions

The research suggests that implementation of NCLB has led to distinct accountability systems in each state, with states using the flexibility of the law to develop accountability systems that reflect local conditions. In some cases, new regulations may be needed to reduce or eliminate differences, for example, by making “proficiency” in reading and mathematics consistent across states. In other cases, it may be appropriate to relax rules to give states additional flexibility, as, for example, in customizing improvement efforts to address specific causes of failure.

The research indicates that educators have become comfortable with the accountability process of setting clear goals, developing measures, and establishing consequences to encourage achievement. They are not comfortable when the requirements of implementation appear to be incongruous with their local situation, as when standards do not match local curriculum or when “proficiency” is perceived to be unattainable for many students. ■



This research brief describes work done for RAND Education and documented in *Pain and Gain: Implementing No Child Left Behind in Three States, 2004–2006*, Brian M. Stecher, Scott Epstein, Laura S. Hamilton, Julie A. Marsh, Abby Robyn, Jennifer Sloan McCombs, Jennifer Russell, and Scott Naflet, MG-784-NSF (available at <http://www.rand.org/pubs/monographs/MG784/>), 2008, 168 pp., \$31.50, ISBN: 978-0-8330-4610-9. The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world. RAND’s publications do not necessarily reflect the opinions of its research clients and sponsors. RAND® is a registered trademark.

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