

March 2011 | Volume 68 | Number 6

**What Students Need to Learn** Pages 78-80

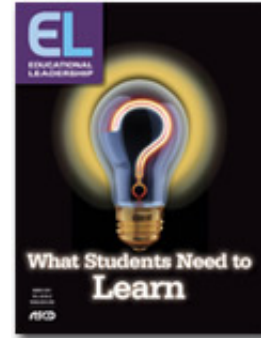
## High-Stakes Testing Narrows the Curriculum

Jane L. David

Are science, social studies, the arts, and physical education really disappearing from elementary schools? Are critical thinking and deep reading of literature fading from the high school curriculum?

### What's the Idea?

The current rationale for standards-based reform goes like this: If standards are demanding and tests accurately measure achievement of those standards, then curriculum and instruction will become richer and more rigorous. By attaching serious consequences to schools that fail to increase test scores, U.S. policymakers believe that educators will be motivated to pay attention to what is on the tests.



### What's the Reality?

Educators do pay attention to what is on the tests—but the consequences are not necessarily the intended ones. Even the most carefully designed standards are only as effective as the tests that assess how well students have achieved them. And standardized tests can only assess a small portion of the curriculum. State accountability tests leave out some subjects altogether, and they only cover a limited sample of the many subtopics covered in others. In addition, for practical reasons, state tests tend to rely on easy-to-score questions that measure basic skills and recall instead of higher-order thinking. Worse yet, when stakes are high, it's more likely that what's missing from the tests will disappear from the curriculum, especially in schools with low-performing students.

The need to make test performance the first priority has forced many teachers to push topics and activities that do not appear on the test to the end of the school year, after testing is finished. Others try to compensate for lost curriculum areas by integrating subject matter from science and social studies into language arts and math, the most tested domains.

### What's the Research?

Research in the last few decades documents that state testing can significantly affect curriculum and instruction.

In the 1990s—when a number of states introduced performance-based assessments that included open-ended questions, written explanations of problem solving, and even experiments—researchers found clear evidence that these assessments influenced instruction. Teachers began to include more writing and extended math problems in classroom instruction and classroom tests (Koretz, Mitchell, Barron, & Keith, 1996). In states that tested different subjects in different years, teachers adjusted their curriculum to emphasize the subjects to be tested that year (Stecher & Barron, 1999).

During that era, when stakes attached to testing were lower, the average amount of time that U.S. teachers devoted to different subjects at the national level was steady. From 1987 to 2003, time allocation across subjects in all public elementary schools in the United States stayed roughly the same: about two hours a day in language arts, one hour in math, and one-half hour each in social studies and science (Morton & Dalton, 2007; Perie, Baker, & Bobbitt, 1997).

In contrast, since the advent of No Child Left Behind (NCLB), with its high stakes for schools, the traditional pattern of time allocation across subjects in elementary schools has changed markedly. Five years into NCLB, researchers found that 62 percent of a nationally representative sample of all districts in the United States—and 75 percent of districts with at least one school identified as needing improvement—increased the amount of time spent on language arts and math in elementary schools. These increases were substantial: a 47 percent increase in language arts and a 37 percent increase in math. Correspondingly, these districts decreased time allotted to other subjects and activities, including science, social studies, art, music, physical education, and recess (McMurrer, 2007).

Other studies from the NCLB era conclude that the higher the stakes are for educators, the more curriculum and instruction reflect what's on the test—particularly in low-performing schools where the threat of sanctions is strongest. A study of a large urban district from 2001 to 2005 (Valli & Buese, 2007) found that as worries about adequate yearly progress increased, teachers matched the content and format of what they taught to the state test. These researchers concluded that the content of the tests had effectively become the learning goals for students.

Au's 2007 synthesis of 49 recent studies found a strong relationship between high-stakes testing and changes in curriculum and pedagogy. More than 80 percent of the studies in the review found changes in curriculum content and increases in teacher-centered instruction. Similarly, a study of California, Georgia, and Pennsylvania school districts found that teachers narrowed their curriculum and instruction to focus on tested topics and also increased their use of test-like problem styles and formats (Hamilton et al., 2007).

## What's One to Do?

High-stakes testing will likely remain the coin of the realm for the foreseeable future. In fact, if test scores are used to evaluate individual teachers, the stakes will increase even more.

The challenge, then, is to ensure that state tests do not continue to distort the curriculum in ways that deprive students of meaningful learning. Two complementary approaches are promising. One is to improve testing by expanding both the number of subjects tested and items that tap understanding and reasoning; the challenge is to do so without increasing the total amount of testing.

The other approach is to devise a more coherent curriculum. A curriculum derived from what's on the test cannot be as comprehensive and coherent as one designed around content standards that reflect what is most important. Such a curriculum can then serve as the basis for designing better tests. The Common Core State Standards offer a first step in this direction in two subjects, but whether they alter the landscape will depend on how they are translated into curriculum and assessed. Contrast, for example, the role of teachers' lesson study in developing curriculum around new standards in Japan with the role of test and textbook publishers in creating curriculum in the United States. Without a collaborative and iterative process of curriculum development that involves teachers, vested interests are likely to take over.

In the absence of a well-designed curriculum that embodies state standards, accountability tests will continue to be the curriculum in struggling schools. This is a disservice to both teachers and students.

## References

- Au, W. (2007). High-stakes testing and curricular control: A qualitative metasynthesis. *Educational Researcher*, 36(5), 258–267.
- Hamilton, L. S., Stecher, B. M., Marsh, J. A., McCombs, J. S., Robyn, A., Russell, J. L., et al. (2007). *Standards-based accountability under No Child Left Behind: Experiences of teachers and administrators in three states*. Santa Monica, CA:

RAND.

Koretz, D., Mitchell, K., Barron, S., & Keith, S. (1996). *Perceived effects of the Maryland school performance assessment program*. Los Angeles: University of California, Center for Research on Evaluation, Standards, and Student Testing.

McMurrer, J. (2007). *>Choices, changes, and challenges: Curriculum and instruction in the NCLB era*. Washington, DC: Center on Education Policy.

Morton, B. Q., & Dalton, B. (2007). *> Changes in instructional hours in four subjects by public school teachers of grades 1 through 4*. Washington, DC: U.S. Department of Education, National Center for Education Statistics. Retrieved from <http://nces.ed.gov/pubs2007/2007305.pdf>

Perie, M., Baker, D. P., & Bobbitt, S. A. (1997). *Time spent teaching core academic subjects in elementary schools: Comparisons across community, school, teacher, and student characteristics* (NCES 97-293). Washington, DC: U.S. Department of Education, National Center for Education Statistics. Retrieved from <http://nces.ed.gov/pubs/97293.pdf>

Stecher, B., & Barron, S. E. (1999). *Quadrennial milepost accountability testing in Kentucky* (CRESST Tech. Rep. No. 505). Los Angeles: University of California, National Center for Research on Evaluation, Standards, and Student Testing.

Valli, L., & Buese, D. (2007). The changing roles of teachers in an era of high-stakes accountability. *American Educational Research Journal*, 44(3), 519–558.

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