



# High School Accountability and Assessment Systems

Issue Papers The High School Leadership Summit

For nearly two decades, education policymakers have struggled to improve our nation’s high schools, yet student achievement has remained largely flat, the test scores of minority students continue to lag behind those of White students, and there has been little progress toward closing the international achievement gap. United States high school students consistently rank below their peers in other countries on international mathematics and science assessments.

As part of their efforts to improve student achievement, states are instituting academic assessments of all students as part of their standards-based accountability systems. The exams are designed to help schools and educators focus on improving students’ mastery of the curriculum. While these systems have been gaining momentum since the mid-1990s, all states are now putting into place comprehensive accountability systems as they implement the *No Child Left Behind Act of 2001 (NCLB)*. States are:

- *Setting standards* to establish what all students should know and be able to do in the core academic subject areas;
- *Aligning curriculum and instruction* to these standards;
- *Measuring the performance* of students and schools through standards-based assessments;
- *Reporting results to the public*, including student performance on academic assessments and other outcomes such as rates of high school completion;
- *Adopting improvement strategies* to help schools and students meet higher standards; and
- *Providing supportive services and expanded educational choices* for students who attend chronically underperforming schools.

Advocates have long suggested that the goal of measuring student performance can be met by administering fair but rigorous state-sponsored examinations to complement teacher administered tests. They say that standards-based examinations create incentives for improving student performance and encourage higher expectations. They are also very clear on the point that the exams need to be carefully aligned with state standards.

Nationally, there is strong public support for such accountability systems. For example, the Public Agenda’s *Reality Check 2002* found that 95 percent of high school students surveyed said they could handle standardized testing, although a majority agreed that a student’s graduation or promotion should not depend solely on one test.<sup>1</sup> Voters and elected officials across the nation have supported such systems as well. As of spring 2002, approximately 70 percent of students nationally—in 24 states—already take at least a minimum competency examination.

## Facing the Issues

Still, supporting the concept of accountability and creating an effective system are two quite different things. *NCLB* gives states great flexibility in setting standards and assessments and designing accountability systems. Yet developing such accountability systems challenges the creativity of policymakers and schools. To succeed they must:

- Set *expectations high enough* so that all students will be prepared to participate successfully as workers in a changing economy and as citizens in our democracy;
- Devise *effective assessments* to determine if the expectations are being met;

- Create an accountability system that *motivates students and schools* to fulfill these high expectations; and
- *Support students who need extra help* in meeting these new, higher expectations.

Much attention is paid to one form of standardized testing in particular: while not required by *NCLB*, “high stakes” exams in some states can mean that a student who does not pass the test does not graduate from high school with a regular diploma. Yet whether testing is high stakes for students or used to hold schools publicly accountable for student performance, some external measure is needed to ensure equity in instruction.

While teachers have always assessed student learning in a limited fashion using quizzes, exams and questioning strategies to understand what students know and can do, the reliability of this type of assessment does not extend beyond the classroom. Likewise, to those who argue that grades are a reliable measure of school quality, the data suggest otherwise. According to a study by the U.S. Department of Education, students in high-poverty middle schools who received mostly “A” grades in English got about the same reading score on a standardized tests as did the “C” and “D” students in the most affluent schools; in math, the test scores of the “A” students in the high poverty schools most closely resembled those of the “D” students in the most affluent schools.<sup>2</sup> Grades, while valuable for immediate feedback, are notoriously unreliable indicators of global achievement.

Standardized state assessments are useful because they enable policymakers and educators to make comparisons within the state’s or district’s educational system to determine where strengths and weaknesses lie, and to address the weaknesses systematically.

## Recognizing Concerns

Despite their benefits, the introduction of statewide high school examinations has raised concerns that include the following:

- Overly narrow tests will distort the curriculum;
- Teachers will spend excessive amounts of time on test preparation strategies;
- Some students may drop out before graduation, certain that they will never be able to pass one or more graduation tests;
- Poor and minority students will be disproportionately burdened by a new exam regime; and
- Standard multiple-choice exams do not accurately measure the knowledge and skills of students.

The research to date seems to allay the major concerns about standardized assessment. An analysis by Carnoy and Loeb (2003) rated all 50 states on the strength of their accountability systems and found that the stronger a state’s accountability system, the greater the gains students made on the 8<sup>th</sup> grade National Assessment of Educational Progress (NAEP) test in mathematics between 1996 and 2000, particularly for students scoring at the proficient level.<sup>3</sup> They found that strong accountability systems did not have negative effects on graduation and grade retention.

On the issue of excessive teacher focus on test preparation strategies, a 5-year study of high schools working to improve student achievement in reading, writing and English found that one of the key distinguishing features between successful and unsuccessful schools was that teachers in the successful schools integrated test preparation into their instruction, rather than treating it as a separate subject. Many of these successful schools had high proportions of poor and minority students.<sup>4</sup>

Research has also found that assessments need not distort the curriculum so long as the states provide flexibility in their definition of assessment. New York and Virginia, for example, allow schools to substitute high quality, widely recognized tests in place of their state end-of-course exams. In New York, advocates for alternative schools argued that preparing for the state exit exams would alter the unique curriculum and character of their programs, many of which successfully educate students who have done poorly in regular schools. The New York State Department of Education has now approved the use of certain Advanced Placement (AP), International Baccalaureate and SAT II tests as substitutes for

the State Regents exams. In Virginia, students can substitute scores on 40 other exams, including AP or International Baccalaureate tests, to earn their diplomas.

But the effect of exams on poor and minority high school students is an important concern. Even though the exams are intended to benefit all students, the students most immediately affected by high school exit exams are likely to be those who do not pass on the first attempt. Historically, disproportionately large numbers of poor and minority students fall into this category.

However, advocates argue that standardized testing allows open and objective consideration of the facts regarding low achievement at the school and course level for the first time. Educators and the public have better information about student learning, the achievement gap, and what works in high schools. While some may conclude that it is the *test* that is causing this gap, research shows that the gap has been around for too long and has remained pronounced for too many years to be purely the result of test bias. The purpose of identifying and highlighting achievement gaps is not to stigmatize or blame students, but to focus energy and attention at the state, district, and community-level on eradicating these gaps.

Continued use of traditional multiple-choice exams has been criticized for failing to assess the richness of the student's knowledge of a subject. To address this concern, states are increasingly adopting the use of essay and short answer formats. Fifteen states have some form of essay writing on their exit exams. This number is projected to grow to 22 states by 2008. The number of states using short answer questions in their exit exams is projected to more than double in the next 6 years from 7 to 15.<sup>5</sup> These changes are expected to improve the alignment of the tests with state proficiency standards since more open forms of response permit assessors to judge in-depth understanding of subject matter better.

## Choosing an Approach

Two kinds of standardized assessments are of special interest to policymakers concerned about high schools. These are exit exams, which test all subject matter comprehensively, and end-of-course examinations, which measure knowledge of each subject separately.

**Exit exams.** Of the 19 states that have mandatory exit exams, 6 use minimum competency exams (MCEs), defined as exit exams that focus on basic skills *below the high school level*, and 13 have standards-based exams (SBEs), defined as exit exams that are aligned with state standards *at the high school level*. All states with exit exams assess English/language arts and mathematics. Exit exams for science and social studies are becoming more common. Currently, more than a third of the states with exit exams assess science and/or social studies.<sup>6</sup> However, studies of items on selected state tests suggest that state exit exams vary considerably in level of difficulty.<sup>7</sup>

States administer high school exit exams as early as grade 8 (for minimum competency) and as late as grade 11, but most are choosing grade 10 as the point when students take these exams for the first time. Yet this does not necessarily mean that all exams are calibrated to 10<sup>th</sup> grade standards. All states with exit exams allow students who fail the tests initially to retake the parts they did not pass on the first try. Typically, these students take a second version of the test with slightly different questions. States offer from two to eleven retesting opportunities in subsequent grades. Passing grades (so-called "cut scores") for the state assessments are typically based on the state proficiency standards modified by policymakers' expectations about what are reasonable levels of student achievement.

Two basic approaches to establishing cut scores have been tried. Some states set the cut score requirements high but allow plenty of time for schools to adjust before there are real consequences associated with low student performance. Others set the requirements at a low level and gradually increase them over time, and the consequences of failure become effective almost immediately.

**End-of-course exams.** End-of-course (EOC) exams test students on what they learned immediately after completing a course, rather than waiting one or two years to test what a student learned in a series of courses over a period of time. However, like the exit exams, they are administered by a third party rather than the teacher and, as such, allow comparability among schools and courses. The best-known EOC exams are the Advanced Placement, New York Regents, and International Baccalaureate exams. Fifteen states include, or will soon include, EOC exams as part of their high school assessment systems. The number of exams offered ranges from two in Arkansas to 15 in New York. Generally,

states offer at least one exam in each discipline, with six states currently offering at least one EOC exam in all four core subject areas, and five more that are planning to do the same. New York is the only state that offers EOC exams beyond the core subject areas. Only 4 states require students to pass one or more EOC exams to graduate high school: Mississippi, New York, Tennessee, and Virginia. Texas allows students to choose between end-of-course exams and the TAAS exit exam for graduation. Several more states are anticipating introducing these exams in the next few years.<sup>8</sup>

While there is no conclusive evidence to date about the effects of the EOC exams on student achievement and other outcomes, several studies conducted by Cornell University researcher John Bishop suggest that EOCs are a promising strategy. The National Education Longitudinal Study (NELS:88) followed a nationally representative sample of students who were in 8<sup>th</sup> grade in 1988 over the course of six years. After controlling for differences in students' family backgrounds, the characteristics of their high schools and communities, and other variables, Bishop found that students in New York, one of the first states to implement EOCs, registered significantly greater gains between 8<sup>th</sup> and 12<sup>th</sup> grade than students in other states on standardized assessments that were administered to the NELS:88 sample. This was true for students who had low, average, and high grade point averages (GPAs) at the end of 8<sup>th</sup> grade. In addition, Bishop found that New York students who had low GPAs (C-) in 8<sup>th</sup> grade were significantly more likely to attend college than their counterparts in other states. Bishop has found similarly promising outcomes in analyzing data from the 1991 International Assessment of Educational Progress and the 1994-5 Third International Mathematics and Science Study.<sup>9</sup>

**Facing the future.** To date, the experience of state accountability systems, and the exams that go with them, refutes the fears of the critics but has yet to fully meet the expectation of supporters for aligning teaching to state standards and improving student learning. Realizing the full potential of standardized accountability systems will require additional, careful work by states and educators. *No Child Left Behind* supports their efforts to master this critical challenge.

## Endnotes

<sup>1</sup> *Education Week*. "Reality Check 2002." Available from [www.publicagenda.org/specials/rcheck2002/reality.htm](http://www.publicagenda.org/specials/rcheck2002/reality.htm). Posted March 6, 2002.

<sup>2</sup> U.S. Department of Education, Office of Educational Research and Improvement. 1995. "What Do Student Grades Mean? Differences Across Schools." *Education Research Report*.

<sup>3</sup> Carnoy, M. and Loeb, S. "Does External Accountability Affect Student Outcomes? A Cross State Analysis." *Educational Evaluation and Policy Analysis*. 2003. Available for a fee from: [www.aera.net/pubs/eepa](http://www.aera.net/pubs/eepa).

<sup>4</sup> Langer, J. *Beating the Odds: Teaching Middle and High School Students to Read and Write Well*. On-line Research Report Number 12014. Albany, NY: Albany State University: Center on English Learning and Achievement, 2003. Available from <http://cela.albany.edu/eie2/index.html>.

<sup>5</sup> Gayler et al. *State High School Exit Exams*. Washington: Center on Education Policy, 2003. Available from [www.cep-dc.org/highschool/1/exitexam4.pdf](http://www.cep-dc.org/highschool/1/exitexam4.pdf).

<sup>6</sup> Gayler et al.

<sup>7</sup> Achieve, Inc. 2001. *Measuring Up: A Report on Education Standards and Assessments for Massachusetts*. Washington, DC.

<sup>8</sup> Somerville, J., L. Levitt and Y. Yi. *State Policy Review of High School End of Course Assessment Programs*. (Prepared for the U.S. Department of Education, Office of Vocational and Adult Education.) Washington: National Association of System Heads (NASH), 2002. Available from <http://www.nashonline.org>.

<sup>9</sup> Bishop, J., F. Mane and M. Bishop. *Is Standards-Based Reform Working...and For Whom? Working Paper 01-11*. Ithaca, NY: Cornell University Center for Advanced Human Resources Studies, 2001. See also: Bishop, J. 1998. *Do Curriculum-Based External Exit Exam Systems Enhance Student Achievement?* Philadelphia, PA: Consortium for Policy Research in Education, University of Pennsylvania, 1998.

This paper is one of a series produced in conjunction with the U.S. Secretary of Education's *High School Leadership Summit*. For more information about the U.S. Department of Education's work on high schools, visit <http://www.ed.gov/about/offices/list/ovae/pi/hsinit/index.html>.