

The governors, corporate leaders and educators who organized this meeting extend their deepest sympathies to those who lost loved ones in the terrorist assaults of September 11. Events of that day have profoundly affected every American.

The people of the United States can draw on great reservoirs of patriotism, decency, courage and resilience as they respond to this unpardonable tragedy. The participants in this meeting, united in the belief that healthy public schools are the foundation of our democracy, dedicate this Summit to the task of building a stronger America.

2001 National Education Summit



Briefing Book

October 9-10, 2001 Palisades, New York

Sponsored by Achieve, Inc.

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About Achieve, Inc.

Achieve is an independent, bipartisan, nonprofit organization created by governors and corporate leaders to help raise standards and performance in American schools. Achieve was founded at the 1996 National Education Summit and subsequently sponsored another Summit in 1999.

Achieve's principal purposes are to:

- provide sustained public leadership and advocacy for the movement to raise standards and improve student performance;
- help states benchmark their standards, assessments and accountability systems against the best in the country and the world;
- build partnerships that allow states to work together to improve teaching and learning and raise student achievement; and
- serve as a national clearinghouse on education standards and school reform.

Achieve is providing a number of print and electronic resources to help education reform advocates as they work to ensure academic and career success for *all* students. The organization has expanded its Web site (www.achieve.org) to provide additional information and resources.



About This Summit

his meeting marks the third time in five years that leaders from government, business and education have gathered to consider ways to raise standards and achievement in America's schools. At the 1996 National Education Summit, governors and business leaders pledged to work together, state by state, to accomplish these goals. Since then, academic standards and testing systems have been created in nearly every state, including many that never before had them. The participants also agreed to create a new organization, Achieve, to assist states in their reform efforts.

In 1999, education leaders joined governors and corporate CEOs for another Summit to examine the capacity of schools and school systems to deliver on the promise of high standards for all children. That Summit produced an unprecedented set of commitments across the states to improve the quality of teaching, provide supports to struggling students and tighten accountability systems so that no children are left behind.

Why hold another Summit? Because our work is not done. While there are examples of schools that are turning things around, the goal of high standards for all has not yet been met. The president and Congress are poised to enact legislation that will accelerate the pace of these reforms. States will be challenged to expand their testing and accountability systems, intervene in chronically low-performing schools, and close the achievement gap that continues to separate the advantaged and disadvantaged.

Most states are working hard on this agenda. Most will have to work even harder in the months and years ahead. The 2001 National Education Summit will provide an opportunity for a frank exchange among governors, business leaders and educators about the challenges and priorities that must be addressed if these efforts are to result in real academic success for our children.

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Letter From the Summit Co-Chairs

Dear Colleague:

This gathering of governors, corporate leaders and education officials at the 2001 National Education Summit comes at an important juncture. Less than one month removed from the tragic events of September 11, we're reminded in the most poignant way possible of the need to unite and to aggressively resume the work of building the future of this great nation. Both of those objectives will be front and center as we continue the work of driving higher academic achievement for all students in our public schools.

Our agenda is straightforward: We must accelerate our progress in raising standards and our ability to measure progress. We must address the achievement gap that threatens to divide the nation into two camps — the education "haves" and "have nots." And we must move with speed, in order to capitalize on the momentum and broad-based public support for the reform movement.

Improving the nation's schools for each and every child embodies our nation's highest ideals, our democratic values, and our economic and societal aspirations. The future of America, and of our children, depends on our focused diligence in enabling all children to learn and succeed.

Over the next 24 hours, we will focus on strengthening state education systems in three areas: teaching, testing and accountability. This briefing book includes information on state activities in each of these areas, as well as data on our progress since 1996 and on public support for our efforts, to inform our discussions. Our goal is to adopt a statement of principles that we all must follow to accelerate our progress in raising the bar and closing the achievement gap.

We look forward to working with you at the 2001 National Education Summit. We have a tremendous responsibility before us. Let us make the most productive use of our time together.

John Engler, Governor State of Michigan

Louis V. Gerstner, Jr. Chairman and CEO *IBM Corporation*

Acknowledgments

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This briefing book would not have been possible without the hard work of many individuals and organizations. Achieve would like to thank all those who contributed ideas, research and writing to this book and commented on early drafts.

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Finally, special thanks to Kathy Delaney and her colleagues at KSA-Plus Communications for managing the design and production of these materials.

Progress Report

ive years ago, the nation's governors and business leaders sat down together in Palisades, N.Y., to consider what to do to stimulate the movement to raise standards and achievement in America's schools. At the time, there was evidence that the standards movement had stalled. The voluntary national standards, which were expected to guide state efforts, were attracting criticism from many quarters and were not providing the models states expected. Few states — fewer than 14 — actually had developed standards in core subjects. And ratings of those standards were mixed at best.

These challenges failed to deter participants at the 1996 National Education Summit. On the contrary, the governors, chief executive officers and educators steeled themselves and recommitted their states to setting high standards for all students, developing assessments to measure progress against the standards and holding schools accountable for performance as a way to improve instruction. As further evidence of their commitment, the governors and CEOs created an organization, known as Achieve, to help states in their efforts.

How far we have come. Today, 49 states have set standards for students, and while the quality of those standards varies, many represent a considerable improvement over earlier standards. The best of the 1996 standards would be about in the middle of the pack today.

Similarly, virtually all states now test their students in the four core subjects. The quality of the tests varies as well. But tests today are more likely than ever to include questions requiring short answers or essay responses, and on the whole, tests are more challenging, asking students to demonstrate that they have met rigorous standards.

States also increasingly have added accountability measures, holding both schools and students accountable for performance. And these accountability systems are starting to show some effects: There is evidence that they are creating a host of incentives for states, districts and schools to improve performance.

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When governors and CEOs gathered again in 1999 for a National Education Summit — this time with even more educators — they reiterated their commitment to holding students and schools accountable for their performance. At the same time, they focused greater attention on raising the quality of teaching and on giving all students a fair chance to reach standards conditions vital to improving the nation's schools. States offered action plans that were published on Achieve's Web site describing how they would hone their accountability systems to create incentives for schools and students to succeed and how they would respond to greater demands on teachers and students.

Changes have been difficult, but the resulting activity, including new state poli-

cies, is evidence of the national consensus. The biggest news is that the efforts are beginning to pay off where it counts — in improved student achievement.

We're Seeing Results

Many sources show trends moving in the right direction.

National Gains

■ In mathematics, performance improved substantially for 13year-olds during the 1990s, according to the National Assessment of Educational Progress (NAEP, nces.ed.gov). Although performance remains lower than it needs to be, the percentage of students performing below the basic level dropped sharply, from 50 percent to 31 percent; and the percentage of fourth graders who perform at the proficient level or higher in mathematics doubled over the decade. to 26 percent. (See chart at right.)

State Gains

- Twenty-seven of 31 states have significantly improved their performance in mathematics at the eighth-grade level since 1990. In **North Carolina**, for example, mathematics scores for eighth graders climbed 30 points on a 500-point scale over the decade. **Illinois**, **Indiana**, **Ohio** and **Texas** also substantially improved mathematics scores.
- Performance in reading also has improved over time in some states. In Connecticut, for example, nearly half 46 percent of fourth graders read at the proficient level or better in 1998, up from 38 percent four years before. Colorado showed similar gains, moving from 28 percent proficient to 34 percent proficient between 1994 and 1998. (See map on next page.)

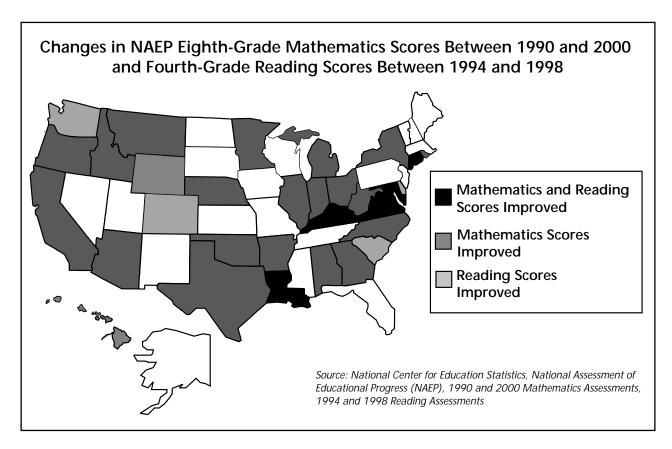
NAEP Mathematics Achievement Results Across Years: Grade 4 1%* 12%* 16% 19%* 23% 13%* 18%* 37%* At or Above 21% 41% **Proficient** 26% 43% 43% 50%* 50%* 59%* At or Above 64%* 41% Basic 69% 36%* 31% 1996 1990 1992 2000 * Significantly different from 2000. Note: Percentages within each mathematics achievement Advanced level range may not add to 100 or to the exact percentages Proficient at or above achievement levels due to rounding Basic Source: National Center for Education Statistics, National **Below Basic** Assessment of Educational Progess (NAEP), 1990, 1992,

District Gains

1996 and 2000 Mathematics Assessments

- Below the state level, a number of districts and schools registered impressive gains in performance. For example, **Houston** improved its performance on the state's Texas Assessment of Academic Skills (TAAS) in every grade between 1994 and 2000; moreover, its rate of improvement exceeded that of the state average — also in every grade. Houston not only improved overall performance, but the district also substantially narrowed the achievement gap between white and minority students. For example, the proportion of Hispanic fourth graders passing the TAAS test rose from 69 percent in 1994 to 89 percent in 2000 — just 7 percent less than the proportion of white students who passed.
- In **San Diego**, two-thirds of the city's schools improved their performance in





2000 at a pace to enable them to qualify for cash awards from the state. Under the state's accountability system, schools earn awards if overall performance and the performance for all racial and ethnic groups within the school improves.

- According to the Council of the Great City Schools (www.cgcs.org), 86 percent of the country's largest urban school districts increased state test scores in mathematics in all grades tested, and 80 percent increased reading scores in more than half the grades tested.
- The gains for some districts have been so rapid that they now defy a stereotype: Some urban districts now outperform their suburban and rural counterparts. In Albuquerque; Hillsborough County, Florida; and San Francisco, the mathematics scores in every grade were higher than statewide averages.

Our Work Is Not Done

Despite these signs of progress, the achievement data also provide sobering reminders of why high standards, challenging tests and strong accountability remain essential levers for improving schools. Consider the performance of U.S. students compared to students around the world. When American fourth graders were tested in the Third International Mathematics and Science Study (TIMSS, nces.ed.gov/timss) in 1995, they ranked fourth and scored well above the average of all countries that participated. Four years later as eighth graders, U.S. students fell below the international average of countries that participated in both studies. (See chart on next page, left.)

Several states and school districts took part in the 1999 TIMSS as if they were nations. While some states did better than others, none had scores significantly better than the U.S. national average. More alarmingly, the study showed large gaps between students in large urban districts and other students in the same states.

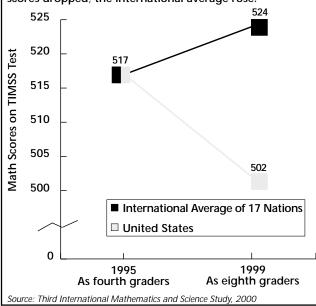
Results from NAEP also show that, despite gains in a few states, American student performance in reading remains stubbornly flat and that achievement gaps between white and minority students are large and — in some cases — widening. (See chart below, right.) The 2000 NAEP mathematics scores, while showing improvement, also show that 12th-grade performance slipped in the past few years, but not significantly.

The data show clearly that our work is far from over, and the promise of the standards movement remains unfulfilled for many young people. If for no other reason than to redeem that promise, we must continue down the path we have laid.

But there are more important reasons to stay the course. The need for higher standards and levels of achievement is at least

Math Scores on TIMSS Tests: 1995 and 1999

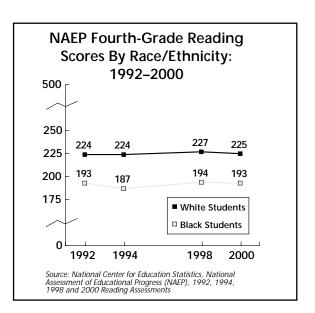
Of countries that participated in both studies, in 1995, U.S. fourth graders performed at the international average in math. Four years later as eighth graders, U.S. students' scores dropped; the international average rose.



as acute, if not more so, than when states started down this road. Consider:

- The failure rates on employeradministered literacy and mathematics tests rose from 18.9 percent in 1996 to 35.5 percent in 1998 — not because the applicants' skills declined, but because skill requirements for jobs increased, according to the American Management Association (www.amanet.org).
- Nearly 50 percent of college students end up taking remedial courses in reading and mathematics, according to a recent study by the U.S. Department of Education. However, even more sobering is this fact: The more likely a college student is to take remedial classes, the more likely that student is to drop out and not finish college. (See chart on next page, top.)
- In surveys by Public Agenda (www. publicagenda.org), college professors and employers report high numbers of students and job applicants lack key skills in writing, mathematics and problem solving. (See chart on next page, bottom.)

The consequences of failing to carry through on our commitments are severe. Make no mistake: Young people face high stakes — in the economy and in society. If





they graduate from high school without the knowledge and skills they need to succeed, they face closed doors. They will not be able to live productive, fulfilling lives. The aim of the standards movement is to open doors — to ensure that all students obtain the knowledge and skills they need. Earning a high school diploma should be a ticket to a bright future.

The good news is that governors and other state policymakers remain committed to the agenda of raising standards and achievement in America's schools. They are hard at work developing, implementing and improving policies that will accomplish those goals.

And the success of states and districts that are improving performance points the way for other school systems. The factors that are leading to their success are not a secret. The most important characteristic they all share is that they embrace the standards agenda and stick with it. They accept no excuses and make it everyone's business to ensure that students meet the high standards set for them. They measure results and let everyone know who succeeds and who does not. and they use data to improve teaching and learning continuously. And they make sure that everyone is responsible for educating all students to high standards.

The hard work lies ahead:
Standards, assessments and accountability are only the first steps. The real challenge is enabling all students to reach challenging standards. That is the most significant task states face as they look ahead to the next five years of the reform movement.

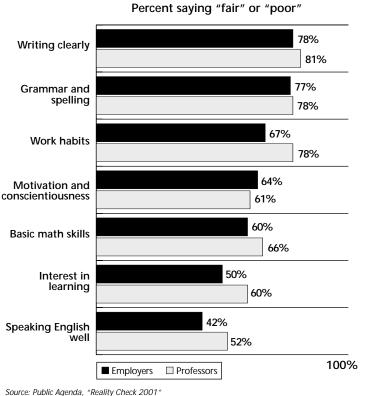
How well prepared for college courses are high school graduates?

Percent of Students at Four-Year Colleges Needing ...

Remedial reading	10%
Remedial writing and/or math	39%
TOTAL NEEDING REMEDIATION	49%

Source: U.S. Department of Education, Office of Educational Research and Improvement, June 1999

How would you rate recent job applicants/freshman and sophomore students when it comes to ...? Percent saving "fair" or "poor"



Progress Since 1999

Two years ago, governors, business leaders and educators made a strong start toward meeting the challenges states face. At the 1999 National Education Summit, the leaders pledged to do so by addressing three main areas: improving teacher quality, helping all students achieve and strengthening accountability.

To gauge states' progress since the Summit, we turned to *Education Week*, which provided preliminary data from an annual state policy survey conducted for "Quality Counts 2002," and to other sources. These data show that states have made progress in many areas, but more work is needed.

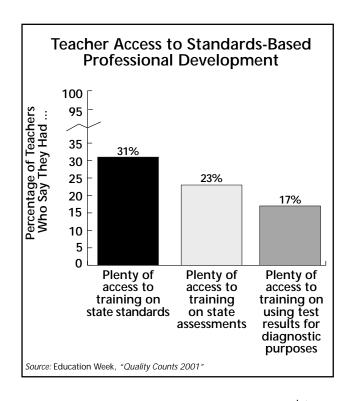
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Improving Teacher Quality

Summit participants agreed to focus on improving the recruitment of well-qualified people into teaching, raising standards for new teachers, strengthening the professional development of teachers and revamping compensation systems to reward high performance.

Recruitment. States increasingly have instituted policies to attract individuals into teaching, including signing bonuses, housing subsidies, better pay and improved working conditions. In addition, states have created incentives to attract well-qualified teachers to schools where they are most needed. Eleven states are providing financial incentives for teachers to teach in lowperforming schools, the Education Week survey found. But states need to ensure that these incentives are sufficient to attract well-qualified teachers to such schools and that schools can retain teachers once hired.

- Raising standards for new teachers. Seven states have implemented policies to hold teacher-education programs accountable for their graduates' performance on licensure tests, the Education Week survey found. A number of additional states are beginning to revamp their accreditation systems to give more attention to the quality of graduates from teacher-education programs. A few states also are discouraging out-of-field teaching. Compared to just one state in 1999, six states now notify parents if teachers are practicing outside of their certification area. And, according to preliminary data for "Quality Counts 2002," 16 states require a subject-area license for middle school teachers.
- **Professional development.** Preliminary data from the *Education Week* survey show that 43 states now encourage ongoing professional development by providing specific funds. However, teachers remain concerned about the quality of the professional development they are receiving and the lack of alignment with the standards they are expected to teach. (See chart below.)





Compensation. Thirty states provide subsidies to teachers who seek certification from the National Board for **Professional Teaching Standards** (NBPTS, www.nbpts.org), and 30 states provide bonuses to teachers who earn NBPTS certification. This is up from 23 states providing subsidies and 22 states providing bonuses in 1999. But only a handful of states and districts notably, Iowa, Cincinnati and Denver — have begun to revamp compensation systems more broadly to reward teachers for skills and performance. Such steps are critical to ensure that the bestqualified teachers remain in teaching, just as pay-for-performance systems in business encourage the best employees to stay with their companies and work hard to improve performance.

Helping All Students Achieve High Standards

Participants at the 1999 National Education Summit pledged to ensure that all students have access to a rigorous curriculum tied to high standards and to provide extra learning time for struggling students.

Extra learning time. According to state reports to *Education Week*, about

half the states provide or require districts to provide after-school, summer-school or extended-day academic services to low-performing students. And although nearly all the states with graduation examinations in place today require that students who fail the exams receive such remediation, in 2001 only half the states with such examinations paid for such remediation, *Education Week* found.

Massachusetts has invested heavily in supplemental learning opportunities, providing \$80 million over three years to districts with large numbers of students with low scores on state tests. Districts have created a range of afterschool and summer programs that provide intensive, individualized instructional support for students.

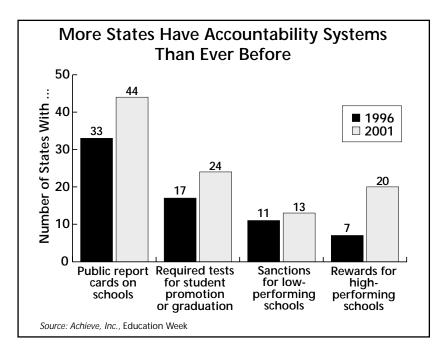
Strengthening Accountability

The 1999 Summit pledged to reward high performance, provide assistance to struggling schools and apply sanctions to those that are failing persistently.

■ Accountability components.

Compared with 36 states in 1999, 44 now produce or require districts to produce school-level report cards, accord-

ing to Education Week's survey. Twenty-seven states now assign ratings to all schools or identify those that are low performing — up from 19 states in 1999 — and all of those states provide assistance to at least some of the poorly rated or low-performing schools. Compared with 13 states in 1999, 20 states now are providing rewards to highperforming or greatly improved schools. Thirteen states have the authority to close or reconstitute failing schools, up from 11 in 1999. (See chart at left.)



■ Comprehensive systems. Although states are moving to put in place components of accountability systems, few have put all the pieces together. According to preliminary data from "Quality Counts 2002," only a handful of states now have comprehensive accountability policies that include school report cards, ratings for schools to show which ones need help, rewards for successful schools and sanctions for failing schools. The number of states with such comprehensive policies has increased only from five to six since 1999.

Why Another Summit?

Governors, business leaders and educators recognize that 2001 represents a time of enormous challenge — and a time of opportunity. Although some school systems have made great strides, the pace of the economy and the society are changing so rapidly that we cannot move incrementally. We must take bold steps to transform the education system quickly so that all students can benefit. And it's a collective responsibility. States and districts need support from the business community and the public.

At the same time, we recognize that the standards agenda the states put in place during the 1990s is being put to the test. While there continues to be overwhelming

public support for the core policies we committed to five years ago, some states are experiencing a pushback as accountability policies take hold. This is hard work. We must be sure that we develop the right policies, implement them fairly and shore up public support.

Now is the time to focus on the most crucial challenges and address them in a deep enough way so that states can meet them.

What are those challenges?

- Supporting teachers and improving teaching so that all students have a fair shot at meeting high standards.
- Improving assessment by ensuring that tests provide high-quality information on student performance.
- Strengthening accountability in ways that are firm, fair and balanced.

One way to begin to focus on these challenges is to look at what other states have done. Achieve's strategy is to employ benchmarking: to examine the practices of the best performers and consider ways those practices can be adapted by other states. The 2001 National Education Summit is a time to reflect on the work ahead, to look to best practices for ideas on how to move forward and to commit, together, to reach the goal of building an education system where all students achieve high standards.



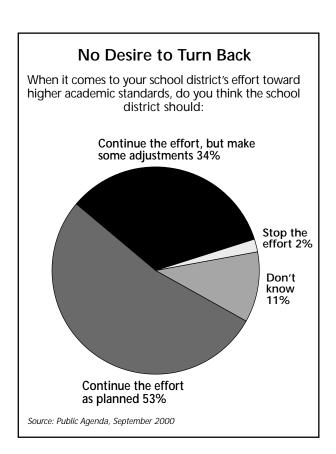
Public Support

topping the concerns registered by the public in national polls over the last two years, it is understandable that the steps states are taking to improve their schools would draw significant attention — particularly from parents and the media.

Three extensive public opinion surveys undertaken in the last 18 months have delved more deeply into the demand for better schools. The polls examine what people — especially parents — think about the push for higher standards, testing and accountability for results. These surveys from The Business Roundtable (BRT, www.brt.org), Public Agenda (www.publicagenda.org) and Educational Testing Service (ETS, www.ets.org) tell the same story: The public, including parents, remain squarely behind the agenda of standards, assessment and accountability. Consider:

- Only 2 percent of parents who are aware of standards would stop implementing higher standards and go back to the way things were, while 53 percent want to continue the reform efforts as planned and 34 percent want to proceed while making some adjustments, Public Agenda found. (See chart at right.) In BRT's survey, more than 80 percent of parents and nonparents said the emphasis on raising standards was a move in the right direction.
- Sixty-five percent of parents and 70 percent of nonparents said students should have to pass a statewide test to graduate from high school even if they have passing grades in their classes, BRT found. Support rises above 75 per-

- cent for both groups if respondents know that students have the chance to take the test more than once. (See chart on next page.)
- In all three surveys, parents and the public agreed that tests are a valuable way to target extra help for students falling behind, to identify poorly performing schools and to inform parents of their own children's progress.
- Public Agenda reported that 81 percent of parents favored a policy requiring summer school for students who did not meet standards, with 65 percent holding to that support even if their own child had to attend summer school.



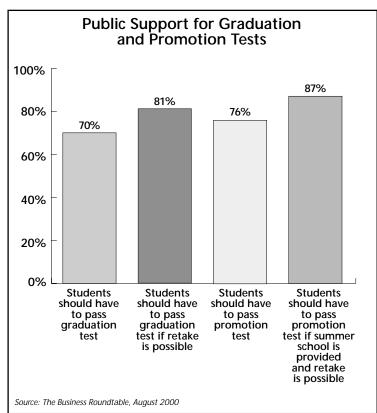
Backlash Overblown

The findings of these polls conflict in many ways with some common portrayals of a growing "backlash" against standards, testing and accountability. There are trends toward increased reporting on standards and tests, according to a 2000 media analysis commissioned by Achieve, Inc. The analysis also found stories that presented an increasingly negative view of these reforms. The phrase "high-stakes testing," for example, appeared in 666 stories in the 12 months studied, compared to just 17 stories five years earlier.

The media accounts often are driven by boycotts, rallies, petition drives or other activities undertaken by a vocal, but relatively small chorus of critics. These local protests have increased as accountability measures have been put in place — creating real pressure on schools and students to improve performance. Some have seized on these scattered protests as evidence of widespread discontent; they are quick to turn the discussion away from the benefits of higher expectations and toward the limitations of assessment. It is vital for states to draw distinctions between the unfounded

NARROWING THE CURRICULUM OR TAKING SHORTCUTS LIKE OVER-EMPHASIZING TEST PREPARATION ARE INAPPROPRIATE WAYS TO RAISE ACHIEVEMENT, BUT TESTS CANNOT BE USED AS AN EXCUSE FOR BAD INSTRUCTIONAL PRACTICE.

charges leveled by opponents of testing in general and the more legitimate concerns raised by parents, teachers and others about specific aspects of testing and accountability policies.



The most damaging misconceptions spread by antitesting forces are that testing takes up too much valuable class time and that testing is "dumbing down" schooling and forcing teachers to abandon "real teaching." The facts:

Testing represents a relatively minor investment of time for a worthwhile goal: to understand how students and schools are performing. Of the states that specify the amount of time students are expected to spend on statewide tests, testing time averages five hours and 19 minutes — less than 1 percent of the typical school year. And parents do not believe that there is too much testing. Both BRT and Public Agenda found that 15 percent or fewer parents believe too much testing is done. In states where testing has not gone smoothly at first, the percentages of parents who believe there is too much testing is higher but remains a minority view. Moreover, parents believe that testing is useful. More than eight in 10 parents agree that tests help



	United States	Boston	Chicago	Cleveland	Los Angeles	New York
Teachers are putting too much academic pressure on their child	9%	9%	11%	13%	6%	8%
Their child's school requires too many standardized tests	11%	18%	14%	18%	9%	9%
Questions on their child's standardized tests are so difficult that students can't be expected to answer them	12%	22%	15%	20%	17%	11%
Teachers in their child's school focus so much on preparing for the test that real learning is neglected	18%	24%	19%	27%	18%	21%

schools evaluate how students are performing and that they help parents evaluate school performance and monitor student progress.

Schools are trying to use standards to raise achievement, not to narrow **instruction.** The goal of education reform is teaching to standards to raise achievement. Standards are raising expectations for student learning, and tests are the best way of measuring progress toward the standards. Narrowing the curriculum or taking shortcuts like overemphasizing test preparation are inappropriate ways to raise achievement, but tests cannot be used as an excuse for bad instructional practice. While some teachers and schools have resorted to shortcuts, those choices are misguided and by no means the norm.

Fortunately, only a minority of classrooms are resorting to the inappropriate shortcuts. According to a national survey of teachers commissioned by Education Week, less than one-fourth of teachers reported using commercial testprep materials, altering lessons to fit what's on state tests or using practice tests provided by their state "a great

deal." By comparison, fully 79 percent of teachers said their curriculum was more demanding today than three years ago — and about two-thirds of those teachers said the increased rigor was a result of standards.

Only 18 percent of parents told Public Agenda their child's school spends so much time preparing for tests that real learning is sacrificed. (See table above.) Fifty-five percent said there is nothing wrong with spending considerable time preparing for tests because they measure important skills and knowledge.

Legitimate Concerns

While spurious claims are easily challenged with facts, there are legitimate concerns that have emerged as states and districts have introduced new tests and accountability provisions. States must strengthen their policies in ways that promote better teaching and more learning the ultimate test of reform for parents and the public. In this way, states that are responsive to valid criticism are better positioned to weather any initial discontent from holding schools and students accountable.

The three polls show that parents and the public have nuanced views of standards and testing. The surveys show that people understand the limitations of assessment. Nearly half of the public believes that some children will do poorly on tests even if they know the material, and more than 70 percent believe statewide tests cannot measure many important skills children should learn, BRT found. But weighing concerns against benefits, 68 percent told ETS they favor greater use of testing as part of a broader education initiative.

At the same time, parents and the public may not know all that they should about states' standards and tests, despite increasing media coverage. Thirty-one percent of parents and 40 percent of the public do not know if their states have standards, BRT found. Half of parents told Public Agenda they did not know enough about the questions on their states' tests to know if they were fair. This lack of information, coupled with some misgivings about the limitations of testing, creates the opportunity for antitesting advocates to erode existing sentiments favoring standards, testing and accountability.

States can take steps to maintain and build broad-based public support. These actions should address misgivings about testing and help convince the public and parents that testing and accountability are vital to raising standards and improving schools — and are not simply policies to embarrass and punish schools and students. To bolster public understanding and support, states should strive for:

■ Standards and tests that are clear to all. Parents and the public need to know what the expectations are and how they are being measured before they can be expected to fully support these policies and practices. One way to achieve this is by aligning standards and tests well. What is written in the standards, which, in many cases, are distrib-

uted widely, should be what is tested. In addition, tests cannot be state secrets. Given their increased importance, tests should be transparent to allow parents and the public to satisfy themselves that the questions are challenging but fair.

Accountability that is fair on its face. The public demands that high standards and tests that measure them not be used simply to penalize students. Polls show that parents are reluctant to use a single test to determine if a student is promoted or graduates. Many states already offer students several opportunities to take tests that serve as gatekeepers for promotion or graduation. Parents also remain unconvinced that students thus far have been prepared well enough to succeed on state tests. As a result, finding ways to phase in consequences for students, while offering more support to those students who lag behind, can be vital to maintaining support.

STATES MUST STRENGTHEN
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PROMOTE BETTER TEACHING
AND MORE LEARNING —
THE ULTIMATE TEST OF REFORM
FOR PARENTS AND THE PUBLIC.

■ Teachers who have more of what they need. Eighty-seven percent of teachers told *Education Week* that raising standards was a "move in the right direction," but roughly two-thirds expressed concern about excessive focus on state tests and its impact on other important content. (See chart on next page.)

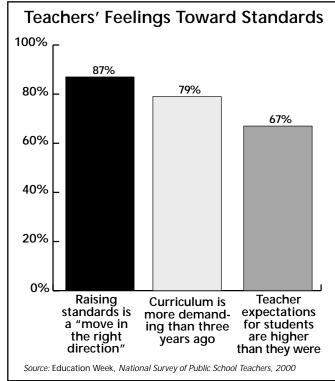
In part, teachers are feeling unsupported in the push to raise standards. Most states still are working to give teachers the tools and training they need to help students reach higher stan-



dards. In *Education Week*'s survey, fewer than half of teachers reported having "a great deal" of access to curriculum, textbooks and model lessons tied to standards.

When it comes to professional development, fewer than one-third of teachers reported having "a great deal" of training on their states' standards and tests or on the use of test results to improve classroom practice, despite the courses they took in universities prior to entering teaching or subsequently thereafter. *Education Week* found that the more training teachers had had, the more likely they were to modify curriculum or lessons to reflect what their states' standards call for.

Continued reinforcement of the messages that standards matter and are working to improve schools. When parents and the public lack key information, they can be convinced more easily by misinformation. While states have worked to inform the public, the three recent surveys show that an information gap still exists. The public needs constant reminders of the "hidden" accountability students always have faced — the inability to succeed in college or on the job because they lack important skills and knowledge. Business has an important role to play in this regard. Business-led coalitions in a few states provide strong examples of how privatesector leaders can act to balance the media coverage from a protest on the Capitol steps. Groups such as Mass Insight (www.massinsight.com), a business-education coalition in Massachusetts, and the Partnership for Learning (www.partnership4learning. org) in Washington state explain expectations clearly and highlight schools that are succeeding. In New Jersey, an



alliance of business, education and community leaders — known as New Jersey United for Higher Standards — has taken the lead in convening a series of meetings around the state that provide citizens an opportunity to learn about the state's efforts to raise standards. The group also has conducted a statewide poll to gauge citizens' understanding of and support for New Jersey's reforms.

Beyond spreading the word, business and higher education can make a strong statement for high standards by using state test results in hiring and admissions decisions.

Oregon and **Georgia** are among the few states where educational institutions have forged alliances. Both have aligned the admissions or scholarship requirements for their public universities and colleges with their respective state's K-12 standards and tests.

Teaching and Learning: Closing the Achievement Gap

he evidence is mounting that the quality of education students receive depends first and foremost on the quality of instruction.

Standards place new demands on teachers by expecting them for the first time to educate all students to high levels. To meet higher standards, all students need and deserve teachers who are fully capable of teaching to those standards and who are armed with the curriculum and teaching tools they need to meet that challenge.

This is particularly important for students who are struggling. Too often low-performing students are clustered in schools that perform inadequately. Turning around these low-performing schools is a critical step toward closing the achievement gap.

Fortunately, there are numerous examples of schools that have turned themselves around. Although their student populations resemble those of schools that tend to be doing less well, these high-performing, high-poverty schools have transformed teaching and learning so that they can succeed. Their examples suggest ways that states can help all schools follow their lead and improve teaching and learning so that the achievement gap is eliminated.

Researchers who have studied these successful schools have identified a number of characteristics they share. These include:

■ A relentless focus on academic performance for all students. Highachieving, high-poverty schools also focus their resources and attention on one area, often literacy, rather than try to tackle the entire curriculum.

- A shared sense among the faculty and staff that they are all responsible for the learning of every student.

 These schools acknowledge that students face obstacles from their backgrounds and home lives but do not accept these conditions as excuses for failing to educate all students to high levels.
- Frequent and regular assessment of student progress for diagnostic purposes. These schools continually monitor student learning to make sure that students are keeping pace with instruction and adjust the instructional program when assessments identify gaps.

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- Principals who are true instructional leaders. They focus the school on teaching and learning, use data to plan improvements, supervise teachers' instructional practices, and provide them with the support they need to improve practice.
- A flexible use of time to modify and extend the school day and year as needed to provide the time all students need to reach challenging standards.

How can state policies foster improved learning for all students and close the

achievement gap? There are several principles states should follow.

Creating a Supportive Policy Environment

Although state policies on standards, assessment and accountability do not by themselves improve teaching and learning, they can contribute quite a bit. By sending clear signals about instructional goals and providing useful data about performance, the state policy environment can help schools improve teaching and learning.

Clear Standards

Standards can help improve teaching by providing clear guidance about what all students are expected to learn. Ideally the standards also should include suggestions for classroom activities that would enable students to demonstrate that they have met the standards and samples of exemplary student work that provide models for teachers.

While virtually all states have set standards for student performance, the quality of these standards varies. Not all state standards provide the type of guidance teachers need to improve instruction.

The best standards are clear, are measurable and provide appropriate guidance to teachers, parents and test developers. They are comprehensive yet allow for indepth treatment of essential content. They achieve a balance between what students should know and what they should be able to do with that knowledge. And they are rigorous and expect what the highest-achieving states and nations expect of their students.

Since 1998, 12 states have sought to improve their standards by enlisting Achieve's help to compare them to the best in the world. One was **Indiana**. In a report issued in January 2000, Achieve found that Indiana's standards failed to measure up; they were less rigorous, they

underestimated what students could do and they omitted important content. State officials took the report seriously and later that year produced revised standards that are among the strongest in the nation.

Oregon also revised its standards after an Achieve review pointed out ways they can be improved. The new standards are expected to be considerably stronger.

Ohio, meanwhile, is working to improve its standards as part of a larger effort to redesign the state's assessment and accountability system and to ensure the system is aligned to standards.

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Disaggregated Assessment Data

Disaggregated testing data — by race/ ethnicity, income, special education status and limited English proficiency — is essential. Knowing that a certain percentage of students in a school meets standards may hide important differences among different students that are never remedied. By knowing the gaps within schools, teachers and administrators can adjust instructional strategies to improve learning for all students. Disaggregation has been a powerful tool in Texas, where the accountability policy requires all groups of students to meet standards for schools to earn "acceptable" status. Educators have said that the requirement forced them to pay attention to gaps they might have missed if they looked only at the school averages.

State reports also can help improve teaching by comparing the achievement of schools against similar schools. If schools



see that others with comparable student populations are succeeding, they can learn what the high-performing schools are doing well and begin to adopt similar practices. The nonprofit group Just for the Kids (www.just4kids.org) has pioneered this approach in Texas: Its Web site charts the performance of each school compared to similar schools that are the top performers.

Direct Assistance to Low-Performing Schools

States also need to develop and implement policies to provide direct assistance to enable low-performing schools to turn around.

The first step is figuring out what assistance schools need. While low test scores can signal a problem, the test results do not reveal how to address it. Only on-the-ground reconnaissance by trained educators can help schools determine if they need to revamp the reading program, replace the staff or take some other step to improve instruction and raise performance.

THE QUALITY OF TEACHING IS
PERHAPS THE MOST IMPORTANT
FACTOR IN TURNING AROUND LOWPERFORMING SCHOOLS.

In **Kentucky**, the state trained a cadre of "distinguished educators" who were assigned to help low-performing schools develop and implement improvement plans. In **North Carolina**, state-supported teams serve the same function. These efforts have been effective in helping low-performing schools turn around. The key is to give the external support teams authority to recommend significant changes and carry out their recommendations.

Stable, Unified Leadership

Nothing kills schools' efforts to improve teaching more than conflicting or shifting signals from the state. Yet sometimes state officials do not speak with one voice about what all students are expected to learn, or the expectations change when a new leader comes to the state capital.

It is no accident that the states that have shown the most improvement over the past decade — such as **Connecticut**, **North Carolina** and **Texas** — tend to be the ones where state policy has remained stable during that period. These states also have enjoyed stable and strong support from the business community.

Improving the Quality of Instruction

The quality of teaching is perhaps the most important factor in turning around low-performing schools, and states need to address head on policies that improve the quality of teaching and learning. These include policies for improving the quality of teachers, enhancing teachers' and administrators' knowledge and skills, and providing them with tools to do their jobs better.

Attracting and Retaining Qualified Educators

Too often students who need the best teachers end up with the ones with the least experience and least preparation. This must change. If we are to close the achievement gap, students in low-performing schools need access to the most able teachers and administrators.

One way to attract well-qualified teachers and administrators to low-performing schools is to provide incentives, such as higher pay. **South Carolina** does this by providing a 50 percent salary bonus for teachers in low-performing schools. **California** has authorized bonuses for teachers who have earned certification from the National Board for Professional Teaching Standards (NBPTS, www.nbpts. org) and who agree to teach in such schools.

However, states have found that the pay incentives may not be sufficient; even

with higher pay, teachers still may not want to teach in low-performing schools. For that reason, states also need to consider improving the conditions in such schools to make them attractive places to work.

This means not only improving the physical conditions of the schools and addressing safety concerns, but also providing amenities — like telephones and computers — that teachers in higher-performing schools tend to have.

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In addition to creating these incentives, states and districts need to address the seniority policies that have allowed experienced teachers to gravitate to highperforming schools and instead consider ways for schools to select the faculties they need to strengthen instruction. Some pioneering districts, notably Seattle, have negotiated union agreements to allow principals to select their teaching staffs and to give teachers substantial roles in the hiring process. As long as states hold schools accountable for performance, they need to make sure schools have the authority to run themselves, including, where possible, the ability to select the faculty.

It's one thing to attract teachers to low-performing schools. The next challenge is to keep them there. The turnover rate for new teachers, particularly in struggling schools, is notoriously high. But without a stable staff, such schools continually will scramble to improve.

One reason teachers leave is because they see little prospect for growth. But

states can encourage teachers to remain in schools by enabling them to earn higher salaries by raising performance, and by providing opportunities to take on additional responsibilities. A handful of districts, like **Cincinnati**, have created salary scales that reward teachers who demonstrate improved teaching abilities. **Iowa** is developing a similar pay-for-performance system. And 30 states reward teachers who earn certification from NBPTS.

Arizona, meanwhile, has worked with the Milken Family Foundation to pilot a Teacher Advancement Program, which creates opportunities for skilled teachers to coach and mentor their colleagues. The master teachers earn higher salaries based on their level of skills and student performance.

High-Quality Training

For teachers and principals who entered the profession before the 1990s, the standards movement represents a dramatic shift. Now for the first time they are expected to teach all students to learn at levels only a few had reached before. To meet this new challenge, teachers and principals need to acquire new knowledge and skills. States need to provide them with opportunities to do so.

Providing learning opportunities for skilled professionals is not new; businesses and other professions, like law and medicine, provide them routinely. These opportunities help professionals hone their skills and keep up with developments in the field. In education, though, professional development often has been ineffective because it is delivered in ineffective ways — often one-shot workshops, which do not allow teachers to follow up on the lessons by applying them in practice — or because it is unrelated to the content teachers are expected to teach. For principals, professional development has not always kept up with the demands of their jobs in standards-driven schools.



To enhance teachers' and principals' knowledge and skills — particularly those in low-performing schools — states and school districts need to invest heavily in professional development that works.

They can start by conducting an audit of the professional development they currently provide to determine if it is addressing the standards teachers are expected to teach. The Boston Public Schools, together with a nonprofit group, the Boston Plan for Excellence, conducted such an audit and found that 78 percent of the \$23.7 million the district spent on professional development was not aligned with the district's instructional goals. In response, the district shifted more than \$3 million of the funds from the central office to schools, required schools to write professional development plans and required "lead teachers" — specialists who provide professional development in schools — to focus on instruction in reading and mathematics.

Another district that has revamped the way it operates professional development is **Community District 2 in New York City,** which, for more than a decade, has organized itself around instructional improvement. The district sets aside 5 percent of its budget for professional development and provides a wealth of opportunities for teachers to improve their knowledge and skills. But beyond the specific programs, professional development is embedded in the district's culture: Principals are charged with formulating professional development plans for their faculties, based on student performance data, and are held accountable for carrying out those plans and improving performance. As a result of the district's efforts, District 2 has improved from 10th among the city's 32 community school districts in reading and mathematics performance to second.

California has invested considerably in improving the ability of teachers to teach to high standards — particularly teachers in low-performing schools. Building on its

acclaimed Subject Matter Projects, the state in 1999 created Professional Development Institutes aimed directly at providing intensive instruction for teachers in subject matter and teaching strategies around the state's content standards. The first institute, on reading for elementary teachers, proved highly successful; 90 percent of the first group of first graders taught by teachers who attended the institute reached state benchmarks. Since then the state has expanded the institutes to include elementary mathematics, prealgebra and algebra, high school mathematics, high school reading, writing, and English language development.

TO ENHANCE TEACHERS' AND PRINCIPALS' KNOWLEDGE AND SKILLS — PARTICULARLY THOSE IN LOW-PERFORMING SCHOOLS — STATES AND SCHOOL DISTRICTS NEED TO INVEST HEAVILY IN PROFESSIONAL DEVELOPMENT THAT WORKS.

Principals also need professional development, and a few states are beginning to provide them with opportunities to enhance their knowledge and skills. In Ohio, a public-private partnership has launched the Ohio Principals Leadership Academy, which provides professional development for hundreds of the state's school leaders. In North Carolina, the University of North Carolina Center for School Leadership Development offers intensive three- to 20-day residential training on numerous school issues, as well as smaller, focused institutes on particular topics. Created by the state Legislature in 1984, the center also conducts research to identify the characteristics of effective school leadership.

Tools to Support Teaching

In addition to training, teachers also need classroom tools to help them teach to

standards. Yet an *Education Week* survey of teachers found that fewer than half said they have "plenty" of access to curriculum materials or textbooks that match state standards.

States need to find creative ways to make materials available to teachers because in many ways, the state role in curriculum development is a limited one. Most teaching materials are produced by commercial publishers, who try to tailor them to the needs of many states and districts and, thus, produce materials that are not aligned to any one set of standards. In addition, although some states have authority to establish statewide curricula or to approve textbooks for statewide use, in most states, the decisions about curricula are local matters.

One way states can help provide materials is through the use of technology. Several states are building electronic tools to disseminate lesson plans based on state

standards. One effective program in **West Virginia**, developed in partnership with the IBM Corporation, posts best practices, based on juried selections by teachers, on the state education department's Web site (www.wvdes.state.wv.us). The detailed lesson plans are matched extensively to state standards.

Another option is to band together to create a market for curriculum materials aligned with standards. One example of states banding together is the Mathematics Achievement Partnership (MAP), a consortium of 14 states brought together by Achieve. MAP has developed a common set of expectations for middle school mathematics, and participating states will administer an eighth-grade assessment based on those expectations. The hope is that the partnership can stimulate a demand that will encourage publishers to develop textbooks and other materials that match the expectations.



Testing and Accountability: Using Data to Drive Improvement

∎ esting and accountability play a vital role in any effort to improve teaching and learning. It's unreasonable to ask schools to simply meet higher expectations without giving them the tools and information they need to succeed and the incentives to do so. Educators need regular information about how well standards are being met, which classroom strategies are succeeding and which students are struggling. Parents and students need to know if students are making progress and learning the skills they need to be successful. That's why testing is such an important part of an overall strategy to improve student learning.

At the same time, accountability encourages students and schools to continue improving performance. By rewarding high levels of performance and substantial improvement and by making clear the consequences for failing to improve, states send a signal that results matter. The pressure the accountability mechanisms exert may feel uncomfortable at times, but it is essential if schools are to enable all students to reach high standards of performance.

Over the past few years, with leadership from governors and the business community, states have worked to collect better information about how well students are learning and to put in place systems for holding students and schools accountable for results. Nearly every state has instituted a new testing system or revised its existing one in order to get better information about student learning and how well students are meeting standards. Of the 48 states with statewide tests in 2000 (all but Iowa and Nebraska), most report working to align their tests to more clear, rigorous standards for what students should be learning.

In addition, about half the states (23) now or soon will require students to pass tests in order to graduate from high school, according to *Education Week* and the Consortium for Policy Research in Education (www.gse.upenn.edu/cpre). Just over half the states rate school performance, 20 reward schools for high performance and 13 have the authority to impose tough penalties on persistently low-performing schools. More states are likely to implement accountability systems in the next few years to meet the mandates of federal education legislation.

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Yet, obviously, not all tests and accountability systems are equally effective in providing the information and incentives students and educators need. States now need to ensure that their tests and

accountability systems are as good as they can be — and need to be. Making needed changes to ensure state testing programs are of the highest quality is both good policy and good politics. A rich, sophisticated and well-designed test becomes a powerful tool to improve instruction — and to mute the concerns of testing critics.

Making the Most of Tests

As tests have taken center stage in the education policy debate, the purpose they serve — providing information that helps students, parents, teachers and policymakers make appropriate decisions about education — often has been lost. School systems do not test for the sake of testing; they need information they cannot get in any other way. But like anything else, tests can serve this purpose well or poorly. Not all tests are equal.

Quality

Cheaper and faster tests are not necessarily better. The cheapest tests are usually readymade and "off-the-shelf" — generic tests that measure generic skills. But state standards include, as they should, a broad range of skills and knowledge — from knowledge of basic facts to writing ability and problem-solving skills. And state tests need to measure this wide range of skills and knowledge. If they don't — if they only measure a few skills or the easiest skills — they risk narrowing the curriculum.

It is important not to take alignment for granted. Aligning tests to standards is hard work. It requires time and money, and it requires states to be diligent consumers with test publishers. Ready-made, off-the-shelf tests rarely provide a tight fit with states' standards. Even tests created exclusively for states sometimes fail to measure the full range of standards. Yet alignment is essential. Without it, test results will be misleading. And a lack of alignment sends mixed signals to parents, students and teachers about what knowledge and skills are important.

Measuring rigorous standards usually requires the use of open-ended and essay questions as well as multiple-choice questions, and these written responses take time and money to score. States need to weigh the educational benefits of the various types of tests, as well as the financial costs, in making decisions about developing tests.

The most effective tests are challenging, measure important content and are aligned to standards. Among states with which Achieve has worked, tests in Michigan and New Jersey stand out. Those state tests are demanding, they measure the knowledge and skills the state expects all students to know, and they encourage challenging instruction. Not surprisingly, Michigan students outperformed those of all other states on the Third International Mathematics and Science Study-Repeat in 1999.

Transparency

What states are testing should never be a secret. Teachers, parents, students and others should understand clearly what is expected, for reasons both of fairness and instructional effectiveness. (Broad understanding also can mute generic criticisms about testing.) One way to achieve transparency is by aligning tests to standards; when tests truly are based on clear and public expectations for student learning, what's being tested is not a secret.

In addition, states can ensure tests are as transparent as possible by releasing most or all of the test questions every year. **Texas** has made the investment to release all of its questions each year, and the benefits are enormous. As Nicholas Lemann, a writer for *The New Yorker* magazine, noted in an article this summer: "Go on the Web site and read a Texas Assessment of Academic Skills test — are you really comfortable with kids' not knowing that material?" Twenty-two other states also release at least some of their test items each year.



States also should distribute to teachers and parents student responses to individual questions, particularly essay questions, as **Washington** state plans to do. Such efforts help improve instruction by providing examples of work at each performance level. Teachers gain a better understanding of how to evaluate students' work and what they need to address to bring all students to higher levels. And students can compare their work with excellent examples and know what they must do to improve it.

Utility

Sophisticated tests, with lots of openended questions, take time and careful attention to score accurately. Nonetheless, states should strive to report test results as quickly as possible. The attention of parents and teachers — not to mention of the students themselves — has moved on when test scores from one year come back the next. This does not mean, though, that states need to abandon the use of open-ended and essay questions; such questions are valuable for tapping skills not well measured by multiple-choice questions. Involving teachers in scoring

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exams also is extremely worthwhile. **Massachusetts** has addressed this issue by releasing the results from the multiple-choice portion of its test quickly, while maintaining the open-ended portion and releasing those results at a later date.

The most effective types of reports are those that break down information to show how different groups of students perform, so that teachers and administrators can identify patterns that they can address. In addition, effective reports also enable comparisons with other schools and districts, so educators can see those that appear more effective and learn from their successes.

Technology can help improve the reporting of test information, and several states, such as Illinois and Maryland, have begun to develop innovative methods of reporting test results through the Internet. The Maryland site (www.mdk12. org), which receives 1,600 "hits" a day, allows school teams to identify schools with similar demographics that are performing at significantly higher levels. A similar, privately run system widely recognized for effectiveness is Just for the Kids, a nonprofit organization in **Texas.** Created in 1995, Just for the Kids has established a Web site (www.just4kids.org) that provides test data for each school, broken down by race, gender and other categories, and identifies the highest-performing schools with similar populations of economically disadvantaged and limited-Englishproficient students.

Another private organization, Standard & Poor's (www.standardandpoors.com), has developed a system for providing useable data for school districts. **Michigan** and **Pennsylvania** have contracted with the firm to provide the service in those states. Policymakers, parents and educators can assess their spending and performance in relation to other districts statewide, neighboring districts and "peer districts" with similar geographic and demographic characteristics.

Comparability

New federal education requirements likely will require annual testing for every student in grades three through eight in reading and mathematics. The goal is to create a coherent, comparable measuring tool that can track student progress accurately from grade to grade and disaggregate data over time. To accomplish this goal, state

leaders will need to pay careful attention to the alignment of the new tests with the standards and the articulation of the tests from grade to grade.

According to Education Week, only seven states in 2001 measure student performance against standards in all the grades that will be required. To fill in the blanks, Achieve estimates that 260 new tests will need to be created and used across the country. The easiest solution would be to use tests that are already in place — to "mix and match" state and local tests or customized and off-the-shelf tests — to provide measures for every grade level. But unfortunately, this solution will not answer the need. Results from completely different tests can't be calibrated, experts say (most recently, the National Research Council in a report to Congress), and can't yield coherent, reliable information about student progress from grade to grade and year to year. In addition, parents and teachers will be confused by tests that look different — and by results that do. too.

Coherence

A state test cannot do it all. Yet a state can build a coherent assessment system. An assessment system is richest when state tests provide a good snapshot that complements information from local, teacheradministered, regular assessments given in the classroom. Thus, while making state tests the best they can be — using some of the best practices described above — state leaders should work with local leaders to examine all the tests that students take to see if they complement one another and provide additional value. If a test does not add value, it shouldn't be used.

Local assessments can be valuable by providing diagnostic information that state tests may not provide and by measuring some standards that state tests do not address. To encourage the use of such assessments, states should invest in the development of assessments that school districts can elect to use in the classroom throughout the school year. **Indiana** is considering such an approach. Under a plan being considered in that state, Indiana will develop assessments for local use, which will be administered and scored locally, but with quality controls to ensure that the scoring matches state standards.

Creating a Fair and Firm Accountability System

Incentives for Students

If we are to achieve our goal of preparing all students for the challenges they will face after high school, then the accountability system must create incentives for students to work hard and achieve the standards. Schools do students no favors if they allow them to graduate from high school only to face limited opportunities because they lack needed skills. If students reach high standards, the high school diploma will stand for something that colleges and businesses value, and students will strive to attain a diploma. At the same time, states must be fair; they must give students a reasonable chance to meet the standards.

Role for Business and Higher Education

It is here that business and higher education have an important role. Educators in K-12 have shouldered the burden of implementing standards and holding students and schools accountable for results. The stage now is set for business leaders and higher education officials to do their part by using student performance on graduation tests as a factor in hiring and admissions decisions. It makes little sense for students to do what they need to do to graduate from high school, only to find that they are ill prepared to enter college or find a job. Only with a coherent system that links high school with college and work can high stakes open doors to opportunities for all students. Such a system also



can earn support from parents and students, since they know that the high school graduation tests have value.

A few states, such as **Oregon** and Georgia, have forged alliances between K-12 and postsecondary systems to align the expectations for high school graduation with those for college admission and placement. As part of Georgia's effort, the state has created college scholarships for students with high achievement in high school and has begun a campaign to communicate the requirements for the scholarships to younger students to help them prepare for the scholarships. In addition, Georgia also has launched a new effort to create incentives for younger students by ensuring that students are promoted only after meeting standards.

And some 20,000 businesses have signed on to the Making Academics Count program by using high school transcripts as part of the hiring process for entry-level workers. This campaign was created by the Business Coalition for Education Reform (www.bcer.org), a partnership of major businesses and business organizations led by the National Alliance of Business.

But the pace is too slow. Students in 23 states soon will have to pass tough tests to graduate from high school. A commitment from higher education and business to use the results of high school tests could help sustain support at a time when the standards movement faces its greatest test.

To encourage higher education and business to play a more active role in accountability, four national organizations — Achieve, The Education Trust (www. edtrust.org), the National Alliance of Business (www.nab.com) and the Thomas B. Fordham Foundation (www. edexcellence.net) — have launched an effort to determine the knowledge and skills entry-level workers and college freshmen need to succeed. The American Diploma Project will work with a select

group of states over the next two years to help them align their high school exit standards to those requirements.

Giving students a fair shot. It is unreasonable to implement a graduation-testing requirement and expect students to meet it right away — unless, of course, the standard is so low that everyone can meet it. Schools need time to adjust their curriculum to meet the new requirements, and teachers need to upgrade their skills to prepare all students to meet the standards. Students also need multiple opportunities to pass tests.

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FACES ITS GREATEST TEST.

All states with graduation tests provide multiple opportunities, and virtually all states have phased in their testing requirements. **New York**, for example, laid out a careful strategy for its plan to require all students to pass Regents Examinations to graduate from high school; in the past, 40 percent of students had taken the rigorous examinations. The state initially required only the English examination and lowered the passing score from 65 to 55. The state plans to revert to the higher passing score in 2004 and to add additional tests as graduation requirements over time.

Providing academic supports. If all students are to meet high standards, states and districts must provide learning opportunities beyond the traditional school day and year. Not all students learn at the same pace; some need extra help.

Maryland, which boasted some of the largest increases in mathematics scores in the 1990s, has developed a comprehensive plan aimed at providing sufficient learning

opportunities for every student. The plan includes early intervention at the preK level, training for teachers in the diagnosis of learning problems and strategies for dealing with them, and individual learning plans for students in elementary and secondary school who fall behind. Because the Legislature provided only \$19 million of the \$49 million the plan called for, state officials postponed implementation of a high school graduation test.

Accountability for Schools

To motivate schools to improve performance, accountability systems need to focus their attention on raising performance and providing the right incentives. States want to ensure that schools do the right thing to raise the performance of all students.

Appropriate measures. The first step in holding schools accountable for performance is measuring their performance in appropriate ways and determining if they should earn rewards or if they need assistance. Just over half the states now rate school performance, and out of those, 10 identify low-performing schools only, according to *Education Week*.

To encourage schools to raise performance for all students, states should measure school performance in three ways: absolute performance, to determine if students are meeting standards; progress over time, to see if schools are improving at an appropriate rate; and the effectiveness in closing gaps in performance between high and low performers. States that rate school performance generally use one or two of these methods, but a system under development in **Delaware** is promising because it incorporates all three. The Delaware system also looks at performance over a twoyear period; this is important because school performance often fluctuates from year to year.

Shining a spotlight. The ratings states assign schools based on performance can be extremely powerful. Schools eagerly seek to

avoid a low rating and work hard to earn a high rating — even if there are no rewards or sanctions associated with the ratings. Researchers who have studied schools in **Texas**, for example, have found that the ratings themselves have served as powerful incentives for change in that state.

The ratings states assign schools based on performance can be extremely powerful.

Schools eagerly seek to avoid a low rating and work hard to earn a high rating — even if there are no rewards or sanctions associated with the ratings.

Yet such ratings can work only if they are public and widely known. Nearly all states produce report cards on schools, but more states need to rate school performance so it is clear which schools are succeeding and which need help. And states need to do a better job of publicizing those ratings to maximize their effectiveness in encouraging change.

Providing assistance. Although some low-performing schools can turn themselves around when the spotlight encourages them to do so, most require some form of assistance. All of the 27 states that rate and identify low-performing schools provide some assistance to those schools, according to *Education Week*. The assistance varies; most states that provide such assistance send a team to help schools develop and implement an improvement plan, while a few provide extra funds or require professional development. Three states require low-performing schools to adopt a research-based reform program.

North Carolina's effort to send state teams to schools appears to be highly effective. There, the state sends an assistance team to work full time for a year in a school identified as low performing. The



team is required to evaluate teachers and administrators and work with them in implementing an improvement plan. The team reports to the local superintendent, the local school board and the state board of education. Since its inception, 88 percent of schools that have been identified as low performing have moved off the low-performing schools list, with state assistance. And North Carolina was one of only three states where the lowest-performing students improved in reading achievement between 1992 and 1998.

Applying sanctions. States cannot let schools perform poorly with no schedule for improvement. Without the prospect of dramatic action, the lowest-performing schools have little real incentive to improve quickly. And this is terribly unfair to the students. They have one chance for a good education; they cannot wait.

As the *Education Week* survey found, 13 states have the authority to impose penalties on chronically low-performing schools. As of 2000, only four states applied any type of sanction at all. Possible penalties include replacing the staff, turning over control to private management, converting schools to charter status, allowing students to transfer to other public schools (or, in the case of **Florida**, to private schools as well) and closing schools. Although the few examples of state actions provide only preliminary evidence of whether these approaches are effective, it is clear that such penalties must be one of the tools states have at their disposal to ensure that students are not trapped in chronically lowperforming schools.

Focus on continuous improvement. The state's responsibility to schools does not end when it applies sanctions; nor does it end when schools reach their targets.

The goal of an accountability system must be continuous improvement for all schools. Those that were in dire shape need to get better, and those that are succeeding still can strive for improvement.

In addition, the accountability system itself needs to improve continuously. States need to examine their assessments, rewards, assistance efforts and sanctions to see what is working and what needs improvement. As they do so, they can learn from other states and the private sector. There is no reason for every state to invent an accountability system on its own.

A number of states have taken on this challenge and looked outside their borders for ways to improve their education systems. For example, states such as Maryland, Massachusetts, New Jersey, Ohio, Oklahoma and Texas have worked with Achieve to examine their standards, assessments and accountability systems and refine them. Their efforts will result in stronger education systems for all their students.

www.achieve.org

Achieve's expanded Web site provides additional information on the following topics addressed in this section:

- Criteria for quality standards and testing (Initiatives section)
- Extensive background information about why America needs higher academic standards and stronger assessments, featuring data about how U.S. schools and students are performing (Call to Action section)
- Policy tips on testing and accountability, with advice for policymakers and examples of promising practices (Policy Tips section)

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Goals

The education technology demonstrations will showcase innovative education technology programs, prototypes and products that seek to help improve student achievement. We expect these demonstrations will offer the governors, CEOs and educators attending the 2001 National Education Summit a better sense of how technology can advance the education reform agenda, particularly in the following areas:

- using accountability and data for decisionmaking;
- improving instruction to meet high standards; and
- providing professional development opportunities for teachers.

The Review Process

The Center for Children and Technology of the Education Development Center, a nonprofit research and evaluation organization located in New York City, coordinated the technology demonstrations for the 2001 Summit. A review committee selected the technologies according to a focused set of criteria that reflected this year's Summit themes.

General questions regarding the technology demonstrations can be directed to:

Deborah Keisch
The Center for Children and Technology
Education Development Center
96 Morton Street
New York City, NY 10014
(212) 807-4264
dkeisch@edc.org

Accountability and Data for Decisionmaking

Technology offers a powerful means of increasing accountability during a time when more and more schools, teachers and students are being held responsible for results. Technology can widely distribute timely, comparative data on classrooms, schools, districts and states, giving a picture of performance across subjects and grades. Using this data, stakeholders can demand specific changes and showcase schools' successes so that their specific improvement strategies and practices can be replicated.

Education's Web-Driven Solution to Accountability

www.ed-soft.com

Sponsor: EdSoft Software Corporation

Contact: Trey White

CEO

(972) 490-4044

trey.white@ed-soft.com

Project Description: EdSoft facilitates teacher, student and administrator accountability through a Web-based, fully integrated curriculum, instruction, assessment and management solution. Educators can develop and deliver districtdefined curriculum, online lessons and formative/summative assessments correlated to standards and objectives. Students, parents, teachers and administrators have immediate access to recorded data on student performance and objective mastery. In academic year 2001-02, teachers, students and parents in 30 districts with more than 40,000 students will use the benchmark assessment module.

The solution has demonstrated the following results:

- Real-time benchmark assessment results allow teachers to address student performance immediately.
- Systemic analysis capability immediately identifies district, campus and grade level, and student performance strengths and weaknesses.



- Integrated curriculum captures "district subject matter best practices" and facilitates subject matter development collaboration.
- Teachers recapture more than seven hours spent in administration and teacher preparation time per week.

GreatSchools.net

www.greatschools.net Sponsor: GreatSchools.net Contact: Bill Jackson President and Founder (415) 977-0770, ext. 111 bjackson@greatschools.net

Project Description: GreatSchools.net is a nonprofit online guide to K–12 schools that helps parents understand school performance and make informed decisions about their children's education. Parentfriendly features include in-depth school profiles, school search and comparison tools, and regular e-mail updates about the performance of individual schools.

GreatSchools.net has been piloted in Arizona and California. Using data provided by the U.S. Department of Education, GreatSchools.net recently became the first Web site to incorporate results on statelevel assessments for virtually every school in the nation. Over the next several years, GreatSchools.net plans to work with states, private foundations and other partners to bring its in-depth school guide to dozens of states across the country. GreatSchools.net has been developed with the support of the Hewlett, Pisces and Stuart foundations, as well as Washington Mutual and the New Schools Venture Fund.

The Grow Network

www.grownetwork.com Sponsor: The Grow Network Contact: David Coleman

CEO

(212) 889-5678 dcoleman@grow.net

Project Description: The Grow Network communicates relevant student assessment information to educators and parents — and gives them the specific tools they need to help their students in primary, middle and secondary schools achieve at higher levels. The work is tailored to state and local educational standards and reflects a deep commitment to enhancing learning opportunities for children at all ability levels.

Both in print and online, The Grow Network seeks to translate student and class information into insights, making assessments understandable and actionable. The Grow Network's team of leading educators collaborates with key educational and policy organizations in continually refining its materials and professional development strategies to ensure the achievement of three goals: helping teachers enhance their classroom practice, assisting principals in their roles as instructional leaders, and enabling parents to understand their children's strengths and weaknesses and to help them grow.

School Information and Improvement Project

www.just4kids.org Sponsor: Just for the Kids Contact: Brad Duggan Executive Director (512) 320-4150 brad@just4kids.org

Project Description: Just for the Kids (JFTK) is a nonprofit educational research organization that analyzes student achievement information and investigates educational best practices. The JFTK data analysis identifies the academic potential of a school by

benchmarking it against other schools that serve similar student populations. The differences between high- and average-performing schools are investigated to identify the most effective educational programs with different student populations over multiple years. More than 3,000 schools have been trained to use the JFTK model, and foundations, communities, businesses and state governments use this information to evaluate the effectiveness of their reform efforts.

The JFTK Web site currently links more than 10 million individual student records for more than 12,000 schools in six states: Texas, Washington, Tennessee, Florida, Arkansas and Minnesota.

Decision Support System

www.mdk12.org

Sponsor: Maryland State Department of

Education

Contact: Mark Moody

Assistant State Superintendent, Division of Planning, Results and Information

Management, Maryland State Department

of Education (410) 767-0073

mmoody@msde.state.md.us

Project Description: The Maryland Department of Education and the Maryland Business Roundtable for Education collaboratively created the School Improvement in Maryland Web site, which allows all stakeholders to access, analyze and use data to improve student performance. The vision began with helping schools analyze and use their state assessment data for school improvement. It has expanded to helping them understand what the state assessments measure and what satisfactory performance looks like so that they can teach and monitor individual student progress on the same outcomes and indicators.

The tools support schools and students in attaining high standards by helping build the capacity of educational leaders and stakeholders to understand, teach and assess the Maryland Content Standards and to monitor individual student progress.

Standard & Poor's School Evaluation Services

www.ses.standardandpoors.com Sponsor: Standard and Poor's

Contact: William Cox Managing Director (212) 438-7998

 $william_cox@standard and poors.com$

Project Description: Standard & Poor's School Evaluation Services (SES) feature a unique synthesis of financial and academic performance factors, including data tables that show where new dollars are being allocated, how those dollars are achieving results and where achievement gaps exist. The massive array of data and actions that result from this new level of transparency promote the sharing of best practices among schools and districts. Standard & Poor's analytical conclusions, independent of local or national political agendas, measure and assess the relative "return on investment" in education and, importantly, provide context for this return. SES purposely does not generate superficial rankings of schools or school districts. Standard & Poor's aggregates data from a variety of sources and organizes these data into a unique framework consistent across school systems and states.

Michigan and Pennsylvania are the first two states to employ SES. The SES Web site, launched this summer, already displays Standard & Poor's independent written analyses of the strengths and challenges found in more than 1,100 school systems. The Web site also displays hundreds of data trends and comparisons for every school district. Users can create their own comparisons to measure their district's performance across hundreds of achievement, financial and demographic variables.



Handheld Reading Diagnostic Software

www.wgengroup.com

Sponsor: Wireless Generation

Contact: Larry Berger

CEO

(646) 336-5451

lberger@wgengroup.com

Project Description: Wireless Generation's platform for mobile observational assessment solves one of the most crucial problems in K-12 education — how to get a continuous feed of meaningful student performance information outside the classroom so teachers and parents can act on this information to improve student achievement. These tools support real-time capture, analysis, tracking and reporting of information about student achievement, and at the same time, they streamline numerous unwieldy bookkeeping and administrative tasks for teachers.

Wireless Generation's product for early reading assessment replaces a widely used assessment practice that traditionally requires pen and paper. By enabling the assessment system on inexpensive, easyto-use handheld devices that synchronize with Web-based servers, Wireless Generation transforms this assessment from a cumbersome, paper-generating system into a powerful engine for continuous improvement. Teachers, administrators and parents can track student progress continuously. Teachers can target instruction to individual student needs, and parents can provide appropriate support at home. The product currently is being piloted in Mamaroneck, N.Y., and York, Pa.

Improving Instruction to Meet High Standards

Technology that is well integrated into the classroom can help students reach high academic standards. It can help teachers tailor instruction to meet individual student needs, allow students to learn at their own pace to master complex skills, and give students and teachers access to

instructional resources — such as real-time data or scientists, historians and other experts — that can enhance the learning experience.

Carnegie Learning: The Cognitive Tutors™

www.carnegielearning.com Sponsor: Carnegie Learning

Contact: Bill Hadley

Vice President, Education Services and

Chief Academic Officer

(412) 690-2442

bill@carnegielearning.com

Project Description: The Cognitive Tutor program's intelligent software follows and guides students step by step as they solve rigorous, standards-based mathematical problems. By focusing on each student's unique problem-solving process, the software helps students develop the mathematical skills and knowledge they need to continue to achieve at higher levels. The Tutor provides assistance (hints) when a student appears to be having difficulty. It also tracks each student's mastery of specific skills and uses this information to select problem-solving activities and adjust pacing to meet each student's needs.

Because teacher preparation is critical to the program's success, all teachers must take a four-day workshop before using it. The Cognitive Tutor program is in use in 36 states and 668 sites, including urban, suburban, rural, private, public, parochial, charter, middle and high schools, as well as junior and two- and four-year colleges.

Watch-me!-Read

Sponsor: Don Johnston, Incorporated

Contact: Hilda Gentry

Reading Director, Houston Independent

School District (713) 892-7214

hgentry@houstonisd.org

Project Description: Watch-me!-Read (WM!R) software uses interactive IBM speech-recognition technology to help beginning readers practice reading. Using



WM!R, a student can read aloud from preprogrammed books or from any story scanned into the tool by a teacher. The student is accompanied by a computerized "panda," who plays the role of a teacher or parent, providing assistance as it is needed throughout the reading session. The panda recognizes mistakes, asks the student to repeat a word he or she misread, and "reads" the correct word if necessary. At any time during the reading, the student can listen to what he or she has read. Students also can create multimedia presentations, complete with video introductions they can share with their peers or teachers. WM!R also captures information for teachers, including recordings of each reading, time-on-task measurements, a catalog of missed words and student answers to comprehension questions.

An evaluation study found that students using WM!R were engaged more highly in reading, read more challenging material and comprehended reading material better than when they read alone. In academic year 2001–02, the fourth year of the project, approximately 150 first-grade teachers will receive training on WM!R.

Learning With the Library of Congress

www.loc.gov

Sponsor: Library of Congress

Contact: Susan Veccia

Manager, Educational Services

(202) 707-6151 svec@loc.gov

Project Description: The Library of Congress' American Memory online collections provides free access to a wide range of primary sources. Its more than 7 million items include photographs, maps, diaries, films, manuscripts, sound recordings, song sheets and cultural ephemera. Because primary source material is not only difficult to acquire but also requires different teaching methodologies, the collection's Learning Page provides professional development guides and highlights

common curriculum themes to make these materials more helpful to K-12 educators.

The Web site helps teachers and students learn to think like historians, find and analyze pieces of the historical record, and construct hypotheses for further research and study. The goal is to strengthen life-long learning through the continual development of research and critical-thinking skills. Teachers at all levels — elementary, middle and high school, as well as university — are using these materials to develop inquiry skills and support standards-driven lessons.

The Florida Virtual School

www.flvs.net

Sponsor: The Florida Virtual School

Contact: Julie E. Young

Executive Director

(407) 317-3326, ext. 2742

julie_young@fhs.net

Project Description: The Florida Virtual School (FVS), an online high school, was designed to give every public, private and home-educated student in Florida an equal opportunity for educational choice. But it quickly reached beyond the state borders. Last year, over 5,000 students in 13 states earned credit toward graduation in one of 66 FVS courses, most of which were not offered at their traditional schools. Because FVS understands that teaching is about connecting with students, online courses have been designed to be interactive, engaging and challenging, while exceeding most state and national standards.

EarthPulse Center

www.riverdeep.net

Sponsor: Riverdeep Interactive Learning

Contact: Don McBurney

Director, Implementation Services

(800) 453-2449, ext. 02 dmcburney@riverdeep.net

Project Description: With Riverdeep's EarthPulse Center, students and teachers use the Internet to solve science problems



with actual scientists. Classes explore standards-based scientific topics together by analyzing up-to-the-minute scientific data, and they are connected via Web sites and e-mail to real scientists. The students themselves interpret data, draw conclusions and make predictions based on their own analyses. In this way, science and math standards come alive as they are applied to real-world problems.

Riverdeep currently is in more than 53,000 schools — more than 40 percent of the elementary, middle and high schools in the United States.

Real-Time Adventures on the Internet: Applying Knowledge in the Real World

www.k12science.org

Sponsor: Stevens Institute of Technology, Center for Improved Engineering & Science

Education (CIESE)

Contact: Edward A. Friedman

Director of CIESE (201) 216-5375

friedman@stevens-tech.edu

Project Description: Through Real-Time Adventures on the Internet, students use the Web's resources — and multidisciplinary skills — to act as scientists solving realworld problems. For example, by accessing real data about the locations of merchant ships at sea, students become navigators, plotting the ships' courses and evaluating the effects of ocean currents and weather conditions on their progress. This exercise requires students to use mathematics skills, develop geography and mapping skills, and use social and cultural information about countries engaged in international trade. Writing and language arts skills come into play as students present their findings through Web-based publishing and conduct e-mail exchanges with other students in port cities around the world.

Materials were developed by the Center for Improved Engineering & Science Education (CIESE) at Stevens Institute of Technology in collaboration with teachers from a number of school systems. CIESE also conducts teacher professional development programs that bolster teachers' content knowledge and help them deliver these Internet-supported lessons in their classrooms. To date, more than 7,000 teachers in Arizona, Florida, New Jersey and New York have been trained on the use of these materials. Through a \$9.3 million U.S. Department of Education program known as Alliance+, Stevens is introducing these materials and promoting teacher training in Miami, Phoenix and Cleveland.

Providing Professional Development for Teachers

A computer can never replace a good teacher, and Internet access and computer labs alone cannot improve instruction. However, technology can enhance preservice and in-service professional development opportunities by removing the isolation teachers historically experience. Technology gives teachers access to effective instructional practices and strategies, helps them better understand the link between assessment and instruction, and connects them with their peers and outside experts for ongoing support and continuous learning.

Seminars on Science

www.amnh.org/learn/pd/sos/index.html Sponsor: American Museum of Natural History

Contact: Francine Millman

Project Manager (212) 496-3522 millman@amnh.org

Project Description: The Seminars on Science program has eight, six-week online courses that connect teachers to science and give them the confidence and experience they need to conduct inquiry-based, hands-on science with their students. Each course is driven by an American Museum of Natural History scientist's research investigation and encourages learners to wrestle with the same questions and ideas that engage the authoring museum scientist. Original course lectures by the scientists provide learners with an in-depth and personal view of the topics. Online resources — such as virtual specimen, interactives that demonstrate scientific processes and techniques, and videos — are developed in collaboration with the scientists to complement the course lectures and engage learners with the tools and techniques used in scientific investigation.

At the center of each course are learning activities, which include online threaded discussions, assignments and a final course project. All activities encourage reflection and the practical application of the concepts emphasized in each course. A highlight of every course is the offline, investigation-based assignments that provide learners with opportunities to observe, question, hypothesize, record and analyze data, and communicate findings, similar to the daily work of museum scientists.

Designing Professional Development Solutions: The FreshPond Learning Network

www.freshpond.com Sponsor: FreshPond Contact: Rob Ramsdell Director and Founder (617) 864-2425, ext. 11 robr@freshpond.com

Project Description: The FreshPond Learning Network is a compelling alternative to traditional professional development workshops. It uses Design Teams — focused teams of teachers using a studygroup approach — to improve teaching and learning. Design Team participants create and critique standards-based model lessons, which will be used to improve student learning in an academic area that teachers target for improvement. Freshpond.net provides a comprehensive

set of Web tools that helps teachers design, publish, share and evaluate high-quality lessons focused on improving student performance. FreshPond also helps facilitate district-level steering committees, and provides intensive training and support of local facilitators who lead study groups.

FreshPond has conducted professional development programs in more than 100 schools and districts throughout New England and New York, ranging in size from 1,000 to more than 20,000 students.

IBM Learning Village — Online Jurying Process

West Virginia: http://reinvent.k12.wv.us Sponsor: IBM Corporation Contact: Donna Landin WVDE/IBM Reinventing Education Grant Coordinator West Virginia Department of Education (304) 558-0304 dlandin@access.k12.wv.us New York State: http://wfl.wnyric.org Contact: Nicole Sayer Putman Learning Village Project Coordinator

FEH BOCES (518) 483-6420 nicole@mail.fehb.org

Project Description: Educators in West Virginia and New York are using IBM Learning Village to give teachers the skills, knowledge and resources they need to integrate state standards into instruction and assessment. Teachers are using the technology to create, share and find standards-based, online lesson plans. Using IBM Learning Village's Jurying Tool, teachers who develop their own lessons submit them to a jury of their peers, who review the plans and suggest revisions to strengthen them if necessary. These lessons become part of a databank that teachers from all over the state can use in their classrooms as a way of sharing effective practices. The Learning Village Private Conference application facilitates commu-



nication among jury team members, moderators and Learning Village administrators throughout the lesson-approval process. The tool also integrates a range of other functions, including teacher home pages, communication tools, authentic assessment tools and professional development applications — all designed to support instruction.

In West Virginia, the technology is available in all middle and high schools, and, through a federal grant, the state is expanding the project into elementary grades and teacher education programs at 13 state colleges and universities. In New York, the technology is being implemented in more than 60 school districts, organizations and nonpublic school systems. An independent evaluation found that underperforming students in grades seven through 11 scored significantly higher in every core curricular area when they were taught using the juried lesson plans. For students performing above the average, use of the curricular materials maintained their performance lead.

Reinventing Education Change Management Toolkit

www.reinventingeducation.org Sponsor: IBM Corporation Contact: Robin Willner Director, Corporate Community Relations (914) 499-5619 willner@us.ibm.com

Project Description: The Reinventing Education Change Management Toolkit offers principals and other school leaders the tools they need to successfully institute changes in their schools. Based upon the work of Professor Rosabeth Moss Kanter of Harvard Business School, a world-renowned expert in organizational change management, this set of interactive online tools and materials has been customized specifically for educators focused on implementing standards-based reforms.

Regardless of the specific initiative, the Toolkit helps answer a number of critical questions: What is your vision for change?

How do you build a foundation of support? When is the right time to start, and at what pace should you move? How do you hold teachers, administrators and other stakeholders accountable for results? Using the Toolkit, principals and other users can take a diagnostic self-exam that leads them to information and strategies designed to address these and other questions. Or they can simply browse through the Toolkit, which includes both specific change tools and stories about real changes in schools and districts. What's more, the Toolkit allows principals to collaborate with their administrators and teachers. Principals can invite their site-based management team into the Toolkit, share information with them, ask them to complete diagnostic tools and review information they have submitted.

Classroom Solutions From Learning Effects

www.learningeffects.com Sponsor: Learning Effects Contact: Dave Daniels

Vice President, Marketing & Business

Development

Learning Effects, Inc. (207) 781-8420, ext. 229

Project Description: Learning Effects provides innovative, proven professional development systems that help teachers and schools meet the challenge of higher standards and raise student achievement. Learning Effects allows teachers to practice assessment online using prescored student work. It then guides teachers as they evaluate actual pieces of student work online, providing them with detailed information on the specific skills students are expected to demonstrate. Learning Effects also offers teachers opportunities to work online collaboratively with their peers to score student work — a powerful form of professional development that helps raise expectations of student performance and improve instructional practice.

Learning Effects offers programs for improved performance in writing, mathematics, science and reading in grades three through 12 and currently is working in California, Connecticut, Illinois, Maine, New York and Ohio.

LessonLab

www.lessonlab.com Sponsor: LessonLab Mitch Gordon Vice President (310) 820-6612, ext. 238 mitchg@lessonlab.com

Project Description: Using LessonLab's software, educators can create their own case-based examples of effective teaching practices. LessonLab's Web-based tools allow teachers and other professionals to study and discuss videos and other artifacts of classroom practice, face-to-face and over the Internet. Supplemental materials, expert commentary and personal learning tools enrich this professional development experience. The platform consists of three components: LessonLab ViewerT, which enables teachers and others to interact with cases in the digital libraries; LessonLab BuilderT, the application for creating content for the digital libraries; and the digital libraries themselves, which form an expandable repository of case materials.

LessonLab is used at universities nationwide, including Pepperdine University and UCLA, states such as California and Connecticut, and school districts such as Duval County in Florida and the Los Angeles Unified School District.

SchoolNet

www.schoolnet.com Sponsor: SchoolNet Contact: Denis P. Doyle Co-Founder and CAO (310) 986-9350 denis@schoolnet.com

Project Description: As an education technology solution provider, SchoolNet establishes partnerships with school districts, offering a suite of easy-to-use, tailored modules. SchoolNet's suite — Account, Align and Outreach — helps teachers and administrators analyze and compare specific student performance data in individual classrooms and across schools and districts, develop standards-based lesson plans that are aligned with assessments, and engage community members online in the service of student learning.

SchoolNet's solution was designed with the guidance of teachers and some of the nation's leading school reform figures. It is content-neutral, permitting a wide array of partnerships with content providers. At the same time, SchoolNet encourages teacher professionalism by providing lesson-building and publishing tools that make teacher-designed and teacher-tested materials widely available. SchoolNet currently is working in Ohio, Pennsylvania and South Carolina.

Teachscape

teachscape.com
Sponsor: Teachscape
Contact: Beth Lief
Senior Vice President, Strategic Relations
(212) 336-0702
beth.lief@teachscape.com

Project Description: Teachscape, an indepth professional development system, is designed to help improve teaching and, as a result, raise student achievement. It focuses on helping teachers and principals study current, research-based instruction models in literacy, mathematics and science. Each course includes videos of one or more



teachers using effective instructional strategies in their classrooms. Videos are accessed online or on CD. They come with supporting materials including lessons plans, student work, teacher reflections and specialist commentary, and additional readings and Web sites.

All courses are correlated to national and state content and teaching standards. Online assessments and activities, individual online journals, and facilitated on-site and online learning communities assist educators in acquiring, deepening and applying knowledge of content, teaching strategies and assessment. Teachscape works with local school district and state and higher education leaders to introduce the Teachscape system and train those educators who will work with teachers or student teachers.

Additional Resources

The following is a representative listing of additional resources for individuals seeking information on topics covered in the briefing book.

I. Progress Report

American Federation of Teachers Making Standards Matter 2001, November 2001

Scheduled for release in early November, *Making Standards Matter 2001* will report on each state's effort to implement standards-based reform systems in their schools. Academic standards, standards-based curriculum, aligned assessments and student accountability will be discussed and reviewed. A new online database — which will track each state's efforts to implement a strong, standards-based reform system — also will be unveiled in November. Available online at www.aft.org.

Ravitch, Diane (ed.) The Brookings Institution Brookings Papers on Education Policy, 2000 and 2001

This publication includes articles on education policy that help summarize the real state of education in America, including standards-based reform efforts and where they are headed. These annual volumes are edited by Diane Ravitch, and a 2002 version will be available later this year. Available online at www.brookings.org. Click on "Publications," then "Bookstore."

Council of the Great City Schools *Beating the Odds, May 2001*

This new city-by-city study of testing data shows that urban schools have made substantial gains in math and reading achievement, and they are showing significant reductions in the achievement gap between white and minority students. In at least half the grades that were tested, 23 districts posted math gains that were faster rates than those of their states. Seventeen percent posted reading gains that were faster. Overall, 92 percent of cities improved math scores in a majority of the grades tested — 80 percent in reading. Executive summary available online at www.cgcs.org, along with ordering information for the full report.

The Education Trust "Education Watch Online"

This site is a user-friendly source of state and national data on educational performance and equity by race and class, kindergarten through college. Users can select, access and compare state and national data in such areas as student achievement, teacher quality and investments. Available online at www.edtrust.org. Click on "Ed Watch Data."

The Education Trust New Frontiers for a New Century: A National Overview, Spring 2001

The latest report in The Education Trust's "Thinking K-16" series reviews the progress made in education reform and uses lessons learned to suggest reforms for the new century. Available online at www.edtrust.org/main/reports.asp.

The Education Trust Youth at the Crossroads: Facing High School and Beyond, Winter 2001

Prepared by The Education Trust for the National Commission on the High School Senior Year, this report looks at where today's students are as they leave high school and examines whether they are better educated than their predecessors were 11 years ago when the National Education Goals first were conceived. In general, it finds that student achievement has not improved at the rates we hoped for, and indeed after decades of leading the world in high school completion, the United States currently ranks 17th, with completion rates that have remained stagnant for nearly 30 years. Available online at www.edtrust.org.

Education Week "Quality Counts 2001: Gaining Ground," January 2001

Achieve and *Education Week* analyzed state standards and assessments and discovered that while standards and assessments are stronger today than when they first were being developed in the early 1990s, they still aren't strong enough to move America's schools as far as most would like in the 21st century. The report also includes findings from an in-depth analysis Achieve conducted of state standards and tests in nine states. Available online at www.edweek.org.

Finn, Chester E., Jr., and Michael J. Petrilli Thomas B. Fordham Foundation

The State of State Standards, January 2000

This Fordham Foundation report is an indepth study of state academic standards. It includes general reviews of English language arts, mathematics, history, science and geography standards. How good are the standards? Compared with the organization's original research in 1997, things are looking much brighter. But, the authors argue, the standards in general still have a long way to go before they can be considered anything more than average. Available online at www.edexcellence.net.

Grissmer, David, et al. RAND Corporation Improving Student Achievement: What State NAEP Test Scores Tell Us. 2000

Using data from American student scores on the 1990–96 National Assessment of Educational Progress tests in math and reading, the authors of this RAND book determine which states have made the most progress in improving student achievement scores. The book includes an in-depth look at reform efforts — and results — in Texas and California. Available online at www.rand.org. Click on "Publications."

Mullis, Ina V.S., et al TIMSS 1999 International Mathematics Report, December 2000

The follow-up to the original Third International Mathematics and Science Study (TIMSS), this report analyzes the performance of eighth-grade students from 38 countries — including 26 that participated in the original study — in mathematics and science. The study shows some disconcerting figures, including the fact that the same American students who had scored above the international average in mathematics four years earlier as fourth graders now scored near the average as eighth graders. While students from other countries were improving their performance, American students actually were falling behind. Available online at www.timss.org/ timss1999i/publications.html. Click on "Publications."

National Center for Education Statistics and the National Assessment Governing Board

Mathematics 2000: The Nation's Report Card, August 2001

Math scores from the 2000 National Assessment of Educational Progress were released in early August. This study shows that the scores of fourth- and eighth-grade students are rising, while the scores of 12th graders declined. Many states have



shown improved performance, but few have narrowed the black-white achievement gap. Available online at http://nces. ed.gov/nationsreportcard/mathematics/ results.

National Education Goals Panel Raising Achievement and Reducing Gaps: Reporting Progress Toward Goals for Academic Achievement, April 2001

The latest report by the National **Education Goals Panel provides analyses** of achievement scores on the National Assessment of Educational Progress. The study finds that while gains have been posted by the highest-achieving students, low-performing students still are falling behind, and relatively few states have been successful in reducing the achievement gap. The report does find that states are making progress in increasing achievement in mathematics — significant improvement when compared to reading gains. Available online at www.negp.gov. Click on "Latest publications, reports and policy recommendations."

StandardsWork The Results Card, 2000

The Results Card is a means for states to diagnose and monitor school performance over time. It identifies more than 60 indicators that states and districts should collect and analyze to determine whether their new standards and associated instructional initiatives are making a difference. StandardsWork, a nonprofit education group, analyzes trends in the data in relation to the states' goals and policies. A document for each participating state and an overall national perspective — with a chart comparing trends — is released publicly. The Education Leaders Council, a group of reform-minded education chiefs from seven states, participated in the pilot project. Available online at www.standards work.org. Click on "Results Card."

II. Public Support

Alexakis, Georgia N. "Test Prep," *The Washington Monthly,* March 2001

This article describes the lessons learned from a school improvement effort in Revere, Mass. According to the magazine, the town's attitude "has shifted from grudging acceptance to a full endorsement of the Massachusetts Comprehensive Assessment System and the standardsbased movement." Available online at www.washingtonmonthly.com. Click on "Archives."

The Business Roundtable Assessing and Addressing the "Testing Backlash," April 2001

This Business Roundtable report evaluates the national "backlash" to testing — the prevailing perception that much of the public, including parents and teachers, is wary of standardized testing. While maintaining that concerns about testing and accountability are neither a surprise nor abnormal, the report advises business coalitions and standards advocates about how to best address this backlash — especially in the face of a perceived media bias that tends to "play up" opposition to testing. Available online at www.brt.org. Click on "Education," then "Academic Standards and Testing."

The Business Roundtable Making Standards Work: Public Attitudes About Standards and Testing, December 2000

A summary of public opinion research and focus groups with parents and teachers, *Making Standards Work* includes findings, plus communications and policy recommendations for policymakers, business groups and other advocates of standards-based reform. Available online at www.brt.org. Click on "Publications."

Educational Testing Service A Measured Response: Americans Speak on Education Reform, May 2001

This survey, commissioned by the Educational Testing Service and conducted by the polling firm of Peter Hart and Robert Teeter, shows that while a majority of Americans support greater accountability in public schools, they also are demanding increased federal funding to help all students reach those goals. Available online at www.ets.org. Click on "Policymakers."

The Gallup Organization and Phi Delta Kappa Public Schools Get Highest Ratings in 30 Years, August 2001

This survey from The Gallup Organization and Phi Delta Kappa shows that Americans give their local public schools the highest rating they have received in the 30-year history of the poll, with over 50 percent saying they are satisfied with the direction of the public school systems. Available online at www.gallup.com.

Public Agenda "Reality Check 2001"

This is an annual report on the progress of the academic standards movement and the impact of reform efforts on schools and the work world. A joint project of Public Agenda and *Education Week*, it surveys public school students, parents and teachers, and employers and college professors who work with recent high school graduates. Questions address education policies, efforts to raise standards, testing and promotion anxiety, standards, standardized tests, preparedness for college and work, and computer use/technology support. Available online at www.publicagenda. org/specials/rc2001/reality.htm.

Public Agenda National Poll of Parents of Public School Students, October 2000

This survey of 803 parents of public school students in grades K-12 shows that news

reports of a parental backlash against academic standards and standardized tests are highly exaggerated. The report highlights parents' personal experiences with standards and finds that, even among parents who live in districts that are implementing higher academic standards, support for continued reform is strong. Funding for the survey was provided by the Thomas B. Fordham, George Gund, John D. and Catherine T. MacArthur, and John M. Olin Foundations. Available online at www.publicagenda.org. Click on "About Public Agenda," then "Research Studies."

Public Education Network Action for All: The Public's Responsibility for Public Education, April 2001

The Public Education Network's (PEN) latest poll, conducted with Education Week, finds that many Americans are not as involved in public schools as they feel they should be to help them improve. While education regularly tops the list of voter concerns in election years, fewer than half of Americans say they are involved actively in public education. At the same time, most Americans are skeptical of how hard their communities are working to improve the quality of public schools in their neighborhood. Only 22 percent of voters say people in their community are taking "a lot" of responsibility for ensuring quality in public schools. Available online at www.publiceducation. org. Click on "Publications."

III. Teaching and Learning: Closing the Achievement Gap

American Federation of Teachers Resource Guide for Redesigning Low-Performing Schools, 2001

This continually updated Internet resource guide presents ideas, information and materials that teachers and local union leaders can use to help foster sound techniques to help fix failing schools. This portion of the American Federation of Teachers' Web site includes its policy state-



ment on redesigning low-performing schools, as well as district profiles and examples of promising practices. Available online at www.aft.org.

American Federation of Teachers Doing What Works: Improving Big-City School Districts, October 2000

This American Federation of Teachers report profiles big-city school districts that are having success producing measurable gains in student achievement. A number of districts profiled — including Baltimore, Chicago, Philadelphia and Washington — all had sustained gains for at least three years. The report examines districts that are having success and documents what efforts made the results possible. Available online at www.aft.org. Click on "AFT reports."

The Business Roundtable and National Alliance of Business Pay-for-Performance: An Issue Brief for Business Leaders, July 2000

This issue brief developed by The Business Roundtable and the National Alliance of Business provides an overview for business leaders describing how pay-for-performance salary structures can reward teachers for improving student achievement and suggesting ways in which business leaders can support new compensation systems like pay-for-performance through collaborative work with educators and policymakers. Available online at www.brt.org. Click on "Publications," and select year "2000" from the pull-down menu.

Center for Reform of School Systems How Urban School Systems Can Succeed (Executive Summary and Report from the "Making the Grade" Conference), 2001

The history of urban school reform hardly paints an optimistic picture, with too many urban districts characterized as uncooperative. That is not the case in the Houston Independent School District. With

a reform agenda in place for over a decade, Houston schools have made remarkable gains. These reports explain what strategies were used, why they were successful, what challenges remain — and how they might be replicated in other urban districts. The reports are based on deliberations at the "Making the Grade" conference, which convened researchers and other experts to critically examine Houston's progress. Available by calling (713) 682-9888 or writing mcadams@ crss.org.

Council for Basic Education The Eye of the Storm: Improving Teacher Practices to Achieve Higher Standards, October 2000

The September 2000 Wingspread Conference, held in Racine, Wis., brought together a small group of experts who debated ways to improve student achievement through identifying and investigating various institutional practices. The Council for Basic Education (CBE) has compiled this collection of papers, which describe the goals of the conference and highlight the promising practices studied by the participants. Available online at www.c-b-e.org. Click on "Publications."

Council of Chief State School Officers Gaining Ground, August 2001

This issue of *Gaining Ground* recaps the High Poverty Schools Initiative held in Baltimore in May 2001. The conference focused on providing state and district support to low-performing schools. The issue also includes a summary of California's efforts to develop a statewide infrastructure in support of after-school programs. Available online at www.ccsso. org. Click on "Publications."

Education Commission of the States Comprehensive School Reform: Five Lessons from the Field, 1999

With funding from the Annenberg Foundation, the Education Commission of the States started in 1995 to work with governors and other state and local policymakers to raise public awareness about the new generation of public education reforms. This report shares lessons learned during the first five years and seeks to advise legislators and educators on what works and doesn't work in the classroom. Available online at www.ecs.org. Click on "Publications."

Education Week and The Pew Charitable Trusts "Quality Counts 2000: Who Should Teach?," January 2000

The fourth annual "Quality Counts" report published by *Education Week* looks at what states are doing to attract and keep the most-qualified and best-prepared teachers — and finds that they are not doing enough. While schools set standards for those coming into the field, they often don't hold teachers accountable for their performance during their careers. As a result, millions of students sit down every day before instructors who do not meet the minimum requirements their states say they should to teach in a public school. Available online at www.edweek.org.

Elmore, Richard F. Albert Shanker Institute Building a New Structure for School Leadership, 2000

In this analysis, the author explores the problems with the structure and leadership of public education. The report includes cases of exemplary leadership in public schools, where principals and superintendents are making it possible for teachers to improve instruction. Available online at www.shankerinstitute.org. Click on "Education."

Finn, Chester E., Jr., Marci Kanstoroom, Michael J. Petrilli and Sheila Byrd Thomas B. Fordham Foundation The Quest for Better Teachers: Grading the States. November 1999

Using a state-by-state survey to gather data on teacher quality, this report finds that despite intense public concern over teacher quality and preparation, many states are failing in their effort to boost teacher quality. According to the study, only nine states received high grades for their efforts. Among other findings, the report finds that only 12 states have variable teacher pay structures based on performance or marketplace conditions and only eight have devolved personnel decisions to the school level — numbers that must improve in order to help raise achievement for all students across the country. Available online at www. edexcellence.net. Click on "Our Publications."

The Heritage Foundation No Excuses: Seven Principals of Low-Income Schools Who Set the Standard for High Achievement, 1999

This report profiles seven principals of lowincome schools with records of achievement showing that all children can learn, regardless of their families' income levels. The book is a part of the *No Excuses* series, which can be found on the Web at www. noexcuses.org. Available online at www. heritage.org. Click on "Bookstore," then "Publications Library."

Just for the Kids Promising Practices: How High-Performing Schools in Texas Get Results, January 2001

This report is based on Just for the Kids' study of Texas schools that are succeeding at helping low-income and ethnic minority children succeed. Researchers found that while the approaches to reform weren't exactly the same, they shared common elements, including paying



attention to teaching quality and using assessments to guide instruction. Available online at www.just4kids.org. Click on "Promising Practices Study Overview."

National Alliance of Business Investing in Teaching, January 2001

Developed by the National Alliance of Business in conjunction with The Business Roundtable, National Association of Manufacturers and U.S. Chamber of Commerce, this report follows a year's worth of research into how to get the bestqualified teachers into the classroom and elevate the teaching profession in general. Through interviews with teachers, administrators, business leaders, policymakers, and college and university faculty, the report makes recommendations including the creation of a rigorous new model for teacher training and professional development. Available online at www.nab.com. Click on "Education," then "Teacher Quality."

National School Boards Association Into the Classroom: Teacher Preparation, Licensure and Recruitment, 2001

Study after study demonstrates the essential role that teachers play in determining their students' success, both in school and beyond. Into the Classroom, the first in the National School Boards Association's new Elements of Teacher Effectiveness series. examines the circumstances that have led to increased demand for effective teachers and the policies that have contributed to their diminished support. Based on a careful analysis of the research literature, this new study offers guidance to school boards, district administrators, state legislators and others with a stake in the improvement of teacher preparation, licensure and recruitment policies. Available online at www.nsba.org/bookreports/bestsellers.htm.

National School Boards Association The Key Work of School Boards Guidebook, 2000

This guidebook provides information for understanding and implementing the National School Boards Association's Key Work of School Boards, an ambitious project designed to establish student achievement as the top priority of school boards, staff and communities. The guidebook focuses on eight action areas that successful boards have focused on in improving student achievement: vision, standards, assessment, accountability, resource alignment, climate, collaboration and continuous improvement. Available online at www.nsba.org/keywork/guidebook.htm.

Partnership for Learning Making Standards Work, October 2001

This publication provides results from a three-year research project that investigated strategies used by rapidly improving schools as well as what prevents struggling schools from improving. The research findings provide information about the programs and attitudes that make a difference for students and student learning. Partnership for Learning, a coalition of Washington state businesses committed to higher academic standards, has distilled these findings into five broad strategies that, together, can help school improve. The report also suggests challenges — and possible solutions — to sustaining success. Available online at www.partnership4learning.org. Click on "Free Resources," then "Guides/Brochures."

Solmon, Lewis and Michael Podgursky Milken Family Foundation The Pros and Cons of Performance-Based Compensation, June 2000

This paper analyzes current and historical criticisms of performance-based compensation in K-12 education, including comments from a group of Milken Foundation award recipients. The authors find that not only is performance-based compensation feasible in K-12 education, but it also is

necessary to attract the best candidates to the teaching profession and keep them in the classroom. Available online at www.mff.org. Click on "Publications."

Southern Regional Education Board Making Middle Grades Matter: A Planning Guide for School Improvement

The Southern Regional Education Board helps schools develop and implement comprehensive improvement plans that center around the following: an academic core aligned with rigorous content and performance standards, high expectations and a system of extra help, classroom practices that engage students in learning, teachers working together, support from parents, use of data, and strong leadership. Available online at www.sreb.org. Click on "High Schools That Work," then "Making Middle Grades Matter."

Stigler, James and James Hiebert *The Teaching Gap*, 1999

This book provides a comprehensive analysis of international approaches toward teaching, including a comparison among math instruction practices in high-achieving countries such as Japan, Germany and the United States. In providing their analysis and observations, the authors suggest that education reform needs to begin with teachers, from raising the level of requirements to improving peer review and interaction among teachers. Published by the Free Press.

Wenglisky, Harold Educational Testing Service How Teaching Matters: Bringing the Classroom Back into Discussions of Teacher Quality, October 2000

This report reviews and analyzes the impact of teachers on student achievement in mathematics and science. The study links student achievement to three aspects of teacher quality: teacher inputs (such as education level), professional development and classroom practices. It finds that classroom practices matter more than the others and

in many cases outweigh independent factors such as students' socioeconomic status. Available online at www.ets.org. Click on "Researchers."

IV. Testing and Accountability: Using Data to Drive Improvement

Achieve, Inc.

Standards: How High is High Enough?, Spring 2001

While states have used different strategies for phasing in higher standards, this policy brief makes the argument that high education and businesses need to send more explicit signals to students that higher standards matter — and they can do this by aligning their admissions and hiring decisions to students' high school performances. Available online at www.achieve.org. Click on "News/Reports," then "Publications."

Achieve, Inc. *Testing: Setting the Record Straight,*Summer 2000

This inaugural issue of Achieve's policy briefs analyzes the strengths and weaknesses of the new generation of tests, debunks many of the test-bashing myths and profiles states that proactively are trying to strengthen their systems. The brief contains examples of promising practices. Available online at www.achieve.org. Click on "News/Reports," then "Publications."

Center on Reinventing Public Education How States Can Hold Schools Accountable, June 2000

Based at the University of Washington in Seattle, the Center for Reinventing Public Education examines and analyzes accountability systems nationwide and, in so doing, seeks to identify lessons learned from other states' experiences with designing and implementing accountability systems and to use those examples to create a model for an accountability system that a state like Washington could use. Available online at www.crpe.org. Click on "Publications."



The Charles A. Dana Center, The University of Texas at Austin Equity-Driven, Achievement-Focused School Districts, September 2000

The Dana Center's report shows Texas school districts that are working to improve achievement for low-income students, a movement largely focused at the school level. The study shows that district-level leadership in general and the state's accountability systems in particular have enabled educators to target those students who need the most help — then provide it. Available online at www.utdanacenter.org. Click on "Products and Publications."

Committee for Economic Development *Measuring What Matters*, February 2001

Released at the crux of the congressional debate over new testing and accountability requirements sought by the Bush administration, the Committee for Economic Development's (CED) Measuring What Matters hails these policy instruments as a key to improving student learning, while cautioning that tests are a means, and not an end, to effective school reform. Specifically, CED calls on business leaders to continue their wide-ranging support for assessments and accountability as an ongoing step in developing long-term education reform. Available online at www.ced.org. Click on "Education and Early Childcare."

Education Week "Quality Counts 2001: A Better Balance," January 2001

The fifth "Quality Counts" report published by *Education Week* looks at how standards-based reform is affecting the classroom. The study shows that states' investments are paying off. There are examples of rising test scores for students and higher expectations in schools, but there also are fears that states may be moving too quickly to hold schools accountable without providing enough support to help them improve. States need to strike

a better balance among standards, assessment, and tools for schools and students before education reform can be firmly in place and long lasting. Specifically, policymakers must ensure that state tests do not overshadow the standards they were designed to measure. Available online at www.edweek.org.

Gandal, Matthew and Jennifer Vranek "Standards: Here Today, Here Tomorrow," *Educational Leadership*, September 2001

This article by Achieve staff members describes the general public support for standards-based education reform and argues that successful reform depends on three keys: clear standards, well-crafted tests and fair accountability. The article also offers educators several strategies for putting those critical pieces in place. Available online at www.ascd.org/readingroom/edlead/elintro.html.

Jerald, Craig D. The Business Roundtable and The Education Trust Real Results, Remaining Challenges: The Story of Texas Education Reform, April 2001

Texas has become a touchstone in the national debate about the merits of student testing and education accountability. This paper briefly summarizes the effects of Texas policies to raise academic standards, measure student performance and impose consequences for results over the past decade. While Texas hasn't yet achieved an education "miracle," the state has taken several steps forward and achieved some real successes. Available online at www.brt.org. Click on "Education," then "Academic Standards and Testing."

Lemann, Nicholas "Testing Limits," *The New Yorker*, July 2001

This article reviews President Bush's education reform efforts, from their inception



while he was Texas governor to the 2000 presidential election and the recent debate in Congress. "Testing Limits" also analyzes the politics surrounding the issues. The business community supports the efforts and sees standards as a way to produce a better-educated workforce, yet educators and minority groups worry that the new tests will be used to designate minority students and their teachers as "subpar." The author argues that the goals of education reform supersede the politics. Not available online.

Maryland State Board of Education Every Child Achieving: A Plan for Meeting the Needs of the Individual Learner, October 1999

Every Child Achieving provides the framework for state and local efforts to change the fundamental systems that affect children's development and learning to focus resources — including time and money more sharply on individual students who are struggling to meet the state's increasingly rigorous standards. The plan recommends strategies to prevent student failure through academic intervention, strengthen teachers' skills and administrators' leadership by improving educator capacity, and enhance learning experiences for very young children to ensure student readiness. Available online at www.mdk12.org/ practices/ensure/initiative/index.html.

Massachusetts Educational Reform Review Commission How Massachusetts Schools Are Using MCAS to Change Curriculum, Instruction, Assessment and Resource Allocation. November 2000

This report shows the results of a study of state educators to determine how teachers receive MCAS results; identify common practices among Massachusetts schools and districts using MCAS results to change curriculum, instruction, assessment and resource allocation; identify and disseminate information about positive or initially suc-

cessful practices or possible negative implications; and promote discussion and sharing of effective strategies for using MCAS results. Available online at www.massedreformreview.org. Click on "Research."

Mass Insight Uncommon Wisdom, June 2001

This is a review of effective reform strategies from Mass Insight's 2001 Vanguard Schools, which have made significant improvements. The report includes detailed performance data for the schools and insights from administrators and teachers as to what worked and why. Available online at www.massinsight.com/meri/index.html.

Mass Insight For the First Time Ever. November 2000

This report focuses on the extraordinary efforts in Massachusetts schools to get extra help to the students who need it most. The commonwealth has provided \$80 million over the past three years to support "academic support programs." The report poses the questions: "Are they working?" "How are they working?" "And "What strategies seem to be working best?" The report includes studies of academic intervention programs in Attleboro, Boston, Quincy, Springfield and Worcester. Available online at www. massinsight.com/meri/e_pressnew.html#FirstTime.

National Center for Education Statistics High School Academic Curriculum and the Persistence Path Through College, August 2001

Recently released by the U.S. Department of Education's National Center for Education Statistics, this report shows that the rigor of the high school curriculum has a strong impact on whether kids go to college and how long they stay enrolled, regardless of other independent factors such as poverty, race and grade-point average. Available online at www.nces.ed.gov. Click on "Electronic Catalog."

