1999 National Education Summit

Briefing Book

About Achieve, Inc.

Achieve is an independent, bipartisan, nonprofit organization created following the 1996 National Education Summit, when the nation's governors and corporate leaders came together to focus the country's attention on the urgent need to improve the performance of America's schools.

Achieve's three principal purposes are to:

- serve as a resource center to states on standards, assessments, accountability and technology;
- help states benchmark their academic standards, assessments and achievement against the best national and international examples; and
- provide sustained public leadership and advocacy on behalf of the movement to raise academic standards and improve student performance.

1999 National Education Summit

September 30–October 1, 1999
Palisades, New York

Sponsored by
Achieve, Inc.

Co-sponsors
The Business Roundtable
Council of the Great City Schools
Learning First Alliance
National Alliance of Business
National Education Goals Panel
National Governors' Association

Briefing Book

Table of Contents

Letter From the Summit Co-chairs i

Acknowledgments ii

Section I: The State of the States: A Progress Report

A Decade of Reform 1

Progress Since the 1996 Summit 4

Are We Seeing Better Results? 10

Challenges Ahead 13

Section II: Issue Briefs

Introduction 19

Strengthening Accountability 20

Helping All Students Achieve 28

Improving Teacher Quality 36

Diversifying the Delivery System 46

Sustaining Public Support 51

Section III: Public Opinion

Standards and Accountability: Where the Public Stands — *a report from Public Agenda* 57

Section IV: Viewpoints

Introduction 63

Making Mid-course Corrections in Standards-based Reform *by Ronald A. Wolk* 64

The Role of Higher Education in the Standards Movement *by Kati Haycock* 71

The Marriage of Standards-based Reform and the Education Marketplace *by Chester E. Finn, Jr.* 78

Linking Information Technology to Accountability *by Denis P. Doyle* 86

Section V: Resources 93

Dear Colleague:

A little more than three years ago, the nation's governors and business leaders came together at the 1996 National Education Summit. The Summit provided an opportunity to jump start education reform efforts around three core principles:

- Reform begins with a commitment to set the highest academic standards.
- Quality assessments are essential to measure progress against those standards.
- Implementation of comprehensive systems is required to guarantee full accountability for results, starting with real improvement in student achievement.

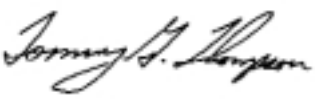
In order to sustain the pace of reform, Summit participants also agreed to create a new nonprofit, independent organization called Achieve to assist states and business leaders in this work. As we review our progress, it is important both to acknowledge what we have achieved during the past three years and identify the steps we need to take to accelerate our reform efforts.

Virtually every state now has academic standards in place. Businesses are increasingly demonstrating their support for standards-based reform by demanding records of high school performance — not simply diplomas — before they hire graduates. This is meaningful progress, which must be followed by immediate actions to increase the rigor and effectiveness of the standards, align high-quality assessments with those standards, and provide accountability for results.

Because education is first and foremost a state-led activity in this country, we have called the nation's governors back together. The governors will be joined once again by business leaders whose partnership in this effort is vital to broad-based public support. This year, key education leaders, whose work is critical to the goal of raising student achievement, also will be full participants in our deliberations.

The following materials provide essential information that will help us examine and formulate our commitments on critical issues. It is time to chart a course for improvement and make the changes needed in teaching, learning and accountability that will help our children reach their full potential. We look forward to working with you at the 1999 National Education Summit, where we will craft the agenda for the coming years.

Sincerely,



Gov. Tommy G. Thompson
State of Wisconsin

Louis V. Gerstner, Jr.
IBM Corporation

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Progress Report

The State of the States: A Progress Report

A Decade of Reform

The 1990s and, indeed, the 20th century are ending on an historic and positive note for education policymaking. This is not because everything is fine in our schools — we know this is not the case. It is because in little more than a decade, politicians, education leaders and business leaders across the country have formed a consensus about how to improve our schools. Standards, assessments and accountability have become the education reform strategy of choice, and unlike most education reform proposals, it looks as though the idea of standards-based reform has considerable staying power.

The need for higher academic standards became a national issue in 1983 following the publication of *A Nation at Risk*. This federal report delivered the jarring message that most American youngsters were achieving far below their potential, and their mediocre performance posed a serious threat to the nation's economic prosperity and civic well-being. Momentum continued to build in 1986, when the nation's governors issued *Time for Results*, a bipartisan report calling for greater educational flexibility at the local level in return for stricter accountability.

1989 Summit

In 1989, President Bush and the nation's governors held the first-ever National Education Summit in Charlottesville, Va. Raising academic achievement in schools was at the top of the agenda. The Summit produced an unprecedented set of broad education goals and committed the nation to a 10-year effort to measure progress toward those goals. The goals emphasized the importance of young children's readiness for school, high school completion rates, adult literacy and school safety. But the thread running through all of the goals was the importance of improved student learning.

The 1989 Summit was particularly noteworthy for two reasons. First, it was a sign that governors were moving beyond their traditional state leadership roles into the national policy arena, forging a bipartisan agreement around a national set of goals. Second, the very concept of goal setting signaled a shift away from the traditional emphasis on educational inputs toward an approach that measures and values results.

After the 1989 Summit, some states began the demanding process of defining state academic standards and building public support for standards-based reform. Business leaders also began to focus their efforts on improving student achievement in each state. But standards setting proceeded slowly and fitfully. By the time of the second National Education Summit in 1996, few states had clear, measurable academic standards in place, and even fewer had systems for holding schools accountable for meeting those standards. The result:

- The academic achievement of most American students continued to be shockingly low. Scores on national and international tests as well as reports from universities and employers indicated that most young people were entering college and the workplace inadequately prepared.
- Across schools and school districts, students were held to dramatically different standards. Low standards were a particular problem in poorer communities, where disadvantaged students often were not

expected to take challenging courses and reach high levels of achievement.

- As American families became more mobile and students changed schools at much higher rates, the lack of consistent standards across states and school districts made the transition very difficult both for students who moved and for their new classmates.
- Without clear academic standards and achievement targets to serve as a guide, critical elements of the education system such as curriculum, assessments and teacher training were not aligned well and sometimes worked at cross-purposes.
- Parents and the public were growing increasingly concerned about the quality of public schools and questioning how their tax dollars were being spent. Some began to look for alternatives.

1996 Summit

In March 1996, the nation's governors came together once again, this time with prominent business leaders, to organize the second National Education Summit in direct response to these problems. The 1996 National Education Summit, held at the IBM Executive Conference Center in Palisades, N.Y., continued to focus on results over inputs but shifted the emphasis from broad goals to specific, measurable standards. Every governor invited one CEO who was a key player in the state's education reform, and together they pledged to undertake specific action steps to define academic standards and hold schools accountable for results. Governors pledged to develop academic standards and translate them promptly into state policy, and business leaders pledged to make academic achievement, as reflected in student transcripts, count in the hiring process. Efforts in both of these directions have been extensive and impressive.

The participation of business leadership in the 1996 Summit brought a new sense of energy and urgency to the table. For most companies, competition and a fast-growing economy meant that a decade was too long to wait for significant educational improvement. But the involvement of the business community also added an element of political support and legitimacy that was not there before. National business leaders were staunch supporters of efforts to set goals, define standards and measure progress in education. These ideas already were part of their culture.

Since the movement for higher standards began, states and school districts across the country have focused attention on student achievement and on the regular flow of information showing whether student learning is improving over time. While in 1989 some states resisted comparing their students' performance, claiming the comparisons to be unfair, today, many states welcome this information and, like businesses, see a benefit to benchmarking their students' performance to that of others'.

Why Another Summit?

Over the past decade, the education landscape has been changed irrevocably. Education has risen to the top of the list of the public's policy interests, and it has stayed there. The current reform effort has been the longest and most concerted in history. Enormous progress has been made in forming a consensus on the need for challenging standards and in efforts to define what standards should include. But the job is far from finished.

With standards now set in nearly every state, there is an urgent need to make them the daily reality of schools and chart the course for

serious changes in order to reach those standards. As quickly as possible, we must answer crucial questions:

- What changes need to be made within schools to ensure that all students meet the new standards?
- How do we prepare teachers to teach to higher standards, and must we raise standards for teachers as well?
- What types of rewards and consequences for performance need to be in place to encourage schools and students to take the new standards seriously?
- How do we promote greater choice and diversity among schools while maintaining strict accountability for results?
- How do we ensure the kind of strong public support necessary to succeed in these efforts?

These are the challenges that lie ahead as states and communities strive to achieve the higher academic standards they have set. It is in this context that governors and business leaders have invited education leaders to join them in a third National Education Summit to examine what's working and agree on what remains to be done to make America's schools second to none.

Progress Since the 1996 Summit

The 1996 National Education Summit successfully brought more than 90 governors and business leaders together to pledge their support for higher standards and greater accountability in schools. Each group committed to take specific actions in the years that followed.

Governors pledged to:

- Put higher academic standards in place.
- Create better assessments to measure achievement of those standards.
- Establish accountability systems whereby performance would be reported publicly and schools and students would be held responsible for results.

Business leaders promised to:

- Expand state and local business coalitions to support efforts to raise academic standards and achievement in schools.
- Change hiring practices to pay closer attention to students' academic achievement, thereby sending the signal that hard work in school pays off in the workplace.
- Make the quality of states' educational standards and performance a key factor in decisions to open new facilities or expand existing ones.

In a historic move, governors and business leaders at the Summit also committed to form a new national organization to help state policymakers develop and implement rigorous standards, assessments and accountability systems. This organization, Achieve, Inc., was officially chartered in 1997 and is led by a bipartisan board of directors made up of governors and corporate CEOs.

Setting Standards

Between 1996 and 1999, reform advocates undertook a tremendous amount of work in states to set new achievement standards in the core academic subject areas. In 1996, only 14 states had adopted standards in English, mathematics, science and history/social studies. As of the 1999 Summit, 45 states have adopted standards for what students should learn in each of the core subjects, and four others are in the process of completing such standards. Within the next year, we expect that 49 states will have academic standards in place in their schools in the four core subjects.

The purpose of standards is simple: to clearly communicate to schools and the public what students are expected to know and be able to do at key checkpoints during their education. Accomplishing this goal has been hard but valuable work.

Most states began ambitiously, taking the opportunity to engage educators and the public in a rich discussion of what matters most in children's education. Standards setting became not simply a bureaucratic activity conducted inside state governments, but rather a democratic one, designed to foster dialogue about the knowledge and skills students need to be successful and the changes needed in schools to enable students to meet such expectations.

In many states, setting standards has sparked debates and disagreements about what should and should not be expected of students. California is a notable example. The Legislature established a special commission and charged it with developing new standards for California's schools. The commission, which included teachers, university professors, business leaders, representatives of community groups and others, took the task very seriously, looking across the

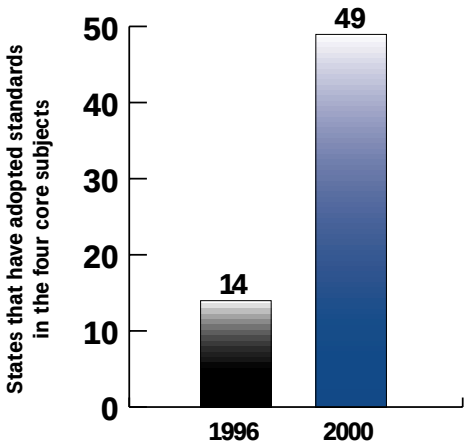
country and around the world to better understand what was expected of students in other states and nations. The commission took more than two years to finish drafting the standards, and during that period, debates raged across the state about the content and rigor of the proposed standards. The arguments were so heated and the stakes so high that a variety of national organizations and scholars from across the country weighed in. Californians still may disagree on some of the details that made it into the final set of academic standards, but most agree that there are few issues in education more worthy of such public dialogue than what we expect students to learn.

The debates within states have been fueled by a series of national reports issued by groups such as the American Federation of Teachers (AFT) and the Thomas B. Fordham Foundation. These organizations have developed their own criteria for what high-quality academic standards should look like and have graded the standards in each state based on those criteria. The reports have attracted significant media attention and raised the levels of dialogue within states. They also have created some confusion, as the organizations have not always agreed on what strong standards should look like.

Achieve, as part of its mandate from the governors and business leaders who created it after the 1996 Summit, helps states take a serious look at the quality and alignment of their education standards and tests by comparing these to the best examples in the United States and abroad. Through Achieve's benchmarking initiative, more than 20 states have received candid, confidential information about how to improve their standards and assessments.

Although the debates have slowed the reform process in some states, the resulting heightened awareness and more sophisticated dialogue have led to more effective reforms. Over the last several years, 46 states have revised their standards after considering constructive criticism and looking at standards in other states. Since the AFT began issuing its report in 1995, 21 states have improved their standards dramatically in the AFT's view. There is more room for improvement, to be sure — only 13 states' standards receive high marks from both the AFT and Fordham. But states have managed to make substantial progress in a relatively short period of time.

Commitment to Standards



Sources: Achieve, American Federation of Teachers

Measuring Achievement

In most states, the push to set standards has been followed closely by the development of new assessments to measure how well students meet the standards. In 1996, 39 states gave at least one assessment at the statewide level. Such assessments usually were used to take the temperature of schools and districts, rather than to measure and report achievement against standards. Often, the only exams with consequences for performance were the minimum-competency tests that less than half of the states required students to pass to earn a high school diploma.

As standards have made their way into schools, states have designed new assessments to measure their standards. By 2000, 48 states will assess reading and mathematics in elementary, middle and high school. A majority of these state assessments report student performance against the state standards. The other two states, Iowa and Montana, require districts to measure and report student achievement.

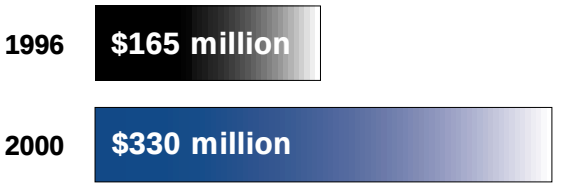
States have been slower to develop standards-based tests in science and social studies. Only 17 states measure these subjects in elementary, middle and high school, although 12 more plan to do so in the next several years.

States and school districts have always relied on test scores as an indicator of student performance, but the last several years have seen a push for more rigorous tests that measure performance more accurately against the standards states have put in place. With the pursuit of higher standards, we have seen a move away from "norm-referenced" tests that simply report student performance based on how students compare to the "average." Instead, most states are moving toward tests designed to measure student performance against a set standard — being "above average" on a bell curve is no longer good enough. Students must now demonstrate that they have learned what they were supposed to — not just that they are doing better or worse than other students. And, with standards-based exams, educators have the tools they need to gauge students' progress and focus instruction in order to help students meet the standards.

With the rise of new state assessments, we also have seen a move away from tests that rely solely on multiple-choice questions. Instead, states are building in performance items designed to measure students' abilities to write essays, solve complex math problems and show how they arrived at their answers.

Investment in Assessment

Total estimated annual spending on assessments, 50 states



Source: Achieve

Despite states' investment in new tests, serious questions remain about the quality of the new assessments states are using and the extent to which they align with states' standards (see pages 13–14). But judging from the initial results in many states, it seems the new tests are more challenging than the old ones. Not unexpectedly, of the states that have instituted new assessments since the early 1990s, nearly all of them have reported scores that were lower than scores on previous tests; in many cases, the scores were significantly lower. As states continue to raise expectations, the real measure of success will not be what test scores look like in the first year, but whether they improve significantly over time.

Establishing Accountability

As the public has grown increasingly concerned about educational quality, more states have taken steps to hold schools and students accountable for performance. The most commonly used aspect of states' accountability policies is public reporting of test scores and other performance data. Thirty-six states now issue some form of report card that measures the performance of each school based on a variety of indicators, including assessment results. Ten years ago, only a handful of states publicly disseminated achievement data on a regular basis.

Although the quality and quantity of the information being reported varies from state to state, the fact that achievement data is now

publicly available has begun to change the nature of conversations in statehouses and school buildings. Educators and policymakers are focusing on results, asking tougher questions about why results are not as high as they should be and beginning to pay closer attention to what needs to change in schools to raise achievement.

School Accountability

When it comes to establishing real accountability for results, public reporting is only the first step. The next logical step is to dispense rewards or consequences for performance. In this arena, the number of states drops dramatically:

- 19 states use a rating system to publicly identify low-performing schools and then provide assistance to those schools to help them improve;
- 16 states have put consequences in place for schools that fail to make adequate progress; and
- 14 states provide rewards to schools that make significant progress from year to year.

The good news is that these numbers represent significant progress over the last several years. In 1996, only seven states issued rewards to high-performing schools. Few provided assistance to low-performing schools, and only 11 had sanctions in place for those that were persistently low-performing. It is also worth noting that several states recently have passed accountability legislation or are in the process of developing such legislation, so the number of states with rewards and consequences likely will grow in the near future.

The reality, however, is that most states do not have serious measures in place to hold schools accountable for results. And of those that do, relatively few actually have used their authority to intervene in failing schools.

Student Incentives

Most states have come to recognize that putting standards and tests in place, and even holding schools accountable for overall gains in performance, is not enough. States also are creating incentives for students to meet higher standards. Twenty-four states have put graduation tests in place that students must pass to receive a diploma (three more states plan to do so in the next several years) and six states have instituted policies that counter "social promotion," requiring students to meet the standards in key grades before being promoted to the next grade.

States that are attaching high stakes to standards and tests are doing so to motivate students to work harder and, ultimately, to help ensure that all students meet the standards. However, simply putting new exit or promotion gates in place without providing students with the help and support they need to meet the standards is not prudent policy. Only 19 states are requiring and funding schools to provide low-achieving students with targeted assistance such as tutoring and summer school.

In many ways, the school districts with the greatest barriers to raising student achievement — those in the big cities struggling against poverty and limited English proficiency — have led the way in holding students accountable for meeting higher standards. In Houston, officials have built the district's policy around the Texas state assessments, requiring students to meet the state standards for mathematics and reading before moving to the next grade. Chicago's stand against social promotion, requiring mandatory summer school for students who score too low on standardized tests, also has received national attention. At least 35 of the nation's largest urban school systems

similarly have adopted policies to end social promotion, and 21 have instituted summer school programs for students who fall behind.

Role of the Business Community

At the 1996 Summit, business leaders pledged to support states in their efforts to raise education standards. Specifically, CEOs agreed to expand state and local business coalitions to provide political support for standards-based reforms and to make student achievement a factor in hiring decisions.

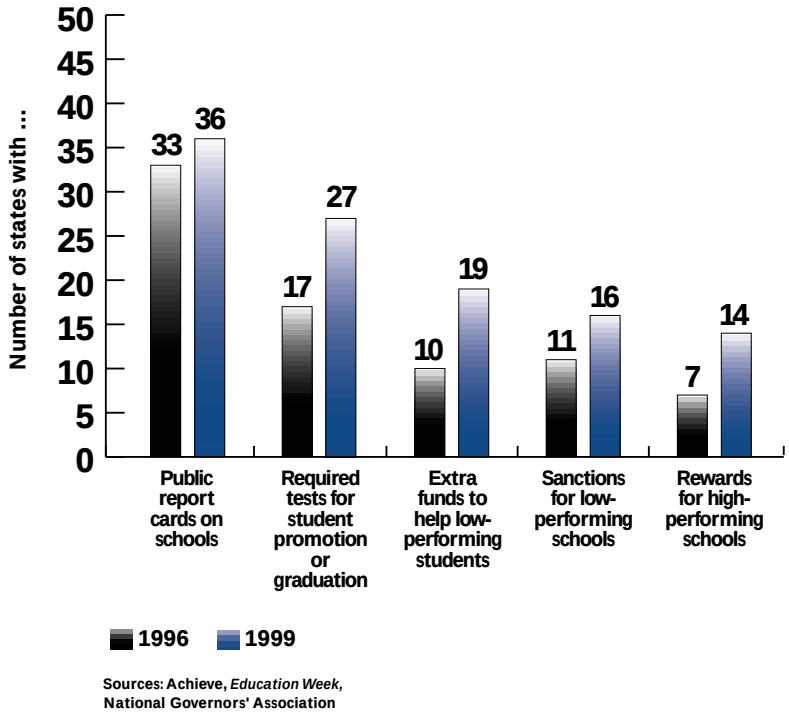
Partnering for Reform

Since the Summit, the Business Coalition for Education Reform, a group of 13 national business organizations managed by the National Alliance of Business, has increased its network of state and local business coalitions from 100 to 600 members. These coalitions are dedicated to working with educators and elected officials to improve student achievement. Business coalitions have played significant roles in shaping education reform policies throughout the 1990s, and in several states — Kentucky, Maryland, Massachusetts, North Carolina, Texas and Washington — the involvement of business has been critical to the success of the reforms to date.

In Washington state, the Partnership for Learning was created and funded by the business community with the sole purpose of supporting the state's efforts to put higher standards and more demanding assessments in place. The organization has led a statewide public engagement campaign to inform parents of the new expectations and keep them on board in the face of disappointing initial test results.

Incentives and Consequences

Accountability measures implemented by states



Sources: Achieve, *Education Week*, National Governors' Association

Making Academics Count

Getting into a good college may motivate some high school students to work harder, but many students fail to see any tangible reward for mastering difficult coursework. In fact, research demonstrates that 84 percent of high school students say they would work harder if they knew that employers were paying closer attention to their academic performance.

Business leaders know that external incentives for students are essential. One of the most visible business-led activities that grew out of the commitments made by CEOs at the 1996 Summit has been the campaign to encourage employers to review student transcripts and academic records when hiring. This effort, the Making Academics Count campaign, is a direct response to a specific challenge put before the 1996 Summit attendees: Send the message to students that hard work in school will pay off later.

In 1996, few American companies systematically reviewed the academic achievement of high school students as a regular part of their hiring practices. In some cases, the information was not readily available to employers, or if it was available, it was not very useful. In other cases, there were perceived legal barriers to reviewing academic records and using them in hiring decisions. The Making Academics Count campaign was launched to address these challenges.

IBM, Eastman Kodak and BellSouth are among the companies that have provided national leadership for this important effort. The goal was to have 10,000 companies of all sizes asking for student records and other profiles of academic performance as part of their hiring practices. As of August 1999, that goal has been achieved, and the number of employers participating is expected to keep growing.

The campaign also is working to improve the quality and usefulness of high school transcripts. A task force of corporate human resources directors, higher education admissions officers, educators and business leaders are reviewing current high school transcripts and developing recommendations for making them more useful and meaningful.

Are We Seeing Better Results?

The central purpose of setting standards and developing assessments and accountability systems is to raise student achievement. So it is reasonable to step back from all the work in states and districts and ask whether it is making a difference.

Signs of Progress

There have been some significant bright spots that seem to indicate education reform efforts are paying dividends. Many of the states with new assessments have reported strong achievement gains since the tests were first implemented, indicating that progress toward higher standards is being made. Some states also have shown significant gains on the National Assessment of Educational Progress (NAEP) math and reading assessments.

North Carolina and Texas have made impressive gains on NAEP and their own state assessments, and many attribute those gains to a standards and accountability strategy that has been in place for more than 10 years. Colorado, Connecticut, Kentucky and Michigan also have improved student results on their tests and NAEP, suggesting that reforms in those states might be making a difference.

We also are seeing signs of progress in big city school districts around the country, particularly those that have instituted standards and accountability measures or have been the beneficiaries of strong state policies. Chicago, Community School District 2 in New York City, Houston, Philadelphia and San Francisco are among the urban districts that have recorded impressive student achievement gains over the last several years. District 2's most recent performance on the New York state exams was in fact higher than results from surrounding suburban schools.

Pace Too Slow

Although we can point to pockets of noteworthy gain, the overall achievement of American students over the last 20 years has given us little to celebrate. The failure to spur real national improvement is made more troubling by the pace of change in the economy, which is far outstripping any differences registered in schooling. While it is hard to find data on the overall achievement of American students that reflects performance solely over the last three years, what we know from NAEP, the Third International Mathematics and Science Study (TIMSS) and other sources is that progress in student achievement through the mid-1990s was too slow:

College readiness — It is clear that students are not entering community colleges or four-year institutions equipped with the knowledge and skills they need to succeed. According to the Thomas B. Fordham Foundation, remediation takes place in all public community colleges, in four out of five public four-year institutions and in more than six out of 10 private four-year institutions. In 1995, almost 30 percent of first-time freshmen — those who typically started higher education directly after completing high school — enrolled in at least one remedial course.

Success on the job — Businesses also are finding recent graduates unprepared for the demands of the new workplace: A recent survey by the American Management Association of more than 1,000 companies found that more than one-third of job applicants are turned away because they do not have the math and reading

continued on page 12

Staying the Course in North Carolina and Texas

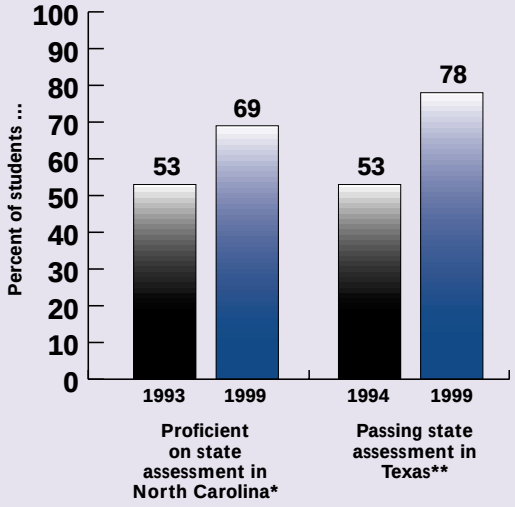
New evidence is emerging that strong and sustained reforms focused on standards, assessment and accountability can raise student achievement dramatically. North Carolina and Texas in particular have been praised for making great strides in improving student achievement. Both states have realized impressive gains on their state assessments and the NAEP assessments. And there is evidence that disadvantaged students are progressing much more rapidly than ever before.

Dr. David Grissmer of the RAND Corporation analyzed the two states' education reform efforts to identify key factors in their progress. In a report published by the National Education Goals Panel, Grissmer found that the rapid achievement gains are not related to traditional policies such as increased spending, smaller classes or more qualified teachers. Instead, he argues that the impressive results have come about as a result of the comprehensive and sustained approach each state has taken to improving its schools, relying heavily on standards, assessments and accountability as the foundation for other reforms.

What specific reforms have North Carolina and Texas undertaken that seem to be making a difference?

- Grade-by-grade standards with aligned textbooks and curricula;
- expectations for all students to meet the same standards;
- statewide assessments closely linked to the standards;
- accountability linked to the assessments, with rewards and consequences for performance;
- deregulation and increased local flexibility to meet the standards;
- computerized feedback systems and achievement data used for continuous improvement; and
- reallocation of resources to schools with more disadvantaged students.

Achievement Gains in North Carolina and Texas



Sources: North Carolina Department of Public Instruction, Texas Education Agency

*All students, grades 3–8 — reading and mathematics
**All students, grades 3–8, 10 — reading, writing and mathematics

Other states have implemented some of these policies, without always seeing similar results. What sets North Carolina and Texas apart is the comprehensive nature of these policies and, just as important, the ability of the states to sustain these policies over time. Even as political administrations have changed, governors and business leaders have stayed the course.

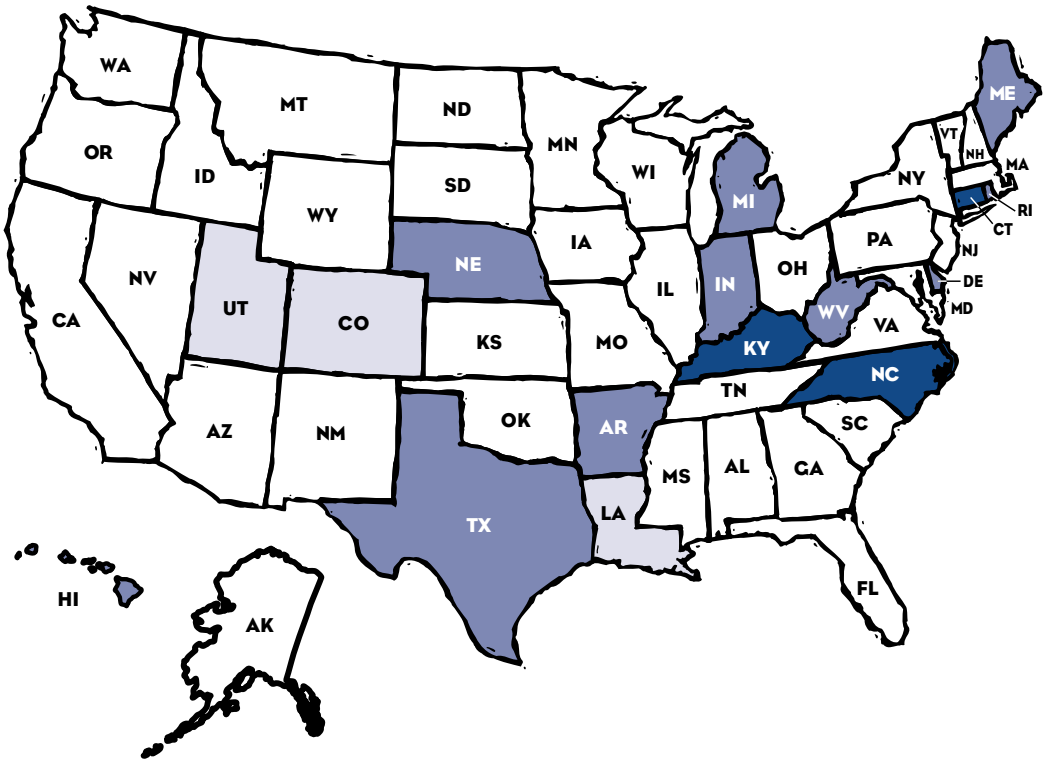
It is clear that putting in place a comprehensive approach to reforming schools with standards, assessment and accountability as the centerpieces is not easy, and sustaining such an agenda over the long haul is even more difficult. But the successes enjoyed by North Carolina and Texas in raising achievement prove that this is the strategy that will make the real difference for children.

skills they need to do the jobs they seek. Just three years ago, this figure was only 19 percent.

NAEP — No more than three out of 10 students in the fourth, eighth, and 12th grades could perform at the proficient level or above on the NAEP math and science tests. The history results are even more disappointing, with only 17 percent of fourth-graders, 14 percent of eighth-graders, and 11 percent of 12th-graders scoring at or above proficient. The best NAEP results came in reading, with 31 percent of fourth-graders, 33 percent of eighth-graders, and 40 percent of 12th-graders scoring as proficient readers or better.

TIMSS — Evidence from TIMSS, a major international study of mathematics and science teaching and learning in more than 40 nations, is equally disturbing: While American students did relatively well on the fourth-grade math and science assessments, placing near the top of the participating nations, they dropped to below the international average in eighth grade and slid down near the bottom of the performance charts by the end of their secondary schooling.

States With Significant Achievement Gains on NAEP Tests



States that have shown statistically significant progress on the NAEP grade 4 reading assessment, 1992–1998 (CO, LA, UT)

States that have shown statistically significant progress on the NAEP grade 8 mathematics assessment, 1992–1996 (AR, DE, HI, IN, ME, MI, NE, RI, TX, WV)

States that have shown statistically significant progress on both the NAEP grade 4 reading assessment and grade 8 mathematics assessment (CT, KY, NC)

States that have not participated in NAEP or have not shown significant progress on NAEP assessments

Source: National Center for Education Statistics

Challenges Ahead

Perhaps the greatest indicator of progress over the last decade is also the most underappreciated. The need for higher standards in our schools is no longer the subject of great debate. Policymakers of most ideological stripes agree that standards, assessments and accountability systems are the necessary foundation for improving schools. Business leaders have stepped forward to support these efforts, fully appreciating the role that standards play in their industries. Voices of protest within the education community have become the exception, not the rule. And public complacency about the quality of local schools has given way to a sense of urgency and support for higher standards. In essence, we have moved from the question of whether we need more challenging standards to how we are going to meet them. This has brought a whole new set of challenges to light.

Achieve has called the 1999 National Education Summit to focus public attention on these challenges and help governors, business leaders and education leaders share effective strategies for dealing with them. What are these challenges, and what will it take to overcome them?

1. Continuous improvement of standards and assessments

If standards and assessments are going to serve as the roadmap for all other school reforms, it is absolutely essential that they be of high quality. Otherwise, states may find themselves unwittingly moving in the wrong direction. States must not consider the job finished once the standards are set. Standards and assessments need to be benchmarked and upgraded continually, or they will become inadequate indicators of achievement.

Although nearly all states have put standards and assessments in place, serious questions about the quality of standards and assessments remain:

Rigor — Standards that are set too low will not challenge students to work harder and will not encourage schools to improve at a fast-enough pace. In fact, such standards could have the reverse effect. Recent evaluations of standards and assessments conducted by Achieve indicate that most states have not set their academic expectations high enough, particularly when compared with those of other industrialized nations. For example, while the top-achieving Asian and European countries expect their students to learn algebra and geometry in middle school, very few American states make this the focus of their math standards and assessments at those grade levels.

Quality vs. quantity — In an effort to accommodate a diverse set of views about what should be included in standards, some states have failed to make tough decisions about what is most important for students to learn. The result: voluminous standards that compel teachers to try to rush through the curriculum to cover everything, rather than encouraging them to focus in greater depth on the most important topics.

An equally grave mistake is writing standards in such vague language that they can be interpreted very differently within a state. This has been a particular problem in states trying to walk the line between state standards and local control of curriculum. Standards that are too broad convey very little useful information to teachers and parents about what is most important to learn, and they give no indication of what will be tested on the state assessments. The result: confused students and parents, frustrated teachers, and diminished enthusiasm for reforms.

Alignment — Assessments that do not measure a state's standards adequately will provide educators and the public with misleading

results. Few would argue with this. The problem is there are wildly different notions among the states of what it means for a test to be aligned with a set of standards. In Achieve's benchmarking work with states, we have found that strong alignment is the exception, not the rule. For a variety of reasons, most assessments do not measure states' standards with an adequate level of depth or rigor.

Comparability — With 49 different sets of standards in place (or in development) across the country and a variety of different tests used to measure those standards, it is impossible to compare the achievement of individual students and schools across state lines. Test results in California cannot be compared to results in Michigan, because the content of the tests is so different. There is not much appetite among states for a top-down national test developed by the federal government, but there is considerable interest among states in working together to create such tests from the bottom up. Achieve has launched such an effort in mathematics. (See sidebar, page 16.)

2. Strengthening accountability

Even the best standards and assessments will lead to very little change if there are no incentives or consequences for performance. As the late Albert Shanker used to say, the first thing students want to know when they are given a test or an assignment is, "Does it count?" When it counts, they pay closer attention and try harder. In many ways, the same is true of adults in the education system.

Accountability is on the education agenda in nearly every state. The challenge now is to put real meat on the bones of state accountability policies.

Better reporting — Although most states issue annual reports that include test scores and other data on school performance, both the quality of that information and the extent to which it is reaching parents and the public vary considerably. The states with the most effective public reports use such information as test scores, graduation and dropout rates, and other indicators to identify low-performing and high-performing schools. More and more states are taking advantage of the Internet and other media to reach a wider audience with these accountability reports, but if the information is not clear and understandable, it will have little impact.

Real consequences — Public reporting is a necessary component of an accountability system, but it is not sufficient. Without specific rewards and consequences for performance, there is not much incentive for schools to change. The impressive achievement gains in North Carolina and Texas are attributable largely to the comprehensive nature of their accountability systems — students know that their performance on state tests counts, and school officials understand that there are rewards for progress and penalties for persistent failure. Fewer than half the states attach any real consequences to school performance, and only a handful have given their policies real teeth. None has a system as comprehensive as those of North Carolina and Texas.

Role of employers and higher education — No matter how extensive its policies, the K–12 education system cannot build and sustain an effective accountability system on its own. Yet states and districts still are approaching the reform process in this manner. With a few notable exceptions, employers and college admissions offices are being left out of the accountability equation. The very institutions that high school students and their parents pay the closest attention to are not paying much attention to the results of states' new high school assessments. As noted earlier, the business com-

munity has begun a nationwide campaign to encourage companies to make student records a factor in hiring decisions. That is an important first step. Now it is time for the higher education community to follow suit by connecting college admissions with performance on states' new high school assessments.

3. Helping all students achieve high standards

Setting standards and measuring student performance against standards are not ends in themselves. The aim of standards-based reform always has been to ensure that students reach the new, more rigorous benchmarks. Data from NAEP and the experiences of states that have introduced new assessments aligned to rigorous standards tell us that reaching these new targets for achievement will be a substantial challenge for many, if not most, students and schools. When New York state released results from its new performance-based reading and writing assessment for fourth-graders earlier this year, more than half the state's students failed. Even in some affluent suburban districts accustomed to 90 percent passing rates on a previous minimum skills test, failure rates reached 40 percent.

Results like these demonstrate that, for schools, "business as usual" will not succeed in a system driven by standards, assessments and accountability. States need to encourage schools to change the ways in which they operate. In this effort, states should be guided by a growing consensus in research about the traits that effective schools share. In addition, states should consider specific interventions that have shown promise. For example, students who cannot reach standards in the typical school day and year will need extended time before and after school, on weekends, and over the summer to master content. Students must know that failing to meet standards has consequences — retention in a grade, for example — but they also must have a fair chance to catch up.

4. Improving teacher quality

The interaction among teachers and students in millions of classrooms remains the essential aspect of schooling. It takes only common sense to know that students will not reach high standards by themselves. A study using Tennessee's state test showed that an effective teacher makes a 40-point difference in the results of low-achieving students. And in Dallas, students that started with the same reading performance ended up 35 points apart depending on whether they had three effective teachers or three ineffective teachers in a row.

In many ways, however, the nation is failing to recruit exceptional teachers, keep them in the classroom and make them better on the job. Consider:

- Schools will need about 200,000 new teachers a year for the next decade, in part to make up for the 20 percent of teachers who leave the classroom within their first three years in the profession.
- More than a quarter of secondary school teachers in most subjects have no college major or minor in the subject they are teaching. The figure jumps to over 50 percent in history and science.
- Only four out of 10 teachers surveyed last year by the National Center on Education Statistics reported feeling very well prepared to implement state or district standards or new methods of teaching. Sixty-one percent of the teachers had participated in no more than eight hours of training on delivering standards-based instruction in the previous year, and only 7 percent of those teachers believed the training had improved their teaching significantly.

Achieve's Mathematics Achievement Partnership

In May, Achieve and 10 states announced the Mathematics Achievement Partnership, an unprecedented initiative designed to help states work together to raise expectations and measure results using a rigorous, internationally competitive yardstick. This partnership is a direct response to the poor performance of American students on national and international tests such as the Third International Mathematics and Science Study (TIMSS).

Why is Achieve working with these 10 states? Although states are committed to raising education standards, concerns about the comparability and rigor of the states' strategies for improving education are beginning to surface among education policymakers. For example, in some states, more than 80 percent of students are meeting the state standards, while in other states the vast majority of students are failing. While states have made great progress in developing education standards and tests, there is no way to compare results across state lines against a common high standard. Governors, educators and business leaders want to know: Have we set the bar too high? Too low? How do we know?

The Mathematics Achievement Partnership will design a rigorous eighth-grade assessment that states can use to compare their performance with each other. To support states as they raise the bar for mathematics achievement, Achieve also will identify instructional materials and professional development strategies that will help teachers and students meet the high standards.

Founding Partner States:

- Illinois
- Indiana
- Maryland
- Massachusetts
- Michigan
- New Hampshire
- North Carolina
- Vermont
- Washington
- Wisconsin

Over the next three years, Achieve will develop:

- a syllabus or other materials outlining the core concepts students need to learn to meet internationally competitive mathematics standards;
- concrete guidance on how to strengthen middle school math curricula and instruction to help students achieve at world-class levels; and
- an internationally benchmarked eighth-grade math assessment that will allow states to annually compare the performance of their schools with those in other states.

The solutions are complex; raising entry standards into the teaching profession, for example, could deplete the pool of potential applicants. In the same way, opening new avenues into teaching must include equal attention to high licensure standards. States should address these issues with a comprehensive recruitment strategy that considers both quality and supply. Once in the classroom, teachers need more opportunities to improve their practice embedded in the daily operation of the school and tied directly to the content they teach. The classroom cannot be a dead end when it comes to professional development.

5. Sustaining public support

Inherent in the idea of high standards is the notion of their public acceptance. To drive students, teachers, schools and school districts, standards must be a widely valued currency. The tests that measure them and the accountability that flows from them have to be seen as fair and appropriate. Parents have to want children to reach the standards. Employers must see the connection between states' standards and a better workforce.

As states put new, tougher tests in place, addressing public expectations has become a top priority. States must make a strong case for standards-based reform, particularly early on, when many students may fall short of the benchmarks. In states such as Maryland, Massachusetts and Washington, education officials and the business community have developed effective ways of delivering their beliefs about high standards to the public. Their success has come down to explaining standards and tests well and repeatedly.

Conclusion

The 1999 National Education Summit comes at a pivotal time for American education. As we turn the corner into the next century, it is clear that a growing economy and a high-technology, information-driven society will continue to challenge Americans to know more and do more. Today, 80 percent of sustainable jobs require some education beyond high school, whereas at the turn of the last century, only 3 percent of high school graduates went on to higher education. Almost two-thirds of today's workforce needs advanced reading, writing, mathematical and critical-thinking skills, compared to only 15 percent of workers just 20 years ago.

A well-placed sense of pride grows from looking back over what has been accomplished in education reform in a relatively short span. But leaders in government, business and education so responsible for this improvement cannot afford to let pride be replaced by satisfaction. While this report can point to progress in many states, such progress has come in bits and pieces. And though some can claim to be moving in the right direction, no state should claim to have put in place all that is needed. The consequences of these missing links are clear in the most recent NAEP reading results. Even with growth from four years ago, in no state are more than half of the fourth- and eighth-graders proficient readers. The plain fact is that the demands of economic and social changes still outpace the ability of American schools to deliver.

The American spirit has always been marked by aspiration, innovation and forward thinking. As the nation approaches the 21st century, we should recognize how far we have come in making schools better, but we must finish the task we have started. Our accomplishments to date are a source of genuine optimism. They show how committed Americans can be to the task at hand, and they show that higher standards and accountability yield results. States, their leaders and their citizens want higher standards, and they deserve schools that can help children achieve them.

Issue Briefs

Issue Briefs

Introduction

This section of the Briefing Book is designed to provide a backdrop for the discussions and action steps that are the focus of the 1999 Summit. While not intended to be exhaustive, these issue briefs highlight the central challenges facing governors, business leaders and education leaders as they move to implement higher standards and raise achievement in schools. For more information on these issues, see the Resources section at the back of this book.

Strengthening Accountability

Accountability is the "engine" of the standards movement. Now that virtually every state has adopted standards for student achievement and most have developed assessments to measure student performance against the standards, it is time to hold districts, schools and educators responsible for results. What are the ingredients of a comprehensive accountability system, and how many states have put such systems in place?

Helping All Students Achieve

The paramount objective of standards-based reform is high performance for all students. As states and districts put higher standards and tougher tests in place, they must pay careful attention to helping students achieve those standards. States will need to provide students with access to better courses and increased instructional time, including after-school tutoring and summer school. They also will need to explore more sophisticated uses of technology and smaller classes to engage students who might otherwise not be learning. The real challenge will be to lift the academic proficiency of the more than 12 million impoverished and disadvantaged young people who struggle with reading, mathematics and science. These children have the most to gain from a system that expects more of them.

Improving Teacher Quality

No improvement is more critical to the success of the standards movement than making sure that there is a competent, committed teacher in every classroom. Nothing else we do will significantly improve schools if they are not staffed with competent teachers. Many states and districts are upgrading the process by which we recruit, prepare and keep good teachers. But the pace of improvement is lagging far behind the need, and an impending teacher shortage heightens the urgency.

Diversifying the Delivery System

Advocates of the "marketplace" strategy of reform argue convincingly that school choice can potentially open up the system, create healthy competition and offer diverse educational opportunities to a diverse student body — all within the context of standards-based reform. But choice is a complicated and controversial issue, and not all who favor greater choice embrace standards and accountability. The challenge for states is how to provide parents and students with greater choices while maintaining strict accountability for results.

Sustaining Public Support

Public support is vital to the success of standards-based reform, and polls have shown that such support has been increasing. But now the movement is entering the accountability phase in which consequences exist for schools and students, and some observers fear a backlash will develop. To combat this, states should develop a public engagement strategy now. A few, along with some school districts, are blazing the trail. They're learning that it is important to provide plenty of reliable information, encourage public participation in the discussion and manage the conversation.

Strengthening Accountability

Accountability is perhaps the hottest issue in education policy right now, and for a simple reason: Policymakers recognize that setting standards and measuring performance are not enough. Virtually every state has adopted standards for student performance, and most states have developed methods of measuring student performance against the standards. But that alone has not improved performance. The next crucial step is to hold educators and students responsible for results by attaching real consequences to meeting the standards.

Although some states have had accountability systems in place for some time, few states have put all the pieces together. As an *Education Week* survey found, although 48 states currently test students and 36 publish annual report cards on individual schools, fewer than half rate the performance of all schools, only 16 have the power to close or take over failing schools, and only 14 provide monetary rewards for high-performing schools. The National Governors' Association reports that slightly more than half the states — 27 — require or will require students to pass state tests in order to graduate from high school. Only six states require educators to take achievement on the statewide tests into consideration when making decisions about promoting students to the next grade.

It is one thing to talk tough about accountability, but it is something else to put comprehensive accountability systems in place and enforce them. The current gap between the rhetoric in favor of tough accountability and the reality of where states are today reflects the very real challenges states face in measuring performance and attaching rewards or penalties to the results. In many cases, states have just put in place new assessments, and their rigor and the degree to which they align with standards vary. States also need to build support among educators — and the public — for the new systems.

States and school districts are just beginning to attend to the elements that will make accountability systems effective, such as providing the professional development that teachers need to teach to the standards. And states are just starting to think of ways to build bridges to the business community and higher education so that all sectors send a common message to schools and students about learning.

While it may be too early to judge the results that most states' accountability systems are producing, it is clear that establishing comprehensive accountability policies, and building and sustaining support among educators and the public for those policies, can lead to higher performance.

Who Is Accountable?

In many respects, the renewed emphasis on accountability stems from *Time for Results*, the 1986 report from the National Governors' Association. In that report, the governors proposed what they called a "horse trade": They said they would relax rules and regulations for schools and provide them the flexibility they needed to improve schooling for their students. But, the governors said, they would hold schools strictly accountable for results.

As states move toward creating the systems envisioned by that report, they are doing so in

somewhat different ways. One of the key issues is deciding *who* is accountable for results. The most effective and fair approach is to hold accountable both schools and students, though few states have designed incentives and consequences for both (see page 25).

Many states have focused on institutions — schools and school districts — as the units of accountability. Their reasoning is that schools are responsible for educating students, and if students fail to reach high levels of performance, it is the school or district that should answer for that failing. Moreover, they believe, districts and schools are more likely to try to improve themselves if they know there are rewards for meeting standards or penalties for not doing so. The range of school accountability measures includes publicly rating schools' performance from unsatisfactory to exemplary; offering positive incentives to spur enthusiasm and support for reaching higher standards; establishing intervention programs to assist staff in schools with consistently low performance; and instituting more drastic measures for schools that fail to improve, such as closing them down or "reconstituting" their management and staff.

Maryland is one state that began by holding schools accountable for performance and more recently has turned its attention to incentives for students. In the early 1990s, the state developed an innovative, performance-based assessment in grades 3, 5, and 8 that is designed to assess school performance; it cannot produce scores for individual students, as each student takes only part of the assessment. Schools that are designated low-performing receive mandatory assistance from the state and, if they fail to demonstrate improvement on the assessment over time, they can be closed down and reopened under new management.

In order to motivate students to work harder in school and take academic standards and assessments more seriously, Maryland is now developing a series of high school tests that students will have to pass to graduate. For years, the state has required that students pass a set of basic-skills tests in order to get their diploma, but in 1997 the state board of education agreed to phase in more challenging high school exit examinations that align with the high school standards. Under current plans, students in the class of 2005 must pass end-of-course exams in three subjects — government, English, and either algebra or geometry — in order to graduate from high school. Ultimately, Maryland students will have to pass 10 tests during high school in order to graduate.

More than half of the states require students to demonstrate that they have met the state's standards in order to graduate from high school. California is one of the more recent states to approve such a policy under the leadership of Gov. Gray Davis. Beginning in 2004, seniors will have to pass an exit exam before getting a diploma. California's accountability plan, approved by the Legislature, also will hold schools accountable for student achievement.

Some states are not waiting until high school to hold students accountable. They are moving to curb "social promotion" — the practice of passing students to the next grade regardless of performance. At least six states and a growing number of school districts now require students to pass a test in order to advance to a higher grade at one or more points in their school career.

Accountability for What?

Although the new accountability systems are all based on student performance, how states define and measure student performance varies widely.

For the most part, states use statewide tests to measure achievement as part of their accountabil-

ity systems. By the year 2000, all states except Iowa and Montana will have statewide tests in English and mathematics. The tests include commercially available tests, such as the Stanford Achievement Test and the TerraNova; customized versions of such tests that are specially designed for states; and assessments developed by states to align specifically to their standards.

States also use measures beyond test scores in calculating performance. Kentucky, Louisiana and Washington, among other states, measure attendance and dropout rates. Several states, such as Indiana, Kansas, New Mexico and Rhode Island, consider data from site visits as well.

The process by which states decide "how good is good enough" on the statewide assessments varies. According to *Education Week*, 17 states compare schools against an absolute standard, nine states compare schools' annual performance against their past performance and two states compare schools against similar schools.

Texas takes a unique approach to the problem of setting standards for its schools, one that combines a concern for high standards with an emphasis on equity. The state sets an absolute passing rate and judges schools according to the percentage of students who pass — both in terms of schools' total enrollment and for socioeconomic and ethnic subgroups. The passing rate schools must reach to avoid the label "low-performing" has risen by five percentage points a year over five years. For a school to earn a high rating, the overall passing rate must exceed state standards and so must the passing rate for African Americans, Latinos, whites and economically disadvantaged students.

States that look at improvement over time consider schools "successful" if they register gains as compared to previous performance and "unsuccessful" if scores stagnate or decline. For example, South Carolina rates schools as improving if their gain in performance exceeds what might be expected based on previous performance. Other states consider schools' demographics when calculating their progress over time. Indiana, Kansas and New Mexico take into account the poverty of the student population in calculating performance.

Truth and Consequences

The consequences attached to student achievement — rewards for high performance and interventions or sanctions for low performance — are where the rubber meets the road in accountability. But it is here where the gap between rhetoric and reality yawns the widest. *Education Week*'s comprehensive analysis of the 50 states' efforts to reform public schools, *Quality Counts '99*, reveals that while most states publicly report school performance, relatively few have established comprehensive policies with real consequences for schools and students.

Reporting Achievement to the Public

Perhaps the most widely used consequence is the least severe: publicity. A majority of states produce "report cards" on schools that provide information to the public about the schools' performance on statewide exams and other measures. When these are made public, especially in the media, they can spur teachers and administrators to act. But in some states, it is not clear how public such report cards truly are, and their quality and usefulness vary widely. One recent study found that few parents, taxpayers or educators had actually seen the school report cards and, moreover, that the information they provided was not what parents were looking for.

While most states issue report cards, only 19 states actually rate their schools as low-

performing, satisfactory or exemplary. This is a critical step to establishing real rewards and sanctions for schools, and, at the very least, such ratings can help the public make sense of the data on the report cards.

Anecdotal reports from states suggest that reporting results will get educators' attention and spark action. The fear of adverse publicity — being labeled a "school in crisis" or a "low-performing school" — seems to encourage principals and teachers to act to improve schools. In Georgia, for example, the number of schools that have prepared improvement plans since the state began publishing report cards in 1996 has increased by 300 percent, according to the state department of education.

Intervening in Failing Schools

Once schools are labeled low-performing, what happens to them? Interventions in low-performing schools typically come in two stages: assistance to help schools improve and penalties or sanctions for schools whose performance does not improve rapidly enough.

Nineteen states provide or require districts to provide direct assistance to low-performing schools. Assistance comes in many forms, but the more effective strategies include some or all of the following:

- sending external review teams to the schools to analyze poor performance and make recommendations;
- requiring schools to develop and implement improvement plans or comprehensive school reforms that are focused on helping *all* students reach the state standards;
- providing additional funding and/or professional development for school staff; and
- assigning expert principals and teachers to assist school leaders and teachers in making the changes to curriculum, instruction, professional development and school organization that are necessary to raise student achievement dramatically.

Kentucky's Highly Skilled Educators Program and Washington's Mathematics Helping Corps are two examples of interesting ways states are beginning to help turn around low-performing schools. Nevada, New Mexico and New York maintain lists of research-based whole-school reform models and require failing schools to adopt one of the approved models, and New Jersey is funding whole-school reform in its poorest districts.

When achievement fails to improve after adequate time and assistance, states should take the necessary actions to ensure that students will not be trapped in failing schools. These actions, or sanctions, come in different forms, and some are stronger than others. Sanctions that states may use include:

- revoking a school's accreditation status;
- reconstituting schools by replacing the principal and teachers;
- taking over or closing persistently failing schools; and
- allowing parents and students to enroll in other schools.

Sixteen states have the authority to reconstitute, take over or close failing schools, and seven states grant parents and students the option of transferring to another school. A few states require districts to intervene in failing schools, and four can impose sanctions on districts when the districts' schools persistently underperform. However, only a handful of states — New York,

Oklahoma and Texas among them — have actually exercised their legislative authority to close or reconstitute schools.

When there is substantial evidence of districtwide failure to raise academic achievement, 12 states have laws on the books to intervene in district management. In 1996, Maryland assumed some responsibility for the Baltimore public schools in partnership with the city because so many of the district's schools were failing. Similarly, New Jersey took control of three major urban districts nearly 10 years ago, and is just now beginning to relinquish authority over the districts' schools. While the results from such takeovers have been mixed, states deserve credit for taking responsibility for improving the schools whose students are most likely to be low-achieving.

Recognizing and Rewarding Success

Positive incentives that reward schools for high achievement are less common than interventions, but they are an important part of a comprehensive accountability system. According to *Education Week*, 14 states provide cash awards to highly successful schools, and several of these states, such as North and South Carolina, couple the rewards with public recognition. Some states also provide waivers from state regulations for schools rated "exemplary." Only Kentucky, North Carolina and Texas offer monetary rewards to schools based on their performance under the states' accountability systems.

The Role of Higher Education and Business

While most of the interest and activity around accountability has centered on states' K–12 systems, other institutions, chiefly higher education and business, also have a role to play. By the signals they send to students, colleges and universities and employers can enhance or impede states' efforts to hold students accountable for their learning.

To date, though, there have been few efforts to enlist businesses and higher education institutions into education accountability systems. One notable exception is the Business Coalition for Education Reform, a coalition of 13 national business organizations managed by the National Alliance of Business, which has spearheaded a campaign to encourage employers to ask for high school transcripts when hiring. Their goal is to encourage students to take challenging courses by showing students that their hard work will pay off in the workplace. The campaign, known as Making Academics Count, was launched to fulfill a commitment made by corporate leaders at the 1996 National Education Summit. The campaign set out in 1997 to have 10,000 employers asking for school records, and it reached its goal in August 1999.

Higher education has played an even smaller role in holding students accountable for meeting performance standards. (See Kati Haycock's essay on page 71.) In most states, there is a substantial gap between what students are expected to master by the end of high school and the entrance requirements for two- and four-year colleges and universities. In fact, very few states have systematically articulated the connection between the requirements for high school graduation and college entrance. In Oregon, K–12 education leaders and higher education officials are working together to try to bridge the gap. Under Oregon's Proficiency-based Admission Standards System (PASS), scheduled to be implemented in 2002, state-sponsored colleges and universities will admit students based on demonstrations of specified knowledge and skills, rather than on course credits and admissions tests. The idea is to hold students accountable for learning by rewarding them with college admission if they reach challenging standards. Colorado, Georgia, Maryland and Wisconsin are developing similar policies.

continued on page 26

Accountability: Putting the Pieces Together

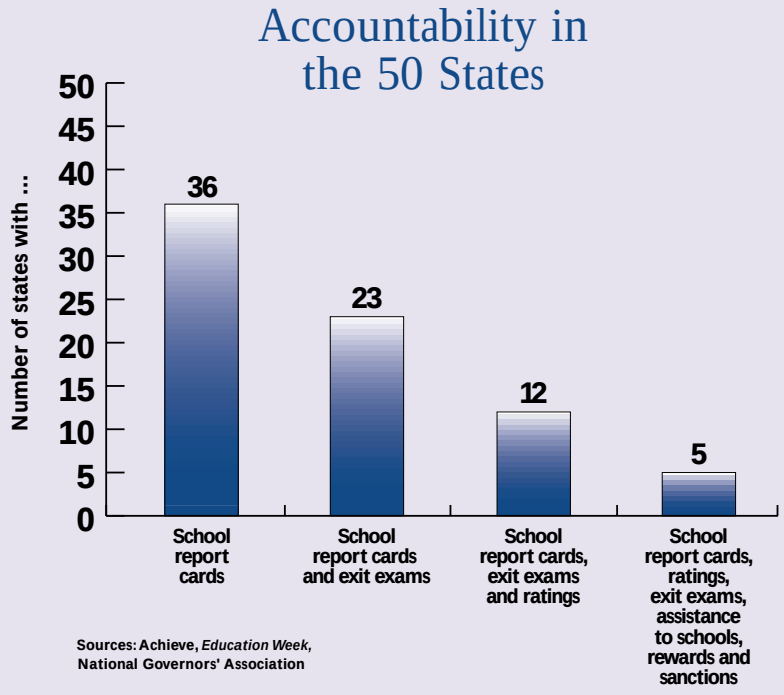
A comprehensive accountability system should include a combination of incentives, rewards and consequences for both schools and students. While states have made progress in establishing some of these key elements, relatively few have put all the pieces together.

Two reforms in particular — publicly reporting school achievement and administering high school exit exams for students — are taking hold, with over half the states requiring school report cards and implementing tests that students must pass to graduate from high school.

But there has been much less movement in other critical areas. What should a comprehensive accountability system include?

- Student incentives, such as graduation and/or promotion exams;
- report cards that report achievement and other information for individual schools;
- ratings that classify schools based on performance;
- assistance for low-performing schools to help them improve;
- rewards for highly successful schools, including monetary bonuses and public recognition; and
- sanctions for chronically failing schools, including takeovers and reconstitution.

Only five states — Indiana, Maryland, New Mexico, North Carolina and Texas — have put all these pieces together.



What Challenges Remain?

Policymakers who view accountability as the critical linchpin of standards-based reform see it not as an end in itself, but as a potent tool to bring about high levels of learning among all students. Businesses have long known that accountability is the key ingredient to improved performance. Clear and comprehensive systems of accountability that have real teeth will send a powerful signal about the importance of meeting higher standards and should focus resources to enable schools to reach the goals.

In order to make accountability systems effective, though, policymakers need to attend to some important challenges.

- Ensure the quality of standards and assessments. In an accountability system, assessment information is critical in driving decisions about students and schools. Moreover, as educators well know, what gets tested gets taught. But if assessments do not provide valid or reliable information or if they fail to measure challenging standards, then the accountability system's effectiveness is compromised.

  Achieve, Inc. is helping states address the quality of their assessments through its benchmarking process. By providing candid information to states about the extent to which assessments measure challenging standards and can drive improvements in teaching and learning, the organization helps states understand what they need to do to focus educators' attention on the content that matters.

- Build the capacity of schools and districts to educate students to rigorous standards. Although teachers and administrators in most schools need help in teaching to rigorous standards and reorganizing schools to focus on student learning, persistently failing schools pose the greatest challenge. Significant and long-term intervention is necessary to help these low-performing schools develop the capacity to succeed. But as noted above, fewer than half the states have policies to provide that intervention.

  In their efforts to provide the level of assistance schools need, states should recruit colleges and universities to play a major role. In El Paso, Texas; Long Beach, Calif.; and a number of other cities, universities are teaming up with local school systems to enable teachers to help students reach challenging standards.

  Similarly, students also need support if they are to meet those standards. Early estimates suggest that in some states, large numbers of students are likely to fail the examinations that will soon be required for graduation from high school. In order to avoid such a disaster, states need to get more serious about intervention. Students who are not meeting standards deserve extra time and extra help — they should not simply be promoted on to the next grade for another teacher to worry about.

- Establish and enforce real consequences. The ultimate question states and school districts face when establishing accountability policies is what to do for schools or students that consistently fail to measure up. Many states are recognizing that it is unfair to pass students along to the next grade or allow them to graduate unprepared. Instead, they are drawing the line in the sand and saying that promotion and graduation must be earned, for the good of the students.

A similar line must be drawn when it comes to low-performing schools. Schools that persistently fail to educate their students cannot be allowed to continue to do so indefinitely. The futures of too many students are at stake.

- Maintain public support. Like any attempt to shake up the status quo, accountability faces resistance, and overcoming that resistance requires support. In many places, accountability measures have sparked a backlash — from parents angered that their children may not graduate from high school, from teachers who doubt the credibility of a testing system and from people who fear the loss of their neighborhood school. Some states have reversed course in the face of potential opposition, but those that have stayed the course have substantial student achievement gains to show for it. They demonstrate that a commitment to standards and accountability over the long haul can produce results.

Helping All Students Achieve

Standards and assessments play a powerful role in holding students and schools accountable for progress in achieving high standards. They also help identify what areas of teaching and learning need to be improved and which interventions are most successful. The standards that have taken root in 49 states have made it clear that all children need to be brought to observably higher levels of performance and that we must do more to eliminate disparities in schools' abilities to achieve results for students from all backgrounds.

As the Progress Report (Section I) at the beginning of this Briefing Book shows, states and districts are making some progress in raising achievement, but still have miles to go. What gives the most cause for hope is that pockets of excellence can be found in some of the most impoverished communities.

What are some schools doing that is causing young people in some of the most difficult circumstances to achieve at higher levels? In part, there is evidence that students — especially African American and Latino students — are signing up for tougher courses, and researchers and educators have found that students who take more advanced courses generally improve their performance on tests. The simple fact is that students cannot master essential knowledge if they don't take the necessary courses.

Interventions that have led to these improvements include programs that inject more rigorous course content into curricula, provide technical assistance to teachers and staff, reshape the use of school time, offer nontraditional approaches to learning to meet the needs of young people, and use "whole-school" reform, which offers a combination of these interventions.

Getting Students Beyond Grade Level

Just as a rising tide lifts all boats, a properly implemented standards strategy should benefit all students, not just those with the most potential. While schools and students are taking steps forward, the reform movement still has a great deal of work ahead. To succeed in the long run, standards-based reform must work even for the most at-risk students — the more than 12 million impoverished and disadvantaged young people who do not read well enough to do grade-level work and who struggle with mathematics and science. Most of these students attend schools in inner cities and poor rural areas, and they drop out at the earliest opportunity or get promoted through graduation, without ever having learned the basic skills.

More than half the fourth- and eighth-graders in the nation's urban public school districts fail to reach even minimum standards on national tests in reading, math and science, according to the National Assessment of Educational Progress (NAEP). Urban students perform far worse, on average, than children who live outside central cities on virtually every measure of academic performance. In urban schools that enroll high percentages of students who live in poverty, two-thirds or more of students fail to reach even the "basic" level on national tests, meaning that they probably cannot do work appropriate to their grade level.

However, a recent report by the Education Trust offers evidence of how high standards can

yield impressive results. An analysis of 1998 student achievement data in Kentucky revealed that the achievement gap separating low-income students from other students could be closed if low-income students received high-level instruction. Some high-poverty schools in Kentucky even outperformed some of the state's most affluent schools on the state's assessment. According to the report:

- five of the 20 elementary schools with the highest reading scores in the state were high-poverty schools;
- six of the 20 elementary schools with the highest mathematics scores in the state were high-poverty schools; and
- 13 of the 20 elementary schools with the highest writing scores in the state were high-poverty schools.

What Makes a Good School?

Reform advocates hope to break new ground with at-risk students by changing the way traditional schools are governed, organized and operated. By rethinking how the learning environment should be structured, educators are discovering the characteristics of schools that are most effective in raising student performance for a broader range of students.

Another study by the Education Trust, *Dispelling the Myth: High-Poverty Schools Exceeding Expectations*, identifies the characteristics of top-performing high-poverty schools. By analyzing survey data from 366 elementary and secondary schools in 21 states, the study found six important characteristics common to these schools:

- extensive use of state/local standards to design curriculum and instruction, assess student work and evaluate teachers;
- increased instructional time for reading and mathematics;
- substantial investment in professional development for teachers that focuses on instructional practices that help students meet academic standards;
- comprehensive systems to monitor individual student performance and provide help to struggling students before they fall behind;
- parental involvement in efforts to get students to meet standards; and
- accountability systems with real consequences for adults in the school.

Other investigations of what makes schools effective by researchers such as Paul Hill and Joseph Johnson support many of these same findings but also emphasize the importance of decentralized decisionmaking and school-level control over resources.

These principles are not new. Business leaders recognize that some of the most successful corporations are characterized by a clear sense of mission, effective quality controls, a sensitivity to their market and a commitment to involve employees in decisionmaking. What is new is that educators are using these ideas to reach students who might not otherwise succeed in traditional schools.

Tougher Courses Lead to Better Results

As a first step in the transformation process, states and school districts must make clear that high academic standards are for all students, including minorities and disadvantaged students. That means eliminating low-level coursework that fails to challenge students and introducing more rigorous courses such as Advanced Placement classes.

The benefits of taking advanced coursework to college-bound students have become increasingly apparent over the years. In 1983, the National Commission on Excellence in Education urged states to ratchet up graduation requirements to encourage more students to take a rigorous academic core. As a result, from 1982 to 1994, the proportion of high school graduates enrolled in core academic courses and studying advanced mathematics and science increased dramatically.

And a new study by the U.S. Department of Education indicates that the biggest factor in determining whether students will earn a bachelor's degree is participation in rigorous academic courses in high school. According to the study, the completion of a solid academic core is correlated more strongly with earning a bachelor's degree — especially among African American and Latino students — than high school test scores, grade-point average or class rank.

The study found that of all precollege curricula, the highest level of mathematics a student learns in secondary school has the strongest continuing influence on the likelihood of completing a bachelor's degree. Finishing a course beyond the level of Algebra 2 (for example, trigonometry or precalculus) more than doubles the odds that a student who enters postsecondary education will achieve a bachelor's degree.

But tougher academic courses also have an impact on noncollege-bound students. In the past, schools have expected less of "vocational students," and as a result, their academic curriculum has been watered down significantly. Today, the best programs designed for students likely to move directly into the workplace have higher academic expectations and connect the material students learn in the classroom with real experiences in the workplace.

For example, more than 800 schools in 22 states are involved with High Schools That Work (HSTW), a reform program that seeks to eliminate "general track" courses in high school and provide high-quality vocational training that integrates academic skills for students who are not college-bound. Some of these schools require all students to take college-preparatory courses in the core subjects, but they approach the material differently, providing alternative, "applied" courses that cover the same material in a more hands-on way. The students in HSTW schools who have completed core academic requirements consistently have scored significantly higher on standardized tests compared with other students nationwide and are better prepared for work than other students. In 1998, 97 percent of HSTW seniors taking BellSouth's entry-level employment test passed, compared to only 51 percent of students from the general population.

Ending Social Promotion

The movement to introduce tougher courses and raise standards is leading states and school districts to address other fundamental problems in education that have yielded chronic underachievement. For more than a generation, schools have found it easier to move failing students along from grade to grade than to acknowledge that these students simply were not learning what they needed to know. "Social promotion" was education's dirty little secret — a reflection of the low expectations schools held for poor and minority students based on the assumption that these students either couldn't learn or didn't want to learn. Most of those students who didn't drop out received a diploma and disappeared into the ranks of the underemployed or the unemployed.

In recent years, the education and business communities have come to realize that this failure

to educate students properly has taken a significant toll on the overall skill and competency levels of America's workforce. This skills shortfall will become increasingly clear as the economy grows more technology- and information-oriented and employers attempt to fill high-skill positions with an ever tighter talent pool. Moreover, the costs of this education failure — in lost income and various social problems — are staggering. Groups such as the Hudson Institute paint a bleak portrait of a "bifurcated U.S. labor force" — an economy split between "haves" and "have-nots."

Recently, state and local policymakers have renewed their commitment to building incentives for students. A recent report from the National Governors' Association notes that 27 states now have or will have in the near future exams that all students must pass in order to receive a diploma. And according to an *Education Week* survey, six states — California, Delaware, Louisiana, Ohio, South Carolina and Wisconsin — have instituted policies that connect promotion decisions to test scores. Several other states are following this lead, including North Carolina and Texas, which recently developed new policies aimed at ending the practice of social promotion.

Districts are setting such policies on their own, too. Since 1992–93, according to the Council of the Great City Schools, 35 of the nation's 49 largest school districts have established policies to combat social promotion. The most widely known of these districts is Chicago, which declared in 1997 that nearly 41,000 students in grades 3, 6 and 9 were required to attend summer school because their test scores, and in some cases their attendance, failed to meet minimum standards. As a result of summer classes, promotion rates have improved over the past two years. Slightly more than half of the 26,000 Chicago students in summer school in 1997 and 1998 were promoted. And of the more than 25,000 students attending summer school in 1999, nearly two-thirds (66 percent) of students were promoted to the next grade, according to recent data from the school district.

Despite the need to raise achievement and ensure that students are on track academically, the process of ending social promotion is not without controversy. Research shows that simply holding students back a grade and repeating what didn't work the first time is likely to have negative consequences, such as increased dropout rates later on. In addition, holding students back is a costly prospect financially for school districts.

Extra Time for Learning

To reduce the number of students held back and avoid social promotion, states and districts are establishing summer programs, extended school calendars and intervention practices that provide tutoring and academic enrichment to low achievers. According to the Education Trust, 78 percent of the successful high-poverty schools it studied provided extra academic help and offered non-educational services outside regular school hours.

In Missouri, 422 of the state's 525 school districts offer summer enrichment programs, which were endorsed by the Legislature in 1993 with the passing of the Outstanding Schools Act. During summer 1999, about one out of every five students in the Missouri public schools enrolled in some form of enrichment program.

States like California and Connecticut have focused efforts to use vacation and weekend time to address literacy problems. California alone will invest $75 million in summer "reading academies." And some Connecticut districts are using their state reading grants to fund "Saturday Acad-

emies" for young children who need help in reading, writing and math.

In Utah, Gov. Michael O. Leavitt recently signed a bill creating a $5.2 million program designed to ensure that children can read at grade level by the end of third grade. To boost reading skills, students who are below grade level will receive an extra 30 days of specialized reading instruction in small classrooms.

One of the boldest moves to avoid social promotion is being made by the Boston Public Schools, which will spend $21 million over the next few years in an effort to allow failing second-, fifth- and eighth-graders to move on with their peers but simultaneously participate in an intensive catch-up program. This "transition" program will give them extra hours of instruction in reading and math plus summer classes, without the stigma of being held back.

Reducing Class Size

Teachers have always argued that smaller class sizes enhance teaching and learning by providing time for more individual student contact, but until recently, research was inconclusive. In the past few years, a Tennessee program has demonstrated convincingly that reduced class size can in fact improve student achievement, particularly in the early grades and among disadvantaged students.

Of course, states must anticipate the unintended consequences of a large-scale effort to reduce class size before they introduce such programs. Will there be enough teachers and classrooms available to make the policy successful? If additional teaching positions are created in affluent suburbs, will inner-city teachers be lured away from where they are needed most? These are important lessons California learned after it mandated small classes in early grades. The number of less-qualified teachers in the state has increased dramatically, for example, and so has the number of children taught in portable classrooms.

It is also true that smaller classes alone will not lead to higher achievement. Quality teaching and high academic standards are indispensable ingredients for improvement.

Innovations in Teaching and Learning

Despite the effects that extended teaching time and reduced class size can have on the learning environment, ultimately student performance depends on how teachers help students master

continued on page 34

Harnessing Technology to Raise Achievement

Helping students meet higher standards requires innovative approaches to teaching and learning. Technology can and must play a critical role in this endeavor. The goal is not simply to increase the use of computers in schools, but to use technology more effectively as a means to an end: higher achievement for all students.

The power of the Internet today provides schools with new opportunities to bring the curriculum to life for students and connect them with information from around the world. Students who have never had access to a science laboratory can use simulation software to dissect a frog, visit the surface of the moon or track a storm based on data from a National Weather Service satellite. Students in

Atlanta, Ga., and Rochester, Minn., are using imaging technology to "discover" the basic laws of motion and to understand the mathematical formulas that explain the world around them. Students collect data and work in collaborative teams — sometimes including students from around the world — to compare their results, build data sets across counties or across nations, and act as real scientists to test their hypotheses in different situations and review their findings.

Technology also can narrow the gap separating those from different socioeconomic backgrounds. Whether they live in rural Vermont or downtown Chicago, students can access extensive library collections and visit museums in countries around the world. Urban youngsters can visit a farm or nature preserve online, and those who live on farms can experience the bustle of the city. The world of work is no longer a mystery, as students meet scientists, artists, engineers, doctors, lawyers and Indian chiefs on the Internet.

Students with disabilities also can benefit from technology. Students who are physically disabled are now able to tour the world virtually. Technology can be children's eyes or ears and enable them to participate in a regular class. And students with learning disabilities can use technology to manipulate text and give them control over written words that previously seemed impossible to decipher.

Teachers benefit as well, ending the isolation that most teachers experience behind a closed classroom door. Today, with the Internet, teachers can find and create networks of teachers and other experts to provide support, recommendations and resources. Teachers in West Virginia and New York are using their state's intranet to develop standards-based lessons, review and refine them with their peers, and post them for teachers throughout the state to use. New teachers are no longer left stranded, repeating the same mistakes of their colleagues from previous years. Instead, they can easily access resources and assistance online. And master teachers have new career opportunities as online mentors, sharing the experience they have gained over the years.

In Chicago, where rising standards require that all students be prepared for algebra, the Internet is providing teachers with a range of resources, including basic content, lesson plans and classroom activities, a discussion group of peers who are implementing the same curriculum, and access to experts from the district and local universities. Most important, the information is available whenever teachers need it, not just once a year at a scheduled workshop. Professional development is being transformed into an ongoing, collaborative process that is available to teachers every day.

With technology, teachers and students are beginning to work in ways that were never before possible. Clearly, technology is not a substitute for good teaching, higher standards or clear accountability — nor is it an end in itself. But implemented properly, technology can enhance the quality of teaching and learning in our schools in powerful ways — especially for the most disadvantaged students.

subject matter. To help schools and teachers address this challenge, a growing number of intervention techniques rely on outside expertise to improve teaching and course content.

Some interventions focus on teaching and learning improvements in specific subject areas. For example, Project SEED, a national mathematics education organization, brings mathematics specialists from universities, corporations and communities into elementary and middle schools to introduce young students to advanced topics in abstract algebra, calculus and other higher-level mathematics. An ongoing 10-year longitudinal study of the program by William Webster indicates that Project SEED has led to higher student test scores and improved students' ability to solve complex problems, think more critically and develop better conceptual understanding of mathematics.

Focus on Literacy

Other intervention programs are designed specifically to address the literacy needs of students. One such program, Reading Recovery, offers intensive individual tutoring for students who are struggling to read. States such as Maine have been using the program for many years to address reading deficiencies. Maine also has funded incentives and teacher-development programs to assist teachers and school districts in implementing research-based literacy reforms.

Focus on Whole-School Changes

Many states and districts are turning to more comprehensive schoolwide programs that provide teacher development, curriculum enhancements and research-based approaches to learning. Success For All, for example, incorporates reading, science, history and mathematics and provides at-risk students with tutors, family support and a variety of other services aimed at eliminating obstacles to success. The program consistently has demonstrated statistically and educationally significant improvements in test scores for students most at risk of school failure, according to the American Institutes for Research.

Success For All is affiliated with New American Schools (NAS), a nonprofit organization that promotes whole-school change by offering an array of models from which districts and schools can choose. Today, more than 1,500 schools in 45 states are using NAS designs to introduce a research-based curriculum; present a shared, coherent vision of the school's learning program; and benefit from continuous networking with technical assistance providers.

The expansion of schools using this approach received a boost in 1998, when Congress, under the Comprehensive School Reform Demonstration Program, set aside $145 million per year for two years to allow more schools to transform themselves through whole-school reform. California also recently invested $17 million in state funds to support the effort.

None of these models has been researched as thoroughly as Success For All. The American Institutes for Research study says that the models are too new to have gathered a sufficient body of research confirming their effectiveness.

Stepping Up Early Childhood Education

Research has shown that students who struggle with reading in elementary school are far more likely to suffer long-term academic failure. Consequently, states and districts are beginning to mandate or finance preschool and early literacy programs to ensure that children enter school ready to learn and read well in the early grades. Connecticut's early literacy program, funded in 1998 at $19 million, targets at-risk students in 14

poor school districts. Oklahoma's "Reading Sufficiency Act" requires schools to draft individual plans for first- through third-grade students who are not reading at grade level. And Virginia is allocating $32 million to launch "reading academies" within schools over a two-year period.

Ensuring Equal Opportunities

To be successful, students need access to competent teachers, adequate learning tools and a curriculum that is tied to standards. With this in mind, advocates for the poor often take the position that it is inappropriate to hold high-poverty schools — and particularly their students — accountable for meeting high standards until they have an equal opportunity to learn. But most reform proponents do not see a lack of resources as an excuse for expecting less of disadvantaged students. Instead, they enthusiastically support standards-based reform in the hope that accountability systems based on universally applied standards will shine a spotlight on inequities and encourage states and communities to pay more attention to the schools that consistently fail to measure up.

In the words of Hugh Price, president of the National Urban League, "To have a fair shot at succeeding, the education poor children and children of color get must be on par as well. They must have the rigorous, challenging, inspiring curriculum that suburban schools have and white children in general have access to. Poor children and children of color also must have a corps of teachers whose qualifications and experience match those of teachers of white children."

Researchers differ sharply on how much money matters. It seems clear that schools with deteriorating facilities, a lack of materials and a lower-quality staff are at a significant disadvantage. But it is also clear that simply putting more resources into struggling schools without attention to how the money is spent will not necessarily yield results.

States and districts need to invest wisely and make tough choices, ending programs that do not work or that distract from efforts to raise student performance. At the same time, states also must continue to address equity challenges that inhibit disadvantaged students' access to quality teaching and learning. By holding students to high standards, measuring their performance, and providing resources and interventions when needed, states and communities that take this challenge seriously can succeed in raising student performance for students previously ignored and considered most difficult to teach.

Improving Teacher Quality

When it comes to improving schools and producing a skilled national workforce, good teachers are the indispensable ingredient. Several recent studies confirm this.

William L. Sanders of the University of Tennessee tracked the cumulative influence of effective and ineffective teachers on student performance. Sanders defined effectiveness and ineffectiveness based on the value teachers add to student test scores. According to Sanders, students can have vastly different achievement levels as a result of the quality of teachers they are assigned. Using state testing data, researchers can predict what they believe a student's increase in scores should be from year to year. Effective teachers are those whose students outpace what would be predicted in student performance; ineffective teachers have students who achieve less than would be predicted. Sanders found that fifth-grade students who had three very effective teachers in a row gained 50 percentile points more on the state's assessment than students who had three ineffective teachers. Sanders found that the effects of even one bad teacher are long-lived: Two years after the fact, fifth-graders' performance is still affected by the quality of their third-grade teacher.

Using the same approach as Sanders, Dallas researcher Robert Mendro found similarly disturbing results for students taught by teachers of differing abilities. According to Mendro, fourth-graders who were assigned to three highly effective teachers in a row rose from the 59th percentile in fourth grade to the 76th percentile by the end of sixth grade. But students assigned to three consecutive ineffective teachers saw their performance drop from the 60th percentile to the 42nd percentile during the same period. Mendro found the same kind of impact on students who study mathematics in elementary school.

Not only does the quality of teaching make a substantial difference, the opportunities teachers receive to learn and grow on the job also matter. A study by Ronald Ferguson found that every additional dollar spent on more highly qualified teachers produced greater increases in student achievement than did expenditures that did not focus on instruction.

Additional research conducted by the University of Michigan's David Cohen and others found that California teachers who participated in sustained professional development based on mathematics curriculum standards were more likely to use reform-oriented teaching practices and have students who achieved at higher levels on the state mathematics test.

Quality Teaching Is Crucial

The public knows almost instinctively what these studies show: Quality teaching is crucial to raising student performance. Opinion polls show that Americans think improving the quality of education is the most pressing issue confronting the nation, and in a 1998 survey, an overwhelming majority considered improving the quality of teaching to be the most effective way to improve public education. But until very recently, school improvement efforts have focused on increasing standards for students and developing stronger

assessments, without much attention to what *teachers* should know and be able to do — essentially putting the cart before the horse. Students will not meet the standards unless teachers have the knowledge and skills to help them get there. The long-term challenge for education reform is to get and keep high-quality teachers — something we don't do nearly as well as we should. To accomplish this, states will have to step up efforts to overhaul the process of producing and retaining good teachers — recruitment, preparation, initial licensure, induction, professional development and advanced certification. States are making progress in all of these areas, but we need to move more quickly. This is not a menu of reforms from which states can choose; all of these items require urgent attention.

A Good Teacher for Every Classroom

The United States will have to hire at least 2 million new teachers — a number greater than the populations of 16 states — in the next 10 years. More than half of these will be first-time teachers, according to the U.S. Department of Education. In the words of David Haselkorn, president of Recruiting New Teachers, an advocacy group based in Belmont, Mass., this challenge is equivalent to having to replace every doctor in the United States two and a half times over.

Why the need for so many teachers? First, enrollment in U.S. public schools is at an all-time high and rising, thanks to the "baby boom echo" (i.e., baby boomers having children of their own) and increased immigration. Second, a combination of teacher resignations and retirements will deplete the teaching force severely in the coming years; about 40 percent of current teachers are in their forties, and a quarter are at least 50 years old. In addition, as states move to reduce class size, the demand for teachers is increasing.

Improving Pay

One of the biggest obstacles to recruiting teachers is low pay. The average teacher salary in 1998 was $39,347, and in most states, teaching pays less than other occupations requiring a college degree. In addition, teacher salaries rarely are linked to performance in the classroom — bad teachers earn as much as good teachers, and the opportunities for promotion within the teaching profession are extremely limited. To help alleviate these problems, some states and districts are raising teacher salaries, and several states tie bonuses to school performance on state tests.

A main thrust of Connecticut's reform strategy in the 1980s was to attract the best teachers in the nation by raising both teacher standards and salaries dramatically. The plan seems to be working. Today, Connecticut's teachers are the nation's best paid, and Connecticut received the highest grade in the 1999 edition of *Education Week's Quality Counts*, along with North Carolina, for teacher quality. Connecticut also had the largest gains on the 1998 National Assessment of Educational Progress (NAEP) in reading and now ranks among the top half-dozen states for its scores on NAEP reading, math and science tests.

Developing More Innovative Strategies

One problem with the teacher supply is uneven geographic distribution, which causes teacher surpluses in places like Miami-Dade County, Fla., and shortages in places like California and Texas. Teachers may complete an undergraduate teacher education program in a state with more teachers than openings, such as Pennsylvania or Wisconsin, and never know about vacant positions in other states. However, even if positions were advertised widely, new teachers would find that state laws can make transferring credentials and pensions across state lines difficult and expensive.

Another part of the supply problem is that certain kinds of teachers are in greater demand than others. Generally, there are too many elementary school teachers, but there never seem to be enough specialists in math, science, special education or bilingual education. Minority teachers are even more scarce; only about 14 percent of teachers in public schools are minorities, while minorities comprise more than 32 percent of K–12 students. Inner cities and rural areas are the most likely to suffer from shortages of all types of teachers.

Overall, teacher recruitment has been carried out on an ad hoc basis rather than in any consistent, strategic way. Every spring, school districts around the nation compete like sports franchises or corporations, trying to lure talented professionals to their schools. Increasingly, school districts are offering signing bonuses and providing housing allowances.

But states and districts are beginning to develop more effective, comprehensive, long-term policies than these quick-fix solutions. These efforts include developing loan-forgiveness programs that encourage more talented college students to become teachers and stay within the state. And states and districts are developing alternative programs that bring retirees, military personnel and individuals with content knowledge in key subject areas into the classroom.

They also are creating paraprofessional programs to help enable teachers' aides to receive the education and training they need to become certified. A 1996 study from Recruiting New Teachers (*Breaking the Glass Ceiling*) of nearly 150 "paraeducator"-to-teacher programs in 20 states indicated that these programs help expand the pool of potential teachers from minority groups, have brought nearly 10,000 new teachers into classrooms and have far lower attrition rates than traditional educator programs.

Retaining Quality Teachers

One of the best ways to address the teaching shortage is to keep talented new teachers from leaving the classroom. According to the National Commission on Teaching and America's Future — a blue-ribbon group of 26 public officials, business and community leaders, and educators — between 30 percent and 50 percent of beginning teachers leave the profession within their first five years; the problem is worse in urban districts. New teachers often are hired at the last minute and have little time to prepare or acclimate themselves to the classroom; they also routinely get the toughest teaching assignments. So-called "induction programs" that provide new teachers with a veteran mentor help reduce attrition and boost the teaching skills of teachers just starting off in the classroom. Without induction programs, many new teachers find their assignments a "sink-or-swim" experience.

A recent study by Recruiting New Teachers, *Learning the Ropes*, revealed that new teachers who have mentoring and induction experiences are significantly more likely to stay in the classroom. However, that study also found that only half of beginning teachers participate in any sort of induction other than school orientations. That may be due to the fact that few states have stepped up their efforts to provide support to beginning teachers. A recent study by *Education Week* revealed that while 22 states have some kind of induction program, only 10 of those states provide funding for them.

Strengthening Teacher Preparation and Licensure

Unfortunately, teacher preparation for the classroom is often uneven, inadequate or out of date. Education schools are criticized for producing teachers for yesterday's schools. In most states, educators can become licensed without knowledge of state standards. As Kati Haycock, director of the Washington, D.C.-based Education Trust, notes, education schools have not made a tight link between field work, courses and standards.

In addition, today's teachers face unprecedented challenges in the classroom. The rapid expansion of knowledge and a demand for new skills in a high-tech society means that students must learn more than previous generations. Moreover, many of these students come to school with additional burdens: poverty, poor health, inadequate English skills and the like. Tomorrow's teachers will need to know more and have a broader array of teaching strategies at their fingertips, and few education schools are preparing such teachers.

While the need to raise the standards for teaching is undisputed, the methods for ensuring teacher quality are controversial. The National Commission on Teaching and America's Future argues that the focus should be on improving teacher preparation programs. The Commission says standards for education school accreditation should be tougher; prospective teachers should participate in extensive, supervised internships; and licensure standards for what new teachers should know and be able to do should be raised.

In its 1996 report, *What Matters Most: Teaching for America's Future*, the Commission called for better links between teacher education coursework and classroom teaching, expanding teacher education to the graduate level, and adding a yearlong internship in professional development schools, the "teaching hospitals" of education.

Some improvements are under way in these areas. For instance, since 1986, about 300 colleges have added a year to their education programs, allowing participants to earn both a bachelor's degree in an academic field and a master's degree in education. In addition, to ensure the effectiveness of the teacher-licensing process, 15 states have transferred regulatory authority for licensing from state agencies to independent professional boards.

Others use a different reform focus. In its 1999 report, *Better Teachers, Better Schools*, the Thomas B. Fordham Foundation proposes that the key to improving teacher quality lies in easing criteria for state licensure and providing alternate ways into teaching for those with strong academic backgrounds but no formal education training. The report contends that excellent candidates for teaching positions (such as business executives or military leaders) often are put off by the length and expense of traditional state-approved college and university teacher-education programs.

For its part, the National Commission on Teaching and America's Future does not embrace alternative certification or a relaxation of licensing requirements. Instead, the Commission advocates a "three-legged stool" approach to ensuring teacher quality — accreditation of education schools, strong licensing requirements and advanced certification of teachers by the National Board for Professional Teaching Standards, which sets high standards for teaching and recognizes highly accomplished teachers. The Commission says teacher-preparation programs should meet the rigorous standards of accreditation set by the National Council for Accreditation of Teacher Education (NCATE). The Commission also

endorses the work of a consortium of more than 30 states and professional organizations called the Interstate New Teacher Assessment and Support Consortium (INTASC), which has created a set of standards for beginning teacher licensing. More than 20 states have adopted the INTASC standards, but to date, fewer than 10 states mandate accreditation of their colleges of education by NCATE. States and districts also are offering financial incentives and rewards to teachers who pursue and attain certification from the National Board. More than 1,800 teachers have been certified to date.

Ensuring quality teachers in classrooms may not require an either/or solution. The challenge lies in raising standards *and* expanding pathways into teaching to draw more talent into the profession.

Keeping Teachers on the Cutting Edge

To relieve teacher shortages and improve teacher quality, states must retain good teachers once they're hired and keep their skills up to date.

A recent survey of more than 4,000 teachers by the U.S. Department of Education found that most teachers have limited preparation in the academic content American students should know. Only 20 percent of teachers surveyed said they were confident in using new technologies or working with students from diverse backgrounds, with limited proficiency in English or with disabilities. The study indicates that only 38 percent have an undergraduate or graduate major in an academic field and just 22 percent of elementary school teachers have a degree in an academic field.

Invest in Teacher Training

Although states are beginning to raise licensing requirements and introduce more rigorous testing for new teachers, these measures will have little effect on raising the skill levels and knowledge of the more than 3 million teachers already in the classroom. According to the American Society for Training and Development, the nation's employers spent $55.3 billion for staff training in 1995. The National Staff Development Council recommends that 10 percent of district budgets be set aside for professional development and "25 percent of educators' work time … be devoted to learning and collaboration with colleagues." The National Commission on Teaching and America's Future urges states to allocate at least 1 percent of state and local education funding to high-quality professional development tied to student standards. It also urges states to create matching grants to local school districts that increase their investments in professional development to 3 percent of expenditures.

School districts do in fact expend significant amounts of money to encourage ongoing professional development of their teachers. Virtually every school district provides salary increments to individual teachers when they complete a predetermined number of graduate courses or obtain a graduate degree. The rationale for this was to encourage teachers to continue to stay current in their fields and to advance their skills. However, in practice, districts have little if any control over the content of courses offered by universities and these graduate courses suffer from the same problems exhibited by preservice programs.

Other than the investment in the salary scale, professional development is largely neglected by schools and districts. Federal survey data from 1998 indicate that, typically, teachers had between one hour and eight hours of professional development in the preceding 12 months. The survey also found that the number of hours teachers spent in professional development related directly to how much they felt it improved their teaching — more time, more improvement.

continued on page 42

A New York City District Succeeds

Historically, professional development has meant "in-service training" — a one-day workshop that exposed teachers to speakers or experts who would hand down simple, often unconnected, recipes for teachers to introduce into their classrooms. In the words of one expert, "Traditional professional development programs provided teachers with dull lectures on how not to give dull lectures in the classroom." Typically, professional development through course-taking has been required for teachers to earn salary increases, but states and school districts have exercised little quality control over the courses available to teachers. Today, with higher standards and stricter accountability measures in place, professional development must become more "professional" and more focused on what is required to raise student achievement.

Although the quality of professional development varies greatly from school district to school district, new research on what works in schools suggests that teachers best improve their skills not by taking courses or going to occasional workshops but by re-examining their own practice to learn what they can do to help raise their students' performance. Quality professional development opportunities also help break the isolation of the classroom, encouraging teachers to share knowledge with each other through mentoring and collaboration in teacher networks, school-to-school networks and teacher academies.

New York City's District 2 has become a national model for showing how investing in teacher learning can help raise student achievement by changing the culture of teaching. The district makes improving teachers' abilities to raise student achievement part of every activity, from how principals are selected, to how teachers are evaluated, to how budgets are determined for individual schools.

Richard Elmore, a professor at Harvard University's Graduate School of Education, examined District 2's professional development initiatives and identified five particularly effective approaches used by the district:

- Instead of sending teachers to summer and school-year institutes to learn about the educational innovation *du jour*, the district hopes to have a cumulative impact on teachers by investing in a few training programs focused on academic content such as specific techniques for teaching reading and math.

- Teachers and principals visit other schools, inside and outside the district, to see firsthand exemplary practices in action. They also are encouraged to seek out and consult with their peers on issues related to teaching practices.

- An experienced practitioner is designated as a "resident teacher" who agrees to accept a certain number of visiting teachers into his or her classroom each year. Each visiting teacher spends three weeks observing and practicing under the supervision of the resident teacher. During this time, an experienced and qualified substitute takes over the visiting teacher's class. The resident teacher also follows up with the visiting teacher in his or her classroom to consult on issues of practice.

- The district hires outside consultants and specially trained in-district consultant teachers to work with individual teachers and teams of teachers to improve instruction.

- Top administrators spend at least two days a week visiting schools and make at least one formal review of each school in the district per year.

These approaches seem to have paid off in terms of raising student achievement. Out of 32 districts in New York City, District 2 went from scoring 10th in reading and fourth in math in 1987 to ranking second in reading and second in math in 1996. During the same time, the multiethnic, multilingual, 22,000-student district saw its immigrant student enrollment increase and its student population as a whole become more linguistically diverse and economically poor.

And although more than half of all fourth-graders in New York failed the state's new English test given last January, District 2's students posted better student achievement gains than wealthier public schools and private schools in New York City's Upper East Side and affluent suburbs. District 2 ranked second on the state test among city school districts. Some 63 percent of students meet or exceed state standards, even though 70 percent are poor enough to qualify for free lunches and 30 percent are not fluent in English.

To enact the changes outlined above, district leadership had to make tough budgetary decisions, reallocating existing funds and phasing out practices and policies that were less central to teaching and learning. This has resulted in increased investment in teacher professional development. Several years ago, the district spent barely one-tenth of 1 percent of its budget on staff development. By 1998, that figure had climbed to 6 percent of the overall budget.

Quality matters, too. Virtually all teachers — 99 percent in one national survey — attend professional development sessions, often called staff development or in-service training. But such activities are often just one-shot workshops or conferences and are not terribly worthwhile or helpful. Greater investments of time and money will not make much of a difference if professional development continues to be approached as an add-on or if it remains disconnected from the subject matter teachers are expected to teach.

Adopt Best Practices

Programs that are likely to increase teacher knowledge and skills and contribute to improving student learning have a common set of qualities. According to independent researcher Julia Koppich and Tom Corcoran of the Consortium for Policy Research in Education, the most effective professional development programs are:

- Curriculum-centered and standards-oriented — Professional development is not about process. Effective staff development programs revolve around the subjects teachers teach, the curriculum for which they are responsible and the standards they are helping students meet.

- Opportunities for teachers to become deeply immersed in subject matter — Teaching is an intellectual pursuit requiring mastery of content. Yet not all teachers are the subject-matter experts they need to be to help their students reach the new standards.

- Continuous, sustained and cumulative — One-shot workshops, one-day courses and one-time lectures do little to improve teaching. In order to be effective, staff development programs need to be long-term and long-range.

- Directly linked to what teachers do in their schools and their classrooms — Effective professional development makes the connection between subject matter and instructional pedagogy and between the content of instruction and instruction itself. And it is practical — it provides information and techniques teachers can readily apply in their classrooms.

Without a systematic approach that provides continuity between what teachers learn and what goes on in their classrooms and schools, professional development is unlikely to produce lasting improvements — either in teacher quality or student achievement — experts argue. David Cohen's research on the effects of staff development on mathematics achievement in California indicates that teachers who receive extended training in specific, standards-based curriculum and instruction can lift student test scores.

Most professional development is organized at the district level. However, several states, including Florida, Kentucky, Missouri and Oklahoma, have passed initiatives encouraging or mandating certain types of professional development and, in some cases, providing funding. In 1997, Arkansas began requiring school districts to provide a minimum of 200 minutes of scheduled time each week for teacher conferences and instructional planning and preparation.

To help states address deficiencies in teacher knowledge and skills to meet new standards in virtually every subject area, the National Staff Development Council recently established a cooperative initiative to upgrade the abilities of classroom teachers and school leaders in 10 states. The new initiative will help state educators and policymakers work cooperatively on strategies to make the best investment of billions of dollars allocated to upgrade teacher skills and knowledge.

Remaining Challenges

As states and districts move to improve the quality of teaching, they must meet a series of challenges, which include:

Link Teaching to Standards

Teachers need more content knowledge to be able to teach what we expect students to know. All aspects of teaching, from teacher education to licensing efforts to quality professional development, must be better connected to standards for student learning. One of the reasons Wisconsin was one of the most improved states on the 1998 NAEP mathematics assessment, state officials believe, was the Wisconsin Academy Staff Development Initiative. In 1998, Wisconsin launched this effort to expose teachers to an intensive one-week, 30-hour mathematics seminar with simultaneous work in science and technology. The academy helps teachers focus on the state's mathematics and science standards and how to teach them in each subject area. It then encourages teachers to make presentations to other teachers in their own schools, demonstrating classroom strategies to teach the standards-based curriculum.

Provide Opportunities for Teacher Leadership

The next stage of teacher development will be to introduce optional career paths so that the best teachers are not promoted out of the classroom. States and districts must work to provide more opportunities for teachers to demonstrate their leadership and be rewarded for their work as mentors, coaches and leaders of professional development within their buildings. Teachers can help other teachers learn how to evaluate student performance, provide research-based interventions to increase student achievement, and use data from student tests and school operations to guide improvements in teaching and learning within the building.

Prepare Principals, Too

If professional development is to occur at the school building, principals must be prepared to become instructional leaders along with their colleagues. An organization functions and excels when it is structured to ensure effective supervision, collaboration, peer review, consistency and individual accountability that make the most of everyone's talents and minimize individual shortcomings. But with the way public education currently is structured, individual teachers of varying degrees of competence are isolated with groups of students who have almost nothing to mediate a teacher's mediocre or negative impact. And principals themselves do not have the multiple skills to address these challenges.

Recruit and Retain Good Teachers

States must develop comprehensive plans to bring the best and brightest into the field through alternative pathways and programs such as loan-forgiveness efforts at the college level, in addition to developing mentor and induction programs to retain talented teachers. In California, for example, state leaders have approved a comprehensive teacher education initiative that, among other things, will provide more money for internships while establishing a two-year internship requirement for new teachers. The measure is intended to boost student recruitment into teaching much sooner in their college careers in order to meet the state's need for more than 300,000 new teachers for an expanding student population and to accommodate the state's smaller class size initiative.

Strengthen and Fund Professional Development

School districts must discover new ways to find more time and resources to provide quality professional development opportunities for teachers within the school day and embedded in their professional work. This can be accomplished by redirecting resources for unnecessary staff positions and using federal Title I money to develop opportunities for team teaching and collaboration during the school day. Encouraging more teachers to pursue National Board certification also can help improve opportunities for greater collaboration and professional development in the field.

Put It All Together

Perhaps the biggest challenge is developing a system that supports teachers and connects that effort to greater accountability. In North Carolina, Gov. James B. Hunt, Jr. pushed through an ambitious plan that will raise certification standards and teacher salaries while imposing new accountability measures on educators. The state's 1997 Excellent Schools Act restructures the state certification system into three tiers.

- The state issues an initial certificate to teachers after they successfully complete preservice training.
- Teachers can earn a continuing certificate after three years of teaching experience. Every five years after that, teachers must renew the continuing certificate.

- Tenured teachers who complete an approved graduate program or demonstrate competency as "master teachers" are eligible for an advanced "Masters/Advanced Certificate."

The North Carolina law also requires training in special education for all students in teacher education programs, increases the period needed for teachers to achieve "career status" from three years to four years, and directs the state board of education to "evaluate and develop enhanced requirements for continuing certification." The law also directs the state board, in consultation with local school boards and the governing board of the University of North Carolina, to study ways to make the certificate renewal process "more rigorous."

Research shows that the best way to improve student achievement is to improve teaching. Raising the quality of teaching, therefore, should be a high-priority component of every state's reform strategy. Growing concern from the public and from educators and policymakers about the need for more teachers with deep content knowledge will only increase the pressure on states to develop comprehensive programs that improve teacher quality at every stage of the pipeline.

Diversifying the Delivery System

School choice — allowing students and their parents to pick the school they attend — is a very attractive concept. So it's no surprise that some governors, legislators, local school officials and other leaders are looking to choice options as a way to achieve the school improvement that still remains elusive after more than a decade and a half of unprecedented effort. If students are expected to meet high academic standards, allowing them the opportunity to choose among different kinds of schools with diverse curricula might help them achieve these standards and improve their performance — especially given that children learn in different ways and at different rates.

Choice is also attractive because it embodies the American free-market ideal that competition will force improvement. Given freedom of choice, the theory goes, parents and students will leave bad schools in favor of better schools. Indeed, about 10 percent of public school students already participate in some form of choice program. The idea is that the bad schools will improve to compete for students. And if they don't improve despite market pressure, the bad schools will close and therefore won't continue to harm students.

Three Assumptions

This optimistic scenario is based on three assumptions:

1. *There will be enough alternative schools with various programs for students to choose from, and they all will have high standards.* This would seem to be an obvious requirement, but there is not much unused capacity in either the nonpublic or public education systems, and high standards are not yet commonplace or always a high priority for parents. Presumably then, new schools with high standards would need to be created to accommodate educational choice on a widespread basis.

2. *The students who currently attend low-performing schools and their parents will be given sufficient information about the alternatives to make an informed choice. Once they choose, they will need a way to get to their new school. And the alternative schools must be accessible to all children, including those with special needs.* At present, in many places, there is scant information about the various alternatives, little money for transportation to them and few provisions for children with special needs.

3. *To close the circle, low-performing public schools should learn from the good schools; they will adopt their innovations or develop their own in order to become competitive.* This is the expected outcome of a free-market system. But after nearly 20 years of reform, there has been very little replication and very little scaling up. Bad schools exist a few blocks away from successful schools in every American city.

School choice has the potential of opening the system, creating healthy competition and offering a wide range of educational opportunities to a diverse student body — and to do so in tandem with standards-based reform. But choice programs present their own set of challenges and, like other proposed solutions to the complex problems of American education, answer some questions only to raise others.

Many Types of Choice Available

The broad umbrella of school choice provides options. A school system can pick from a continuum of programs — open enrollment, magnet schools, alternative schools such as the New Vision Schools in New York City, and the increasingly popular charter schools and controversial voucher programs.

Open-enrollment and Magnet Schools

Open-enrollment programs and magnet schools are the most widely accepted and least controversial forms of choice, mainly because they exist within the public system. They're also the oldest, deployed in the 1960s as a way to achieve racial integration without mandatory busing.

Open-enrollment programs allow students to transfer to public schools outside their neighborhood or district. Seventeen states and Puerto Rico permit students to transfer to schools across the state, subject to minimal restrictions. Eleven other states permit such transfers only within districts or permit districts to decide whether they will accept students from beyond their borders.

Magnet schools are a specialized form of open enrollment. They are schools with special programs — often math, science or the performing arts — or with targeted curricula that focus high school education on a particular career path, such as aviation or finance. Often located in less desirable areas of a school district, they are intended to serve as a magnet to draw a diverse group of students from across the district.

The U.S. Department of Education estimates that nearly 4 million students nationwide take part in open-enrollment programs, with as many as one-fifth of the students in some districts attending a school outside their neighborhoods. Even so, the word has not gotten out to many parents that liberal student transfers are available. Only 20 percent of parents surveyed in Colorado, for example, knew of an open-enrollment option that had been available for several years. And even if they know about them, some families can't take advantage of open-enrollment programs because most states require the students to find their own way to and from their new school.

Charter Schools

Charter schools are the latest addition to the school choice menu. They have the advantage of being public schools and thus don't incur the enmity that private school choice options arouse. The charter school movement was launched in Minnesota in 1991. Since then, charter laws have passed in 36 other states, the District of Columbia and Puerto Rico. As of spring 1999, more than 300,000 students attended the more than 1,200 charter schools in 27 states and Washington, D.C. Another 400-plus charter schools are in the works, according to the Center for Education Reform. Charter schools continue to gain momentum because they are a politically acceptable alternative to controversial voucher programs, which threaten to move public dollars to private schools. They are designed to operate like private or parochial schools and thus appeal to those disenchanted with the public schools.

Charter schools get their name from the charter that an educational authority (usually a state or local board of education) gives to a group of parents, teachers, community leaders or others to establish a school. The charter agreement outlines the mission of the school, its educational approach and the types of students it is targeting, and it sets out the conditions for operating the school as well as the academic results expected.

Being public, charter schools must be free and obey health, safety and civil rights laws, but they

usually are exempt from many of the rules and regulations that govern regular public schools. Although one national teacher union and some local unions, such as Boston's, have their own charter programs, many of the charter schools around the country are not unionized. Because a charter school is the brainchild of the diverse individuals who obtain the charter, each offers a distinct size, curriculum, pedagogical style and educational approach.

Theoretically, it is easier for the education authority to hold charter schools accountable for high standards than regular public schools because the charters must be renewed periodically. If the school hasn't lived up to its promises, the authority can revoke the charter. For all these reasons, charter schools are expected to be innovative and thus serve as laboratories for school reform — living demonstrations of excellence and high standards whose innovations regular public schools should be eager to adopt.

Early Results

To date, evidence of the educational impact of charters is mostly anecdotal, for even the oldest charter is too new to have undergone a comprehensive performance evaluation. The overwhelming majority of charter schools have been in operation for only a few years, if that. The U.S. Department of Education has a four-year national study of charter schools under way; in 2000 it is expected to yield a comprehensive analysis of achievement trends and other national data about these schools. In the meantime, although much has been written about charters, most of the information is anecdotal and much of it expresses a particular point of view.

A 1997 study by Chester E. Finn, Jr., Bruno Manno and others based on site visits to 60 charter schools in 14 states revealed that the schools, on the whole, created rich learning environments where devoted teachers work tirelessly to impart essential skills and knowledge to willing learners. The authors summarized their findings as follows:

"What most charter schools offer is what most families crave: small, safe places where everyone knows each other, schools with coherent academic missions and high standards, schools led and staffed by people who believe in those missions and care about kids actually reaching the standards, schools full of students and teachers who want to be there, schools that take their customers seriously — not least because nobody is obliged to remain."

A 1998 study of charter schools in 10 California school districts, conducted by the University of California at Los Angeles, was far less positive. In 17 case studies, it compared the claims of charter school proponents with the experiences of people involved in the schools. It concluded that most schools were not being held accountable for student achievement; the schools did not necessarily reflect the racial or ethnic makeup of their districts; and while teachers valued the freedom and collegiality at charters, they complained about the workload.

How well charter schools are serving disabled and other special needs students is still an open question. Some charter schools — such as the Metro Deaf Charter School in St. Paul, Minn., or the Macomb Academy in Clinton Township, Mich. — were created specifically to serve disabled children. When they are factored into a local analysis, it looks as if charters are doing a great job with special education. In larger-scale studies, however, the numbers have not been so positive. But that is changing. In the last year or so, the charter movement has made a special effort to attract and serve these children.

Putting Vouchers to the Test

Vouchers and their alternate forms, scholarships or tuition tax credits, have been growing in popularity. In April 1999, the well-financed Children's Scholarship Fund — which last year received a $100 million endowment from businessmen Ted Forstmann and John Walton — awarded 40,000 partial-assistance grants to families seeking to enroll their children in private schools. But for each scholarship recipient, the fund turned away another 30 applicants.

The great popularity of these programs has not diminished the controversy over their use. As the name implies, vouchers are certificates that parents can use to pay tuition at public or private schools. Some public school advocates oppose any use of public funds for private schools, contending this will siphon needed funds away from public school improvement. The conflict escalates into a constitutional battle where vouchers may be applied to tuition at sectarian schools. In any case, every voucher program enacted so far has been challenged in court.

Despite their high profile, there actually are very few extant voucher programs. Two big-city programs have been in operation for a few years. The Milwaukee Parental Choice Program was the first, established by the state legislature in 1990. For the 1998–99 school year, about 6,200 low-income students received $5,000 vouchers to attend public, private or parochial schools, and about 8,000 students are expected to enroll this school year. About 3,700 students participated in the three-year-old Cleveland, Ohio, program, which provided vouchers of up to $2,500.

Earlier this year, the Florida legislature enacted the first statewide voucher program as part of a larger education reform package proposed by Gov. Jeb Bush. The voucher program will provide vouchers to students at the state's lowest-performing schools to enable them to transfer to other public schools or to attend private or parochial schools. The value of the voucher will vary according to the student's needs, but will be no less than $3,000. For the 1999–00 school year, only two elementary schools rated low enough on a state test to trigger the voucher program. However, the reform package included a tougher test for next year that will likely trigger the program for as many as 150 schools.

Arizona has adopted legislation allowing parents a tax credit against their state income taxes for contributions to private scholarship funds. In Illinois, parents get tax credits for 25 percent of tuition and fees at public or private elementary and secondary schools. For years, Vermont and Maine have had a voucher program in which towns that are too small to have their own public schools reimburse parents for sending their children to schools in other towns.

The Role of the Courts

The future of vouchers at the state and local levels continues to be as much in the hands of the courts as in the hands of voters. Courts are involved in all of these programs. Suits have been filed challenging both the Florida voucher program and the Illinois tax credit. The Wisconsin Supreme Court upheld the constitutionality of the Milwaukee program; in 1998, the U.S. Supreme Court refused to hear a challenge to it, thus letting it stand. The Arizona Supreme Court upheld that state's tax credit. However, the Vermont and Maine Supreme Courts — and a federal appellate court in a separate Maine case — have ruled it unconstitutional for the vouchers in those states to be used at parochial schools. As we went to press, a federal judge allowed returning students in Cleveland to use vouchers, but prohibited new students from receiving them. Further expansion

of Cleveland's voucher program was in limbo pending a ruling on its constitutionality.

Over the last several years, public opposition to vouchers has waned substantially. Fifty percent of those surveyed opposed vouchers in 1998, down from 74 percent five years earlier, according to an annual survey of public attitudes toward public schools conducted by *Phi Delta Kappan* and Gallup. Meanwhile, other polls show that a majority of African Americans favor vouchers.

The bottom line — whether students in voucher programs do better in school — seems to depend primarily on who is doing the evaluation. Multiple studies of the existing voucher programs show conflicting results, and it is still too early to assess their impact on the students and schools that are left behind.

Future Challenges

So can school choice help improve schools and raise education standards? Maybe. But first, state and local governments will have to overcome significant obstacles.

Balancing Flexibility and Accountability

The biggest challenge may be figuring out how to provide freedom and flexibility simultaneously while holding schools accountable for high standards. Massachusetts charter schools, for example, can set their own goals, and their charters are renewed based on progress in achieving those goals. But many people argue that all charters should be accountable to state standards and state tests in the same way that public schools are held responsible for performance. States must balance flexibility and accountability in a way that is equitable to all children and determine how to measure those outcomes fairly and objectively.

Broadening Availability and Impact

The next challenge is to make high-standards alternative schools available to all the students in a state. This will require not only a major public information campaign, but an outreach effort to persuade uninterested parents and students to avail themselves of the opportunities. It will require that all schools be made accessible to all students. This will mean transportation to school and provision for the special needs of disabled children within the school. None of this will be cheap.

Nor will school choice accomplish the free-enterprise goal of excellence through competition if the schools left behind are allowed to continue providing a poor education to the students who choose to stay. The state will have to make sure that those schools achieve high standards whether they want to or not — either by freely adopting the better approaches of the alternative schools or having effective approaches imposed on them. The test of a free-enterprise model might be whether choice can accomplish that goal. The test of a high-standards education program, however, may be how to achieve excellence in all schools regardless of the choices exercised by parents and students.

Sustaining Public Support

Throughout the 1990s, politicians, business leaders and education reformers have been proclaiming the need to raise American academic standards to "world-class" levels. Their rhetoric has resonated with a public yearning for better schools. Polling data continue to show that overwhelming majorities of Americans say they support raising standards. But until recently, the standards conversation was mostly abstract; it rarely got to the specifics of what students would have to learn, why they should learn it or who would be accountable if their academic performance did not rise to acceptable levels.

Making Standards Count

Richard Mills, commissioner of education in New York state, recalls his puzzlement when he visited classroom after classroom and saw little evidence that teachers were using the new, higher academic standards, although the state had distributed hundreds of thousands of copies of the standards to schools. Mills kept asking teachers why they weren't connecting the standards to the lessons they were teaching. Finally, one teacher told him bluntly: "You don't get it. Until these standards are on the test, they don't count."

"I get it now," says Mills, who has changed the nature of the conversation by putting challenging tests in place throughout the state, including new writing tests for fourth-graders and plans to require all students to pass the state's Regents Exams before graduating from high school.

As Mills and others have discovered, tests and test results make academic standards real — and force communities to consider the consequences that come with higher expectations. They also have found that although public support for standards is strong on an abstract level, the actual implementation of new standards is a much more difficult pill for communities to swallow.

Consider the headline in *The New York Times* just before Memorial Day 1999: "Most of State's 4th Graders Fail New English Test." Or consider the opening paragraph in a *Washington Post* article in January 1999: "More than 97 percent of Virginia's public schools have flunked the first round of the state's new student achievement tests, according to figures released yesterday — a failure rate so high that some local school officials and parents say it threatens the credibility of the state's testing program."

Low Test Scores Prompt Criticism

In these states and elsewhere, there has been a public backlash against rigorous assessments. According to *Education Week*, "The public outcry that followed the release of test scores is becoming a familiar pattern — repeated in several states in the past year alone — as tough new standards for students and schools, and tough new tests to measure them, come on line. … How states handle the situation has emerged as a vitally important issue, one that can make the difference between maintaining public support or confronting a public relations disaster."

This backlash has come in part from suburban parents who are used to high performance from their children and schools on less rigorous standardized tests such as the Iowa Test of Basic Skills and the Stanford Achievement Test, Ninth Edi-

tion. It is easier for parents to blame lower student scores on the tests than to acknowledge that, until now, schools have not been pushing their children to achieve at world-class levels.

Parents, often goaded on by teachers who do not like the new tests, are complaining that the tests are too tough, are being forced on students too quickly and cost too much. Parents also claim that to expect all students to meet high standards is unrealistic. This backlash has resulted in efforts in many states to weaken, delay or eliminate high-stakes, high-standards testing programs. Those efforts have consumed a great deal of energy and political capital to keep the higher standards and tough tests on track. In Wisconsin, for example, the Legislature killed a new high school graduation test the governor had proposed. And in Michigan, the governor started an expensive college scholarship program to help persuade suburban parents and students to support the state test.

Engaging the Public

But some places, particularly those that have managed the public conversation on standards and tests vigorously, seem to be dealing with this potential backlash successfully by strategically listening to and engaging their publics.

Just as high standards and "performance assessment" came into vogue among education reformers in the 1990s, so did the concept of "public engagement." To some school superintendents, this phrase was really just a new term for better public relations. To some education reformers and community activists, the phrase meant finding new ways to make schools much more democratic, giving parents and taxpayers a greater voice in running schools. For others, it meant involving parents and communicating with them clearly. And for a relative few, it meant reminding people that public schools are the foundation of America's democratic and economic systems.

In the past, school districts and states rarely have communicated effectively with parents and taxpayers. But as states began making significant changes in schools, this trend came back to haunt them. Pennsylvania, for example, tried to establish outcomes for students in the early 1990s, but did a miserable job explaining them and fell victim to political activists, who reframed the outcomes as big government and antifamily. California created what some education experts considered the best performance test in the country but failed to explain it well or heed citizen complaints; as a result, the multimillion-dollar test was killed before it could take root. Kentucky's testing program, a complicated by-product of the state's 1990 reform legislation, came under repeated attack during the 1990s, and the Legislature eventually threw the tests out in 1998. And a rigorous test in Delaware was killed in its infancy in the mid-1990s by a Legislature that had been unprepared for high rates of student failure. The list could go on.

Key Lessons

Educators and policymakers in states where public opposition has derailed or diluted rigorous standards and assessments have gleaned a number of important lessons from these failures:

- The tests — and the standards on which they are based — need to be explained clearly and repeatedly to the public.
- Key groups — particularly parents and legislators — need to know what to expect from initial test results and by what means improvement will occur.
- Classroom teachers need better information about tests and the consequences of high failure rates, as well as assurances that they will get the training necessary to help their students succeed.

- Business leaders have a critical role to play in explaining the importance of higher standards in a changing economy, and they provide much-needed continuity as elected officials and school leaders change.
- If higher standards are to survive, public engagement needs to be an ongoing effort.

In many ways, these are the ingredients of good marketing and political campaigns — straightforward explanations that clarify why a potential customer or voter should buy or support something ("What's in it for me?"). But state education departments rarely have either the expertise or the capacity to conduct these kinds of campaigns. In many states, if this kind of public engagement has taken place at all, it has been left to governors or the business community.

Prepare the Public in Advance

"This is where governors need to invest time and political capital," says Bill Porter, executive director of the Partnership for Learning, a business-backed group whose primary role is to explain and "sell" Washington state's reform program that centers on tough new tests and standards.

Porter has had a firsthand look at the payoff from a governor's investment in academic standards. Before moving to Seattle, Porter worked six years for Roy Romer, then governor of Colorado. Romer barnstormed Colorado during the 1990s, talking about the need for higher standards at every opportunity. He also made sure that state educators involved parents and other citizens in the creation of Colorado's academic standards, and that people could see how such citizen input was used to modify the initial drafts.

As a result, despite Colorado's contentious politics, strong academic standards and a new state test are in place today. The first test results came out a couple of years ago and were quite low, but Romer and others had worked to prepare Coloradans for the news. Indeed, when the scores came out, part of the state's message was that "the bad news is the good news" — reformers used the scores to make the case for improvement.

In Massachusetts, Bill Guenther has applied what Porter and others have learned about public engagement and elevated those lessons to new levels. Guenther's organization, Mass Insight Education, spent 18 months preparing policymakers, educators, parents and taxpayers for the first results from Massachusetts' new standards-based test. The message: The results would be disappointing — but should be seen as a starting point for higher levels of student achievement.

Guenther and his allies organized leaders from business, politics, education and the teachers' unions to stand as a united front and speak for the higher standards and new test. They crisscrossed the state, meeting with editorial boards and reporters to help frame the conversation in the media. And they developed easy-to-read materials for parents that put the standards, tests and the need for reform in perspective.

When the first results came out last fall, the scores were low, but the media coverage was positive, and the backlash was minimal. Guenther's message to others: "Start early to prepare for the test results."

One key to dealing successfully with the public in this area is not just starting early but also communicating continuously. Guenther, for example, is running a communications campaign called "See for Yourself" to help the Massachusetts public see the test items and how they connect to the standards and the demands of employers and universities. His organization also is

conducting workshops for thousands of teachers and administrators to help them understand and use test data to improve instruction.

The states that seem to be making the smoothest progress in sustaining school improvement are those where there are both strong political leadership and influential outside partners who can both push traditional education thinking and build the public support that is critical to sustained success.

Make the Messages Clear

Just as these advocates have learned that building continuous communications campaigns for standards and tests is crucial, they also have learned that they must make sure standards and tests are "ready for market," in the same way that an advertising campaign must rely on a good product for success.

At a minimum, that means standards and tests need to be understandable. When Washington state's standards were being developed, several of them were quite vague and peppered with education jargon. Steve Mullin, Porter's predecessor at the Partnership for Learning, privately kept pushing state officials to sharpen the standards by saying, "I don't get it. What does this mean?" As a result, the Washington standards became clearer.

States also are learning the importance of timing, of making a steady transition to high standards. In 1996, the Maryland Business Roundtable for Education conducted focus groups with parents and learned that there would be considerable resistance to the state's proposal to increase drastically high school graduation requirements. In response, the state built in a longer transition period, allowing teachers more time to prepare to teach to the new requirements and more time to prepare Maryland's public for the changes (and the anticipated initially high failure rate).

Get the Substance Right

Other states have benefited also from outside reviews of their standards and tests, such as those conducted by Achieve, Inc., which enable states to compare themselves to see how they measure up to the best in the nation and the world.

According to Adam Kernan-Schloss, president of A-Plus Communications in Arlington, Va., it is critical for states to get the educational substance right before they begin launching communications campaigns about standards or tests. "If the standards are not clear, no matter how well we dress them up, the public will still see them as fuzzy," he says.

In addition to making sure standards and tests are clear, reform advocates still have a long way to go in convincing the public about the value of some subjects. Surveys show strong support for higher standards in teaching the basics — reading, writing and arithmetic. But when the public is asked if they believe students should be required to master algebra or biology or chemistry, they are considerably less supportive.

In some places, the business community is providing credible assistance in helping educators explain why these subjects are vital. Mass Insight has used workers from a variety of industries to demonstrate that the knowledge and skills they use on the job are based directly on the academic standards that students should be learning in class. For example, a process cook from Gloucester, Mass., talks about the math he must use every day to measure how his company can most efficiently turn 16.5-pound blocks of fish into fish sticks and fillets.

Be Strategic

Several of the states and urban school districts that are engaging the public successfully have developed strategic communications plans to keep

themselves focused. This work, supported in several states by the business community, often includes professional surveys and focus groups to measure regularly how much the public knows about a state's standards and tests and how it feels about them.

In spring 1999, The Business Roundtable provided its members and state partners with communications "toolkits" designed to help them engage their publics more successfully on standards, tests and accountability. Among the recommendations:

- Be strategic. Set priorities, plan ahead and be proactive. Target key audiences critical to success.
- Connect to what people value. Answer the "What's in it for me?" questions.
- Show, don't tell. People need to see what standards-based education looks like before they will support it. Use reading lists, sample test items and examples of student work to explain the reforms.

Seeing Is Believing

The toolkit and accompanying workshops spotlighted several successful state efforts to communicate effectively. In Washington, for example, the state and the Partnership for Learning worked with the McDonald's Corporation to print several of the fourth-grade math questions on the paper tray liners used in their restaurants. The conversations among parents "taking the test," amplified by media coverage, helped thousands of people understand that the new test is different, challenging and sensibly focused on what students should learn.

Delaware held a "Take the Test Day" in December 1998, two weeks before the first scores from the new state test were released. Volunteers and state employees administered the tests to hundreds of Delaware citizens at fast-food restaurants, Wal-Mart stores, shopping malls and even an Amish market. The governor and other state and business leaders took the test, with cameras rolling in the legislative halls. In addition, nearly all households in Delaware found a copy of the sample test in their morning paper. The result was a much more positive climate when the test results were announced, despite scores showing that many of the state's students were not meeting standards.

In New York state, more than 4.5 million sample copies of the state's new fourth-grade test were distributed as newspaper inserts. "We managed the conversation before the scores came out by repeatedly telling people the results would be low," says Mills, the New York commissioner. Mills, a teacher who once served as education aide to former New Jersey Gov. Tom Kean, says that continually engaging the public is crucial. "You have to keep talking about and explaining the standards endlessly," he says. "You have to say it over and over and over until your audiences can lip-synch you, and at that point, you've just begun to get their attention."

Persistence Pays

The need to communicate constantly is particularly acute when the standards and testing program is being introduced. Many veteran teachers and principals seem to believe that high standards and test-driven accountability is a fad that will disappear. "People are waiting for the moment we back away," says Mills. "They can't believe that we actually mean it. You can't back down."

Advocates like Mills make heavy use of success stories to help support their communications campaigns. Mills repeatedly has spotlighted

schools that are succeeding on the new tests despite having high percentages of students below the poverty level. In Washington state, the Partnership for Learning has done the same, distributing to educators and community leaders a booklet that analyzes why dozens of schools did much better on tests than expected. In Kentucky, the Prichard Committee for Academic Excellence has done much the same, helping to lay the groundwork for education reform in the early and mid-1980s by issuing reports and working with the media to highlight problems in education. Since then, Kentucky advocates have undertaken several initiatives both to spotlight success stories and help parents and teachers communicate better with each other about the bottom line: improved student achievement.

As standards proponents point to successful schools, they buy time for their message to sink in and for more schools to improve. In Texas, for example, when a new test was introduced in 1994, only slightly more than half the state's students passed. But since then, passing rates have gone up steadily to nearly 80 percent in 1999 — even as the test has been made more difficult.

And in Virginia, where the headlines in January 1999 shouted about a 97 percent failure rate, the stories in July were much better. Under a headline of "Virginia Standards Improve on Tests," the *Washington Post* wrote: "Virginia public school students did better than last year on all 27 of the state's achievement tests, according to figures released yesterday, and state officials said the results show that students and schools are capable of meeting Virginia's tough new standards. 'These results clearly show that all the hard work by Virginia's students and teachers is paying off,' said Gov. James S. Gilmore III (R). 'Given this is only the second year of the ... tests, we should all be encouraged by this remarkable progress.'"

The challenge for states like Virginia will be to maintain progress and help the public understand what these new tests are all about.

Without widespread public understanding of test scores and the standards on which they are based, there is likely to be little patience for the long-term changes that schools need to make to produce consistently higher levels of student achievement. If standards are to survive short-term backlash and truly benefit students over the long haul, state policymakers, educators and businesspeople must take the lead in driving home their messages to parents, making the connection crystal clear between higher expectations for students now and greater success later on in life.

Public Opinion

Public Opinion — a report from Public Agenda

Standards and Accountability: Where the Public Stands

Opinion research conducted by Public Agenda and others has shown high levels of support for raising academic standards in the nation's public schools. In question after question and survey after survey, Americans endorse the concept of asking students to learn more, and they want public schools to take steps to make sure that this learning does in fact take place. Support for raising standards is strong among Americans in every part of the country and from every walk of life.

Public Agenda's most recent *Reality Check* survey, conducted in cooperation with *Education Week*, shows, for example, that overwhelming majorities of parents (83 percent), teachers (79 percent), employers (94 percent) and college professors (90 percent) say having guidelines for what students are expected to learn and know helps improve academic performance. Majorities agree that high school students would be better off taking tougher classes where expectations are higher. Teachers, employers and professors in particular say students would benefit from being pushed harder.[1]

Appalled at a Lack of Basic Skills

Surveys consistently show that Americans are especially anxious for every child to master at least basic skills — generally defined as a command of standard English, including grammar, spelling and punctuation, plus arithmetic.[2] Public Agenda studies also have shown that people hope most children will learn far more than the basics in school. The large majority of parents, in fact, expect their own child to attend college. But for most Americans, basics springs to mind as the very first standard — the set of skills that all children absolutely must master.[3] In focus groups, people are often outraged that any youngster is allowed to drift through school without acquiring such minimal skills. According to a 1998 Peter Hart survey, almost nine in 10 Americans (88 percent) say "low academic standards" is a serious concern in the nation's schools.[4]

Public Agenda has found that employers and college professors in particular voice frustration over lack of basics. More than three-quarters of both employers and professors give recent high school graduates fair or poor ratings for grammar and spelling. Just as many say students' ability to write clearly is generally fair or poor. Most also express disappointment with student work habits, motivation and basic math skills.[5]

Reality Sets In

Given these views, it is not surprising that the movement to raise academic standards in the nation's public schools strikes such a responsive chord. It addresses a problem that people care about, and it does so in a way that appeals to people's common sense. But strong public support for higher standards does not mean that the issue is immune from the normal controversies and complications that accompany any large-scale policy change.

In communities nationwide, the reality of higher standards is just beginning to set in. Students face new promotion or graduation requirements and tougher tests. In many districts, their chances of mandatory summer school or "being kept back" have increased markedly. Parents, teachers and administrators are all coping with unfamiliar procedures and guidelines. So the question is — given the public's strong commitment to the goal — what can leaders do to smooth the way through the

inevitable rough spots that will occur? And how can leaders avoid the missteps that could undermine (or at least jar) public confidence in standards reform?

Reminding People Why We're Here

Experts and decisionmakers often must concentrate on the labyrinth of complex details needed to make a policy work in real life. But to sustain public support for change, particularly change that touches people's families and daily lives, leaders need to take time periodically to restate the basic rationale, to remind people of the beliefs and values that underlie reform. When the going gets a bit rough, people need to be reminded of why we're here.

For most Americans, there are several key beliefs that underlie their support for standards.

You Ask More, You Get More

Central to the public's belief in higher standards is what amounts to a philosophical rule of thumb for dealing with children. Ask more from them, and they will do more. Ask less, and they will do just enough to get by. This belief is especially powerful for many people because it often stems from experiences they have had in their own lives. In focus groups, participants often tell stories about teachers, parents, bosses or even drill sergeants who challenged them, and as a result, brought them to a higher plane of accomplishment. If it's been true in my own life, people reason, then it will work for others as well.

Basics First

Surveys show that while Americans expect many things from public schools, one mission repeatedly rises to the top of everyone's list: Schools must guarantee that all children read and write English and do basic arithmetic. In earlier studies, Public Agenda has attempted to clarify what some see as the public's "preoccupation" with basics. As we point out, Americans believe that a young person without basic skills will struggle economically for the rest of his or her life. They don't understand how a student can go "beyond the basics" until he or she has them firmly in hand. And they simply cannot conceive how it is possible for a student to spend a decade or more in school and not learn how to read and write. For much of the public, this is the most compelling rationale of all for raising standards.

The Cruelty of Social Promotion

Educators nationwide now are engaged in a heated debate about social promotion and retention, with many arguing that retention by itself does not improve student learning. It is unlikely that the public has absorbed the details of this debate, and for many, a debate between retention versus social promotion may seem a false and frustrating choice. Surveys routinely show that most Americans believe it is preferable to keep children back rather than to pass them along without having learned the needed skills.[6] Some research also suggests that people may be more open to promotion for underachievers if these students receive intensive remedial help.[7] But for the public, the heart of the issue is not whether retention is such a good idea, but rather that social promotion seems to be such an awful one. For many Americans, social promotion (as they believe it has been practiced) seems downright cruel.

Not Ready to Write Off Kids

Some standards advocates worry that many Americans believe that young people, especially ones from disadvantaged backgrounds, cannot achieve at high levels. But Public Agenda surveys show that people have enormous confidence in the potential and resilience of today's youngsters, even those who don't get the best start in life. In a recent study of public attitudes toward children and teens, Americans voice bitter disappointment with the behavior of today's

youth. But almost in the next breath, they reiterate their conviction that virtually every youngster can learn to become a capable and productive adult. Seventy-five percent of Americans say that "given enough help and attention, just about all kids can learn and succeed in school."[8] Despite their frustrations and their fears about today's youth, most people just aren't ready to give up on them.

Standards and Equal Opportunity

Last year, Public Agenda took an in-depth look at the views of white and African American parents on the issue of equal educational opportunity. For African American parents, lagging academic achievement among black youngsters is a crisis. For white parents, the situation is more likely to be seen as a serious problem, not a crisis. (Relatively few parents say the problem is exaggerated.) For differing reasons, both groups voice wariness about time-honored strategies such as busing or redistricting. But both groups soundly endorse establishing and enforcing higher academic standards in schools with large numbers of minority youngsters. Among African American parents, for example, 87 percent say having teachers and principals who push students to study and excel is absolutely essential to a good school (compared to 82 percent among white parents).[9]

What Could Undercut Support for Higher Standards?

By many measures, Americans' current support for standards might be considered "as good as it gets." Compared to Americans' attitudes about reforming Social Security or health care, for example, public support for raising standards is long established and remarkably stable. But the public's belief in the *goal* of raising standards does not mean that leaders can shift into automatic pilot or bypass the fundamentals of sound policymaking. Here are some pitfalls that could derail and unsettle support:

Standards Not the Cure-All

Support for raising standards is broad and deep, but reformers would be mistaken if they assume that standards and accountability are the only education problems people have on their minds. Even before the killings at Columbine High School sparked far-reaching anxiety about school violence, Americans routinely named problems with safety and order as top public school concerns. According to the 1998 Gallup/Phi Delta Kappa survey, over two-thirds of Americans say drugs, discipline, smoking, alcohol and teen pregnancy are serious problems in public schools in their own communities. Almost as many express serious concern about fighting and gangs.[10] Almost all Americans want students to learn more, but most doubt that learning can take place in unsafe, uncivil or overcrowded schools with inexperienced and continually changing staff. Very few Americans see raising academic standards as the cure-all for schools that do not have their basic daily operations well in hand.

Fairly Managed?

No policy reform, no matter how broadly supported, can hold onto public support if it is not competently and fairly managed, and that means more than just delivering bottom-line results. Standards advocates might do well to take a lesson from those who have tried to reform health care over the last decade. Surveys in the 1980s showed Americans deeply concerned about the cost of health care, convinced that doctors often perform too many tests and procedures, and at least open to some features of managed care. But support for the managed care approach has dwindled as patients have encountered one-day hospital stays for deliveries and mastectomies and colluded with doctors on ways to get care covered under layers of new rules. Most Americans now say managed care is inferior — not because of declining health care statistics and life-expectancy rates — but because they fear that the system is becoming arbitrary,

callous and arcane. By the same token, school reform advocates had better be prepared to show how they intend to help all children reach these high standards.

Getting Teachers on Board

Most districts have already taken steps to include administrators, senior teachers and union representatives in the development of new standards and accountability practices. But to assume that these steps, as worthwhile as they are, are all that is needed to "involve teachers" could be a dangerous miscalculation. For most parents, classroom teachers serve as the interpreters, even the ambassadors for reform. If teachers believe that standards policies are important and well thought out, they can sustain and nourish parental support. If teachers are convinced that standards policies are unfair or destructive, they can undercut parental support with extraordinary speed.

Surveys show that teachers generally back raising standards, but they are less likely than others to say that standards in their own schools are too low.[11] What's more, large numbers of teachers feel frustrated by what they see as lack of student effort and parental and administrative support.[12] In focus groups, teachers often say that they learn more about major districtwide changes from rumors than from the administration. District directives are often ridiculed or resented, and experienced teachers have already been through waves of reform, which in their minds produce very little of value. Public Agenda's research strongly suggests that bringing the nation's teacher corps firmly inside the movement to raise standards could be the most pivotal challenge of all.

Counting on Parents to Lead the Fight

Like other Americans, parents strongly support raising standards. Large majorities say it is essential that schools have teachers who push students to excel, and they want schools to promote kids only when they have learned what they need to know.[13] But standards advocates who hope that parents will become the driving force behind reform could well be disappointed. Public Agenda studies suggest very few parents feel comfortable as activists, getting deep into the nitty-gritty of curriculum design or teaching reform.[14] Most are not especially well-informed or vigilant consumers, even concerning their own child's progress.

In general, parents accept grades as accurate measures of their child's proficiency, and very few know much about how their child's skills compare to those of youngsters nationwide, much less how they compare to the skills of kids abroad.[15] Relatively few parents have the experience to say precisely what their child needs to learn or when — and how — he or she should learn it. Parents, even well-educated ones, look to teachers and schools to provide guidance on this, and they generally accept what teachers tell them.

Expecting 100 Percent Happiness

A common question among standards advocates is what will happen when tougher new tests and more rigorous accountability measures really come into play — when the rubber hits the road. Will some parents begin to have doubts? Will some begin to complain? Will some start saying the entire enterprise is useless and unfair? Opinion research cannot predict every response, but the answer to these questions is undoubtedly yes. No serious policy change is ever universally popular, and even the most level-headed parents may become upset if their own child's progress is questioned. The challenge for educators and decision-makers is to plan for at least some level of disenchantment and regret, since it will be almost impossible to avoid.

The Question No One Wants to Ask

Most of the current discussion about standards and public opinion centers on one question: Will public support for standards endure as schools move forward to raise the academic bar and as they put consistent accountability practices into place? Research suggests that as far as public opinion goes, Americans have signed on. Across all demographic groups, Americans say they want leadership to move ahead. They want schools to improve student learning and they want them to guarantee at least a basic academic education for every child.

But another question may be much harder to answer. What happens if the nation's public schools don't succeed in raising standards? What happens if this reform effort, like some before it, disintegrates or derails? Opinion research can't predict what would happen in this event, but the research does suggest, very strongly, that this is one question the public hopes researchers will never have to ask.

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Endnotes

1. *Reality Check '99*, Public Agenda. National surveys of public school teachers, public school students, parents, college professors and employers, conducted October–November 1998. Published in *Education Week's Quality Counts '99*, January 11, 1999.

2. *First Things Firsts: What Americans Expect from the Public Schools*, Public Agenda. National survey of 1,198 adults, conducted August 1994. Also, *Assignment Incomplete: The Unfinished Business of Education Reform*, Public Agenda. National survey of 1,200 adults and 1,151 leaders, conducted October 1995.

3. See *Assignment Incomplete*, Public Agenda.

4. Peter D. Hart Research Associates (sponsored by Shell Oil Company). National survey of 1,123 adults, conducted July 17–20, 1998.

5. See *Reality Check '99*, Public Agenda.

6. See *Reality Check '99*, Public Agenda.

7. Princeton Survey Research Associates (sponsored by *Newsweek*). National survey of 407 parents of children in grades K–8, conducted March 5–10, 1998.

8. *Kids These Days '99*, Public Agenda. National survey of 1,005 adults, conducted December 1998.

9. *Time To Move On: African American and White Parents Set an Agenda for Public Schools*, Public Agenda. National survey of 800 African American and 800 white parents with children in grades K–12, conducted March–April 1998.

10. Gallup Organization (sponsored by Phi Delta Kappa). National survey of 1,151 adults, conducted June 5–23, 1998.

11. See *Reality Check '99*, Public Agenda.

12. *Playing Their Parts: Parents and Teachers Talk About Parental Involvement in Public Schools*, Public Agenda. National survey of 1,220 parents with children in public school and 1,000 public school teachers, conducted November–December 1998.

13. See *Time To Move On*, Public Agenda.

14. See *Playing Their Parts*, Public Agenda.

15. See *Reality Check '99*, Public Agenda.

Viewpoints

Viewpoints

Introduction

In this section of your briefing book are open letters to the 1999 National Education Summit participants from four longtime commentators on education reform. Their essays offer observations, insights and recommendations for sustaining the momentum of the standards-based education improvement agenda. All four writers are well known and respected among their peers in their respective areas of expertise. Although the opinions they express in these essays are theirs alone and not necessarily those of Achieve, Inc. or the National Education Summit co-sponsors, their comments make for insightful, informative reading.

Making Mid-course Corrections in Standards-based Reform

Standards-based reform offers the best hope for substantially improving the nation's public schools, writes *Ronald A. Wolk*, but there is growing concern that it is not being implemented as thoughtfully and carefully as it must be to succeed. This Summit is an ideal occasion on which to take stock of where we are and assess the mid-course corrections we need to make to ensure success.

The Role of Higher Education in the Standards Movement

Higher education has been AWOL from the K–12 school improvement discussion, argues *Kati Haycock*. Present neither at the policy tables where school improvement strategies are formulated nor on the ground where they are being put into place, most college and university leaders remain blithely ignorant of the roles their institutions might play in helping K–12 schools get better — and the roles they currently play in maintaining the status quo. The fact is we *cannot* bring about big changes in elementary and secondary education without also changing the way higher education does business.

The Marriage of Standards-based Reform and the Education Marketplace

It's hard to visualize a standards-based system working well without opportunities for the creation of new schools and the entry of new providers, writes *Chester E. Finn, Jr.* He presents the "marketplace" strategy, also known as choice, as an alternative approach to improving the nation's education system, but argues that it can coexist with standards-based reform. Combining these two strategies for education change can produce more than either alone is apt to deliver — perhaps even more than the sum of its parts.

Linking Information Technology to Accountability

An unprecedented national consensus has emerged that it is now time to change our schools. And a key to school change, *Denis P. Doyle* asserts, will be information technology. While it is difficult to think of a sector that could put IT to better use than elementary and secondary education, it also is difficult to name a sector that uses it more sparingly or unevenly. Doyle outlines how information technology can be used to ensure better accountability for results.

Viewpoint … by Ronald A. Wolk

Making Mid-course Corrections in Standards-based Reform

State policymakers and education reform leaders deserve enormous credit for launching standards-based reform and sticking with it through these difficult days of implementation. This strategy undoubtedly offers the best hope for transforming the nation's public schools into the schools we need for the next century.

This past summer, Americans basked in the World Cup victory of our women's soccer team. The grassroots movement for women's rights in the 1960s led to the passage of Title IX in 1972, which, among other things, mandated equality for women in school sports. It was a radical idea, and there was great resistance for at least a decade. But perseverance produced slow, steady progress that gradually culminated some 30 years later in a profound social change. The U.S. victory in the Women's World Cup is a highly visible symbol of that significant change. There is an important lesson here for all of us working for better schools: Real change takes persistent action by many individuals — often working together — over a long period of time.

Standards-based reform is about nothing less than the first systemic overhaul of public education in history. The job cannot be done piecemeal, hurriedly or cheaply. You have made considerable progress over the past decade creating the structures and processes needed for success. Now, as the movement enters its second decade, you will need all the wisdom, skill and patience you can muster to keep it going in the right direction.

The implementation of a reform this radical and this sweeping is a formidable undertaking. Mistakes, omissions, missed opportunities and wrong turns are inevitable. At least another decade of hard work is needed to produce the significant and widespread student achievement that standards promise.

It is critical that policymakers and educators — and eventually the general public — understand the complexity of this task and the need for patience. Some people will claim the job is too difficult, too costly. Some will pronounce the movement a failure and seek to consign it to the graveyard of educational fads. And some will press to lower the standards and compromise the rigor.

It will be up to you to convince your fellow policymakers and the public to stay the course. But it also will be up to you to take the lead in making vital mid-course corrections without which the standards movement could run aground. There is no better time than now to pause briefly, take stock of where standards-based reform is in your state and, if necessary, craft corrective tactics to get the movement back on course.

Following are the areas that need special attention.

All Children Can Learn, But They Can't Learn Everything

In our zeal to develop rigorous academic content, some states have made standards so all-inclusive that they are probably unattainable by ordinary students and teachers in a typical school setting. Disciplinary experts charged with drafting standards for their own academic fields expect every student to know everything the experts now know. The national geography standards would test the mettle of Ph.D. candidates. The arts standards specify that students should compose music, play an instrument and choreograph a dance. One high school science standard proposed by a Nobel Laureate provides an extreme example of this foolishness. It states that students should "know that the force on a moving particle (with charge q) in a magnetic field is qvBsin(a) where a is the angle between v and B (v and B are the magnitudes of vectors v and B, respectively), and students use the right-hand rule to find the direction of this force."

States need to revisit standards and submit them to a common-sense test — perhaps even convening bodies of ordinary citizens to react to them. Indeed, given that standards setting is an ongoing process, states would do well to establish a mechanism for periodic public review.

In defining a "body of essential knowledge," we should be parsimonious. Standards can specify too much for a child to master in 12 years, and even experts and educators cannot agree on what to eliminate. Meanwhile, new knowledge accumulates at an astonishing rate. Schools should emphasize *how* to learn at least as much as they emphasize *what* to learn.

Achieve analyzed standards and assessments from 20 states to compare our expectations against those of the highest-performing countries on the Third International Mathematics and Science Study (TIMSS). The study identified an "international core" of 10 concepts in math — essentially, the foundations of algebra and geometry — that the highest-performing countries expect their students to master by the end of eighth grade. With maybe one exception, the international core concepts were present in the standards of our 20 states, but they often were buried in longer lists of concepts, and several core concepts did not show up on the assessments. It is no wonder that teachers are unsure of what is most important to teach — and as a result, they tend to teach about all sorts of things, but not in much depth.

The problem is not just one of quantity. Except for the work of Achieve, there has been little effort to coordinate standards writing across state lines to see how different states' standards relate to each other or whether they could all fit logically into a typical school curriculum. As a result, according to a study by the Mid-continent Regional Educational Lab, there is simply not enough time to teach all of the information and skills identified by subject-matter experts. Indeed, the study concludes that *nine* additional years of schooling would be required for students to master all of the material recommended by the national subject-matter organizations that have put forth standards.

States might well focus on the four core subjects of English, math, science and social studies, and leave it to the districts and schools to develop their own standards for the remaining disciplines.

You Can't Measure Air Pressure With a Yardstick

For the standards strategy to work, fair and accurate assessments must be aligned with standards and curricula to monitor student progress. Although many state officials say their tests are aligned to standards, there is growing evidence that suggests otherwise. For one thing, too many states continue to rely on commercial, off-the-shelf, pencil-and-paper, multiple-choice tests that almost by definition cannot be well aligned with every state's standards.

Assessments are pivotal in the standards movement. To measure student progress against the standards, tests must reflect what is in the standards. To assess performance, tests should include performance items that give students an opportunity to write, conduct a science experiment, and solve and explain math problems.

Achieve is working to generate more collaboration among states in developing common standards and assessments toward the goal of saving millions of dollars and producing compatibility in curriculum and testing that would serve mobile Americans well. States with similar standards and common concerns might consider forming consortia to harmonize their standards and collaborating on banks of test items from which each could fashion its own test aligned with its own standards. The technology for large-scale computer adaptive testing has come a long way, and students soon will be able to take individually tailored examinations on the Internet, at a significant savings in time and money. States should work with federal agencies to expedite this process.

You Can't Teach What You Don't Know

Relatively few of today's teachers have ever taught in systems with high academic standards for all students. Teachers now are being asked to do things they've never done before, and there are too few good professional development programs to help them.

The way schools are structured makes real professional development difficult. But we have learned a lot in recent years about the kinds of professional development that work. We know, for example, that professional development is most effective when it is rooted in real work, such as designing curricula or developing rubrics (guidelines) for assessing student work. States should gather the right people, charge them with developing sound programs and begin implementing them.

Professional development means time, and time means money. Resources are scarce, but states could spend the money they have far more effectively. Over time, states should move to reallocate nearly $20 billion to increase teacher salaries instead of

continuing to use these funds as a reward for seat-time in mostly useless night-school courses. This reallocation would be a difficult and controversial undertaking, but the stakes make it worth the effort.

The challenge of professional development would be less daunting if new teachers entering the field were knowledgeable about state standards and prepared to teach to them. Relatively few teacher preparation programs have significantly incorporated the new standards into their curricula. At least in education schools funded with public money, states should be able to correct that problem by requiring schools to include standards in their programs.

Still Waiting for Opportunity to Knock

Unfortunately, it continues to be true in the United States that too frequently the quality of education depends on where children live, the color of their skin and the socioeconomic level of their parents. Because of inequities in financing, many students have not been exposed to high standards or a rigorous education. They are getting shockingly dismal scores on tougher new assessments.

In some states, a sizable majority of students do not score at the level needed to succeed in their courses. On the new test in Massachusetts, 74 percent of 10th-graders and 67 percent of eighth-graders partially understood or failed the math section, and 80 percent of fourth-graders partially understood or failed the English language arts section. In Virginia, which has highly rated grade-by-grade standards, 97 percent of the schools recently failed to achieve the performance goals on the new state tests. Scores on the 1998 national reading test show that two out of five high school seniors cannot read well enough to do grade-level work. Failure rates tend to be much higher among low-income and Latino and African American students.

When Congress debated the standards movement about a decade ago, the issue of "opportunity-to-learn" standards was raised. Proponents argued that standards for schools were as important as standards for students — and that state policymakers should address inequities in the resources of poor schools in urban and rural areas and the resources of schools in wealthy suburbs. Congress decided not to address this problem through federal legislation, but as states move forward to attach stakes to student performance, they need to assure parents and the public that all students in all communities have a fair opportunity to meet the standards, and that schools and districts also will be held accountable for student performance.

It can be said simply and directly: Standards-based reform will not succeed unless and until all students are:

- taught a curriculum aligned with state standards and tests;
- taught by teachers who are adequately prepared to teach that curriculum; and
- offered extra time and help if they need it to meet the standards.

Rewarding Results, Punishing Failure

If standards and assessments are the lever for moving the public education system, then accountability is the fulcrum. Without accountability, standards-based reform remains only a promise.

Developing fair and effective accountability systems may prove to be the most difficult and perilous step in the march toward standards-based reform. States have proceeded cautiously so far, but they have begun to pick up the pace.

Virtually all states now test their students. Thirty-six publish annual report cards on individual schools, according to *Education Week*, and half of these publicly rate school performance or at least identify low-performing schools. Nineteen states require students to pass an exit test to graduate and 16 have legislation authorizing the takeover of persistently failing schools. Fourteen states provide monetary rewards for individual schools based on performance.

Alternatives to Social Promotion

Frustrated with continuing poor student achievement, more policymakers at the national, state and local levels are demanding that students be retained in grade if they score below a designated level on the state standardized tests. President Clinton has called for an end to social promotion and the withdrawal of federal funds from districts that don't fix or close failing schools.

Nobody favors social promotion, but the alternative of holding students back and simply repeating what didn't work the first time also is bad. Clearly, social promotion must end, but educators need to come up with alternative programs and strategies to help students who are not prepared academically to move on to the next grade. Forty percent of students who are held back once drop out before graduation from high school. For those held back twice, the dropout rate jumps to 90 percent.

One possible solution is to have intervention at specific intervals, such as at the end of the third grade and the end of the seventh grade. Students who are not reading well at the end of the third grade might be moved into an intensive literacy program that includes longer school days and weeks. When they demonstrate reading proficiency, they would rejoin their classmates. Students who are failing to keep up in the seventh grade might be offered extended day programs with substantial academic enrichment, opportunities for experiential learning, out-of-school internships and mentoring. Boston has adopted a plan that moves in this direction. Instead of holding failing students back,

for example, the district lets students stay with their class but puts them into a transitional program where they receive additional help.

Misplaced Punishment

Prematurely setting high stakes for students is the most immediate and dangerous pitfall in forging an accountability system. States that put the entire burden of poor school performance on students could place the standards movement on a collision course with reality.

The fact is that a great many students now in middle school and high school, especially in big cities, did not learn to read by fourth grade and thus cannot pass the new high-stakes tests. Many of them attended failing schools that lacked good teachers, textbooks and laboratories. Their academic problems were unnoticed or ignored. Expectations for them were low or nonexistent. To punish these young people for failing in a system that failed them first would be unjust and probably even illegal, especially when the goal is to help them succeed.

If large numbers of students get held back or fail to graduate because they score too low on tests, states are likely to face such legal challenges. And public support will diminish because it will seem unfair to hold students accountable when they have not had an adequate opportunity to learn. If public support wanes, the standards movement will be in peril.

Despite the negative consequences of high stakes, however, one can argue that without them, neither the students nor the system will take the necessary steps to meet the standards. After all, the stakes for academically at-risk youngsters are already enormously high, regardless of whether a state ends social promotion and institutes a graduation test. The children who fail in school today cannot expect to prosper in the high-tech society of the next century; their prospects for a rich and fulfilling life are bleak.

Preserve What Works

We have made impressive progress in creating public schools designed to prepare children for the next century. In a series of discrete and unrelated actions, more by default than by design, educators and policymakers across the country have created alongside the existing public school system what could be called a "parallel system" of innovative and flexible public schools.

These include alternative schools created in the 1960s and 1970s, magnet schools launched to aid racial integration in the 1980s, traditional public schools that transformed themselves during the current reform movement, charter schools in the 36 states that have charter laws and even newly created public schools (such as those in Rhode Island and Hawaii) designed from the start to be nontraditional.

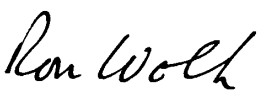
Over and over again, these innovative, mostly small schools demonstrate that they can succeed with the hardest-to-educate students. Most have high attendance, low dropout rates, high college-attendance rates, few disciplinary problems, and high morale among teachers and students.

In some states with overly detailed and prescriptive standards and tests, state policy runs the risk of squeezing the life out of such schools by narrowing their curriculum into a single conventional mold. It is one thing for states to insist, as they should, that all schools, regardless of size or philosophy, should be required to demonstrate on common assessments that their students can read critically and analytically, write clear and persuasive prose, show an understanding of fundamental mathematical and scientific concepts, and display familiarity with key historical events and trends. It is quite another thing, however, for states to design tests that are so content-specific that they dictate the substance and structure of a school's curriculum. Some of New York City's most celebrated and innovative new high schools, for example, believe that the very qualities that have made them demonstrably successful with at-risk students will be jeopardized if they are not given some flexibility from the state's new Regents' exams.

Nobody would argue that all small schools are innovative or that all nontraditional schools are successful — or that these schools be exempt from high standards and testing. But most of these institutions are relatively new and relatively fragile. The state should be flexible and, in assessing these schools, consider not just their test scores but the results of their work. The bottom line is that states should be careful that their assessment programs do not inadvertently impose a cookie-cutter, one-size-fits-all regimen on their schools. They should encourage diversity and pluralism in their schools while holding fast to their focus on results.

Moving Forward

This is a full agenda, but these problems are not surprises. We knew when we undertook standards-based reform that we would be struggling with problems of the specificity and rigor of standards, the alignment and effectiveness of assessments, the quality of teaching and the proper kinds of accountability. It was inevitable that states would have to make occasional course corrections. By recognizing and addressing these problems publicly, you signal a commitment to stay the course. You send the message that it is better to pause, take a little more time and get it right than to have standards reform become discredited because it wasn't properly implemented.



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Viewpoint … by Kati Haycock

The Role of Higher Education in the Standards Movement

Since the release of *A Nation at Risk* in 1983, many people have dedicated themselves to the effort to improve America's public schools. Governors and corporate CEOs have been particularly active in this arena, rolling up their sleeves to join K–12 education leaders in fashioning improvement strategies and putting them into place.

Higher education, however, has been left out of the loop and off the hook. Present neither at the policy tables where improvement strategies are formulated nor on the ground where they are being put into place, most college and university leaders remain blithely ignorant of the roles their institutions might play in helping K–12 schools get better — and the roles they currently play in maintaining the status quo.

In the early years of the school improvement effort, this oversight was understandable. After all, the initial tasks of standards-based reform — setting standards, developing assessments and designing accountability systems — seemed reasonably straightforward. And aside from the need for an occasional faculty member or two to comment on draft standards in their disciplines, there was no obvious role in all of this for higher education.

As we get farther into the reform effort, though, it is becoming more and more obvious that we literally *cannot* bring about big changes in elementary and secondary education without also changing the way higher education does business. For example:

- How are we going to get our *students* to meet high standards if higher education continues to produce *teachers* who don't even meet those same standards?
- How are we going to get our high school students to work hard to meet new, higher standards if most colleges and universities will continue to admit them regardless of whether they even crack a book in high school?

These two systems are intertwined in so many places that no matter how hard you try, *you cannot change one of these systems without also changing the other.*

The mere thought of working simultaneously on changing two such complicated and entrenched systems is probably enough to make you shudder. But doing so is terribly important — and perhaps not as hard as it may seem. Over the last several years, we at the Education Trust have had the wonderful good fortune to work with some communities and states where, some years back, leaders of the K–12, higher educa-

tion and business communities had the foresight to recognize the need for a "K–16" approach to educational improvement. Today, I write both to impress upon you the need for a more encompassing K–16 approach elsewhere and to share what we have learned from these communities about how to make such an approach work.

Preparing Teachers to Teach to High Standards

As school districts across the country struggle to get their students achieving at the levels set by state standards, it has become increasingly apparent that many teachers are not up to the task. Some teachers need help learning the broad range of instructional strategies that are necessary to succeed with the variety of learners in today's classrooms. But many teachers have an even more basic problem: Their own academic knowledge and skills are too limited, especially in the content areas they teach.

Frankly, this problem caught many K–12 education leaders by surprise. For years, their major criticisms of how higher education prepared teachers focused on inadequacies in areas like student discipline and classroom management.

But the new standards have changed all this by putting a premium on the teacher's academic knowledge as never before. Why? Quite simply because the rules have changed.

Under the old rules, if a teacher taught something and only some of the students learned it, that was okay. *Teaching* a concept was what mattered, not whether students learned it. And after all, if it was a "higher-order" concept or skill, only some students — those who would go on to college and subsequently take on some kind of leadership role — needed to learn it anyway.

Under the new rules, *learning* is what matters. We now expect our teachers to get all of their students to levels that only those in the top group used to reach. That means that if a teacher teaches a concept and only 20 percent to 30 percent of her students learn it, she must come back again and reteach that concept another way — then perhaps yet another way still. But this requires a much deeper and more flexible knowledge of content than many of our teachers have.

Fixing this problem will require action on a number of fronts, from better preparing new teachers to providing professional development for continuing teachers. But fix the problem we must. New research makes it very clear that there is nothing more important to student achievement than an effective teacher. Students who are taught throughout their school careers by well-educated teachers will rise to virtually any standard we set. On the other hand, students who have had two or three poorly educated teachers in a row will never recover, and their futures will be forever limited.

Incentives for High School Students

Young students often will put forth their best effort on any exam put in front of them, but motivation changes a great deal by the time students reach high school. If an exam doesn't "count," students are not likely to put forward serious effort — indeed, as several states have found, large numbers of students won't even bother to take the test at all. State or district accountability systems may be pressuring the adults in the school for better results, but if the students feel no such pressure, results are unlikely to improve. In recognition of this problem, state boards of education are moving to attach virtually the only stake within their control: denial of a high school diploma.

There are early signs, however, that this is not a sufficient strategy — at least not if you want standards rigorous enough to drive real change. First, it is politically very difficult to have both high standards and high stakes. Second, such a combination also can mire a state in lengthy and expensive litigation. Third, even if this strategy is upheld, nothing will stop students from circumventing it completely by exiting high school without a diploma and showing up the next day in either a community college or one of the hundreds of open-door four-year institutions. (Indeed, my own daughter did just that. The consequence? A University of California degree, with honors, a full year ahead of her high school classmates!)

Some states may still tread this road. But in others, if leaders want their new standards to have real motivating power, those standards must not only have the qualities normally set forth by the standards gurus — including clarity, parsimony and the like — but the standards and the assessments based on them also must be taken seriously by the only party that really matters to most students and parents (and many teachers, too): higher education.

Yes, signals from business do matter, but in survey after survey, students and parents make it very clear that they care most about higher education. (Not because they don't care about getting a decent job, but precisely because they do and believe that college is an essential way station.)

In most states, however, higher education has not been seriously involved in the development of either the K–12 standards or the assessments based on them. Most standard-setting bodies do include participants from a college or university, but these are individuals acting as disciplinary experts, not as representatives of their institutions. Thus, even though students prepared to meet these new standards would be a dream come true for the faculties of most colleges and universities, college admissions offices continue to use measures — seat time, Carnegie units, grades and SAT/ACT scores — that are totally inconsistent with the direction of measurement in K–12.

This mismatch not only is having a chilling effect on student motivation — it is undermining the reform movement by sending conflicting signals to teachers, parents and students about what is important.

Moving Forward

Despite these problems, many American students will wend their way through the thicket of conflicting signals and teachers of varying quality and still do okay. For others, however, especially the poor and minority students who are most likely to be taught by undereducated teachers and whose parents are often less able to guide them through the confusing messages, this situation is a nightmare.

So, what can you do? Governors, of course, have considerable leverage in higher education, both directly, through budget review and the like, and indirectly through appointed trustees. Business leaders, too, often sit on the boards of public and private institutions. Too often though, it seems that you reserve most of your reform zeal for K–12 education. Now is the time to widen your scope of activity. Here are some suggestions.

1. Bring higher education to the table.

- *If you have a K–12 strategy council in your state, make it a K–16 council.* Such councils can make sure that higher education not only supports and reinforces the K–12 improvement effort in your state, but also gets busy on needed changes on its own turf. First on the agenda?

— Come to agreement with the K–12 community on consistent standards/assessments for high school graduation and college admissions/placement.

— Ensure that teachers, both new and existing, get rigorous subject-matter training.

Several states — including California, Georgia, Maryland and North Carolina — already have K–16 structures, each with a slightly different configuration. Pick the approach that best fits your state's circumstances, and get going. (Make sure that the council includes representatives from sectors other than education; councils whose members share a uniform background get too cozy too fast.)

2. Seize the moment to push big improvements in teacher quality — an incremental approach won't get you anywhere.

- *Insist on increases in academic standards for teachers fully commensurate with the increases in standards for students.* In the short term, about the only way to accomplish this is to demand that licensing bodies use the most rigorous licensure exam available in each content area and set a very high cut score. (States with rigorous exams for

high school seniors also could make another choice: Administer their 12th-grade exam to prospective teachers and insist on a "distinguished" level performance.) As soon as possible, though, the existing exams should be replaced with much more rigorous content assessments, because current licensure tests typically measure only the knowledge and skills a teacher acquired in high school.

■ *Hold higher education strictly accountable for the quality of the teachers it produces.* The new federal Higher Education Act contains a provision requiring states to adopt reporting and accountability systems to monitor and improve the quality of teacher preparation. Wise state leaders will take advantage of this first-ever opportunity for results-oriented accountability in higher education by adopting accountability systems that go well beyond the rather minimal requirements of the law. It is especially important to ensure that such systems are not limited in scope to education schools but rather have clear consequences for the arts and sciences departments that provide most of the academic preparation of future teachers. At the very least, bold accountability systems will:

— place a premium on rigorous subject-matter preparation;

— demand that institutions do what it takes to produce skilled teachers from *all* racial and ethnic groups;

— reward institutions that increase their production of high-quality teachers for subject-matter and geographic shortage areas; and

— close programs that don't produce results.

■ *Ask your K–16 council for an aggressive action plan that contains at least the following:*

— a deadline beyond which no school district will be allowed to employ teachers who teach out of field or do not meet state standards;

— a system to enlist parents as partners in improving teacher quality by requiring school districts to notify parents when their children are being taught by unqualified teachers; and

— a budget proposal for creative initiatives to increase the supply of high-quality teachers in shortage areas. Indeed, governors might want to consider establishing immediately a funding stream to support arts and sciences departments in creating programs, such as University of Texas-Austin's UTEACH, which bases teacher preparation in the academic department corresponding to each teacher's subject-matter area.

3. Throw your weight behind efforts to develop consistent and coherent standards, for kindergarten through college.

Each year, the college careers of countless high school graduates are needlessly derailed by inadequate preparation in high school. Students took the three math courses, four English courses and two science courses that they needed to graduate. Perhaps they even did quite well in those courses and on the state assessment as well. But it turns out that the courses they took weren't the courses that the colleges want — and the assessment they passed didn't test the same things that the colleges value. This doesn't make sense in an era when almost all of our high school graduates are going on to postsecondary education (we're now at 80 percent and rising). It makes even less sense when you realize that most employers now want the same kinds of knowledge and skills as the colleges want.

- *Tell your K–16 council you want a consistent, coherent set of standards, kindergarten through college, in place within three years.* Their work should include:

— agreement across two- and four-year colleges on the knowledge and skills necessary to begin credit-bearing work in college;

— modification of existing high school standards (if necessary) to ensure that by some specified time, all high school graduates have the knowledge and skills necessary to begin credit-bearing work in college;

— agreement, across K–12 and higher education, on a rigorous core academic "21st Century Curriculum" that will ensure all students meet high standards and are ready to begin credit-bearing college work; and

— elimination of unnecessary redundancy in the assessment of high school juniors and seniors. Rather than test students separately for high school graduation, college admissions and college placement, a single set of exams should suffice.

4. Standards make sense in higher education as well.

For too long, we have lived with the myth that we have a wonderful, perfect, internationally renowned higher education system and a wretched, horrible K–12 system. The truth, if you look at the data, is that both systems are routinely producing large numbers of graduates who do not have the knowledge and skills that we normally associate with a degree or a diploma. The sooner we break the mental bonds of this mythology and stop the finger-pointing that has characterized the relationship between these two systems, the better. We are not going to solve the problems in one system without solving those in the other.

While this letter has concentrated primarily on the knowledge and skills of college students who intend to become teachers, recent research suggests that teachers are no worse — and no better — than college graduates more generally. Alarming numbers of college graduates exit college with the reading, writing and mathematics skills we would normally associate with a student midway through high school. And these graduates are but a small portion of those who begin college. Indeed, dropout rates in higher education make those in K–12 look wonderful by comparison.

Yes, it may seem daunting to think about launching the equivalent of standards-based reform in higher education. But if indeed our national future depends on a highly educated citizenry, then our work cannot end in K–12. Other countries have realized this, and are making major investments in both expanding and improving their postsecondary systems. It's time that we did, too.

5. Improve achievement *and* close historic gaps.

Improvements of the sort we are talking about here are important to all students. But they are especially important to the poor and minority youngsters who have been the biggest victims of our current system of different standards — and different quality teachers — for different kids. However, just saying this won't guarantee the work will be done in a way that will narrow the achievement gaps that have haunted this nation for too long. It won't happen unless you insist that it happens.

If we've learned anything during our years of hard work on this subject, it is this: Leadership matters. If you are unequivocal in your belief that all kids can learn at high levels, go on to college and graduate — and if you demand every year to see progress for all groups of students, no matter how poor — you will get results.

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Viewpoint … by Chester E. Finn, Jr.

The Marriage of Standards-based Reform and the Education Marketplace

Standards-based education reform and competition-based reform enhance each other; indeed, they are mutually reinforcing. Change-minded governors, business leaders and education movers and shakers should recognize their synergy and embrace them both.

A Little History

When the governors and President Bush met in Charlottesville, competition-based reform was barely a blip on the radar screen. What was fresh and exciting — and nervy and controversial — in 1989 was the setting of national goals and the intensification of a nationwide push toward standards-based reform.

A country that had long operated as if the way to get better education results was to pump up school inputs, resources and services now found itself grappling with a very different idea: The way to get better results is to stipulate the results you want, make sure you have sound means of gauging progress toward them, create incentives (and disincentives) tied to such progress and "align" the pieces of the delivery system such that all move harmoniously toward the same ends.

A decade later, such systemic strategies remain the primary focus of most reform efforts at the state and national levels and in a number of localities. But they've turned out to be very hard to install, and they don't always work as intended. They consume vast political energy and run into dogged resistance, vested interests and deep-seated inertia. Back in 1989 — and even, I think, at the 1996 Summit — we didn't fully fathom the arduousness of moving from broad goals to specific, high-quality content standards, demanding performance standards, workable assessments and forceful high-stakes accountability systems. Today, only a few states have all these elements in place and can see them paying off to a degree that justifies the effort. Indeed, some jurisdictions are already backpedaling because, to put it simply, they're finding that the short-term political cost of serious standards-based reform rivals the long-term gain.

Why so painful? Because individuals and institutions don't like to change their accustomed behavior, particularly when changing means working harder and being held accountable for their results in ways they previously were not. And because public-sector monopolies are possibly the most change-averse institutions that ever existed. The upshot: The systemic approach alone has not yet generated a reliable, cost-effective and politically feasible strategy for sufficiently altering individual and organizational behavior to yield stronger pupil achievement.

The Systemic Approach Is Not Enough

We're coming to understand that education results change only when people's actions change. Johnny will learn more when he studies more and harder. But what will induce him to do that? What will cause his teachers, principal and the other adults involved in his education to alter their accustomed ways so as to yield better-than-accustomed results?

Systemic reformers still assume that standards-based schemes, properly executed, will trigger the necessary behavioral changes. The oomph in this strategy comes from the top downward and the center outward. It relies on authority for its enforcement. It is, in fact, much like any other government compliance system. Why it seems so novel is that we are unaccustomed to enforcing results-based behavior in K–12 education.

From where I sit, the systemic approach takes an awful lot of doing, and it isn't yet paying off in many places. Perhaps the most important reason is that the "consequences" don't really touch many of the players. Kids still get into college somewhere, even if they do poorly on the state tests. Few employers pay much attention to their transcripts or scores. As for teachers and principals, not many have their jobs or salaries on the line. And the public school system still enjoys almost the same near-monopoly that it always has. However poorly it educates its students, it still holds onto them and the moneys that come with them.

The Marketplace Alternative

Ten years later, another approach to education change also has begun to figure seriously in U.S. school reform efforts: a marketplace strategy in which the impetus comes mostly from the bottom up and the outside in. It's a very American approach — messy, entrepreneurial and opportunistic. Its underlying theory is much the same as that of capitalism itself: Competition leads to efficiency, quality and consumer satisfaction, while forcing ineffective providers either to alter their ways or go out of business. Change within a system comes from competition outside that system. Competition thus benefits not only the children who exercise choice but also the schools and school systems that they forsake. Precisely because the latter institutions lose their monopoly, they must begin to worry about attracting and satisfying their customers with quality, effectiveness and efficiency. Those customers — parents and students — now have options.

Though this looks new in K–12 education, it's been the norm for several decades in higher education and for longer than that in the private K–12 sector.

This is no place for a full discussion of the theory and practice of school choice. I would just make three points about the "marketplace" approach.

Varied Options, Combined Approaches

First, the marketplace approach comes in many flavors, from bland, vanilla kinds (such as public school open enrollment and magnet schools) to Rocky Road offerings (such as home-schooling, vouchers and tax credits). In between, one finds many variants, including today's most prominent variant, charter schools. What all versions have in common is acceptance of the fact that schools can and should be different, not identical, and that the ability to choose among them should extend to everyone, not just to wealthy families.

Second, there is no state today where a pure marketplace approach is the only education reform strategy under way. While most states have some school choice — and a few have quite a lot of it — in every instance it coexists with other reform schemes, most commonly with some version of "systemic reform."

Third, most available evidence suggests that choice programs are benefiting the children they serve. (Research is not yet conclusive with respect to pupil achievement because the choice programs are new and mostly small, in no small part because opponents have staunchly resisted the well-designed, large-scale experiments that would yield more definitive data.)

Visible Benefits and Systemwide Change

We also are starting to see evidence that the marketplace approach, once it grows large enough to be felt by the regular public school system, is beginning to influence it. When a significant number of alternative education providers arise, the system starts to compete with them. The superintendent asks: What must I do to get my students back — or keep them from leaving in the first place? If the charter people are offering an after-school program, why can't we offer that within our system? You say that parents want school uniforms? A back-to-basics curriculum? A Montessori school? A gifted-and-talented program? Why should they have to turn to charters and private schools? Why can't we offer those options? School systems that think this way find themselves, often for the first time, becoming consumer-minded and market-conscious. This is triggering real change in how they organize themselves and what they provide. As choice strategies spread, more such system change will follow.

In a handful of cases, the school system has even embraced the charter strategy for its own purposes, using it to create unconventional schools or programs that would be difficult or impossible to establish under conventional laws, regulations and contract provisions. In a couple of communities, the school system has, in effect, chartered itself, thereby gaining a high degree of regulatory freedom for all its schools. In others, the system has used the charter law to establish R&D schools, develop demonstration programs or experiments, or circumvent rigid certification requirements and collective bar-

gaining constraints. (School systems also are using outsourcing and privatization opportunities to deliver new education options and remake failed schools.)

The system's response to charter schools, open enrollment plans, vouchers and other forms of school choice shows how the marketplace strategy leads to behavioral change — not because someone farther up the regulatory hierarchy dictates it, holds out rewards or threatens sanctions. No, it happens because the marketplace signals that change must occur for the survival of the system itself.

Compare and Contrast

Today, the "systemic" approach to education reform and the marketplace approach are both vigorous, sometimes in the same places, sometimes with different degrees of energy in different places.

The Ability to Improve Education

Each approach has its pluses. "Systemic" reform is clear about its desired results, comprehensive in its ambitions and orderly in its strategies. It exploits the rationalism of the central planner, the know-how of the expert and the talents of the professional. If it works as intended, it will lift all boats, leaving no one out. Although it alters routines, procedures and incentives, it disrupts no basic structures.

"Market-style" reform is dynamic, fluid and adaptive. It eschews standardization and believes that opportunity comes from choices rather than compliance. It trusts consumers more than producers, laymen more than experts and entrepreneurs more than planners. It reallocates power. It is quick to create, overhaul and terminate institutions. It has little tolerance for approaches that don't meet the pragmatic test of whether anyone wants them or not. It also opens the door for more people and organizations to engage themselves in the education enterprise, and thus appeals to many teachers and other school innovators.

The Difficulties of Effecting Change

Each has its minuses, too. The systemic strategy is vulnerable to election returns, personnel changes and holy wars over what's important for children to learn. Its legitimacy hinges on hard-to-achieve consensus about standards — many states have gone to great pains to develop thoroughly mediocre standards — and hard-to-perfect assessment systems. It partakes of a one-size-fits-all view of curriculum, which may not work in the pluralistic society Americans now inhabit.

The systemic strategy also is affected by politics. Its impact hinges on hard-to-implement accountability schemes because its energy comes from the top — and those at the top are subject to political control and therefore vulnerable to stakeholder influence. Such political considerations never really go away, which means that actual

behavior-changing rewards and punishments for individuals and institutions are slow in coming. That's why we see so few examples of top-down accountability systems taking bold action to, say, close down a failing school. Disastrous schools seem to remain on probation for years with nothing really happening to change them. *Education Week's* 1999 *Quality Counts* reported that while 16 states have the authority to reconstitute failing schools, only three have actually exercised that option.

The marketplace strategy is also hard to execute. It relies on good consumer information about school effectiveness (data that often aren't available), and it presumes the existence of large numbers of fussy, motivated parents who prize academic quality above all else (parents we don't always have). Real dynamism hinges on a "supply response," i.e., the willingness of education entrepreneurs to create, replicate and expand institutions, so the political environment must be stable enough and funding must be generous enough to make this possible. We rarely see such circumstances.

School options do some people more good than others. (They are, for example, less viable in rural communities and less meaningful for seriously dysfunctional families.) There are sundry political, statutory and constitutional barriers to the provision of a full range of choices (though here, the politics, once worked through, may ease, as the marketplace takes over). And there remains the risk of "balkanization" if what is taught in one school bears scant relationship to what children learn in another, or if schools begin to market themselves to people solely on grounds of ethnic or social identity (or simple convenience and glitzy amenities) rather than academic effectiveness.

Each approach thus has important virtues and liabilities. Neither is complete unto itself. As Denis Doyle has written, "Without choice, the standards debate is almost certain to become an empty exercise. There is simply no reason to believe that every school in every district in every state will hold itself to the same high standards; it can't be done politically, it can't be done logistically. Only highly centralized school systems even attempt such an approach. American commitment to local control rules out any centralized solution."

Plenty in Common

It turns out that the two approaches have more in common than their most zealous fans and critics like to admit. Standards-based reform treats the individual school as the key accountability unit, insists on school-level report cards, welcomes the publication of school-by-school test scores and employs other market-oriented strategies. Many "systemic" reformers also talk of empowering individual schools to achieve the desired results in the manner they deem best, casting off needless rules and regulations that tend to standardize school practices.

Though not all choice advocates want government agencies setting standards or imposing tests, virtually all agree that well-informed consumers and comparable data about schools are necessary for the marketplace to thrive. Most acknowledge that schools must make their standards and results public. Most welcome external audits of school performance. Most leave room for government licensing, lottery-style admissions, civil rights enforcement and other regulatory strategies meant to protect equitable access for children. Most hope to create ways of channeling private investment toward public ends, such as the birth of new school-provider organizations that then operate as publicly accountable charter and contract schools. Though defenders of the status quo tend to depict proposals like charters, outsourcing and vouchers as greedy market solutions, that's not really what they are. They are more like new ways of doing the public's business, often with the help of private dollars and entrepreneurial energy.

It's hard to visualize a standards-based system working well without opportunities for the creation of new schools and the entry of new providers. Unless states are prepared to create new education options for children whose schools are not teaching them satisfactorily, standards-based reform could turn out to be an elaborate ruse that puts some pressure on schools but doesn't continue on to its own logical conclusion: If existing schools cannot or will not meet the standards, but children nonetheless need to be educated to the standards, then we need new and different schools.

But the converse is true, too. New schools need to be held to, and measured against, the same standards as the schools they replace and those they compete with. Properly crafted charter laws, for example, insist that the charter school show its progress against the state standards as well as satisfactory performance on the state test in order to get its charter renewed. (The school also may have other goals and indicators of its own choosing.)

Thus we shouldn't be surprised to see a hybrid strategy appearing in many places. That's certainly what Florida's new voucher law offers: The state keeps its promise to children and families by ensuring that kids do not remain trapped in schools that repeatedly fail to meet the state's own standards. Choice offers the means of keeping that promise. In the two "poster states" most often touted by systemic reformers, Texas and North Carolina, we also see vibrant charter programs (and, at least in Texas, other new-provider and choice schemes) operating in tandem with statewide standards, tests and top-down accountability structures. In Chicago, we see the system using charters to create new options for families in low-income neighborhoods burdened by low-performing schools. In Arizona, Massachusetts, Michigan, Pennsylvania and other jurisdictions too numerous to mention, we see both strategies operating at once. What's most interesting is how often nowadays we see them buttressing each other, compensating for each other's weaknesses, maximizing each other's virtues.

Moving Forward

Standards-based reform must modify behavior to succeed, yet it has grave trouble doing this exclusively through top-down rewards and sanctions. It needs to leverage change in institutions and individuals, yet finds them resistant to regulatory manipulation. Choice lubricates the system, makes movement possible and alters behavior without command-and-control tactics. Indeed, it alters behavior in the most natural possible way: by allowing alternatives and options. It doesn't eliminate standards or exempt people (or schools) from assessments. In effect, it adds another set of consequences. Think of choice in this context as an additional accountability strategy.

Yet the marketplace doesn't work well unless each school's performance is transparent, consumers have ample information about that performance vis-à-vis some kind of standards or benchmarks external to the school itself, someone outside the school is auditing that performance and somebody is ensuring that basic rules of fairness are followed so that children don't fall through the cracks. Systemic reform can furnish those essential elements of a well-functioning marketplace. It also can supply enough commonality of content across otherwise variegated schools to mitigate the "balkanization" problem. This means, in the words of a colleague, that "standards make choice safe for liberals." (One might add that choice also can make standards acceptable to conservatives.)

Charter schools again illustrate this synergy. They are accountable in two directions at once:

- "upward" to the public entity that issued the charter, which monitors their performance in relation to their singular promises as well as the standards of the state in which they're located, and which can shut them down if they fail to deliver the results they pledged; and
- "downward" to their clients and customers, all of whom are there by choice and all of whom may leave if they're not satisfied with the school's performance.

These are two forms of serious accountability — each placing the school's very existence on the line — in contrast to a regular public education system that commonly has neither, at least not in any functional sense.

Policymakers should view charter schools as an accountability prototype. Once it becomes clear that these schools exist under a contractual relationship with the state and can be shut down for nonperformance, we face an important question: Why should any school have a permanent lease on institutional life — and a permanent claim on tax dollars — if it is unable to produce satisfactory results for its pupils? Unless the state is prepared to apply an eternal double standard to its schools — holding some accountable for

student achievement, while continually funding others that produce few or no results — the charter school prototype will point the way toward more serious accountability policies for K–12 education in general.

Think of blending standards-based reform and marketplace strategies as the surest way of producing within elementary and secondary education the "tight/loose" management structure that has worked for so many modern organizations: *tight* with respect to the results that must be produced and the ways these will be measured and reported (these elements being provided by the standards-based approach) but *loose* as to the means by which those results are produced, with tolerance for diversity and plenty of competition among production units (with these components furnished by the marketplace approach).

Combining today's two premier strategies of education change can produce more than either alone is apt to deliver, perhaps even more than the sum of their parts. This is also a pretty good way to strike a balance between uniformity and diversity — and between accountability and freedom — in a country that palpably wants all those things (and more) from its K–12 education system.

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Viewpoint … by Denis P. Doyle

Linking Information Technology to Accountability

On the occasion of the nation's third National Education Summit, it is useful to remember that these gatherings represent the public and private sectors at their best, both for-profit and nonprofit joining together in a common cause. It is equally noteworthy that Summits reinforce and shape – but do not create – the national discussion about education. The nation as a whole has put education high on the domestic agenda. Education Summits reflect that concern.

All three Summits have a common background: the information technology (IT) revolution. This phenomenon has replaced the industrial revolution, but at this point, we can only dimly see its emerging contours. For example, at the time of the first Summit a decade ago, the personal computer was in its infancy. It is now nearly ubiquitous. At the time of the second Summit, the Internet was in its infancy. Barely three years later it is now the dominant force in the IT revolution, and its long-term impact, sure to be dazzling in its scope and reach, can only be imagined.

Education and technology exist in a special context, however. Education is conservative; technology is radical — not in the political sense, but in a deeper social and cultural sense. Education conserves the past as it prepares us for the future; it follows rather than leads. Education is not on the cutting edge. Technology is. Education reflects society; technology changes it.

Truth be told, no institution welcomes change. Change is frequently dismaying, often disorienting and unfailingly difficult. Market-driven institutions change because they must, but it is not easy. What is hard for business is harder yet for schools. Most of us prefer having changed to *changing*.

Nevertheless, an unprecedented national consensus has emerged. The public is prepared to change our schools, and schools are in the process of changing. IT will play a key role in both preparing for change and the change itself. The promise of IT is not just to do old things faster but to do new things. Just as information technology is transforming the workplace and our private and public lives, IT will both induce and support profound changes in schooling.

Some of the most sweeping changes will result from using technology to make data available for decisionmaking to strengthen accountability. Using technology, parents, teachers and administrators can have at their fingertips a wealth of information about schools and students that they can employ in their efforts to raise student achievement.

Untapped Potential

Is important to point out that no major domestic sector could put IT to better use than elementary and secondary education, yet no major sector uses IT more sparingly or unevenly. Why? The modern education enterprise is neither propelled by a technology vision nor prodded (hard) by outside forces. Indeed, schools use computers today much as the private sector did two, even three decades ago.

Schools tend to see technology as a cost, not an investment. They see technology as an add-on, not as a means for transformation. Unlike the private sector, in only a few administrative applications is technology viewed as a way to increase output. In most schools, technology is a pedagogical extra rather than a gateway to new pedagogies. To use the dry language of economics, educators do not think of technology as a way to increase productivity, nor do they think of it as a way to substitute capital for labor (i.e., as a way to change the locus of production from teacher to student). Most telling, schools are not driven by either a financial or academic bottom line; incentives and rewards for using new technologies are few, and these often are inadequate.

Why is IT important to education? It is ideally suited to improve the two areas of schooling most in need of modernization: resource management and the improvement of teaching and learning. IT helps schools work smarter. To do so, however, schools must use IT strategically. Users must take the old bromide seriously: Technology is a tool — a means, not an end. It must be used for clearly specified purposes. In too many school districts, technology is something the central office distributes to classrooms, ready or not.

But this need not be the case. Individual schools can earn their technology spurs. For example, although all South Carolina schools have access to the Internet, in the Beaufort school district, no hardware or software is made available to a school until its staff has prepared a technology plan that starts with standards and the educational purpose for the technology.

Many schools across the country use technology wisely and well. But most schools are still in the early phases of what can be thought of as a typical technology trajectory. In the beginning, technology is a novelty, used to solve operational problems or fulfill state or federal reporting requirements. Eventually it is used for pinpoint decisionmaking. Just as the modern firm has learned that technology must move from simple operational uses to strategic uses, so too must schools. In the modern firm, information has moved from the back room to the boardroom to the living room; it must travel the same route in schools.

Learning From the Corporate Model

Thirty years ago companies with massive transactional needs — banks and insurance companies, for example — realized that modern computational power made it possible to store and manage huge data sets electronically, with greater speed, easier access and increased accuracy. The age of hand-posting came to an end as the era of *management information systems* (MIS) began. Twenty years ago *decision-support systems* emerged, growing organically from MIS. Using electronically stored operational data, it became possible for trained *decision-support specialists* to accurately monitor corporate performance and plot trends. Transactional data — originally burdensome to track — became a resource.

Hard on the heels of decision-support systems came expert systems, recognizing knowledge as a key corporate asset, and *executive information systems* (EIS) put IT in the hands of senior executives themselves. Designed to serve decisionmakers, EIS pushed data management and its exploitation to center stage. The chief information officer (CIO) became a key figure in the successful firm and a *data warehouse* became a strategic resource.

Next came *vendor information systems*, giving suppliers and vendors access to corporate databases, making just-in-time manufacturing and delivery a reality for both firms and their subcontractors. At the end of the business day Wal-Mart suppliers know how much stock has moved and how much inventory remains. The most recent paradigm shift is *customer information systems*, providing customers direct access to selected corporate databases. Indeed, some modern, high visibility e-corporations (such as Amazon.com or e-Bay) are essentially electronic databases; others, like Federal Express, give customers access to the corporate database for package tracking purposes. For many Internet users, the most dramatic capacity is the ability to routinely download software patches and upgrades, as well as music, video and other materials over the Internet, completely bypassing CD-ROMs, floppy discs or other physical distribution media.

The lessons from corporate IT uses are obvious and powerful.

IT in Today's Schools

Most schools today have at least a rudimentary MIS in place; however, few have decision-support systems, experts systems or electronic tie-ins with vendors. Almost none have customer information systems. Like Sherlock Holmes' dog that didn't bark, most telling is what is missing: the CIO. While not unknown, the school CIO remains a rarity in all but large districts. True, some smaller districts like California's Clovis Unified in the San Joaquin Valley have a CIO, but the practice is still unusual.

The issue is not lack of data — indeed, even small school districts are awash in data. The issue is the strategic use of data and attention to data integrity. Appointing a CIO

sends a message: Data in this district will be used strategically to improve resource allocation and to fine-tune policy and practice. It will be used to work smarter.

In effective organizations, strategic data use takes two broad forms. First and most important is continuous attention to achieving the institution's mission. In the emergency room, the mission is to save more lives; in the world of business, to meet or exceed customer requirements. Similarly, modern IT helps a school achieve its primary mission: improved teaching and learning for all.

The second form is the use of data to improve policymaking. That is what accountability is all about. Every successful institution must regularly ask (and answer) questions such as: *How are we doing? What is our mission? How do we measure success? How do we improve our performance?* The answers must be clear, concise and, to the extent possible, measurable. True, not everything a school does can be reduced to a number, but most of what schools do can be rendered in objective and measurable terms. *Do all of our students know mathematics? Can they all spell? Which students do not have the knowledge and skills they need? Which schools do they attend? What practices will be most effective in raising these students' achievement?*

Answering such questions objectively does not interfere with more nuanced, less precise measures. *Is our school a good place to teach? A good place to learn? Does IT reinforce habits of mind that make all our students better citizens?* These are proper measures and deserve attention. And they can be approached systematically, even if they cannot be given a numerical score. Such indicators reinforce academic assessments; they do not compete with them.

But large data sets are especially useful when they are kept in a *data warehouse*, where data can be used in new ways for new purposes. In Broward County, Fla., for example, the school district's data warehouse gives school staff the information they need to respond to the district's accountability policies. Data mining is a powerful tool for identifying programmatic strengths and weaknesses, spotting hitherto invisible opportunities and solving real problems in real time. On the other hand, data's usefulness can be severely limited if it is not brought into play in a timely fashion. A classic example is test score reporting. Results from state mandated tests are frequently not available for weeks or months, giving new meaning to Parkinson's last law: Delay is the deadliest form of denial. Old data have little strategic value.

IT can vastly improve the uses of data, for both policy and practice. This can best be seen in technology's potential to strengthen accountability for students and adults.

Accountability

Accountability, like benchmarking, is not a matter of finger-pointing. To be useful, accountability systems must diagnose and prescribe. High-stakes exams are a liability if they do not encourage improvements in policy and practice. Without such improvements, they demoralize and discourage students and teachers alike. In contrast, by making scores available instantly, IT encourages everyone to work smarter. Learning from mistakes can be a powerful learning tool if feedback is immediate.

Properly conceived and implemented, accountability becomes a system improvement opportunity, not a hammer. In a performance-driven school, IT helps everyone meet academic targets. Technology applications — dynamic Web sites, e-mail, data warehouses, relational databases, analytic software and the like — make it possible to use performance data constructively. IT can change "all children can learn" from a wistful mantra to reality.

One deceptively powerful tool practically unique to IT is the capacity to pull up illustrative examples of student work that satisfy a given standard. Students and their parents should be able to see examples of first-rate work. The Achieve Web site (www.achieve.org) has begun to load examples, and other sites are not far behind.

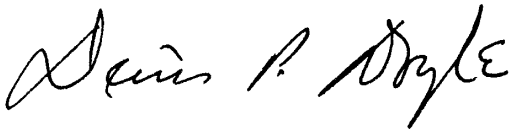
Achieving high standards is first a matter of knowing what they are. *What must I know and be able to do to earn a diploma?* Every student must be able to ask and answer this question. Teachers should ask: *What must all my students know and be able to do to earn a diploma?* Equally important: *As a teacher, what must I know and be able to do to help my students earn a diploma?*

In this quest, no tool has greater potential power than browser-based standards sites. Indexing standards language in an online database in a uniform way — known as common coding — allows users to compare standards from different jurisdictions. Common coding on the Achieve site, for example, makes it possible to compare and contrast the academic standards of 40 states and one foreign country. Linked to state assessments and lesson plans, common coding makes the next step inevitable: comprehensive links to academic and intellectual resources. *The New York Times'* lesson plan link (www.nytimes.com/learning) is an example of things to come. Dynamic Web sites will make it possible for teachers, students, board members and citizens to move from the abstract to the real world of standards-based education.

Posting school accountability data on a dynamic Web site also puts schools on firm footing with their constituencies. It becomes the education equivalent of a vendor or customer information system. Maryland offers an excellent example of a public Web site that provides comprehensive information in an easy-to-navigate format (www.mdk12.org). On the Texas state site (www.tea.state.tx.us), one can examine and download all the state's school performance data. And the Achieve Web site is hot-linked to all 50 state governors' offices and state departments of education.

The capacity to communicate easily with other parents and teachers turns the real school into a digital school. No longer are parents out of the loop: If a student comes to school saying, "The dog ate my homework," parents will be the first to know. They will have access to teachers and will be able to participate in the life of the school by volunteering to mentor students or share their expertise with teachers and administrators.

It is clear, as past is prologue, that schools will continue to reflect the demands, needs and opportunities of the larger society of which they are a part. That is their role. They may not lead change, but change they must. And the most significant change sweeping through our larger society is the information revolution. Educators should not be threatened by IT. To the contrary, they should take comfort in the fact that the information revolution is a standing vote of confidence in education. Schools are the ultimate wellspring of IT. As long as our schools embrace the technologies they make possible, they may face the future with confidence.



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Resources

Resources

The following is a representative listing of additional resources for individuals seeking information on the topics covered in this Briefing Book.

Strengthening Accountability

A-Plus Communications (1999). *Reporting Results: What the Public Wants to Know.* A companion report to *Education Week's Quality Counts '99*. Arlington, Va.: A-Plus Communications.

Breneman, David W. and William N. Haarlow (1998). *Remediation in Higher Education: A Symposium*. Washington, D.C.: Thomas B. Fordham Foundation.

Council of Chief State School Officers (1999). *State Education Accountability System Profiles*. Washington, D.C.: CCSSO.

Curran, Bridget (1999). *Focusing on Results: Towards an Education Accountability System*. Washington, D.C.: National Governors' Association.

Education Commission of the States (1999). *Education Accountability Systems in 50 States*. Denver, Colo.: ECS.

Education Week and the Pew Charitable Trusts (1999). *Quality Counts '99: Rewarding Results, Punishing Failure*. Bethesda, Md.: Editorial Projects in Education.

Fuhrman, Susan and Jennifer O'Day (1996). *Rewards and Reform: Creating Educational Incentives That Work*. San Francisco: Jossey-Bass.

Grissmer, David and Ann Flanagan (1998). *Exploring Rapid Achievement Gains in North Carolina and Texas.* Washington, D.C.: National Education Goals Panel.

Hill, Paul T. and Robin Lake (1997). *Toward a K–12 Education Accountability System for Washington State*. Seattle, Wash.: University of Washington.

Kirst, Michael W. (1998). *Improving and Aligning K–16 Standards Admissions and Freshman Placement Policies*. NCPI Technical Report #2-06. Stanford, Calif.: National Center for Postsecondary Improvement.

Ladd, Helen F., ed. (1996). *Holding Schools Accountable.* Washington, D.C.: Brookings Institution.

Linn, Robert L. (1998). *Assessments and Accountability.* CSE Technical Report 490. Los Angeles, Calif.: National Center for Research on Evaluation, Standards, and Testing.

National Alliance of Business (1998). *Hiring Smart: An Employer's Guide to Using School Records*. Washington, D.C.: NAB.

National Governors' Association (1999). "smartkids4ourfuture: toolkit." Washington, D.C.: NGA.

Watts, James A. (1998). *Getting Results: A Fresh Look at School Accountability.* Atlanta: Southern Regional Education Board.

Helping All Students Achieve

American Institutes for Research (1999). *An Educator's Guide to Schoolwide Reform.* Prepared under contract to the National Education Association, the American Association of School Administrators, the American Federation of Teachers, the National Association of Elementary School Principals and the National Association of Secondary School Principals. Arlington, Va.: Educational Research Service.

Education Trust (1999). *Dispelling the Myth: High-Poverty Schools Exceeding Expectations.* Washington, D.C.: Education Trust.

Learning First Alliance (1998). *Every Child Mathematically Proficient: An Action Plan.* Washington, D.C.: LFA.

Learning First Alliance (1998). *Every Child Reading: An Action Plan.* Washington, D.C.: LFA.

National Association of State Boards of Education (1996). *What Will It Take? Standards-Based Education Reform for ALL Students.* Alexandria, Va.: NASBE.

Schacter, John (1999). *The Impact of Education Technology on Student Achievement.* Santa Monica, Calif.: Milken Exchange on Education Technology.

U.S. Department of Education (1999). *High School Curriculum Structure: Effects of Coursetaking and Achievement in Mathematics for High School Graduates.* Washington, D.C.: U.S. Department of Education.

Improving Teacher Quality

American Federation of Teachers (1999). *Shaping the Profession That Shapes the Future: Speeches From the AFT/NEA Conference on Teacher Quality.* Washington, D.C.: AFT.

Cohen, David K. and Heather C. Hill (1998). *Instructional Policy and Classroom Performance: Mathematics Reform in California.* Ann Arbor, Mich.: University of Michigan.

Corcoran, Thomas C. (1995). *Transforming Professional Development for Teachers: A Guide for State Policymakers.* Washington, D.C.: National Governors' Association.

Darling-Hammond, Linda (1997). *Doing What Matters Most: Investing in Quality Teaching.* Kutztown, Pa.: National Commission on Teaching and America's Future.

Diez, Mary E., ed. (1998). *Changing the Practice of Teacher Education: Standards and Assessment as a Lever for Change.* Washington, D.C.: American Association of Colleges for Teacher Education.

Education Trust (1998). "Good Teaching Matters — How Well-Qualified Teachers Can Close the Gap." *Thinking K–16* Vol. 3, Issue 2. Washington, D.C.: Education Trust.

Educational Testing Service (1999). *How Teachers Compare: The Prose, Document, and Quantitative Skills of America's Teachers.* Princeton, N.J.: ETS.

Elmore, Richard and Deanna Burney (1997). *Investing in Teacher Learning: Staff Development and Instructional Improvement in Community School District #2, New York City.* Washington, D.C.: National Commission on Teaching and America's Future and Consortium for Policy Research in Education.

Ferguson, Ronald (1991). "Paying for Public Education: New Evidence on How and Why Money Matters." *Harvard Journal on Legislation* #28, pp. 465–98. Cambridge, Mass.: Harvard Student Legislative Research Bureau.

Haselkorn, David and Elizabeth F. Fideler (1996). *Breaking the Class Ceiling: Paraeducator Pathways to Teaching.* Belmont, Mass.: Recruiting New Teachers, Inc.

Fideler, Elizabeth F. and David Haselkorn (1999). *Learning the Ropes: Urban Teacher Induction Programs and Practices in the United States.* Belmont, Mass.: Recruiting New Teachers, Inc.

Hirsch, Eric, Julia E. Koppich and Michael S. Knapp (1998). *What States Are Doing to Improve the Quality of Teaching: A Brief Review of Current Patterns and Trends.* Seattle, Wash.: University of Washington Center for the Study of Teaching and Policy.

Kanstoroom, Marci and Chester E. Finn, Jr., eds. (1999). *Better Teachers, Better Schools.* Washington, D.C.: Thomas B. Fordham Foundation.

National Commission on Teaching and America's Future (1996). *What Matters Most: Teaching for America's Future.* Washington, D.C.: NCTAF.

Recruiting New Teachers, Inc. (1998). *The Essential Profession: A National Survey of Public Attitudes Toward Teaching, Educational Opportunity, and School Reform.* Belmont, Mass.: RNT, Inc.

Stevenson, Harold W. (1998). *A TIMSS Primer: Lessons and Implications for U.S. Education.* Washington, D.C.: Thomas B. Fordham Foundation.

Stigler, James W. and James Hiebert (1999). *The Teaching Gap: Best Ideas From the World's Teachers for Improving Education in the Classroom.* New York, N.Y.: Free Press.

Thomas B. Fordham Foundation (1999). *The Teachers We Need and How to Get More of Them: A Manifesto.* Washington, D.C.: Thomas B. Fordham Foundation.

U.S. Department of Education, Office of Educational Research and Improvement, National Center for Education Statistics (1999). *Teacher Quality: A Report on the Preparation and Qualifications of Public School Teachers.* Washington, D.C.: U.S. Department of Education.

U.S. Department of Education (1998). *Promising Practices: New Ways to Improve Teacher Quality.* Washington, D.C.: U.S. Department of Education.

Diversifying the Delivery System

Cheung, Stella, Mary Ellen Murphy and Joe Nathan (1998). *Making a Difference? Charter Schools, Evaluation and Student Performance.* Minneapolis, Minn.: Center for School Change, Hubert H. Humphrey Institute of Public Affairs at the University of Minnesota.

Finn, Jr., Chester E., Bruno V. Manno, Louann A. Bierlein and Gregg Vanourek (1998). "How Charter Schools Are Different: Lessons and Implications From a National Study." *Phi Delta Kappan,* Vol. 79, No. 7. Bloomington, Ind.: Phi Delta Kappa.

Hill, Paul T. (1997). "Accountability Under Charters and Other School-Centered Reforms." *Advances in Educational Administration* Vol. 5, pp. 191–207. Stamford, Conn.: JAI Press, Inc.

Nathan, Joe (1996). *Charter Schools: Creating Hope and Opportunity for American Education.* San Francisco, Calif.: Jossey-Bass Publishers.

National School Boards Association (1998). *Careful Comparisons: Public and Private Schools in America.* Alexandria, Va.: NSBA.

Shokraii Rees, Nina and Sarah E. Yossef (1999). *School Choice 1999: What's Happening in the States.* Washington, D.C.: Heritage Foundation.

U.S. Department of Education (1999). *The State of Charter Schools: Third-Year Report.* Washington, D.C.: U.S. Department of Education.

Wells, Amy Stuart (1993). *Time to Choose: America at the Crossroads of School Choice Policy.* New York, N.Y.: Hill and Wang.

Sustaining Public Support

Annenberg Institute (1998). *Reasons for Hope, Voices for Change.* Washington, D.C.: Annenberg Institute.

Business Roundtable (1998). *Building Support for Tests That Count: A Business Leader's Guide.* Washington, D.C.: BRT.

Business Roundtable (1999). *Communications About Standards, Assessments and Accountability.* Washington, D.C.: BRT.

Farkas, Steve, Ann Duffett, Joanna McHugh and Jean Johnson (1999). *Reality Check '99*. New York: Public Agenda.

Johnson, Jean (1995). *Assignment Incomplete: The Unfinished Business of Education Reform*. New York: Public Agenda.

Johnson, Jean and John Immerwahr (1994). *First Things First: What Americans Expect from the Public Schools*. New York: Public Agenda.

Judy, Richard W. and Carol D'Amico (1997). *Workforce 2020*. Washington, D.C.: Hudson Institute.

Kernan-Schloss, Adam and Andy Plattner (1998). "Building Public Support for Public Schools." *Educational Leadership*. Alexandria, Va.: *Educational Leadership*.

National Education Goals Panel (1998). *Talking About Tests: An Idea Book for State Leaders*. Washington, D.C.: NEGP.

Public Education Network (1999). *Lessons From the Field: Helping Families Improve Local Schools*. Washington, D.C.: PEN.

Steinberg, Laurence (1996). *Beyond the Classroom: Why School Reform Has Failed and What Parents Need to Do*. New York, N.Y.: Simon & Schuster.

Additional Resources

ACT, Inc. and the Council of the Great City Schools (1999). *Gateways to Success: A Report on Urban Student Achievement and Course-Taking*. Washington, D.C.: Council of the Great City Schools.

American Federation of Teachers (1998). *Making Standards Matter 1998*. Washington, D.C.: AFT.

American Federation of Teachers (1998). *Raising Student Achievement: An Internet Guide for Redesigning Low-Performing Schools*. Washington, D.C.: AFT.

Committee on Economic Development (1997). *Connecting Inner-City Youth to the World of Work*. New York, N.Y.: CED.

Committee on Economic Development (1998). *The Employer's Role in Linking School and Work*. New York, N.Y.: CED.

Council of the Great City Schools (1996). *Becoming the Best: Standards and Assessment Development in the Great City Schools*. Washington, D.C.: CGCS.

Doyle, Denis P. and Susan Pimentel (1997). *Raising the Standard: An Eight-Step Action Guide for Schools and Communities*. Sherman Oaks, Calif.: Corwin Press.

Education Week and the Pew Charitable Trusts (1998). *Quality Counts '98: The Urban Challenge*. Washington, D.C.: Editorial Projects in Education.

Elmore, Richard F. and Robert Rothman, eds. (1999). *Testing, Teaching, and Learning: A Guide for States and School Districts*. National Research Council Committee on Title I Testing and Assessment. Washington, D.C.: National Academy Press.

Finn, Jr., Chester E., Michael J. Petrilli and Gregg Vanourek (1998). *The State of State Standards*. Washington, D.C.: Thomas B. Fordham Foundation.

Hirsch, Jr., E.D. (1996). *The Schools We Need and Why We Don't Have Them*. New York, N.Y.: Doubleday.

Murnane, Richard J. and Frank Levy (1996). *Teaching the New Basic Skills*. New York, N.Y.: The Free Press.

Ravitch, Diane, ed. (1999). *Brookings Papers on Education Policy*. Washington, D.C.: Brookings Institution.

Tucker, Marc and Judy B. Codding (1998). *Standards for Our Schools: How to Set Them, Measure Them, and Reach Them*. San Francisco, Calif.: Jossey-Bass Publishers.

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