This report is the final report of the K-16 Education Reform Initiative of the Business-Higher Education Forum K-16 Task Force. Beginning in 1998, the Task Force and the full Forum heard from a variety of education and business leaders, studied reports and research findings, surveyed higher education and business leaders, and conducted interviews and meetings with K-12, higher education, and business leaders. The Task Force observed three characteristics of existing education partnerships: (1) partnerships are more likely to unite business and schools or higher education and schools than to involve all three sectors in cooperative efforts; (2) partnerships projects with K-12 are often unconnected, duplicative, and may even be competitive; and (3) many projects have goals that are not directly related to student achievement. The focus of this report is on tripartite partnerships that involve K-12 education, higher education, and business, moving to a K-16 emphasis that strengthens the connections between different levels of education. Some exemplary partnerships are described, and 10 essential elements for effective partnerships are identified. (SLD)
Sharing RESPONSIBILITY

How Leaders in Business and Higher Education Can Improve America's Schools
The Business-Higher Education Forum, a partnership of the American Council on Education and the National Alliance of Business, is a membership organization comprised of selected chief executives from major American corporations, colleges, universities, and museums. The purposes of the Forum are to identify, review, and act on selected issues of mutual concern; to enhance public awareness of these concerns; and to help guide the evolution of cooperation between corporations and institutions of higher education, while preserving their separate functions. Over the years, the Forum has addressed such critical issues as international economic competitiveness, education and training, R&D partnerships, science and technology, and global interdependence. Forum Chair: L. Dennis Smith, President, University of Nebraska; Forum Vice Chair: Edward B. Rust, Chairman and Chief Executive Officer, State Farm Insurance Companies. For more information, contact B-HEF, One Dupont Circle NW, Washington, DC 20036; tel: 202-939-9345; fax: 202-833-4723; Internet: www.bhef.com.

The American Council on Education (ACE) is the nation's coordinating association of higher education organizations. ACE is dedicated to the belief that equal educational opportunity and a strong higher education system are cornerstones of a democratic society. ACE maintains both a domestic and an international agenda. Seeking to advance the interests and goals of higher and adult education in a changing environment, ACE provides leadership and advocacy on important issues, represents the views of the higher and adult education community to policy makers, and offers services to its members. ACE President: Stanley O. Ikenberry; ACE Chair: Michael F. Adams, President, University of Georgia. For more information, contact ACE, One Dupont Circle NW, Washington, DC 20036; tel: 202-939-9300; fax: 202-833-4766; Internet: www.acenet.edu.

The National Alliance of Business (NAB) is the only national, nonprofit, business-led organization focused solely on human resource issues. The Alliance and its member companies are leading efforts to improve American education, build bridges from school to work, and expand lifelong learning opportunities for all workers, as well as implement workforce development and job placement systems that meet the needs of employers and job seekers. NAB President and Chief Executive Officer: Roberts T. Jones; Chair: Edward B. Rust, Chairman and Chief Executive Officer, State Farm Insurance Companies. For more information, contact NAB, 1201 New York Avenue NW, Suite 700, Washington, DC 20005; tel: 202-289-2888; fax: 202-289-1303; Internet: www.nab.com.
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Several key themes emerged in these conversations with public school, higher education, and business officials.
The K-16 Education Reform Initiative is the work of a Business-Higher Education Forum K-16 Task Force, co-chaired by Charles B. Reed, Chancellor of The California State University, and Paul W. Chellgren, Chairman of the Board and Chief Executive Officer of Ashland Inc.

Beginning in 1998, the Task Force and the full Forum heard from a variety of education and business leaders in its national meetings; studied reports, findings, and research performed by others on education improvement and partnerships; surveyed higher education and business leaders; and conducted numerous interviews and meetings with K-12, higher education, and business leaders.

Several key themes emerged in these conversations with public school, higher education, and business officials:

First: The coordination of efforts and collaboration is an essential strategy.

Second: Partnership efforts should focus more clearly on issues directly related to boosting student achievement.

Third: Partnerships themselves should be held more accountable for the results of their efforts.

Fourth: Increased higher education involvement in a broad array of K-16 issues is necessary.

Case studies illustrating these four themes appear throughout this document.

This final report demonstrates that student achievement has been enhanced by all three sectors—business, higher education, and K-12—working together, with strong commitments by all parties still needed to strengthen their ability to face the challenges of a new decade.
The extraordinary challenge of helping all children learn at high levels demands an increased share of responsibility by business, higher education, and others outside the public school system.
Believing that the improvement of American education is one of the most important issues facing our nation, we enthusiastically came together in 1998 to establish a Business-Higher Education K–16 Task Force.

Our charge was to recommend action that could improve schooling, from pre-kindergarten through graduate school, to make our students and workforce more ready for success in the new economy of a new century. Our study strongly suggests that those of us in positions of responsibility in business and higher education can do much more to lead and support education renewal in the United States.

This pressure is necessary now if we are to achieve the American education renewal that a new century demands. A decade of action by policy makers at federal, state, and local levels and the insistent voices of business and civic leaders have produced a remarkable consensus supporting standards-based reform, with its accompanying pressure on both children and adults in the system. Now the focus shifts from establishing the framework to an even more difficult and urgent task—seeing that all children do indeed learn at higher levels.

Fortunately, we know much more about how to raise student achievement now than in 1983 when the National Commission on Excellence in Education, established by the U.S. Department of Education, issued A Nation at Risk, which articulated the concern that inferior education threatened U.S. economic potential. Yet we also know that new, more effective teaching and learning strategies developed by researchers and practitioners are inconsistently or halfheartedly applied, or sometimes abandoned too soon in favor of the latest quick fix. Often, effective strategies compete with a welter of other education priorities, each advocated by insistent, committed constituencies.

We address this inconsistency, and the accompanying lack of coordination, in this report. We do so with a simple message: **The extraordinary challenge of helping all children learn at high levels demands an increased share of responsibility by business, higher education, and others both inside and outside the public school system.**

After all, if we expect all children to learn more, we should expect the same of ourselves: to learn more about how we can match increased support with the higher standards we demand. If we expect students to assume responsibility, work together, pay attention, tackle the tough subjects, do their homework, not blame others, not
give up, and not make excuses, then we should expect the same of ourselves. If it is unacceptable for our children to give halfhearted efforts and avoid the hard work necessary to succeed in school, then it is equally unacceptable for adults demanding improvement to escape their share of the effort. That means we should work harder—cooperatively and across sectors—to align our improvement efforts behind strategies developed by all stakeholders.

So, as members of a task force comprised of corporate chief executives and college and university presidents and chancellors, we ask our colleagues, policy makers, and other leaders interested in education improvement: How well would we perform if we were tested on the effectiveness of our efforts to improve student achievement?

We will score higher if we accept our share of responsibility and come together more effectively, in partnership, to design, support, and sustain systemic education improvement. We will achieve passing scores when we eliminate the clutter that sometimes creeps into our involvement in education improvement, focusing instead on the most important goals. We will pass when we reduce inconsistent messages about what we value most so that we clarify, rather than confuse, expectations for teachers, students, and schools. Finally, we will pass our test when we work together to bring education improvement up to scale, rather than building small islands of excellence encircled by a sea of mediocrity.

In our advocacy of partnerships, we do not call for a one-size-fits-all approach to collaboration. Indeed, we propose the opposite: Unique state and local conditions, policy environments, and major challenges should determine the course of partnerships. But in the process of developing local and state plans, we believe that we should keep our focus on scaling up the most promising education improvements to achieve broader progress.

We do not intend that the collaborations we advocate replace the thousands of school/community college/university and school/business projects and programs operating today. Most, we believe, provide real value to schools and students. A thousand flowers will and should bloom—but, we hope, within a general strategic framework that helps the projects add up to more than the sum of their parts.

What we deeply believe is that education improvement efforts that fail to include business, K–12, and higher education miss an enormous opportunity to leverage the unique strengths of each of these sectors. Fortunately, we see clear evidence that leaders of the three sectors are more prepared than ever to collaborate. We are particularly encouraged that colleges and universities are becoming more heavily engaged in systemic education improvement, from pre-kindergarten through graduate school and continuing education.
The new generation of collaborations we advocate should build on the groundbreaking work of business organizations that propelled the standards movement throughout the 1990s. Their powerful persistence helped the nation achieve today's consensus about standards-based reform. Their continued involvement, then, will strengthen the drive to raise achievement through higher standards.

Similarly, we applaud the far-sighted university and K-12 leaders who have formed important partnerships to develop a more seamless K-16 education system. We encourage increased involvement in these established collaborations, such as the hundreds of business-education coalitions in the network of the Business Coalition for Education Reform, the K-16 councils assisted by The Education Trust, and the K-16 network of the National Association of System Heads.

More of us must follow those examples to navigate successfully through this perilous time for public education, as we determine whether the current system can fulfill the dream of a quality education for all, or whether that system will dissolve into a radically different structure, with uncertain success.

Finally, we issue a challenge to leaders in the three sectors, to business professionals, to college and university presidents and chancellors, and to school superintendents and school boards:

If no systemic collaboration exists in your city or state, consider the benefits of forming one. If one exists but can be made to work better, involve all three sectors in discussing community aspirations for education and workforce development and in developing a long-term strategy to reach those goals. Above all, engage yourselves in substantive conversations with leaders in the other sectors about how to improve education achievement.

Our Task Force is convinced that the educational challenges of the new century demand that each of us assume an increased share of responsibility for achieving success—and that we hold ourselves accountable for results. We hope our colleagues throughout the nation will join us in a concerted campaign to meet the challenge.

K-16 TASK FORCE MEMBERS

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Today's large challenges demand more comprehensive systemic approaches, and leaving out either businesses or colleges and universities may limit the effectiveness of partnerships to improve elementary and secondary schools.
The idea behind this report is simple, although its execution is difficult. We propose to strengthen the best education improvement work now underway, through a new generation of focused, strategic, and sustained partnerships that elicit the best efforts from leaders in business, higher education, and K-12 schools.

Education partnerships are not new, of course. Untold thousands exist in every corner of the nation. But despite promising results from many, most of these alliances fail to reach a scale that matches the size of our education challenges.

Through its work, the K-16 Task Force observed three key characteristics of existing education partnerships:

I. Relatively few unite all three sectors behind system-changing goals directly related to student achievement. Instead, school partnerships most often fall into two distinct categories: business/schools and higher education/schools. This division is a holdover from earlier generations of education partnerships. Today's large challenges demand more comprehensive systemic approaches, and leaving out either businesses or colleges and universities may limit the effectiveness of partnerships to improve elementary and secondary schools.

II. Often, partnership projects with K-12 are unconnected, duplicative, and sometimes even competing. The level of activity in schools reflects an admirable entrepreneurial spirit, but as an organization of corporate chief executives and college and university presidents, we are convinced that leadership must provide a clear focus to achieve strategic goals.

III. Many of the thousands of projects have goals not directly related to student achievement, and few include methods to measure their effectiveness on student learning. This is the case despite the fact that new state assessments measuring achievement, and consequences for the scores on those assessments, are beginning to dominate the attention of K-12 schools.
So what is different about this report's advocacy of partnerships? It is the focus on tripartite responsibility for measurable increases in student achievement by leaders in K–12, business, and higher education, through systemic approaches that affect students on a large scale. This focus attempts to answer the question asked by the college presidents and corporate executives in the Business-Higher Education Forum: “What more can I and my institution do to improve learning for American students?”

The K–16 concept is the starting point for the answer—although that term itself is too limited for the scope of action necessary. The challenge is, in part, “K–16”—that is, strengthening connections between different levels of education and encouraging a larger role for higher education in education renewal efforts. For higher education, the question is not merely “What can I do to help K–12 education?” Effective, system-changing collaboration requires that colleges and universities be as willing as K–12 schools to make appropriate changes in their functioning.

Yet in today's environment, K–16 collaborations among sectors of education, while necessary, are not sufficient. Business leaders must play an essential role. Motivated by both altruism and concerns about their ability to employ enough highly skilled workers, these business leaders bring important perspectives to education renewal efforts. Their work should be aligned with that of educators to make large-scale improvements.

We also explicitly recognize that three-way collaborations among K–12, higher education, and business will not succeed without the active support and aid of public officials—governors, mayors, legislatures, state school boards, and others. Most importantly, each sector must participate in developing and implementing a strategic plan that joins their best efforts.

We suggest, then, a new generation of collaborations among schools, colleges, universities, businesses, and communities—inclusive, long-term efforts to bring forth the best of all sectors.

We purposely avoid prescribing specific remedies for different states and areas in different stages of education renewal. We strongly believe that prescriptions must meet local conditions and needs. Through collaboration, all sectors involved will share development and ownership of strategic and operational reform plans. Without the involvement of each sector, progress toward education renewal will suffer.
A Coordinated Strategy in North Carolina

In North Carolina, a clear set of goals and tightly knit strategies to meet them flow from the governor and other policy makers into community colleges, universities, and K-12 schools, leading to nationally recognized achievement.

The state's story is characterized by five key elements: (1) strong gubernatorial leadership; (2) state Department of Education and legislature committed to the same goals; (3) continuity in reform efforts; (4) formal organizational structures; and (5) full integration of both two-year and four-year institutions of higher education into reform efforts.

"The alignment of resources is the result of Governor Jim Hunt's leadership," said John Dornan, Executive Director of the business-supported North Carolina Public School Forum. Dornan praised the formation in 1993 of the Education Cabinet, the state's K-16 reform vehicle, chaired by the governor and including the president of the University of North Carolina (UNC), the president of the community college system, and the elected state superintendent of schools. The cabinet, other official organizations, and business groups create "a web of interlocking groups that impact everything in education improvement," according to Dornan.

Each cabinet member developed specific steps to address the state's education goals, a "First in America" strategy announced by Hunt in 1999. UNC President Molly Broad, for example, formulated a nine-point university strategy tied to the broader state goals. "Higher education was on the sidelines from A Nation at Risk until three or four years ago," Dornan said. But now K-16 reform is a clear priority for Broad and the UNC system.

A dynamic standards-based strategy "makes it safe for universities to step up to K-16 improvement in a major way," maintained UNC Vice President Charles Coble, whose work for Broad is dedicated entirely to K-16 improvement efforts. The relationships among the partners are characterized by constant discussion of how to align, rather than whether to get together, Coble said. The result is "a flow of collaboration, formal and informal."

With Hunt having left office in 2000, the post-Hunt era may present challenges that the state's business community is best positioned to address. Dornan said the state education strategy is "depoliticized but fragile. The business community will be a big factor in sustaining it. Come back in two years and see if we're able to sustain it."

For more information about K-16 partnership efforts in North Carolina, contact John Dornan, Public School Forum (919) 781-6833; or Charles Coble, University of North Carolina General Administration (919) 962-4596.
The assumption of greater responsibility by college and university presidents and chancellors in improving teacher education programs is one of three important roles that higher education leaders should play in the K–16 movement.
Teacher Quality: Roles for Collaborations and Colleges

This K-16 project was not conceived as another call for action on teacher quality issues or teacher education programs at America's colleges and universities. Many organizations, including the American Council on Education, have addressed these issues convincingly in recent years. But the inescapable conclusion from ACE, other entities, and recent research is that no systemic education improvement matters more than ensuring a well-qualified teacher for every student in every classroom. Research in Tennessee, for example, shows that teachers have "astonishingly large effects" on student achievement, according to ACE's report, To Touch the Future: Transforming the Way Teachers Are Taught.

Thus our advocacy of partnerships would be hollow without paying special attention to the potential of strategic collaborations to improve the recruitment, preparation, retention, in-service training, and compensation of the nation's education workforce—both teachers and principals.

As we discuss below, the assumption of greater responsibility by college and university presidents and chancellors in improving teacher education programs is one of three important roles that higher education leaders should play in the K-16 movement. And as we also discuss below, the challenge of providing a universally high-quality education workforce far exceeds the ability of higher education to accomplish such a goal alone.

A complex web of factors contributes to the quality of teachers. Among them are compensation; the lack of a national market for teachers; the lack of portability of retirement investments; the respect in which teachers are held in American society; the willingness of the best students to enter the profession; working conditions, including assignments, mentoring, and induction programs; and professional development programs. Of course, the revenue dedicated to K-12 and higher education by state and local governments affects many of these issues, as well.

Without systematic consideration of each of these factors—best accomplished by a combination of K-12, higher education, and public officials, with the urging and support of business leaders—the best-intended efforts to address teacher quality will fail to achieve improvements on a large scale. Thus we believe that addressing teacher quality is one of the issues that lends itself to comprehensive collaboration among public officials, community colleges, universities, K-12 systems, and business leaders.
Systemic reform... means embedding into schools the most important changes that improve teaching and learning.
A Focus on Three-Way, Systemic, Scalable Collaborations

It is not only large, system-changing, three-way collaborations focused on measurable increases in students’ academic achievement that add value to education, of course. K–12 schools can and must do much on their own. Parents, community colleges, four-year institutions, businesses, civic organizations, legislatures, and other public officials all make their own singular contributions. Projects that make a difference for even a small number of students deserve to be recognized for their contribution to achieving overall education goals. And we recognize that variations in learning styles and the pace of learning dictate that different (but coordinated) efforts should be in place, even within a single school, to help all students achieve at higher levels.

But we make a distinction between projects and strategic collaborations with large goals. The latter involve multiple stakeholders behind a common strategy that may result in many different projects, each of which plays a role in achieving the overall goal.

This is the goal of systemic reform, which we define as implementing a series of coordinated actions affecting a number of elements of the education system. This does not mean tackling every conceivable problem in a hodgepodge of activity. It means embedding into schools the most important changes that improve teaching and learning. When those changes are infused into the classroom, all students are affected—and thus reforms are more likely to “go to scale” and enhance every student’s opportunity to learn.

A SPECIAL NOTE ABOUT “SCALE”
Most communities in the United States today can point to success stories in individual schools or cohorts of students. Some entire school districts are achieving enough success with their reform efforts to substantiate hopes that all children will learn at higher levels when faced with higher expectations and appropriate assistance.

But we know from international and national tests that on the whole, we have not yet succeeded with most American students. Pockets of excellence serve as examples of what can be done, but such successful efforts affect too few students. Thus the nation’s task is to “go to scale” with substantial improvement—to reach all students, rather than a fortunate few.
This task is enormous, of course. The National Science Foundation's evaluation of its Statewide Systemic Initiatives (SSI) Program to improve teaching in mathematics and science found that the impact was positive but "limited because no SSI was able to 'go to scale' and intensively affect all teachers statewide . . . How to scale up so that substantial improvements . . . are evident in tens and hundreds of classrooms across the United States is a difficult issue."

But we must resolve that issue if we are to reach our national aspiration: that all children learn at higher levels, particularly those trapped in the achievement gap that engulfs some minority students.

A Formal K–16 Structure in Maryland

As in all states, Maryland's education improvement strategy focused initially on K–12 improvement. But higher education followed quickly with the formation in 1995 of the Maryland Partnership for Teaching and Learning K–16, a council involving the Department of Education, the University of Maryland (UM) System, and the Maryland Higher Education Commission. Its goal is shared responsibility, supported by a belief in the strength of collective strategies.

For UM Chancellor Donald Langenberg, who has advocated formal K–16 structures through the National Association of System Heads and The Education Trust, statewide collaborations are essential. Partnerships of one faculty member with one school or one university and one school "don't exist on a scale adequate to the problem."

The work of colleges and universities draws approval from June Streckfus, Executive Director of the Maryland Business Roundtable for Education, a coalition of more than 100 employers. But there is a long way to go, she said: Education faculty still show "a lack of understanding of new reform structures" and an inability to translate education research in a way that is useful to teachers.

Business, meanwhile, has helped create "one of the strongest political bases for reform in the country," Streckfus added. But while "a lot of business people really get it," more focused business involvement must increase. "Many are still doing a lot of feel-good partnerships and not getting a lot of measurable results."

For more information about Maryland's partnership activities, contact June Streckfus, Maryland Business Roundtable for Education (410) 727-0448 or Nancy Shapiro, University of Maryland System (301) 445-2797.
The Power of Collaboration

We believe ambitious collaborations involving business, higher education, and public schools are more likely to reach a larger scale. These partnerships produce four powerful benefits.

I. GENERATING A COMPREHENSIVE, COHERENT STRATEGY
The varying perspectives of multiple partners enrich the analysis of the problem, produce better strategic plans, and help partners focus their resources on solutions. As Houston Superintendent Rod Paige told us, “The complexity of the solution must match the complexity of the problem,” and that requires the involvement of many partners.

“School reform efforts of the past 15 years, even when on target, have operated in only a piecemeal fashion, attempting to improve only part of the system, part of the problem,” according to James Guthrie, Professor of Public Policy and Education and Director of the Peabody Center for Education Policy at Vanderbilt University. “This lack of a system-wide school reform strategy has precluded greater success.”

II. ACHIEVING CRITICAL MASS IN REFORM EFFORTS
Collaborations involving only two of the sectors are less likely to achieve the kinds of changes in systems necessary to reach the goal of all children learning at higher levels. The participation of both business and higher education leadership is essential, inasmuch as those two institutions are the destinations of all those emerging from the K–12 system.

“Schools will not be able to do the job without a focused, energetic campaign on the part of everyone: community, business and university partners, parents, and especially students themselves,” said Boston School Superintendent Thomas Payzant.

The briefing book for the 1999 National Education Summit said: “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 . . . . 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.”
III. AVOIDING "PROJECTITIS"

Three-way collaborations are more likely to link related projects in order to leverage resources, rather than to allow piecemeal, duplicative, or even competing projects.

Education experts describe the problem of too many projects in various ways. Payzant warned of "projectitis." Stanford Professor Michael Kirst observed that many related school projects exist "in splendid isolation." A partnership director in Seattle called these projects "random acts of kindness" bestowed on schools, while Milton Goldberg, Executive Vice President of the National Alliance of Business called them "random acts of innovation." Ted Dooley of the Boston Compact cited the opportunity costs of adding another project to schools' agendas.

Many of these projects may be good but aren't large enough, or they consume too much of the limited resources of time, energy, and money available to public schools. For that reason, education collaboration leaders in our site visits to Kentucky, Boston, and Houston, in particular, actively discourage projects by faculty or businesses that do not relate directly to raising student performance.

Payzant, facing the challenge of a high-stakes state assessment early in the 1990s, expressed this idea most forcefully: "We can no longer afford the luxury of partnerships, projects, good will opportunities, or experiences that are not squarely aimed at instructional improvement." He and Boston Federal Reserve Bank President Cathy Minehan, Chairman of the Boston Compact, have written that "without a framework to focus our efforts, all of this support, combined with the growing list of reform initiatives, could prove chaotic and distracting."

"At the end of the day, there has to be a bottom line for partnerships—and that's student achievement," Payzant told us. That message is being heard clearly by others in Boston. Northeastern University School of Education Dean James W. Fraser noted that his faculty were involved in projects in about 80 of the city's 120 public schools. "We need to focus our efforts and we need to hold higher education and business partners accountable for real and measurable progress in schools to which we make a commitment," he said.

Three-way collaborations are more likely to link related projects in order to leverage resources, rather than to allow piecemeal, duplicative, or even competing projects.
Working Together over the Long Haul in Kentucky

When the state supreme court declared Kentucky's school system unconstitutional in 1989, the business community provided much of the leadership to produce a new system that is beginning to show results. The fact that it has taken a decade to measure significant gains in student achievement illustrates one essential element of education renewal: the necessity of perseverance over the long haul.

Kentucky leaders give themselves high marks for tackling tough issues. But they acknowledge that sustaining momentum through periods of impatience is an ongoing challenge. That is one of the goals of the business-supported Prichard Committee for Academic Excellence and the Partnership for Kentucky Schools, a collaboration named Business Coalition of the Year by the National Alliance of Business in 1998.

Another major challenge is engaging higher education more fully in reform efforts. The state needs "more demonstrable leadership from higher education," including the use by college and university presidents of "their huge bully pulpit," said Bob Sexton, Director of the Prichard Committee. That engagement is beginning through a new K-16 council involving the state Department of Education and the higher education coordinating board.

For more information about education reform in Kentucky, contact Carolyn Witt-Jones, the Partnership for Kentucky Schools (606) 455-9595, or Robert Sexton, Prichard Committee for Academic Excellence (606) 233-0760.

IV. DEALING WITH "IT'S NOT MY JOB"

Some challenges are cross-functional and require these three partners and others to play a role. For example, responsibility for ensuring a well-qualified teacher in every classroom does not reside in a single institution. No one college or university has sole responsibility for the quality of newly educated teachers, only for the small piece of the whole that they produce. Even higher education collectively is not responsible for the conditions of new teachers' certification, assignments, induction programs, professional development, compensation, or other factors that affect the quality of the education workforce. Local school districts, state departments of education, legislatures, and others must contribute significant pieces to the complex goal.

As a consequence, often no one has the job to devise and implement a comprehensive local or state plan to deal with providing a sufficient number of quality teachers, teaching subjects in which they are well-qualified, in schools where they're needed. But when one sector or a combination of sectors assume the leadership, a comprehensive plan can be devised for a complex systemic issue, with appropriate roles for each collaborator.
Throughout the work of the Task Force, we heard leaders in all sectors express a strong desire for colleges and universities to step up their involvement in K–16 renewal.
The Need for More Higher Education Involvement

Throughout the work of the Task Force, we heard leaders in all sectors express a strong desire for colleges and universities to step up their involvement in K–16 renewal—although that message usually was accompanied by the recognition that higher education is more accepting of the K–16 challenge than ever before.

In states such as North Carolina, Maryland, and Texas, for example, the directors of the business/K–12 organizations now praise higher education’s involvement, or at least those institutions and systems that have made K–16 renewal a high priority.

But the urging of more general higher education leadership and strategic action was evident. A key challenge in one state, the director of a business coalition said, is “how to have more demonstrable leadership from higher education,” which is not a fully effective partner in preparing teachers or improving schools in other ways. He urged university presidents to use their “huge bully pulpit” on behalf of K–16 reform. A big-city mayor said that “universities play around the edges” of school improvement. A superintendent of schools added that “the job of higher education is not to stand on top of the mountain and criticize, but to come off the top of the mountain to help us.”

Their statements support the view of observers who believe that higher education has been slow to warm to the task of K–16 reform. Their case goes far behind the obvious understanding that college students arrive at postsecondary institutions bringing with them both the strengths and the weaknesses (and often the need for remediation) from their K–12 experiences.

For example, Task Force member Donald Langenberg, Chancellor of the University of Maryland, has written: “Although we in higher education are very skillful at ignoring the obvious, it is gradually dawning on some of us that we bear a substantial part of the responsibility for this sad situation [the state of K–12 education].” Kati Haycock, Director of The Education Trust, said, “Higher education has been left out of the loop and off the hook. . . . Despite its obvious stake in the K–12 effort . . . higher education provided shockingly little support.”
But times are changing in higher education, and positive signs reveal more aggressive higher education involvement in three K–16 roles:

I. IMPROVING TEACHER EDUCATION PROGRAMS

At a minimum, colleges and universities should focus on teacher education programs in their K–16 improvement efforts. As ACE’s To Touch the Future report said, “College and university presidents must take the lead in moving the education of teachers to the center of the institutional agenda. Decisive action by college and university presidents is essential if American higher education is to fulfill its responsibilities.”

The level of teacher education program improvement activities has accelerated since the 1996 report, What Matters Most: Teaching and America’s Future, issued by the National Commission on Teaching and America’s Future, chaired by Governor James B. Hunt Jr. of North Carolina. Two-thirds of college and university presidents responding to a Task Force survey indicated that they had experienced external pressure—from governors, legislatures, governing or coordinating boards, and superintendents—to improve teacher education. More than 80 percent said their institutions had changed teacher education programs significantly in the last few years, and more than 60 percent anticipated making other major changes in the years ahead. Yet results of that activity are not yet perceived as sufficient to the challenge.

TO STIMULATE FURTHER ACTION, TO TOUCH THE FUTURE OUTLINED THESE 10 ACTION STEPS FOR COLLEGE AND UNIVERSITY PRESIDENTS:

1. Take the lead in moving teacher education to the center of their institutional agendas.
2. Clarify and articulate the strategic connection of teacher education to the missions of their institutions.
3. Mandate a campus-wide review of the quality of their institutions’ teacher education programs.
4. Commission rigorous periodic, public, and independent appraisals of the quality of their institutions’ teacher education programs.
5. Require that education faculty and courses are coordinated with arts and sciences faculty and courses.
6. Ensure that teacher education programs have the equipment, facilities, and personnel necessary to educate future teachers in the uses of technology.
7. Advocate graduate education, scholarship, and research in teacher education.
8. Strengthen interinstitutional transfer and recruitment processes.
9. Ensure that graduates of teacher education programs are supported, monitored, and mentored.
10. Speak out on issues associated with teachers and teaching and join other opinion leaders in shaping public policy.
II. USING THE "BULLY PULPIT"

Increasingly, college and university leaders are recognizing a broader responsibility for engaging in the work of K–16 reform. The ACE President's Task Force on Teacher Education, for example, urged university leaders to step up their leadership on education reform issues:

"Presidents have a special responsibility and opportunity to build alliances with external constituencies and to develop stronger public support for learning at every level by every sector in the society. To fulfill this responsibility, presidents need to be visibly engaged, vocal spokespersons and strong public leaders in the field of education. Presidents can forge and reinforce strong ties with the schools, with state departments of education, with public policy makers, and with business leaders; they can write opinion pieces for the newspapers; and they can appear on broadcast talk and news programs. Most college and university presidents enjoy the confidence of the public and have a visible platform from which to speak. On the issues of teacher education, high-quality schools, and the role of learning in our society, presidents need to be heard."

Richard McCormick, President of the University of Washington, called for nothing short of a new social compact between universities and society. "If there ever was a time when higher education held itself apart from the broader educational system—afool and elite—that time has passed. For several reasons, we no longer have the luxury of just minding our own educational business. First, there is the pressure of widespread public expectations that higher education will help with K–12 reform . . . . The public is right to ask. As a matter of citizenship, universities do have an obligation to help make the country's entire educational system the best it can be." Additionally, McCormick has written, "The public research university [is] a natural partner in helping to solve the challenges facing K–12 education. And I believe that this particular mission is at the core of the research university's new social compact.”

Similarly, Ira Harkavy, Associate Vice President and Director of the Center for Community Partnership, University of Pennsylvania has urged colleges and universities to “rank among their highest priorities (indeed perhaps their highest priority) helping to create the local coalitions needed to establish, develop, and maintain school community university partnerships.” Colleges and universities are not merely in a city or state, but of them as well, and the destinies of town and gown are inextricably linked.
III. LINKING HIGHER EDUCATION ADMISSIONS AND OTHER PRACTICES TO K–12 STANDARDS AND ASSESSMENTS

This role is perhaps the most difficult and complex for higher education. Education researcher Michael Kirst explained the problem this way: “While educators and policy makers share the common goal of improving student performance, they often act in isolation; thus, efforts are sometimes conflicting or duplicated, and often certain needs are never addressed . . . . The current organization of secondary schools and universities is such that communication between levels is often difficult, if not impossible . . . . The lack of compatibility between K–12 and higher education . . . sends vague and confusing signals to students about what is required to succeed at colleges and universities.” Or, as The Education Trust asked, “How could the K–12 system provide students with meaningful incentives to work hard to meet the new standards if most colleges continued to admit them no matter what?”

Governors and corporate leaders at the 1999 National Education Summit addressed the linkage in briefing materials. “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 . . . . Now it is time for higher education to follow [the business sector’s example] by connecting college admissions with performance on states’ new high school assessments.”
New Commitments from Public and Private Higher Education in Texas

Education reform in Texas has followed a path similar to that of other leaders in education renewal: a response to A Nation at Risk in 1983, the formation of a strong business organization to promote change several years later, adoption of a standards strategy, and now increased attention to the involvement of higher education.

The key to success in both Texas and North Carolina, a Rand Corporation study reported in 1998, is a sustained, coordinated policy environment established with strong business and community support. "Ongoing business support in both states has been an important factor in promoting this continuity."

In Texas, business leadership comes in part from the Texas Business and Education Coalition (TBEC). A decade after its founding, TBEC is focusing on closing the achievement gap and leading what Executive Director John Stevens calls "a cultural shift in which we will prepare virtually all kids to continue their education after high school."

New K–16 commitments by the University of Texas, Texas A&M, Rice University, and the University of Houston, among others, strengthen the state’s efforts. "They are working much stronger with K–12 than ever before," Stevens said. "We are starting a very long train, establishing formal structures, and improving the flow of education about what will be needed for success in college."

Meanwhile, constant turnover of corporate leaders, through retirements, reassignments, and mergers, provides an ongoing challenge to sustain business leadership in education improvement. "We’re consciously making a big effort to re-engage business leaders," Stevens said.

For more information about K–16 reform in Texas, contact John Stevens, Texas Business and Education Coalition (512) 480-8232.
Business leaders have been instrumental in elevating the issue [of school improvements] to the top of the nation's agenda, in fostering the standards-based reform movement, and in insisting on stricter accountability for bottom-line results.
Since 1983, and particularly in the 1990s, business leaders have persistently voiced their support for school improvement, exerting strong external pressure in some cases and providing powerful internal support in others. These leaders have been instrumental in elevating the issue to the top of the nation's agenda, in fostering the standards-based reform movement, and in insisting on stricter accountability for bottom-line results. Beginning with the 1989 National Education Summit and the efforts of the Business Roundtable, business leaders have been key participants in three national education summits in the last decade, building business and political support for the standards strategy. A key element in the strategy of the Business Roundtable has been asking companies to select at least one state—usually where the company is a large employer—to promote education reform through a state business coalition.

Ongoing business activities include the work of the Business Coalition for Education Reform (BCER), a group of 13 national business organizations managed by the National Alliance of Business. More than 600 state and local business coalitions now operate within the BCER network, promoting greater business activity in education at federal, state, and local levels. Business also seeks to make good on the commitment of the 1999 National Education Summit to increase from 10,000 to 20,000 the number of employers who consider high school transcripts in their hiring decisions. And the National Alliance of Business has formed a coalition of other business and education organizations throughout the United States to promote the use of Baldrige's continuous quality improvement principles in education.

Another example of business leaders in education reform is New American Schools, a private, nonpartisan corporation formed in 1991 and supported by millions of dollars of funding from dozens of corporations. New American Schools is now creating a national network of more than 1,500 schools and implementing whole-school reform designs focused on improving student achievement on a wide scale. In 1997, Congress created a $150 million comprehensive school reform program to scale up whole-school reform using New American Schools and other comprehensive school designs.
Business leadership of comprehensive reform stands out as a major factor in achievement test gains in two states, researchers reported in a study for the National Education Goals Panel. "In both North Carolina and Texas, business leadership played a critical leadership role in developing and sustaining reform. Business leaders helped form the strategic plan for improvement, forging compromises with the education interests, and enabling passage of the necessary legislation. . . . Business involvement was also characterized by the presence of a few business leaders who became deeply involved. They took the time to learn the issues in education and sustained their involvement for over a decade. They developed knowledge of all sides of education issues, became acquainted with decision makers at all levels, and could articulate the issues to other, less involved business leaders."

In Seattle, Harmonious Policy Punctuated by Cross-Talk

Noted for a high level of harmony on education renewal strategy in the 1990s, Washington State education, political, and business leaders are beginning to adapt to tough challenges produced by accountability measures being phased in over the next decade. "Sticky issues" lie ahead for partners, officials say, and better collaboration will be necessary to resolve them.

Too little conversation between higher education leaders and business and public schools leads to cross-talk among the sectors, with each believing the other is slow to tackle the most important issues. For some business leaders, colleges of education are a significant part of K–12 problems. Higher education leaders, meanwhile, want business leaders to tackle tough problems such as state revenue limitations that may result in disinvestment in education. "If business doesn't attend to the basic infrastructure," one higher education leader told us, "no amount of haranguing of K–12 or higher education [leaders] will make a difference."

Another need is moving from "random acts of kindness to schools to more strategic and systemic solutions," said the president of a business alliance. "There's nothing wrong with those random acts, but they are add-ons and band-aids, and they don't change the system."

"We're ripe for more communication" to address these issues, one business leader noted. New collaborative structures or organizations might be necessary to facilitate deeper conversations among the sectors, a superintendent of schools suggested: "When you have the power [of all sectors] working together, it's phenomenal for K–12 education."

For more information about education improvement in Seattle and Washington state, contact Louis Fox, University of Washington (206) 685-4745.
Despite a high level of current activity supporting public schools, college presidents and corporate executives are ready to assume even larger roles in K-16 education renewal, according to results of surveys conducted by the Business-Higher Education Forum K-16 Task Force in 1999.

The 200-plus participants in the surveys reported that they engage in an array of projects with K-12 schools, although most are not designed to impact large numbers of students in systemic reform efforts. Fewer than half indicated that they were engaged in collaborations involving business, higher education, and public schools on K-16 improvement efforts.

And although many leaders are involved in some kind of local or state education improvement organization, three-fourths of college presidents and two-thirds of business leaders said they personally would serve on a high-level board to help develop and implement a strategic plan for education improvement in their cities or states.

The two groups expressed some differences in attitudes about public schools and their graduates today. College presidents were more likely to consider today's high school graduates better prepared than freshmen 10 years ago, while business leaders consider their companies' newly hired employees to be less well trained than new hires a decade ago. Computer and technological literacy are considered strengths of today's recent high school graduates, while basic skills in language arts and mathematics are considered weaknesses of many of today's students when compared to high school graduates of a decade ago.

Asking to choose the most important challenges facing K-12 schools, higher education leaders most often named lack of school readiness and early childhood problems and funding. Business leaders most often named low standards and expectations of students. Substantial percentages in both groups perceived that inadequate training of teachers for today's challenges is an important issue for schools.

Two-thirds of college and university presidents reported that they have experienced external pressure from policy makers to improve their teacher education programs. Eight of 10 reported having made significant changes in teacher education in the last few years, and six of 10 anticipated making major changes in the next few years. Sixty percent of higher education leaders said their institutions' teacher education programs prepare students very effectively.
OTHER SURVEY FINDINGS:

- Fewer than half of college presidents reported that their institutions have changed curricula or admissions to reflect new state academic standards and assessments.

- Only 28 percent of college presidents say they have a senior official outside the teacher education program whose job is primarily to work with K–12 schools on education partnerships.

- Fifty-seven percent of higher education leaders report that their governing or coordinating boards have directed or officially encouraged more extensive involvement with K–12 schools.

The Boston Experience:
Not More, But More Focused, Partnerships

For 25 years, Boston leaders have worked through a web of partnerships to improve education after the turmoil of a 1974 federal desegregation order. Together they have forged several versions of the Boston Compact, which serves as a framework for education improvement for the public school system, the city's colleges and universities, and business leaders. Key business, K–12, and higher education organizations signed Boston Compact 2000 earlier this year, committing themselves to three goals: meeting the "high standards" challenge, increasing opportunities for college and career success, and recruiting and preparing the next generation of teachers and principals.

While Boston's leaders are proud of their collaborative efforts, many see a need for improvement, particularly as challenging new assessments threaten high-stakes sanctions for students and schools. In a meeting of dozens of local leaders, sponsored by the University of Massachusetts Boston for the Business-Higher Education Forum, Boston School Superintendent Thomas Payzant urged a greater focus on student achievement, rather than on fragmented partnerships not directly related to urgent academic priorities. Business leaders noted with approval how many of their colleagues are involved with education renewal, but lamented that many others would like to make a difference but don't know how. Mayor Thomas Menino, while recognizing the extensive efforts of colleges and universities, urged higher education to assume even greater responsibility for K–16 improvements. An education dean called for "a higher level of mutual accountability" among all sectors. If partnerships with schools don't improve student achievement, he said, "then something is wrong with the partnerships," and they should be ended or modified.

For more information about education improvement activities in Boston, contact Ted Dooley, Boston Compact (617) 635-9050 or Charles Desmond, University of Massachusetts Boston (617) 287-7637.
A Prescription for Partnerships

The unique value of three-way partnerships—involving business, higher education, and the nation's schools—rests on two powerful realities.

The first acknowledges that America's schools are served by many talented and committed school leaders. At the same time, the rapidly accelerating changes in the world surrounding schools make it essential that school systems and colleges and universities adapt and change accordingly.

The second acknowledges that some of the necessary systemic transformations required in education during the next decade can be accomplished only through the power of collaboration among the business, higher education, and K-12 sectors.

Therefore, we encourage our colleagues in business, higher education, and K-12 education organizations to build new, more inclusive alliances to make the next leap forward in education renewal. Specifically, we recommend that leaders in the three sectors use the following best practices derived from our study of education collaborations throughout the nation.

TEN ESSENTIAL ELEMENTS FOR EFFECTIVE COLLABORATIONS

1. Involve as many different parties as possible. Make certain that representatives from public schools, colleges and universities, and business are present. Seek involvement by elected officials, community organizations, and unions, where possible.

2. Involve the highest level of leadership: company executives, superintendents and presidents of schools, and chancellors of colleges and universities.

3. Establish ongoing, formal collaborative structures with a defined mission and clear goals and agendas. Meet regularly.

4. Focus on student achievement.

5. Develop a long-term focus and commit to a multi-year effort.

6. Develop a collaborative plan focused on systemic, coherent reform efforts.

7. Concentrate on the most important issues: the system-changing improvements that will result in higher student achievement. Be willing to tackle important issues even if they are difficult and may produce conflict.

8. Be results-oriented and establish methods to evaluate results. Hold the collaborators accountable for achieving those results, just as schools and students are being held accountable.

9. Dedicate staff and money to the collaboration.

10. Remain above politics. Insist that the organization's strategic plan and recommendations avoid partisan or special-interest advantage.
ADDITIONAL RECOMMENDATIONS FOR PRESIDENTS AND CHANCELLORS

- Devote a senior staff member to K-16 improvement activities, including systemic collaborations and university/school partnerships.

- Join a business coalition sponsored by the Business Roundtable, or explore relationships with the National Association of System Heads or The Education Trust’s network.

- If no regular, high-level collaboration exists in your community or state, help create one with public school officials and business leaders.

FOR MORE INFORMATION

The following national organizations mentioned in this report are active in K-16 reform efforts and may be contacted for additional information about partnering to improve education:

- **American Council on Education**
  One Dupont Circle NW
  Washington, DC 20036-1193
  www.acenet.edu

- **National Alliance of Business**
  1201 New York Avenue NW
  Suite 700
  Washington, DC 20005
  www.nab.com

- **The Business Roundtable**
  1615 L Street NW
  Suite 1100
  Washington, DC 20036
  www.brtable.org

- **Achieve, Inc.**
  400 North Capitol Street, NW
  Suite 351
  Washington, DC 20001
  www.achieve.org

- **The Education Trust**
  1725 K Street NW
  Suite 200
  Washington, DC 20006
  www.edtrust.org

- **National Association of System Heads**
  1725 K Street NW
  Suite 200
  Washington, DC 20006
  www.edtrust.org

- **New American Schools**
  1560 Wilson Boulevard
  Suite 901
  Arlington, VA 22209
  www.naschools.org
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Peter Likins, President, The University of Arizona
James C. Lintzenich, President and Chief Operating Officer, USA Education—Sallie Mae

Diana MacArthur, Chair and Chief Executive Officer, Dynamac Corporation
C. Peter Magrath, President, National Association of State Universities and Land-Grant Colleges
Modesto A. Maidique, President, Florida International University
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