Second to None in ATTAINMENT, DISCOVERY, and INNOVATION:

The National Agenda for Higher Education

BY THE STATE HIGHER EDUCATION EXECUTIVE OFFICERS (SHEEO)

To the Presidential Candidates:

The 44th President of the United States will have the greatest opportunity—and face the greatest necessity—since the 1950s to lead the nation to sustainable prosperity. In the knowledge economy of the 21st century, America's intellectual edge, creative ingenuity, and adaptive workforce are and will remain the most important components of national strength and economic security.

That strength and security are now threatened as other nations pass us in advanced educational achievement and mount ambitious research programs. But strong leadership and a relatively modest investment can restore U. S. preeminence as the best-educated and most competitive country in the world. In the difficult times we face, adopting this ambition as a centerpiece of your presidency can lift the spirit and the aspirations of the American people. America's colleges and universities stand ready—with the right mix of reforms and resources—to meet the challenges facing the nation.

By the end of your first term:

- The United States will have 3 million more jobs requiring a bachelor's degree and not enough college graduates to fill them;
- Ninety percent of the fastest-growing jobs, 60 percent of all new jobs, and 40 percent of manufacturing jobs will require some form of postsecondary education; and
- Global competition will demand research and innovation on a scale that even the U.S. is not yet prepared to support.

It is far easier to make such projections than to do something about them. Presidential leadership is needed to articulate the needs and achieve the necessary commitment. Economic security, a top priority for the American people, requires access to good jobs that provide stable incomes to support families and build better futures. National security requires the educational and research infrastructure on which a healthy, competitive economy is built. To achieve and sustain both, this country's system of higher education must be second to that of no other nation. We pledge our own commitment to, and ask you to lead us toward, that end.

SHEEO, the national association of state-wide higher education executives, focuses on public policy for higher education in the U.S. It was founded in 1954.

Why is Higher Education So Important?

More than ever, the innovative and productive capacity of the United States depends on the knowledge and skills of our people. Advanced education has become essential in the 21st century: low-skilled, well-paying jobs are increasingly scarce, and higher skills, adaptability, and the capacity to add value in the workplace are essential for economic security. For individuals, higher education and preparation for success in higher education have become urgent priorities.

This is also true for the nation as a whole. During the postwar years from 1948 to 1973, economists estimate that two-thirds of U.S. economic growth was driven by education and the innovations it produced. But although we still lead the world in scientific discoveries and applications of knowledge, our lead is narrowing. We must be second to no other nation in educational attainment *and* in discovery and innovation, or economic security and the quality of life in our communities will deteriorate.

Where Do We Stand in the World?

Our system of higher education has not kept pace with the rising global standard of excellence. People everywhere aspire to the prosperity and quality of life in the U.S., and other nations are rapidly providing postsecondary education to more young adults. A decade ago our adult population led the world in educational attainment; now, the U.S. is tenth in the percentage of young adults with a postsecondary credential.

In almost all countries in the Organisation for Economic Co-operation and Development (OECD), young adults are better educated than older adults. Today 55 percent of young adults in the leading countries have an associate degree or higher. But in the U.S., only 40 percent of adults aged 25 to 34 have an associate degree or higher, which is no improvement over the soon-to-retire baby-boom generation. This is in part because, despite high participation and enrollment rates, we have the worst degree-completion rate among developed nations, especially for low-income students and minorities.

A decade from now, unless we accelerate educational progress, the U.S. will be even farther down the list in educational attainment, despite spending more per capita and a higher percentage of GNP on higher education than any other country. And we have to improve not just the quantity but the quality of college degrees. There is decreasing confidence that all college graduates emerge with the knowledge and skills required in the 21st century.

Moreover, a decade ago the research universities of the U.S. were virtually unchallenged in attracting the world's most gifted scholars. Today, universities in the European Union and Asia are rapidly developing more scientific and technical capacity. They now provide competitive educational and research opportunities for brilliant scholars, who no longer have to travel to the U.S. for education or work. This competition puts our country's research preeminence at serious risk.

The higher-education system of the last century no longer meets the needs of the American people.

How Did We Get Here?

In many respects the U.S. higher education system still reflects the goals and conditions of the 20th century. It was designed when our economy offered many well-paying jobs that didn't require postsecondary education. While justly priding ourselves on widespread educational opportunity, we have honored more highly, expected more from, and spent considerably more on students who have the highest probability of success. We have placed lower expectations on average students, and we allocate considerably fewer resources to the less-selective institutions where they enroll.

The higher-education system of the last century no longer meets the needs of the American people. First, it has become less affordable, which jeopardizes both access and degree completion, in part because competition within higher education for able students and faculty and for graduate programs and research funding has tended to push up costs without a commensurate rise in the quality of undergraduate education. Second, even the excellence of its strongest component, discovery and innovation, is unsustainable because it depends on the underlying strength of the entire American educational system and economy.

Widespread educational attainment and excellence in discovery and innovation must be a unified national agenda—a partnership, not a tradeoff. We must have both, or in the long run we will have neither. While we dare not rest on our laurels in discovery and innovation, the evidence suggests the larger challenge and more urgent need is to achieve greater productivity from our higher-education system. Without higher levels of educational attainment, our people, the enterprises that employ them, and our research universities cannot remain competitive in the global economy.

Our Goals

Second to None in Educational Attainment:
One million more degrees and certificates per year

To match today's leading nations (Canada and Japan), 55 percent of our young adults must have an associate or bachelors degree. By 2025, the U.S. will fall 16 million degrees short of the 55 percent attainment rate if we fail to increase degree production

Recent National Reports on Higher Education

Over the past four years, several national commissions—listed below and on the following pages—have issued major reports on postsecondary education. Their recommendations reflect a growing consensus on the importance of higher education for economic and civic well-being and reinforce our call for a national commitment to address the priorities described here.

Accountability for Better Results, A National Imperative for Higher Education

National Commission on Accountability in Higher Education
State Higher Education Executive Officers
Boulder, Colorado, 2005

Commission members and their titles and positions at the time of publication

The Honorable Frank Keating, President, American Council of Life Insurers; Former Governor of Oklahoma; Co-Chair	The Honorable Richard W. Riley, Senior Partner, Nelson Mullins Riley & Scarborough, LLP; Former Governor of South Carolina; Former U.S. Secretary of Education; Co-Chair	
Kenneth H. Ashworth, Adjunct Professor, Public Affairs & Government, University of Texas and Texas A&M University; Former Texas Commissioner of Higher Education	Dwight Evans, President, External Affairs Group, Southern Company	Stanley O. Ikenberry, President Emeritus, Professor of Education, University of Illinois; Former President, American Council on Education
Robert T. Jones, Former President, National Alliance of Business	James B. Hunt, Jr., Chairman, Hunt Institute for Educational Policy and Leadership; Former Governor of North Carolina	Arturo Madrid, Murchison Distinguished Professor of Humanities, Department of Modern Languages and Literatures, Trinity University
The Honorable Dave Nething, Senator, North Dakota Legislature; Former President, National Conference of State Legislatures	The Honorable Lana Oleen, Former Kansas Senate Majority Leader	Richard Pattenaude, President, University of Southern Maine
Martha Romero, Senior Scholar, Claremont Graduate University; Former President, Siskiyous Joint Community College	Blenda J. Wilson, President & CEO, Nellie Mae Education Foundation; Former Executive Director, Colorado Commission on Higher Education	

above the current rate of about two million per year. An average of three million postsecondary degrees and certificates every year is needed to reach this standard. While population growth will help the U.S. reach this target, our future depends on raising the rate of participation and success in higher education.

Second to None in Discovery and Innovation: World leader in science, technology, and the advancement of knowledge

The achievements of the United States in discovery and the application of knowledge are constructed on competitive federal research programs, along with state and private investment in research infrastructure and talent. To be a world leader in the future will require building on those investments and raising our expectations for quality and innovation.

In the U.S., the basic research that undergirds innovation and creative application occurs almost exclusively in colleges and universities, as does the preparation of future researchers. Within universities, faculty talent must be deployed more broadly—not just to advance scientific discovery, but also to apply knowledge to key problems, synthesize knowledge in every field, and develop the more diverse pool of talented college graduates required to sustain world leadership in research. In short, we must both learn how to employ our intellectual leaders more effectively and replenish our supply of them.

We must face the fact that our past accomplishments, in substantial measure, have come from attracting many of the world's most talented and creative people to work in our colleges and universities. The human capital of the U.S. has been greatly enriched by talented immigrants for whom other nations are now competing more effectively and vigorously. Effective security screening is essential, but being *second to none* in discovery and innovation will require well-designed immigration policies that continue to attract and retain talent from other parts of the world.

A Test of Leadership, Charting the Future of U.S. Higher Education

A Report of the Commission Appointed by Secretary of Education Margaret Spellings
U.S. Department of Education
Washington, D.C., 2006

Commission members and their titles and positions at the time of publication

Charles Miller, Private Investor; Former Chairman of the Board of Regents, University of Texas System; Co-Chair	Nicholas Donofrio, Executive Vice President, Innovation and Technology, IBM Corporation; Co-Chair	
James J. Duderstadt, President *Emeritus*, University Professor of Science and Engineering; and Director, The Millenium Project, University of Michigan	Gerri Elliott, Corporate Vice President, Worldwide Public Sector, Microsoft Corporation	Jonathan N. Grayer, Chairman and CEO, Kaplan, Inc.
Kati Haycock, Director, The Education Trust	James B. Hunt, Jr., Chairman, Hunt Institute for Educational Policy and Leadership; Former Governor of North Carolina	Arturo Madrid, Murchison Distinguished Professor of Humanities, Department of Modern Languages and Literatures, Trinity University
Robert Mendenhall, President, Western Governors University	Charlene R. Nunley, President, Montgomery College	Catherine B. Reynolds, Chairman and CEO, Catherine B. Reynolds Foundation, Educap, Inc.
Arthur J. Rothkopf, Senior Vice President and Counselor to the President, U.S. Chamber of Commerce; President *Emeritus*, Lafayette College	Richard (Rick) Stephens, Senior Vice President, Human Resources and Administration, Boeing	Louis W. Sullivan, President *Emeritus*, Morehouse School of Medicine; Former Secretary of the U.S. Department of Health and Human Services
Sara Martinez Tucker, President and CEO, Hispanic Scholarship Fund	Richard Vedder, Adjunct Scholar, American Enterprise Institute, Distinguished Professor of Economics, Ohio University	Charles M. Vest, President *Emeritus*, Professor of Mechanical Engineering, Massachusetts Institute of Technology
Robert M. Zemsky, Chair and Professor, The Learning Alliance for Higher Education, University of Pennsylvania		

Innovation America, A Compact for Postsecondary Education

National Governors Association
Washington, D.C., 2006

Commission members and their titles and positions at the time of publication

Governor Janet Napolitano, Co-Chair, Arizona	Governor Tim Pawlenty, Co-Chair, Minnesota
Governor Members of the Innovation America Task Force	
Governor Kathleen Sebelius, Kansas	Governor Matt Blunt, Missouri
Governor Jon Huntsman, Jr., Utah	Governor Edward G. Rendell, Pennsylvania

Business and Academic Leaders and their positions and titles at the time of publication

Dr. Craig R. Barrett, Chairman of the Board, Intel Corporation	Dr. G.Wayne Clough, President, Georgia Institute of Technology	Dr. Michael M. Crow, President, Arizona State University
Jamie Dimon, CEO, JPMorganChase	Charles O. Holliday, Jr., Chairman and CEO, DuPont	Dr. Shirley Ann Jackson, President, Rensselaer Polytechnic Institute
Dr. Judith A. Ramaley, President, Winona State University	Dr. Mary Spangler, Chancellor, Houston Community College	John Thompson, Chairman of the Board and CEO, Symantec
Kevin Turner, COO, Microsoft	Margaret C. Whitman, President and CEO, eBay	

What Will it Take to Generate One Million Additional Degrees Each Year?

The fastest, most effective way to generate one million more degrees per year is to focus policies and resources on the students who are not now succeeding in our colleges and universities. These students generally are low-income, first-generation, and/or working adults of all ethnic groups. Because of their low rates of participation and success, low-income college students are much less likely to earn a college degree than similarly qualified higher-income students. African Americans, Hispanics, and recent immigrants or their children constitute a large part of the total. The number of school-age Hispanic children will double in the next two decades; currently Hispanic students are one-third as likely as white students to graduate from college. Most of these students attend college at state-supported two-year or regional four-year colleges or universities.

Increasing degree completion significantly requires addressing the barriers that prevent these students from pursuing and obtaining a postsecondary credential: poor preparation in high school, a complex and poorly targeted financial-aid system, a lack of focus on student success, and inadequate resources at less-selective public institutions.

Inadequate college preparation

Low expectations of high school students, and their own low aspirations in response, are major barriers to meeting the *second to none* challenge. Only one-third of high school students graduate on-time and ready for college and work. Too many high schools maintain a general track that fails to give students the skills they need for success in either college or the workplace. In many colleges more than half the freshmen take one or more remedial courses to learn skills that they should have acquired in high school.

The federal government, the states, educators, philanthropists, and the business community all are working to improve preparation for college, and those efforts must continue and accelerate. But they will only bear fruit if they are accompanied by improvements in other areas of policy and practice.

Complex and poorly targeted financial aid

Numerous studies show that the financial-aid application process is too complex, and policies and resources are neither well-aimed at nor adequate for removing the barriers which keep the neediest students from succeeding. Despite overwhelming evidence about these problems, progress has been glacial at best. Each year, one million low-income students do not apply for financial aid because they lack information about the application process or find it too difficult to navigate. Too often students, families, and counselors fail to cobble together enough funding from different sources, and able, low-income students end up not enrolling, going part-time (which delays or thwarts graduation), or working so many hours that a focus on academic achievement becomes impossible.

Inadequate commitment, insufficient support

Both low-income students and the institutions they attend must increase their aspirations and commitment to timely degree completion. Institutions must remove the barriers to completion in their policies, programs, and practices. States must re-examine their policies and funding to be certain their appropriations, tuition, and financial-aid policies provide adequate resources for a high-quality education, guarantee financial access to properly prepared low-income students, and place the necessary emphasis on student success. And they must not only provide the resources necessary for better outcomes but also demand greater accountability for results.

States and institutions carry the heaviest responsibility for meeting the *second to none* challenge to increase educational attainment.

While private nonprofit and for-profit institutions are making an important contribution to these national goals, most low-income, first-generation college students attend community colleges and less-selective public universities. These institutions, which have the difficult job of educating many students with inadequate academic preparation, typically have much less money than selective colleges and universities to invest in student success. In an analysis of the factors leading to declining graduation rates, researchers from the University of Michigan and the University of Virginia found more low-income students are enrolling than ever before, but inadequate preparation, excessive part-time work, and disproportionate enrollment in weakly financed institutions all contribute to lower success rates.

State and Institutional Roles

Presidential leadership is essential, but no President and no Congress can create the educational conditions necessary for economic security without commitment, initiative, and creativity from the leaders of our states, communities, schools, and colleges. So we want to acknowledge our own responsibilities before turning to what we ask of the President and the federal government.

States and institutions carry the heaviest responsibility for meeting the *second to none* challenge to increase educational attainment. States, through appointed or elected boards, are responsible for governing and operating schools, colleges, and universities in ways that generate better results. States are the primary funders of community colleges and regional four-year institutions, allocating public resources to the activities and programs necessary to achieve more widespread learning and degree attainment. And states must provide need-based financial assistance calibrated to their tuition policies in order to assure that families can afford to pay the bill for college.

Public Accountability for Student Learning in Higher Education: Issues and Options

A Position Paper from the Business-Higher Education Forum
American Council on Education
Washington, D.C., 2004

Working group members and their titles and positions at the time of publication
(Report also signed by fifty-five other members of the Business-Higher Education Forum)

Edward B. Rust, Jr., Chairman and Chief Executive Officer, State Farm Insurance Companies Co-Chair	Charles B. Reed, Chancellor, California State University; Co-Chair	
Lawrence S. Bacow, President, Tufts University	Warren J. Baker, President, California Polytechnic State University	Ralph E. Christoffersen, Partner, Morgenthaler Ventures
Michael J. Emmi, President and Chief Executive Officer, IPR International	Roberts T. Jones, President, Education and Workforce Policy, LLC	C. Peter Magrath, President, National Association of State Universities and Land-Grant Colleges
Constantine Papadakis, President, Drexel University	William J. Pesce, President and Chief Executive Officer, John Wiley & Sons, Inc.	W. Randolph Smith, President, Western Division, Tenet Healthcare Corporation
Betty L. Siegel, President, Kennesaw State University	L. Dennis Smith, President, University of Nebraska	David Ward ,President,American Council on Education

Transforming Higher Education: National Imperative, State Responsibility

Recommendations of the National Conference of State Legislatures
Blue Ribbon Commission on Higher Education
Washington, D.C., 2006

Commission members and their titles and positions at the time of publication

Representative Rob Kreibich, Wisconsin; Assembly Committee on Colleges and Universities; Co-Chair	Representative Denise Merrill, Connecticut; House Appropriations Committee; Co-Chair	
Senator Ben Altamirano, New Mexico; Senate President Pro Tempore	Senator John Chichester, Virginia; Senate President Pro Tempore	Senator Lyle Hillyard, Utah; Co-Chair, Executive Appropriations Committee
Assemblywoman Carol Liu, California; Chair, Assembly Higher Education Committee	Senator Evelyn Lynn, Florida; Chair, Senate Education Committee	Representative Geanie Morrison, Texas; Chair, House Higher Education Committee
Senator Robert Plymale, West Virginia; Chair, Senate Education Committee	Senator Steve Rauschenberger, Illinois, Senate Assistant Minority Leader	Assemblyman Craig Stanley, New Jersey, Chair, Assembly Education Committee

Colleges and universities are the key players in meeting the *second to none* challenge. They have the ultimate responsibility in this country for awarding and for ensuring the quality of the postsecondary credentials so highly prized in the global economy. They must define learning objectives, assess learning, and communicate their expectations and findings clearly enough that high schools know how to prepare students, students have clear learning goals, and faculty can enjoy the satisfaction of demonstrated student achievement and continuous improvement. Colleges and universities must also increase productivity by using their resources more effectively to achieve more degrees and higher-quality learning outcomes.

The Federal Role

The commitment and leadership of the President are essential for the U.S. to be *second to none* in educational attainment, discovery, and innovation. While the powers of the President and the federal government are limited in our system, nobody else can better articulate a national priority and galvanize a national response. We can reach these goals only if the

President, the federal government, the states, and educational and civic leaders together recognize the urgency of the need and the importance of achieving results.

Our first recommendation is straightforward: *We ask you to commit your administration to reestablishing and sustaining a higher-education system that is second to no other nation's in its quality and productivity*. Toward that end, we ask you to join us in committing to the achievement of the two national goals described above: first, to increase by an additional one million the number of Americans who earn a postsecondary degree or credential each year, and next, to ensure that the U.S. continues to be second to no other nation in discovery and innovation.

Then we urge you to reshape federal policies and programs in order to help the nation reach these goals. These specific areas warrant urgent attention.

Re-Engineering Student Assistance

Simplification. Pell Grants provide financial access to postsecondary education, but learning about and applying for financial aid is unnecessarily complex. Over two-thirds of the data elements sought on the Free Federal Financial Application for Student Aid (FAFSA) are derived from the federal income tax form, and students and families should be able to check on that form that they would like to apply for federal financial aid so that the information can be automatically imported into their applications. The FAFSA should then be revised to ask no more than one page of supplemental questions. Modest changes in federal needs analysis would be required to accommodate these revisions, but numerous studies have demonstrated these changes will not negatively affect the neediest students or their families.

Communication. Students and families should be able to understand how average levels of aid from different programs can together finance a college education. They need a financial aid table published with the annual tax form and posted in other prominent places such as schools and colleges. Like the table estimating Social Security benefits upon retirement, this would show estimated awards for students of different income levels. Such a table should integrate Pell Grants, federally guaranteed loans, federal tuition tax credits, and average state and institutional grants.

Dependability. The aspirations of low-income students will rise, and preparation for college will improve, if we give students a dependable commitment while in middle or high school: "If you stay in school and complete the right college preparatory courses, you will be able to afford postsecondary education." This commitment can be made real by continuing the funding for and promoting the Academic Competitiveness and SMART Grants (changed to allow part-time students to receive them) and maintaining the purchasing power of the Pell Grant. The states must do their part by supplementing federal aid with well-designed state programs.

A stable, logical target for the maximum Pell Grant. This dependability will not be possible as long the Pell Grants' role in providing basic access to higher education is confused by the wide variation of tuition and fees among states and sectors. When Pell Grants serve as a source of funding for tuition and fees, the relatively modest maximum award seems very inadequate at higher-tuition institutions and deceptively more than adequate at low-tuition ones.

A better approach would be to target the Pell Grant at living costs plus non-tuition expenses (including books and supplies). These currently total approximately $12,000 for full-time students at virtually all institutions and should be adjusted annually for growth in the cost of living. This approach would emphasize state and institutional responsibilities to moderate tuition increases and provide aid calibrated to their tuition policies in order to help low-income students pay tuition.

Full-time students would be expected to finance approximately $5,000 of this amount with part- time work, and the remaining $7,000, after taking into consideration a reasonable parental contribution, would be eligible for Pell Grant support. Higher tuition costs should be considered in assessing total need, but Pell Grants should be targeted first at the costs of participating in higher education, regardless of the institution attended.

This approach would better recognize the financial burdens faced by low-income, non-traditional students, which are underestimated in many needs-analysis formulas. The excessive hours such students must work to pay living costs is a formidable barrier to the completion of degrees and certificates.

Simpler, more valuable tax credits. Federal tax credits for higher education need to be simplified, focused, and increased. HOPE, Lifetime Learning, tuition and fees deductions, and student loan deductions all have different definitions of college costs and eligible schools and students. The income limits and phase-outs vary for each program, with some of the tax benefits lost by the alternative minimum tax and others not. Above-the-line deductions could be eliminated in favor of a single, refundable tax credit focused on tuition charges for middle- and lower-middle-income students, which would complement a Pell Grant focused on non-tuition costs for low-income students.

Improving Data and Quality-Assurance Systems

In 1867 the nation's first Department of Education was charged with "collecting such statistics and facts as shall show the progress of education in the several States and Territories." While the federal government is not and should not be on the front line of educational decision-making, it plays a vital and irreplaceable role in data collection and quality assurance.

In addition to refining and improving its own data systems, the federal government should invest in the development and refinement of state-based student-level information systems. Such systems can provide early warning that a student is likely to drop out and monitor progression and completion. Because of student mobility across states, the federal government should also help the states create common definitions and standards for data warehousing to protect privacy and facilitate appropriate analyses.

The federal Institute for Educational Sciences should invest in stronger tools for assessing the knowledge, skills, and competencies of our people. The federal government should finance state-level samples of learning measures such as the National Assessment of Adult Literacy (NAAL), the Program for International Student Assessment (PISA), the 12th-Grade National Assessment of Educational Progress (NAEP), and the new Programme for the International Assessment of Adult Competencies (PIAAC). In the knowledge economy of

the 21st century, it is vitally important for America and each of the states to have a clear sense of the knowledge and skills of the population.

The nation's voluntary system of accreditation serves the federal government in ensuring threshold quality control for federal programs, and it serves higher education by providing a tool for institutional self-assessment and continuous quality improvement. The U.S. quality assurance system should not be federalized, but it can be improved by developing more consistent and rigorous standards and procedures. Its impact could be enhanced if accreditors were encouraged and enabled to provide sophisticated, rigorous, private feedback to boards of trustees about performance and areas needing improvement when there is inadequate justification for withdrawing accreditation or publically threatening its withdrawal.

Sustaining and Advancing Discovery and Innovation

Federal investments in research and in building the human capital necessary for world-class discovery and innovation have contributed enormously to America's economic health and leadership in the world. While the government should continue to defer to the expert advice of the scientific community for recommendations concerning specific research priorities and the capacities of individual investigators, the budget constraints facing the nation add urgency to the need for rigorous standards of quality. That said, we strongly believe deeper federal investments in science and technology are needed. Other nations are poised and motivated to challenge America's preeminence in this arena.

We also recommend federal policies that will help refresh the nation's pool of talented scientific investigators. Our recommendations for increasing educational attainment will help develop new talent among citizens and immigrants already within the country. In addition, we strongly advocate immigration policies that will enable our country to attract, as it has over past centuries, gifted people from abroad to increase our scientific and technological prowess.

In Conclusion

We are grateful for your willingness to serve as President at this critical time, and we have written because we believe our responsibilities as postsecondary educators are vitally important to the future of our country. We look forward to working with you on these urgent issues. Thank you for considering our views.

—Officers, Members, and Past Members of The National Association of State Higher Education Executive Officers (SHEEO) ◙

Resources

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