

Exploring a New Role for Federal Government in Higher Education

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The answers to our problems don't lie beyond our reach. They exist in our laboratories and universities, in the imaginations of our entrepreneurs and the pride of the hardest-working people on Earth.

— President Barack Obama

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Even as developing nations embrace the California model, the state itself abandons it year by year. State funding in California is down 40% in the last 20 years, a trend that shows no sign of reversing.

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As America follows the president's call and begins to work through its many challenges, higher education must be as much of a priority as health care, national security and alternative energy development. As the president has suggested, it is the nation's collection of great universities that will produce the doers and dreamers — scientists and technicians, engineers and innovators, theorists and poets — who will conceive and create the solutions needed to invigorate our economy, evolve technologies, bolster national defense and enrich society, not only in this present moment of crisis, but for generations to come.

It is incumbent on those who champion our institutions of higher learning to begin now, with urgency, to examine every aspect of these vital educational engines, to look with fresh eyes on how they are structured, operate and deliver their services to students and society alike. Part of this effort, it seems clear, should be to explore the potential for a new role for the federal government in higher education.

The federal government already does much. Its grant programs open doors for students from all levels of American life. Its support of research has been essential to the development of everything from cancer drugs to national defense systems. Most recently, the American Recovery and Reinvestment Act of 2009 (ARRA) has sought to infuse universities with unprecedented resources for both access and research.

But these significant contributions more and more seem like ornaments hung on a tree that has begun to wither from lack of water. State support for higher education is in decline nationwide. California provides but one example. Its half-century-old model for public research universities has been duplicated across the land and around the globe. But even as developing nations embrace the California model, the state itself abandons it year by year. State funding in California is down 40 percent in the last 20 years, a trend that shows no sign of reversing.

From Minnesota, New Hampshire, Ohio, Missouri, Pennsylvania, Colorado, Kansas, Iowa, Georgia and many more — the narrative details may vary a bit, but the bottom line remains the same. In the last decade, statehouse support for higher learning, as measured by constant dollars appropriated for each full-time-equivalent student, decreased in 30 of the nation's 50 states. This grim roll call comes from a survey by the authoritative State Higher Education Executive Officers group, which also determined that in 11 states the slide in support actually exceeded 20 percent.

From a national perspective, this trend is perilous. We must find creative ways to expand the federal commitment to research and access into a new category: The nuts-and-bolts core funding that is vital to a robust university, allowing it to hire quality professors, equip laboratories, expand the physical plant and so on.

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There never has been an integrated national strategy in this country for higher education. There needs to be one now. The mission is simply too important to leave to state governments that seem disinclined or unable to pursue it. In other parts of the world, particularly in Asia, higher education has been embraced as a national responsibility. America should do the same. To put it plainly, the historic federal role of access creation, research funding and regulation no longer is enough to ensure the quality needed to produce a vibrant economy and an enriched, inclusive society and to maintain a vigorous national defense.

The Path Is Not Unprecedented.

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Higher education and the federal government do not come to one another as strangers. At pivotal moments, the federal government has acted in ways that profoundly influenced the universities and the nation as a whole:

- The Morrill Act of 1862 (expanded in 1890 and 1994) paid for a system of land-grant institutions, one in each state, to advance agriculture, mining and engineering. This act put a young nation on the trail toward becoming a global power.
- The GI Bill of 1944 provided grants and higher education opportunities for veterans returning home from World War II, and along the way remade American universities, invigorated the labor force and created the post-war middle class, which so dramatically changed the landscape of American life.
- The National Defense Education Act of 1958, initiated in the chill of the Cold War and the shadow of Sputnik, dispensed aid to public and private education that made America competitive in science, math, technical education and modern foreign languages. This national investment helped catapult some of the most prominent research universities in the country, including the University of California system, to new levels of achievement and acclaim.
- The Pell Grant program, included in the Higher Education Act of 1965, recognized that, beyond our veterans, access to higher education by students with financial need would advance the ideals of opportunity and democratic fairness that animated the Great Society and Civil Rights era.

In each of these historic turns, our leaders discerned a compelling national interest in supporting higher education. The global financial crisis and fragile national security status we confront today cries out for similar bold action. In 1958, we were chasing the Soviets into space; satellites and Atlas rockets were the tools of the trade. The race today involves genomes and stem cells and climate models and microchips, but the goal has not changed: Keep America strong in a competing world and stable and prosperous at home. And the staging ground for success also remains the same — the laboratories and lecture halls of the American university.

The Need for a National Strategy Is Clear.

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The United States once led the world in the proportion of 20 – 29 year olds who were college educated. It now ranks 14th.

The Association of Public and Land-grant Universities (APLU) estimates that the production of bachelor and associate degrees in this country would need to increase from 2.1 million in 2007-08 to 3 million in 2025 in order to match the proportion of young adults (25 to 34 years old) with similar degrees in Canada and Japan.

The scale of the mission and demands of the moment call out for an integrated national strategy. It must be one that provides the institutions of higher education with a more reliable funding stream — a prerequisite for educating more students and expanding the research that will see us through the 21st century.

Some background is in order. The old model for higher education — in particular as it pertains to public research universities — is being steadily abandoned. For a host of political and societal reasons, states now find themselves with shrinking pools of funds available for so-called discretionary programs. This includes higher education.

The trend in part is a byproduct of mounting levels of mandatory spending, most notably Medicaid. According to the authors of “The Growing Imbalance: Recent Trends in U.S. Postsecondary Education Finance,” between 1987 and 2006 Medicaid nationwide more than doubled its share of state budget expenditures, from 10.2 percent to 21.5 percent.

Within the same window of time, support for higher learning across the country fell from 12.3 percent of state budgets to 10.4 percent; in California the drop was even more dramatic, from 15.2 percent to 11.5 percent, according to numbers drawn from the National Association of State Budget Officers’ State Expenditure Reports.

Inevitably, as states have ratcheted down their investment in higher education, students have been required to pick up an increasingly larger portion of the check. The oft-lamented increases in tuition and fees link directly to dwindling state investment — and not to increases in the actual cost of educating a student, a figure which has been essentially flat.

From 1998 to 2005, according to the Delta Cost Project (DCP), educational spending for a full-time-equivalent student, adjusted for inflation, rose by only two-tenths of 1 percent at public research institutions. And yet, strikingly, tuition rose by more than one-third, 34.6 percent. These higher bills paid by students, the DCP investigators noted, “primarily replaced lost state appropriations.”

The crunch placed on students is not unlike what befalls workers when their employers switch to less-generous health plans. The cost of producing a prescription drug might stay the same, but the patient’s co-payment goes up. That’s what is happening to American university students, and it appears to be having an impact on enrollment.

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A recent McKinsey and Company report, "The Economic Impact of the Achievement Gap in America's Schools," described the true cost of the United States' under-investing in human capital as "lower earnings, poorer health and higher rates of incarceration."

The educational gaps between the U.S. and competing industrial nations, the study found, "impose the equivalent of a permanent national recession.... The gross domestic product in 2008 could have been \$1.3 to \$2.3 trillion higher (9% to 16% of GDP) if the nation's academic achievement levels were equal to those of Finland or Korea.

Those two countries stand as world leaders, with about 55 percent of their young adults earning college degrees. The rate in the United States lags at 41.6 percent. For the country to catch up by 2025, the APLU estimates, undergraduate enrollment must grow by about 42 percent, climbing in less than two decades from 8.9 million FTE students to 12.6 million. An expansion of this scale would require an additional \$40.2 billion in higher education spending. To apply perspective, that's an increase of more than half of the \$77 billion investment in higher learning made by all states combined in 2006.

The sad irony is that this country was once considered the world leader in the development of higher education. In California, we pioneered the model of state-funded, accessible, excellent education for all eligible citizens, an approach which the Republic of Korea, Saudi Arabia, Singapore and many other nations are now trying to emulate even as we walk away from it.

Let's linger for a moment on what the Republic of Korea has been doing. Since the mid-1990s, the Korean government has shifted its national priorities to improve and diversify universities. For instance, in 2009 alone, according to the Korean Ministry of Education, Science and Technology (MEST), it will allocate 5.2 trillion won (approximately \$4.1 billion) for higher education funding — an increase of 14.2 percent over the previous year. Last year the Republic of Korea launched an Educational Capacity Enhancement Project, which through grants seeks to ensure that campuses can meet industrial demands for a high quality work force. And its Brain Korea 21 Project, instituted in the late 1990s, continues to pursue improvements in research infrastructure and graduate-level training.

Contrast this push to the conclusions in a recent McKinsey & Co. report, "The Economic Impact of the Achievement Gap in America's Schools," which described the true cost of the United States' under-investing in human capital as "lower earnings, poorer health and higher rates of incarceration."

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Robert Reich, former U.S. secretary of labor and current UC Berkeley professor, makes a compelling argument that to attract jobs and capital, nations and states face two, quite different choices: Build a low-tax, low-wage, highly deregulated economy (i.e., a smokestack, warehouse economy); or, levy higher taxes and impose more regulation, but invest in the human capital development necessary to sustain a highly productive labor force.

"The only resource uniquely rooted in a national economy," Reich says, "is its people — their skills, insights, capacities to collaborate, and the transportation and communication systems that link them together. Public investment is the key to attracting long-term private investment so that a nation's people can prosper."

At present, though, America finds itself playing catch-up. There are needs on many fronts. Pinpointing one key competitive indicator, the Lumina Foundation for Education has adopted a "Big Goal" to increase the percentage of Americans with quality two- or four-year degrees to 60 percent by 2025.

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The APLU paper notes that public research universities also are a main pathway of opportunity for low-income and minority students. In 2006, the last year measured in its study, more than 26% of students enrolled at public research institutions received Pell grants, compared to 15% at private research universities.

Similarly, a recent study by the Public Policy Institute of California projects a shortage of 1 million college graduates that will be needed to maintain the state's 2025 work force. Unless policy changes are made, only 35% of working-age adults in that year will hold a four-year degree, while 41 percent of the jobs will require one.

Opening the tap to create more college graduates, however, is not a simple task. Among other enhancements, it will require more qualified faculty, which in turn will trigger a need for more graduate students. The growing demand for the research that is the province of our great universities also will not be easily met. But it must.

Virtually all the research conducted by industrial research laboratories in the 1960s now takes place at major universities. As John Wiley, chancellor emeritus at the University of Wisconsin, has observed: "The future technologies our economy will depend on are being born in our university research labs."

In a draft paper entitled "Expanding Undergraduate Education to Meet National Goals: The Role of Research Universities," the APLU echoes Wiley's assessment and asserts that public research universities in particular must lead the charge to expand capacity for learning: "The areas of study they offer correspond with national needs... including over half of all U.S. bachelor's degrees in natural resources, conservation and engineering."

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This leads to a larger point. The nation's interest in quality higher education is not limited to defense, economics and technology. It resides as well in the softer qualities that are engrained and absorbed on a campus, traits necessary to preserve and nourish a great society — opportunity, diversity, citizenship, a cultivated fascination with the march of ideas, an appreciation for the grace notes of life, like a fine painting or a subtle poem.

Here Are Some Pathways to Explore.

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An expanded federal role — one that includes support for operating and infrastructure costs — could reduce the seemingly endless pressure on universities to raise tuition and fees, making education more accessible to lower- and middle-income students. It also could increase the capacity of institutions to accommodate a higher percentage of the population.

A supplement could be added to federal research awards and dedicated to the expansion of graduate programs to train the faculty and researchers of the future. This would not only introduce countless research solutions to societal issues, but also enhance a university's capability to keep future graduate students flowing through the pipeline.

And so the stakes are high and the need is clear. What's left now is to determine how the federal government might expand its role in higher education while respecting the sovereignty of states and the boundaries of academic freedom. Again, the federal government is involved already. It is the nature of that involvement this paper seeks to address.

At present, federal grants and loans help offset the cost of education for students and families, but they do not generate additional funding for core operating expenses for colleges and universities. And broadening access into universities that have been forced to cut faculty, reduce enrollment and cancel programs can be seen as a hollow victory. Similarly, federal research grants in science or engineering spark discovery and innovation, but do not help pay for new faculty recruitment and associated start-up costs, which can run into the hundreds of thousands of dollars.

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We don't come to this conversation with an exact formula for transforming the federal relationship, but we do have some ideas. All of them, it should be noted, anticipate that the president and Congress, in establishing an integrated plan for higher education, would set forth strategically targeted priorities and then provide incentives to push universities to respond.

Moreover, any program formed under the plan should include a state maintenance-of-effort requirement. Even if they involve direct payments to universities, federal infusions under the plan should be conditioned upon consistent state support for higher education and not seen at the statehouse level as potential budget offsets. Given the fiscal dilemma many states now face, a reasonable base year could be established, pegging state contributions to what is expected to be a time of improved economic health.

That said, here are a few ideas that could be considered as part of an overall strategy:

The Pell Grant approach: New federal financial support for core university services could be molded from the current Pell Grant concept, rewarding the institutions that enroll the neediest students. Pell funding, newly expanded under the ARRA act, now will exceed \$25 billion in 2009-10. Thus, an increase in federal investment of 10 percent would provide approximately \$2.5 billion for university core operations.

Various mechanisms could be developed to distribute the additional funds. Universities educating Pell-eligible students might receive supplemental support for core operations as an add-on percentage. This not only would give universities a strong incentive to enroll additional lower-income students, but also provide the resources required to bolster instructional and support services and help ensure that those students succeed. In addition, as Chancellor Charlie Reed of the California State University system has suggested, a minimum enrollment percentage of Pell-eligible students could be established as a requirement of participation in the add-on plan.

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The research connection: Under this approach, a supplement could be added to federal research awards and dedicated to the expansion of graduate programs to train the faculty and researchers of the future. Currently, colleges and universities spend \$30.4 billion worth of federal research and development funds each year. An additional 10 percent devoted to increasing the support for graduate programs at these institutions would generate an additional \$3 billion a year. This would not only introduce countless research solutions to societal issues, but also enhance a university's capability to keep future graduate students flowing through the pipeline.

Funding could be governed in a manner consistent with other federal assistance programs, which require state or non-federal matching requirements, ranging from dollar-for-dollar to 25 percent of administration costs.

The Race to the Top model: The Department of Education will conduct a national competition to allocate \$4.35 billion in "Race to the Top" funds to improve education quality in K-12 school districts across America. The Race to the Top fund will support programs that are making dramatic progress on meeting reform goals identified by the Obama administration.

A partner program for public colleges and universities could be crafted to allow institutions of higher learning to compete for federal funds based on any number of strategic measurements, such as consistent enrollment of Pell recipients, additional institutional support for low- and middle-income students, targeted graduation rates and low loan default rates.

A theater of competition: President Obama already has proposed funding of \$2.5 billion over five years for a new competitive grant program that will reward creative state efforts to improve college completion rates for low-income students. Institutions should also be allowed to compete for similar grants that would direct funds toward humanities education at research-intensive institutions and other disciplines with less access to federal research dollars.

The Build America Bonds model: The Build America Bond program, which provides a 35 percent subsidy on taxable bonds, has opened up new markets for governmental borrowers and saved millions of dollars in interest costs. The federal government could offer a similar program for pension obligation bonds or OPEB bonds issued by local and state governmental authorities. This effectively would provide substantial savings for public universities — savings that could be harnessed to take pressure off operating budgets.

A Challenge.

No doubt there are many additional ideas to be explored, but the point is that the conversation must be started now. The United States has no integrated national strategy on higher education. There has never been one. The historic federal roles of access creation, research funding and regulation will not ensure a robust economy in the 21st century. We are at a crossroads.

We can either regain the prominence and leadership role we once held and invest in our citizens and our future, or we can become accustomed to mediocrity. We can watch from the sidelines as the new information-based economy is led by nations which value investment in human capital. Or we can find new ways to meet the challenges — a course, it seems apparent, that will require a reshaped federal role in higher education.

As G. K. Chesterton once observed, “Education is simply the soul of a society as it passes from one generation to another.”

Let us work together to ensure safe passage.