TOWARD COMPETITIVE

The nation wants higher education to help strengthen U.S. economic competitiveness. Are colleges and universities up to the challenge?

One of the most talked about books in 2006, *The World is Flat*, by Thomas Friedman found that many countries today vie successfully with traditional market leaders—and sometimes beat them. To confront the new challenges of global competition, Friedman says, the United States needs a dramatic burst of American innovation. And Americans should work to “be the best global citizens we can be.”

Echoing Friedman, a panoply of pundits, report writers and statisticians say that the United States must reinvent the way it competes globally, or suffer dire consequences. But for all the statistics and chatter, there has been precious little concerted action. Progress toward a national competitiveness agenda has been only anecdotal and episodic. A “competitiveness movement” has yet to coalesce.

The one commonality, though, is that virtually all calls for improved American global competitiveness count on leadership to come from the nation’s colleges and universities.

Is higher education up to the challenge?

“I don’t think that there is any question that most parts of the higher education community have heightened awareness of the changing global nature of the economy and the issue of America’s place in the world,” says George Mehaffy, AASCU’s vice president for academic leadership and change. However, Mehaffy adds, “I don’t think many people understand yet just how large the threat is, and how poorly we have responded to that threat.”

From his office in the American heartland, Central Michigan University President Michael Rao has a similar view. “I’m not convinced that all of us who are policy makers in higher education or in government are nearly as aware as we need to be of the global marketplace,” Rao says.

Rao thinks that he and colleagues need to demonstrate “the kind of leadership that’s necessary to position our institutions, our people, and our country as serious players in the transformed global marketplace.” But so far, Rao suggests, that’s not happening.

Losing Ground

As a key element in U.S. competitiveness, American higher education has been losing ground. *Measuring Up 2006*, the fourth annual national report card on higher education from the National Center for Public Policy and Higher Education, found that while the United States is still one of the world leaders in the proportion of older adults (ages 35-64) with college degrees, other countries have made great progress toward this benchmark—and, notably, the United States’ progress has virtually stopped. Moreover, educational attainment of adults aged 25 to 34 has waned. The effect is that “for most of the 1990s, the United States ranked last among 14 nations in raising college participation rates, with almost no increase during the decade.” In student degree-completion rates, the United States was 16th of 27 countries. Tellingly, *Measuring Up*’s introduction includes detailed narrative sidebars about education in just two countries: China and India.

Complacency may be a cause for this slippage. George Mehaffy says that too many Americans assume that “because we have been on top, we’re going to stay on top. What people don’t realize until they get outside the borders of this country is that there are a whole lot of people who plan to be number one, with or without our help.”

In February 2006, President Bush announced the American Competitiveness Initiative, a package of proposed incentives supporting research and development, education, and entrepreneurship. The White House originally budgeted $5.9 billion for the program in its first year. On Capitol Hill, competitiveness was
a focus of hearings in the 109th Congress and has already appeared on agendas in the 110th.

It’s a priority, too, of the business community. Just after the November elections, the Business Roundtable began publicizing its “Agenda for U.S. Competitiveness” that urges the country to “strengthen education performance, especially in math and science, and increase support for basic research.” Around the same time, the Council on Competitiveness stated in its latest “Competitiveness Index” that continued U.S. prosperity will depend in large part on improved education.

**Education’s Agenda**

For their part, educators have countless ideas for shoring up U.S. competitiveness.

Central Michigan University (CMU) President Michael Rao says that one part of the solution is raising the academic bar. “We need to stop saying we are going to hold standards higher and just do it,” he says. At CMU, Rao would like to see incoming students better prepared for college work, and he wants them graduated and equipped to “compete effectively with people from other countries who embrace science, math, and technology.”

A recent report from the National Academies, *Rising Above the Gathering Storm: Energizing and Employing America for a Brighter Economic Future*, echoed Rao’s perspective. Observing that U.S. advantages in the marketplace and in science and technology have begun to erode, the report called for a general bolstering of “America’s talent pool” in part by “vastly improving K-12 mathematics and science education.”

Charles Ruch, president of the South Dakota School of Mines and Technology, says that effort has to start early. “The harsh reality of a career in engineering at the academic level is that you had better start with algebra in eighth grade, and better be calculus-ready by the time you graduate [high
school],” says Ruch, adding that higher education needs to “work infinitely more collaboratively with the public schools to help people understand that these are really exciting careers.” Several experts interviewed for this story said that improved teacher education was one part of this equation.

Of ongoing concern is getting more women and members of underrepresented groups into the STEM (science, technology, engineering, and mathematics) pipeline. The National Science Foundation provided a bit of bright news in November when it announced not only that record numbers of Ph.D.s were being awarded in science and engineering, but that the number of women and minorities getting those degrees had also hit new peaks. Higher education now needs to ensure that trajectory continues.

At the University of North Carolina at Greensboro (UNCG), global competitiveness is a community concern—according to UNCG Chancellor Patricia Sullivan, the greater Greensboro region has lost some 300,000 manufacturing jobs as the furniture, textile, and tobacco industries have moved operations offshore. The university is an active partner in efforts to revitalize the local economy with initiatives in biotechnology, biomanufacturing, and nanoscience. UNCG started a new program this year providing summer professional development training for area K-12 mathematics teachers. A team from the university just returned from visiting 12 universities in China. Follow-up work to formalize partnerships is under way, Sullivan reports. A team of UNCG nursing students plans to travel this spring to two hospitals in China for a two-week clinical rotation.

From the Business Roundtable to the National Academies, many are calling for a sustained and strengthened national commitment to long-term basic research, a key driver of global competitiveness. And there is a great deal of rhetoric about research from federal policy makers. But research needs real money and lately when the specifying stops, the dollars too often are insufficient or merely vaporous.

Nonetheless, Richard Dunfee, director of the Grants Resource Center at AASCU, believes that increased federal attention to STEM areas will have a practical payoff. “I think there is going to be tremendous opportunity around competitiveness in all sorts of funding to support faculty research,” Dunfee says. Already he has seen AASCU institutions become more sophisticated in dovetailing their commitment advancing U.S. competitiveness and economic development with a parallel interest in supporting faculty research.

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—Charles Rush

**Cross-Cultural Education**

Any mention of “research at universities” summons thoughts of 9/11. Post-9/11 federal policies generally have impeded rather than expedited the flow of international scholars and students into this country.

The long view, though, is that developing cross-cultural education is an imperative. Just two months after 9/11, President Bush went on record to the effect that “we must…reaffirm our commitment to promote educational opportunities that enable American students to study abroad, and to encourage international students to take part in our educational system.” The *Gathering Storm* report called for new federal policies that encourage, rather than inhibit, the flow of international scientists to this country. November’s National Science Foundation data showed that the largest growth rates in Ph.D. attainment came from non-U.S. citizens. (At the same time, Richard Dunfee reports, new regulations that make colleges and universities responsible for clearing foreign students to work in labs that the government deems sensitive to national security have become the bane of many a university administrator.)

Study abroad for U.S. students also is essential. Many educators have embraced the findings of the Lincoln Commission’s November 2005 report, *Global Competence and National Needs*. Arguing that “the problems of a global society” will place new demands on the United States, the report said “greater engagement of American undergraduates with the world around them is vital to the nation’s well-being.” The commission called for the
United States to send no fewer than one million undergraduates to study abroad annually. In the same spirit, various government agencies—among them Defense, State, and the CIA—have made it clear that they need staff with stronger foreign language skills.

College leaders also understand that they need to prepare students culturally for work in a global economy. “If you are going to be a scientist or engineer today,” Charles Ruch says, “you have to understand that you work in an international environment. You’re probably going to spend part of your time in an overseas assignment, and you’re certainly going to have colleagues all over the world. And so you need to understand all that that brings to the table.”

Money and Coherence

At Central Michigan University, Michael Rao recently turned down a $30,000 compensation bonus. He used the money instead to seed a fund to help “internationalize” the university. The money has sparked CMU faculty and staff to propose new ways of making the university more global. That, in part, is what’s needed now—leaders who put their money where their mouth is to leverage action and reform. Presidents like Rao use their office’s bully pulpit to advocate for the importance of education with a global perspective.

But what also seems to be needed is coherence. At individual institutions of higher education, work that is legitimately part of the broader effort to boost American global competitiveness is administratively fragmented, physically scattered across campus, tucked away in departments, divisions, and administrative offices and with little or no strategic leadership from one place.

What is happening at the institutional level might be seen as a microcosm for what is (not) happening at the federal level. Ideas that would help keep America competitive flow in fractured ways through countless offices and seem overshadowed by better-organized entities, such as Homeland Security. AASCU’s George Mehaffy says that today’s federal policy on competitiveness, such as it is, might be characterized as “an incoherent or nonaligned set of national concerns expressed episodically in legislation.” He believes that the absence of an approach to U.S. global competitiveness is in itself a disadvantage.

The answer is not more government bureaucracy, but rather cohesiveness in policies that advance U.S. global competitiveness. Mehaffy is intrigued by the model of the European Union, where “there is an increasing recognition of the importance of higher education and more importantly the development of structures that facilitate the development of higher education in new and important ways.”

Charles Ruch and Patricia Sullivan both remember programs out of post-Sputnik Washington that helped jump-start innovations in science and engineering education as well as teacher education. The cumulative effect, Ruch says, was that the programs “said that this is a national priority, we think this is important, and here are some bucks to move the agenda along.” He would like to see a similar approach now focused on competitiveness.

Michael Rao says that academe, state and federal government, and business all need to “start talking more about specifically what we can all do—what are the four or five things that we can all do together to make [competitiveness] a priority.” Leading Washington education associations, including AASCU, also have publicly stated that competitiveness needs to be a new national focus.

Aply named and unequivocally direct, the National Academies’ Gathering Storm report stated that “without high-quality, knowledge-intensive jobs and the innovative enterprises that lead to discovery and new technology, our economy will suffer and our people will face a lower standard of living.” The report said that “a comprehensive and coordinated federal effort is urgently needed to bolster U.S. competitiveness and pre-eminence” in science and technology. Of all the major institutions in society, higher education may be in the best position to lead this crucial fight. It’s time now for colleges and universities to show how well they are up to that test.

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