Toward Institutional Innovation in America’s Colleges and Universities

BY MICHAEL M. CROW

TAKEAWAYS

1. More than just a restoration of “normalcy” is required on college campuses in the wake of the recent global economic crisis.

2. Just as universities seek to expand knowledge and innovation on the academic side of the enterprise, it also is imperative that they seek comparable innovation in their own academic structures, practices, and operations.

3. To achieve the ambitious objectives for educational attainment set by the Obama administration, we must first build a higher-education infrastructure commensurate to the task.

4. Colleges and universities need a new set of assumptions that encourage institutions to innovate and differentiate and become useful to their local communities, while at the same time seeking solutions to global challenges.

WHAT IS MOST STRIKING ABOUT THE EFFORTS OF our colleges and universities to recover from the repercussions of the global financial crisis is the extent to which many are determined to frame the moment as an opportunity. Much of the discourse surrounding the response of academic institutions to the recession, however, has been couched in the context of using this “opportunity” either to emerge as more efficient or to restore “normalcy.” I would maintain that efforts directed toward the restoration of normalcy in the academic sector are inherently misguided because, long before the economy proved that our sense of mastery over the course of events was not fully justified, American higher education had been marked not by advancement or even equilibrium but rather ossification, if not outright decline.

Institutional efforts in the wake of the downturn should be focused not on retrenchment or reassessment but rather directed toward embracing change and complexity. I am suggesting that universities and colleges, confronted by the entirely new environment in which colleges must operate, should seek to establish institutional cultures of innovation.

In my usage of the term, “ossification” refers to the lack of innovation in the organization and practices of our institutions. The condition is generally exacerbated by disinvestment—the diminishing decline in investment, particularly from the public sector, in the infrastructure of higher education. But we must not attribute lack of innovation primarily to insufficient resources, whether from dwindling endowments or reduced investment from state legislatures habitually strapped for funds. Those of us in the academy are ourselves responsible for tolerating and perpetuating “design flaws” in our colleges and universities. And unless we come to appreciate the extent and severity of these design
flaws, as well as the shortcomings in our overall model of higher education, our best efforts to turn crisis into opportunity will prove insufficient.

In a nation boasting more than 5,000 institutions of higher education, it is difficult to offer assessments that are broadly applicable, so in the following I largely confine my focus to our nation’s research universities, and especially to our public universities, which are particularly vulnerable given their funding structures. I contend that these complex institutions, which should be understood as comprehensive knowledge enterprises committed to discovery, creativity, and innovation, are the critical catalysts for American adaptability and economic robustness. While each institution endeavors to stimulate the creation, synthesis, storage, and transfer of knowledge on a massive scale, “perpetual innovation”—in ideas, products, and processes—must be their chief product. What is less often recognized is the imperative for universities to seek comparable degrees of innovation in their own academic structures, practices, and operations.

Consistent with these objectives, and with the approval and strong support of the Arizona Board of Regents, as president of Arizona State University I have guided the task of pioneering the foundational model for what we term the “New American University”—an egalitarian institution committed to academic excellence, inclusiveness for a broad demographic, and maximum societal impact. As a case study in institutional innovation, I’ll summarize below selected aspects of the reconceptualization of ASU that we initiated in 2002, but first a clear understanding of the backdrop for our efforts is crucial.

**Lack of Infrastructure and the Challenge of Access**

Perhaps the chief consequence of the confluence of ossification and disinvestment is lack of access to higher education. The momentum of increased access to higher education by a wider range of students that marked much of the 20th century has faltered in the past several decades, with the result that more and more students who would most benefit from access to this most obvious avenue of upward mobility choose not to pursue, or are not aware of the option to pursue, a high-quality, four-year university education.

In order for our nation to achieve the ambitious objectives for educational attainment set by the Obama administration—the president envisions an America in which all children graduate from high school and most go on to college—we must first build a higher-education infrastructure commensurate to the task. Unfortunately, our colleges and universities, both public and private, lack the capacity to offer access to the number of qualified applicants seeking admission. More and more Americans of all ages, socioeconomic backgrounds, levels of academic preparation, and differing types of intelligence and creativity are seeking to enroll in our colleges and universities, overwhelming a set of institutions built to accommodate the needs of our country in the mid-20th century.

The issue of access is far more urgent than most realize, even those on the national stage charged with advancing higher-education policy. While nations worldwide are investing strategically to educate broader segments of their populations for the new global knowledge economy, America has allowed its university system, despite its historical preeminence, to lose its adaptive capacities and stop growing. Unable to accommodate projected enrollment demands with their current infrastructure, our leading institutions have become increasingly “exclusive”—that is, they have chosen to define their excellence through admissions practices based on exclusion. American higher education has thus become thoroughly bifurcated: The small cadre of elite institutions that focuses on academic excellence and discovery contrasts with the majority of less-selective schools that offer access, yet more standardized instruction.

And while our leading universities, both public and private, consistently dominate global rankings, our success in establishing excellence in a relative handful of elite institutions does little to ensure our continued national competitiveness, especially when one considers the disproportionately few students fortunate enough to attend our top schools.

The direct correlation between educational attainment and standard-of-living and quality-of-life indicators has been widely documented—corresponding to the correlation between a highly educated populace and national economic competitiveness. Thus for the first time in our national history, we risk broad decline as a consequence of the insufficient evolution of our institutions and the disinvestment that characterizes our policies toward higher education.

**Additional Challenges in the Decade Ahead**

While the primary challenge confronting American higher education is expanding its capacity, during the next 10 to 15 years public universities and colleges also will have to negotiate substantial reduction or outright elimination of state support. With costs for competing priorities such as prisons and healthcare skyrocketing, state legislatures increasingly frame higher education as a private good and exercise the option to reduce investment. According to our university economists, the percentage of personal wealth per $1,000 allocated to higher education within the vast majority of states is in decline.

While this does not mean that states are no longer willing to invest in higher education, it does suggest that they are going to be largely unwilling to finance it according to standard historical models, such as headcounts. Until new models are in place, institutions will likely continue to experience reductions in funding. In this context, competition from for-profit institutions will certainly increase. If traditional institutions cannot build capacity to meet demand
and the private sector builds platforms that do not require tax incentives or state contributions, the model will shift in short order.

Such disinvestment is by no means the only challenge confronting institutions. Our universities and colleges must prepare to embrace technological innovation in instruction to a greater degree than they have in the past. With the advent of ubiquitous information technologies, traditional institutions no longer enjoy their historic monopoly on higher learning. During the next 10 to 15 years, developers of new technologies will be leveraging all of their resources and talent to create new learning tools and information-acquisition platforms that make current efforts look like Tinkertoys™. These tools lower the costs of productivity and demonstrate the potential to enhance learning processes and make complex subjects comprehensible. When conceived and executed properly, distance learning provides an important complement, or for some an alternative, to the traditional undergraduate experience. But its potential may lead us to assume mistakenly that sufficient alternative capacity for higher education, secured by market forces, is already in place. This in turn suggests that mere access to some or any form of higher education is sufficient. It is not.

Colleges and universities must also prepare to negotiate international competition. As a frontline global power, China, for example, intends to compete by making massive investments in education and research. China well understands the relationship between higher education and the global knowledge economy, as demonstrated last fall by a China Daily editorial headlined, “Chinese Ivy League” (October 21, 2009). While the newspaper takes the position that the Chinese government’s planning for development of a consortium of world-class institutions to rival the Ivy League places undue emphasis on international status, at the cost of concerns for providing access to higher education for the people (a contention with which I concur), the inherent competitive intent epitomizes the ambitions of knowledge enterprises worldwide. It is almost certain that the universities that have been created by emerging economies between 1990 and 2010 will alter the competitive position of the bulk of the world’s economies.

Even more disruptive to rank-and-file institutions in the long term is the coming emergence of what I refer to as “mega-universities” — a class of large American research universities with an expansive global presence and research expenditures that total more than $750 million per year. Following the lead of such institutions as Johns Hopkins, the University of Washington, and UCLA, these universities are generating ambitious portfolios of intellectual property and engaging business, industry, and governments around the world. With their resources, these institutions will affect the competitive posture of all other colleges and universities, especially in terms of such factors as salary structures for faculty recruitment.

The establishment of full-scale operations abroad demonstrates this emerging trend—one need only think of Cornell, for example, setting up a medical school in Qatar and the University of Chicago a business school in Singapore. How many such global institutions will emerge cannot be foreseen, but I perceive the potential for as many as 30 or 40. The emergence of global institutions is only the most recent stage in the millennium-long trajectory of continuous institutional evolution that characterizes the history of the university.

Implicit throughout this discussion is the imperative for universities, beginning with their governing boards and presidents, to adapt to the accelerating velocity of change. While clock time in academia is often measured in quarters or semesters, dramatic shifts in policy and culture and technology now occur at warp speed. Universities generally err on the side of being too deliberative, which means that they often miss out on opportunities. Academe might well learn from the private sector the imperative for adaptability, rigor, and quick but intelligent decision-making. Public institutions must reject the status of being no more than agencies of the state and move toward an enterprise model, which is to say, toward a mindset that is energetic, responsive, and adaptive.

### Institutional Evolution: An Experiment in Real Time

The reconceptualization of Arizona State University as the model for the New American University represents an effort by the university’s administration, supported by the board of regents, to accelerate a process of institutional evolution that might otherwise have taken more than a quarter-century, compressing it into a single decade (2002–2012). The task has been particularly challenging because ASU is the youngest of the roughly 100 major research institutions in the United States, and, with an enrollment approaching 70,000 undergraduate, graduate, and professional students, it is the largest American university governed by a single administration. The unprecedented transformation of the regional demographic profile in one of the fastest-growing states in the nation has determined the profile of our student body and thus shaped our “design process,” informing our decisions to match academic excellence with broad access, promote diversity, and strive to meet the special needs of underserved populations.

While in some measure the initiation of our efforts was inspired by the call some years ago for a “new university” issued by Frank Rhodes, president emeritus of Cornell University, the implementation of the New American University model we are advancing has, in practice, been shaped through exhaustive trial and error, a number of course corrections, and our best efforts at the application of common sense. Initial planning began with conceptualization from the University Design Team, made up of the provost and a number of vice presidents, deans, department chairs, and senior faculty members whose dedication, creativity, and
thoughtfulness advanced the process. Ongoing strategic planning continues with participation from all sectors of the university, as well as input from policymakers and the public.

A re-examination of academic operations and organization produced a model of differentiation. Rather than simply trying to expand our existing operations or model an expansion after the organization of leading research universities, we chose to create a distinctive institutional profile by building on existing strengths to produce a federation of unique colleges, schools, interdisciplinary research centers, and departments—with a deliberate and complementary clustering of programs on each of our four campuses. With “school-centrism,” schools compete for status not with other schools within the university but with peer entities globally. More than 20 new transdisciplinary schools, including such entities as the School of Human Evolution and Social Change and the School of Earth and Space Exploration, complement large-scale initiatives such as the Global Institute of Sustainability (GIOS) and the Bodesign Institute, a large-scale, multidisciplinary research center dedicated to innovation in healthcare, energy and the environment, and national security. In the process, we have eliminated a number of traditional academic departments, including biology, sociology, anthropology, and geology.

Integrating Access and Excellence

At ASU, we reject the notion that excellence and access cannot be integrated within a single institution, and rather than adopting an elitist model, we have sought to redefine the notion of egalitarian admissions standards by offering access to as many students as are qualified to attend. Our keystone initiative here is the President Barack Obama Scholars Program, which ensures that in-state freshmen from families with annual incomes below $60,000 are able to graduate with baccalaureate degrees debt free. During fall semester 2009, the program included more than 1,700 freshmen. The initiative epitomizes our pledge to Arizona that no qualified student will face a financial barrier to attend ASU, and it underscores the success of the longstanding efforts that have led to record levels of diversity in our student body.

While the freshman class has increased in size by 42 percent since 2002, for example, enrollment of students of color has increased by 100 percent, and the number of students enrolled from families below the poverty line has risen by roughly 500 percent. We consider our success in offering access regardless of financial need to be one of the most significant achievements in the history of the institution.

While America was far less populous a century ago and the world arguably less complex, national ambitions for societal progress apparently flourished then because, during the final decades of the 19th century, our country witnessed an unprecedented spurt in the establishment of four-year colleges. The forces motivating their establishment were national as opposed to global and in many instances even regional and municipal, determined by the aspirations of citizens who wanted a local college to educate broader segments of the populace. Whether we consider small-town citizens who organized to convert a normal school into a state college, or tycoons and industrialists such as Johns Hopkins and Leland Stanford whose bequests established world-class institutions, we may well regard such forward-looking ambitions as remarkable, given the current apparent lack of comparable motivation.

In our own century, education has become the most critical adaptive function in the competitive, global knowledge economy. Our national discussion concerning higher education thus must not be limited to arbitrary goals for the production of more college graduates. Mere access to higher education is in itself inadequate and will not produce the outcomes we desire unless we educate greater numbers of individuals successfully and also educate at higher levels of attainment. Thus concomitant with building access, we must also unleash evolutionary change in our institutions.

What is required is a new model for our colleges and universities, a new set of assumptions that encourages institutions to innovate and differentiate and become useful to their local communities, while at the same time seeking solutions to global challenges. What will be required are institutional models that offer access to excellence to a broad demographic range of students. This, then, is a call for our colleges and universities to recover some of our nation’s core egalitarian values to advance a system of higher education that will meet our needs in the future. It is imperative that we get started immediately.

AUTHOR: Michael M. Crow is president of Arizona State University.