Whither universities?

In “A New Model for the American Research University” (Issues in Science and Technology, Spring 2015), Michael M. Crow and William B. Dabars argue that public and private research universities are stuck in a pattern of incremental change, when the times call for radical reform. Research universities, long the gold standard of higher education in the United States, must be scaled up and freed from current design constraints that hamper their ability to produce the kind and quantity of education and research the nation needs at this moment in its history. The new model they describe advocates a dramatic expansion of enrollment at research universities to encompass the top 25% of the nation’s most academically talented students instead of the 5 to 6% they educate now. While noting research universities’ contributions to the knowledge economy, Crow and Dabars criticize the research enterprise in general for being “carried out largely in isolation from the socioeconomic challenges faced by most Americans.” Thus, their model organizes research—more of which they feel should be cross-disciplinary—around societal problems rather than the traditional disciplines. Perhaps the most serious design flaw they see in today’s research universities is the academic department, which, they maintain, impedes the flow of interdisciplinary collaboration within and beyond the university’s walls.

Their recent book from which this article is drawn, Designing the New American University, comes at a time when the nation’s research universities are searching for new models adequate to the realities they face. This is one of its appealing aspects: The authors offer a bold prescription for change, buttressed with a historical perspective on the evolution of the research university; a strong defense of the role of the arts, humanities, and social sciences; and recent theorizing about knowledge and knowledge institutions. They also provide a valuable real-life example of their model, reflected in the changes that Crow has orchestrated as president of Arizona State University (ASU) over the past decade or so. Anyone interested in alternative futures for the research university will want to follow this ongoing experiment in institutional redesign.

It is clear that Crow and Dabars’ model is tailored to what they regard as the nation’s 100 or so principal research universities. What is not entirely clear is whether they intend their model to be for a few of those institutions or for all of them. Although they write that restructuring initiatives are “necessarily sui generis because at bottom there should be nothing generic about institutional design,” their title and much of the book suggest that their model has wide applicability. But there are at least two reasons for caution.

First, the overwhelming majority of public research universities are not, as the authors argue, deliberately curtailing enrollment as a strategy for ensuring their elite standing in national and international rankings. The University of California and public research universities like it are prepared to grow in order to meet student demand and national needs. Yet scaling up the proportion of students they enroll to 25%—an enormous increase—would serve neither students nor institutions. Students can choose from a wide mix of excellent colleges and universities, including ones that offer opportunities for undergraduate research; there is no reason to believe that research universities are the only avenue to a 21st-century education. The costs of expansion would be enormous, at a time when the moderating of the Great Recession has done little to ease
the fiscal struggles of higher education nationwide. Per-student funding in the states is still 27% below what it was in 2008. (The University of California system now receives the same level of support from the state that it did in 1999, even though it educates 83,000 more students and 42% of its undergraduates are low-income Pell Grant recipients.) If current national budget trends continue, according to the Pell Institute for the Study of Opportunity in Higher Education, in 10 years there will be states in which higher education receives no funding at all. Innovations and adaptations—massive online open courses, or MOOCs, for instance—have a role in addressing this fundamental problem, but a real solution requires significant new investments of money. It is not just a question of organization and will.

Second, although the university research enterprise can always be improved, it does not need to be reinvented. Cutting-edge, cross-disciplinary work is thriving as never before at U.S. universities, and so are partnerships with governments, regions, and private industry. Further, a reorientation away from basic research and toward more attention to broad societal challenges or specific local needs is an idea with profound implications that should be carefully considered. Since the federal government’s decision at the end of World War II to make universities the center of the nation’s research enterprise, the United States has come to rely almost exclusively on these institutions for the fundamental discoveries on which the flow of new knowledge and new applications depends. Moving toward a strongly problem-solving approach could diminish that role, which has yielded spectacular dividends for society.

Crow and Dabars offer many ideas for change that are stimulating and useful. But we should also keep in mind how inventive and resourceful research universities have been in overcoming the obstacles that strew the path to innovation. They still are.

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