Challenges and Opportunities Facing American Research Universities

America’s first research university, Johns Hopkins belongs to an elite group of institutions that has served as a foundation of our economic prosperity since the end of the Second World War. Johns Hopkins has also been a global force, a leader among its peers in bringing the benefits of knowledge to the world for over 125 years. American research universities remain the envy of the world and anchors of American society, but they face significant challenges to maintaining their leadership. Chief among these challenges are inexorably rising costs, the difficulty of measuring quality, and signs of a declining commitment to research universities in the United States. Universities must address these issues to be able to continue playing a leading role in confronting many of the great challenges we face as a nation — from energy and the environment to health care and poverty.

Controlling Costs

For nearly thirty years the cost of tuition has grown faster than the overall inflation rate and faster than the growth in median family income.¹ As a sign of the times, the press recently reported that American consumers now have more student loan debt than credit card debt; meanwhile Education Secretary Arne Duncan announced that the default rate on student loans continues to increase.² To keep the growth in net tuition (what students and their families actually pay) below the rate of published tuition, private colleges are spending more on financial aid than ever before.³

In most sectors of the economy, costs have decreased over time with gains in productivity. Higher education, however, has been challenged to achieve a similar pattern of growth. A classroom today looks much the same as it did when Johns Hopkins was founded, and the hands-on process of educating each generation of students has changed remarkably little in that time. Students increasingly go online to learn facts and formulas as universities increasingly turn to technology for teaching foundational knowledge. But the education that distinguishes universities like Johns Hopkins will remain fundamentally the person-to-person transmission of knowledge, a rich experience that depends on lively dialogue, application of lessons learned, and the critical analysis of ideas. This is particularly true in graduate education where there are no economies of scale. A commitment to maintaining excellence is perceived within universities as preventing obvious cost-cutting measures such as increasing class size or relying more heavily on technology or lower-cost part-time and adjunct faculty to deliver education.

As the costs of education grow so too do consumerist pressures on universities to demonstrate their value. Pointing to famous dropouts like Steve Jobs and Mark Zuckerberg, students ask if a college degree is really necessary after all. Expectations are changing too. Students and their parents want to know if they are getting their money’s worth, and education is increasingly viewed as a credentialing process for a high-paying job or a necessary step to a professional degree. Not surprisingly, on campuses across the United States, career offices are reporting dramatic increases in use by freshman seeking their services.4

Measuring Quality

Look at any course catalogue or syllabus and you can tell what is being taught at colleges and universities across the country. What is being learned, however, is a more difficult question to answer. Assessment of quality and of outcomes has been found to be much more complex than in other industries. Reflecting this difficulty, national and international rankings of universities often rely not on outcome measures but easily-quantified inputs like student selectivity, resource expenditure, and reputation. The challenges surrounding the National Research Council (NRC)’s recent graduate rankings demonstrate how difficult it can be to arrive at agreed upon ways of measuring quality.

The singular focus on assessment that was a hallmark of Bush Administration K-12 educational reform has continued in the Obama Administration. Under No Child Left Behind, standardized test scores are the primary vehicle for assessing quality in public schools. Standardized testing has reached higher education as well. The Collegiate Learning Assessment (CLA), a 90-minute test of university general education, is now used by more than 400 colleges though at most institutions relying on a single test like the CLA to measure quality is rejected as inadequate. Unfortunately, there are no obviously effective alternatives. Student evaluations often serve as the measure of teaching quality. But they are an incomplete mechanism at best. Studies provide little evidence that student preferences indicate effective teaching, finding that students tend to give higher ratings to professors who give higher grades.5

Renewing our National Commitment to Research Universities

At a time when countries around the world are increasing the size and quality of their education and research programs, there are signs of a waning commitment to research universities in the United States. Faced with competing claims on revenue and changing priorities, policy makers sometimes view universities as providing more of a private benefit than a public good.

This trend is especially apparent at public research institutions where state support for flagship universities has been declining for two decades. The dramatic cuts at the University of California System were well-publicized. It is little surprise, then, that the Anderson School of Management at

UCLA recently announced their decision to seek to opt out of public financial support altogether, the drawbacks of their public affiliation being seen as greater than the benefits. On the federal level as well, funding levels are in jeopardy as a result of competing priorities in an era of soaring budget deficits. Universities are already incurring more and more of the costs of research. And despite perceptions to contrary, very few institutions generate enough revenue from research commercialization activities to even cover the costs of their technology transfer programs.

Meanwhile, countries as near as Canada and as far as China are witnessing significant increases in research funding despite the global downturn and have designed national strategies for developing their research universities. They have come to understand the tremendous value of institutions such as Johns Hopkins. To prepare for this growing competition, we must find the means — and the rationale — to renew our own commitment to the unique mission of American research universities and support their continued and invaluable contributions to the world.

In June, the National Research Council launched a Committee on Research Universities in response to a request from members of Congress including Maryland Senator Barbara Mikulski. A follow-up to the National Academies’ pivotal 2005 report, Rising Above the Gathering Storm, the committee’s charge is to assess the health and competitiveness of America’s research universities. The work of this committee has never been more important.

**Landscape for the Volunteer Summit**

In this changing environment, Johns Hopkins must position itself to see every challenge as an opportunity. Exploring some of these opportunities within the context of a challenging national landscape is the purpose of the volunteer summit. The four opportunities we have selected for discussion and input — the university’s role in Baltimore, our global presence, teaching and learning in the digital age and personalized medicine — all present exciting possibilities for Johns Hopkins to contribute in new ways to our national prosperity and our collective mission to bring the benefits of discovery to the world.

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