



What is the current state of
**ECONOMIC
SUSTAINABILITY**
of higher education in the United States, and
HOW DID WE GET HERE?

A WHITE PAPER
Jacalyn A. Askin
Bob Shea



NATIONAL ASSOCIATION OF COLLEGE AND UNIVERSITY BUSINESS OFFICERS

National Association of College and University Business Officers
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What is the Current State of Economic Sustainability of Higher Education in the United States—and How Did We Get Here?

This is the first in a series of three white papers prepared as part of the NACUBO Higher Education Economic Models Project, an initiative undertaken in 2014 to:

- Provide NACUBO members with a comprehensive tool that provides the foundation for their institutions to engage in complex conversation about higher education economic models that are financially sustainable, efficient, and effective while meeting the needs of students, employers, and society.
- Influence the national debate on higher education economic models by providing NACUBO member institutions with objective quantitative and qualitative information.
- Develop a communications strategy that gives NACUBO leaders and our member chief business officers a prominent voice in the discussion about changes to the higher education economic model.

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About the Authors

Jacalyn A. Askin is project manager of NACUBO's Higher Education Economic Models Project; Bob Shea is NACUBO's senior fellow, finance and campus management.



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“Some theories of the business are so powerful that they last for a long time. But eventually every one becomes obsolete...The first reaction of an organization whose theory is becoming obsolete is almost always a defensive one. The tendency is to put one’s head in the sand and pretend nothing is happening.”

— Peter Drucker, Management Consultant
“The Theory of the Business,” *Harvard Business Review* (September 1994)

“America seems to have hit a wall. The country that has given the world so many ideas about how to run higher education could do with some new ones itself.”

— Simon Marginson, Professor of International Higher Education
The Economist (28 March 2015)

Higher education institutions in the United States reflect both their European heritage as well as a uniquely American character. For the past 400 years, change has been a cornerstone of higher education, as colleges and universities have responded to the social, political, and economic environments in which they exist. Such change, however, has often occurred at a slow and deliberate pace, ever respectful of industry and institutional traditions, and frequently at the margins.

A key question for colleges and universities in the 21st century, given the rapidly escalating rate of change around them, is whether they can remain relevant and vital without escalating their own rate of change and without changing core elements. If managing around the edges simply means that colleges are managing their decline,

then new paradigms of institutional change are required. For colleges and universities to thrive, change must be proactive and strategic—and must match the pace of the rapidly evolving world in which they exist. The NACUBO Higher Education Economic Models Project is an effort to answer those questions and to provide strategies and pathways for accomplishing those objectives.

A Look Back

Higher education in the United States, like many other organic systems, is the product of nature and nurture. Which is to say, its roots in the medieval craft guilds of Europe, combined with uniquely American environmental factors, have shaped the academic model as well as the economic model of these colleges and universities. Because many of the cultural

and structural changes have been supplemental rather than supplanting, they have led to increasingly complex organizations. Yet, while institutions of higher education have adapted to changes over time, their resiliency in a time of significant and fast-paced change remains in question.

But we get ahead of ourselves. . . .let's first understand the key attributes of the current higher education economic model and how we got to this point.

Definitions of “economic model” abound. Higher education's economic model has at least four important dimensions: the financial environment, the institutional mission and value proposition, organizational structure and decision making, and institutional competencies and processes. As these dimensions have changed, the economic model has evolved as well—but today's challenges of access, affordability, and outcomes necessitate perhaps even greater changes in the future. Indeed, the market forces behind declining public resources and increased competition for students, faculty, and “prestige” prompt college leaders and many others to question and debate the current model's sustainability.

Nearly every day, the popular and industry press mention the changing environment and requisite changes in higher education. Researchers from higher education institutions as well as policy think tanks have authored dozens, if not hundreds, of volumes on the topic. Some, such as Archibald and Feldman's *Why Does College Cost So Much?* and Vedder's *Going Broke by Degree*, have focused on institutional costs and student affordability. Others—including Duderstadt's *A University for the 21st Century*; Carey's *The End of College: Creating the Future of Learning and the University of Everywhere*; and Zemsky, Wegner, and Massy's *Remaking the American University*—have examined the broad range of challenges facing American colleges and universities and the transformation required to meet them. These texts and others all inform the following outline of higher education's current

economic model and our understanding of how these dimensions developed.

Financial Environment

If economics is the study of supply and demand, then key indicators of today's higher education industry are the number of institutions that comprise it and the number of students attending those institutions. Over the past 75 years the number of colleges and universities has more than quadrupled. In 1940 the United States had approximately 1,000 institutions of higher education, while today it boasts nearly 4,400 accredited colleges and universities and more than 10,000 other postsecondary institutions. Significant stratification exists within the 4,400, with 50 to 100 elite institutions at one end of the spectrum and approximately 1,600 open-access institutions at the other.

The primary exogenous determinant, the “nurture” element, of higher education's current economic dilemma relates to funding. Until the 19th century, private colleges and universities, funded by individual donors and religious organizations, constituted American higher education. With enactment of the Morrill Act in 1862, which established federal and state funding for colleges, the creation of more than 70 state universities changed the higher education landscape by making “college more affordable and more readily available than before” (Duniway, 2015, n.p.). Despite this growth, however, college remained largely available only to elite white males.

The next significant change in financing U.S. higher education occurred in 1944. The Servicemen's Readjustment Act, commonly known as the G. I. Bill, was initially proposed to forestall a flood of returning veterans from overwhelming the still-fragile post-World War II economy. The legislation provided a range of benefits that included grants for attending colleges and universities. This caused a previously unmatched increase in demand, with more than 2 million veterans taking advantage of the educational stipends over the ensuing decade.

Pre-World War II higher education had been an elite man's domain. With passage of the G.I. Bill, the 1950's introduced the concept of higher education for the masses. For the first time, access to American higher education was not limited to the wealthy, and funding for such education was awarded on an individual, rather than institutional, level. According to Armstrong (2015), "higher education's business model was redefined to respond to these pressures and trends, and in the process became far more complex" (p. 12).

Funding for public colleges and universities continued to reflect the nation's view of higher education as a public good that benefitted both economic and civic development: State and local appropriations provided more than 80 percent of the educational costs at public institutions. Local funding proved particularly important to the growth of community colleges, which became the largest sector of higher education during the 1960s. Modest tuition, paid by students, made up the balance of institutional operating funds.

The egalitarian notion of higher education broadened in 1965 with passage of the first Higher Education Act (HEA). Access to higher education expanded to the masses with the establishment of the Educational Opportunity Grant which would be renamed the "Pell Grant" in 1980. Despite the availability of these grants, the ensuing decade still proved difficult for private as well as public institutions, as inflation and enrollment declines taxed their resources. Zumeta (2001) asserts that "private institutions survived this decade as well as they did in large part because of the rapid growth of student aid from the federal government" (p. 383), and state appropriations still accounted for 83 percent of student educational cost in 1980 (Kane, 1999, p. 59).

While the 1965 HEA had included some student loans, the Middle Income Student Assistance Act in 1978 shifted access to loans to all students, and in 1980 parents, too, became eligible to borrow. These legislative changes started the

trend of borrowing for college educations, which escalated in the 1990s with the introduction of unsubsidized loans and increased borrowing limits. The dramatic increase in for-profit institutions—the number of which nearly doubled from the mid-1990s to 2010 (*Economics of Higher Education*, 2012, p. 9)—also expanded the use of loans by college students. According to Gladieux, neither the loan policies for students nor the systems for funding and insuring the loans were explicitly planned. Rather they were simply the results of "a confluence of legislative amendments and market conditions" (Gladieux, 1989, p. 1).

As the availability of grants and, increasingly, loans boosted the resources available to potential college attendees, "posted tuition doubled between 1980 and 2000" (*Economics of Higher Education*, 2012, p. 18). Since 2000, tuition continues to increase across all segments of the industry, although it is increasing at faster rates at public four-year institutions. This is perhaps not surprising given the continued decline in state support for state colleges; on average, state support dropped to 23 percent of total public college revenue by 2012, according to the United States Government Accountability Office (2014, p. 9). Higher education has been crowded out of state budgets as spending on Medicaid has greatly expanded. In addition, economic growth is in the service and information technology sectors which are less effectively taxed; and balanced budget requirements are increasingly used as rationale to cap state expenditures rather than increase taxes.

These tuition increases have altered the public perception of the price of higher education. The public now expects colleges to justify their costs, which requires institutions to better communicate about and manage this revenue source.

With tuition now representing the largest revenue stream for colleges—approximately 40 percent, according to the U.S. Treasury Department (*Economics of Higher Education*, 2012, p. 20)—

tuition discounting has become an important element of the institutional financing lexicon. The term refers to using institutional resources, including other tuition revenues and endowments, to offer different prices to different students. Since even full-price tuition does not pay the full cost of education at public and non-profit private institutions (Hurlburt & Kirshstein, 2012, p. 1), the practice of tuition discounting further exacerbates the gap.

The goal, of course, is to create a mix of students paying full tuition with those paying partial tuition to maximize total revenue within enrollment limits—a methodology commonly known as revenue management in the airline and other industries. As demonstrated by the near-closing of Virginia’s Sweet Briar College because of financial difficulties, however, “the ability of colleges to use discounts as a means to expand enrollment and net tuition is weakening” (Doti, 2015, n.p.). Indeed, in a recent survey of college admissions directors, 58 percent of respondents reported missing their student recruitment goals for the current year. Overall, 75 percent of respondents—more among those working in private institutions—blamed the missed enrollment targets on applicants’ increasing concerns about student debt (Jaschik, 2015, n.p.).

According to Zemsky and Wegner (1997), “only those with a naïve idealism” (p. 66) would anticipate the return to broader public support of higher education. Assuming tuition increases have reached or are nearing their limits, colleges and universities within all segments must come to grips with capped growth of traditional revenues.

While increasingly relying on tuition as a source of revenue, colleges and universities have also faced increasing costs. Politicians and other observers have attributed the rising costs to a variety of factors. In 1987 then-Secretary of Education William Bennett asserted that federal subsidies (via student grants and loans) enabled institutions to raise tuition and, thus, increase their expenditures (referred to as the Bennett

Hypothesis). In an opinion piece in the *New York Times*, Bennett wrote about the actions of “Our Greedy Colleges”:

If anything, increases in financial aid in recent years have enabled colleges and universities blithely to raise their tuitions, confident that Federal loan subsidies would help cushion the increase. In 1978, subsidies became available to a greatly expanded number of students. In 1980, college tuitions began rising year after year at a rate that exceeded inflation. Federal student aid policies do not cause college price inflation, but there is little doubt that they help make it possible. (n.p.)

Others, like Baumol and Bowen (1966), had earlier attributed technology’s failure to increase productivity in service industries and offset labor cost increases (often referred to as Baumol’s Cost Disease) as a major contributing factor. In 1993 Baumol reiterated his assertion that productivity increases have continued to elude industries highly dependent on personal services, such as education. He explained this continued stagnation as a function of non-standardized processes as well as services where “quality is, or is at least believed to be, inescapably correlated with the amount of human labor devoted to their production” (p. 20). Thus, according to Baumol, “cost disease” continues to hamper productivity increases in higher education where faculty-to-student ratio and class size are viewed as measures of excellence and contributors to student success.

The labor intensive—sometimes called labor expensive as well—environment of higher education has prompted some to blame faculty for increased cost (the level of expenditures) and increased price (the charges paid by students). But, as Middaugh (2001) asserts, the public has little understanding of “what faculty actually do, and how well they do it” (p. xv).

Archibald and Feldman (2011) concur that both the nature of higher education as a personal-services industry, with its reliance on highly

skilled, increasingly expensive labor, and the inability, to date, of technology to significantly increase productivity are responsible for rising operating costs. Others blame administrative bloat. More recently, researchers have refuted these assertions. They argue that, while costs have risen along with tuition, increased tuition rates are the results of needs to offset revenue declines from other sources. In a May 2015 report, Hiltonsmith asserted that, while administrative costs have increased, the preponderance of responsibility for price increases at public institutions rests with state legislatures that have repeatedly disinvested in higher education for the past decade or more.

Employee compensation typically accounts for about 70 percent of a college or university's operating budget. While personnel costs at colleges and universities have increased, however, the number of full-time, tenure-track faculty across the industry has remained nearly constant. In attempts to reduce costs, or at least hold them steady, many institutions have turned to adjunct or contingent faculty, who are generally paid at significantly lower rates than their tenure-track colleagues and often receive fewer or no benefits. For benefits-eligible faculty and staff, compensation costs have increased largely due to increasing costs of benefits (particularly health care). Even before the recession of 2008, Hearn (1999) observed that the gap between faculty salaries and those of other professionals had continued to widen since the 1970s. Many higher education institutions no longer provide annual salary increases, and during the recent recession some introduced employee furloughs and wage and salary cuts.

Institutions' compensation costs have grown along with the expanding size of their professional staff. Even as clerical and maintenance staffing have experienced cuts, new functions and roles have been added in other areas (for example, enrollment management) thanks to intense competition for students and faculty and an increasingly complex regulatory environment. Between 1976 and 2001 the

number of non-faculty professionals increased 239 percent (Schuster & Finkelstein, 2006, p. 269). Faculty headcount concurrently increased, but largely in the number of part-time, contingent adjunct and full-time, non-tenure track faculty.

In some areas, competition for faculty is raising costs as questions about faculty productivity and the cost of university research increase as well; the State of Texas, for example, recently established a fund specifically to recruit "prestigious faculty." Such faculty often have high visibility and bring with them significant research programs. The high stakes are apparent in a 2015 lawsuit filed by the University of California, San Diego, against the University of Southern California for allegedly trying to take away funding and personnel supporting a major medical research project. Faculty workload is another complex issue; with assignments and expectations varying significantly between disciplines and across institutions and institution types, performance outcomes and quality can be difficult to assess. Analysis of faculty work is particularly complicated in research institutions, where overlaps and synergies between investigatory research work and instruction exist.

Competition has been responsible for other cost increases, perhaps most visibly in capital expenditures. Numerous institutions have engaged in an "arms race" of sorts, one that has resulted in new, more elaborate student recreation centers and sports facilities. Aging facilities, many dating to the higher education building booms of the 1950s and 1990s, also demand commitment of substantial resources—estimated by *The Chronicle of Higher Education* in 2012 to total \$36 billion—to make them energy efficient and functionally effective for today's uses. Student and faculty expect—and sometimes demand—campus-wide connectivity and the latest technology creating ever increasing needs for expanding and upgrading technology. In addition to requiring continual refreshment of networks and equipment, this growing technology infrastructure has increased the numbers of IT

workers needed, from hardware technicians to applications managers.

Perhaps one of the most significant drivers of cost in higher education institutions is the battle for prestige. Despite ongoing criticism of institutional rankings and other well-publicized comparisons, the hallmark of higher education continues to be ivy-covered walls and billion-dollar endowments. Consequently, the industry is increasingly isomorphic. Attracting significant grant funds, creating supporting foundations, and establishing honors programs, for example, have become success measures throughout the industry, even for open-access community colleges that avow teaching and learning as their primary mission.

Compounding the revenue and expenditure challenges are the limitations of tools available to help business officers and others analyze institutional finances. Higher education lacks cost functions, resulting in “almost a complete lack of visibility on how much it actually costs to deliver post-secondary education and how those costs compare with the outcomes achieved” (Anguiano, 2013, p. 3). Because many faculty engage in both instruction and research (and possibly administration and service), sometimes concurrently, the multiplicity and overlapping nature of functions make it difficult to discern the costs of either. Not surprisingly, arguments abound concerning the amount and appropriateness of cross-subsidization. Some, like David Breneman (2001), argue that the complex, joint production functions of university activities make cost allocations and internal cost analysis a political rather than an informative financial exercise.

Some institutions have tested other approaches, including activity-based costing, responsibility centered budgeting (or responsibility centered management), and program prioritization. Activity-based costing has garnered attention, particularly through the Maximizing Resources for Student Success project at Johnson County Community College in Kansas, and responsibility

centered management (RCM) has enabled some institutions—generally larger, research universities—to tie resources to the activity generating the revenue. Neither process, however, focuses on setting institutional priorities and strategically deploying resources to accomplish them.

First discussed in the 1980s in the manufacturing sector, activity-based costing aims to better match an organization’s resources with its activities and link those activities to outputs. The Maximizing Resources for Student Success project, for example, focuses on collecting data on the costs of instructional and student services to provide community colleges with comparison benchmarks. Ultimately, the project intends to facilitate better understanding of institutional cost drivers’ impact on student success outcomes. In her 2013 paper Maria Anguiano demonstrates the potential of activity-based costing to improve institutional planning and decision making while noting its limited use in U.S. universities. The emphasis on outcomes measurement, she notes, has neglected assessment of the cost of attaining those outcomes—something activity-based costing can inform, although institutions will still need to identify core outcomes through strategic decision-making processes.

Program prioritization, as described in Dickesen’s (2010) text, offers a methodology for colleges to align programs, services, and requisite resources to institutional mission and goals. While more than 50 colleges and universities have successfully implemented this model, it has not made inroads at institutions where resistance to change and complacency with the status quo held sway.

Institutional Mission and Value Proposition

Its mission communicates a college or university’s purpose and value to prospective students. While internally derived, the mission connects the institution to the individuals and entities it wishes to serve.

The American university was an English transplant, and like its model, it upheld the tradition of a prescribed liberal arts curriculum based upon a primarily classical preparatory course; it was deeply concerned with the forming of moral character and the conserving of existing knowledge rather than the search for new knowledge; it placed great value on a residential pattern of life for students; and its major role was the training of a special elite for community leadership in all fields of endeavor. (Zubatsky, 2)

This mission remained intact for more than 200 years until enactment of the Morrill Act in 1862. This legislation began the movement toward more meritocratic access to higher education in the United States, through purposeful establishment of state colleges and universities focused on economic development. These new institutions were required to include instruction in “agriculture and mechanic arts, in such manner as the legislatures of the State may respectively prescribe, to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life” (Morrill Act of 1862).

In 1876 the scope of higher education institutions again broadened with the founding of Johns Hopkins University—the first research university in America. Johns Hopkins was based largely on the German model of the university, which separated graduate and professional education from the liberal education provided by colleges that served as preparatory institutions. Before long, the American university model evolved into an amalgam of the two, with institutional missions incorporating both the traditional liberal arts as well as technical and professional programs.

In 1945, having seen the importance and impact of science in winning World War II, Vannevar Bush published *Science: The Endless Frontier*. Bush, who had headed the U.S. Office of Scientific Research and Development during the war, called for the federal government to increase its investment in basic research, advocating for

the research to be conducted at universities by faculty. The nation, nonetheless, continued to place significant value on a liberal education, as reiterated in the 1947 *Truman Commission Report*. According to the report’s authors, a liberal education not only supported democratic principles in all aspects of life but also sparked the development and use of creativity in problem solving. Liberal education was seen to serve individuals, regardless of their occupations, as well as their communities and the country, so it continued as a fundamental mission of American higher education.

As discussed above, the 1950s and 1960s brought substantial change that further modified the mission: education for the few increasingly became education for the masses. These changes were manifest in the proliferation of open access two-year colleges (renamed “community colleges” by the Truman Commission) and the increased co-education and racial diversity on campuses that resulted from the civil rights movement. Vannevar Bush’s push for expanded government investment in science led to creation of the National Science Foundation and increased focus on research at many colleges. The evolving multiversity with its diverse departments and growing emphasis on research and graduate and professional education began losing its isolated, Ivory Tower status and became more reflective of the world it occupied.

For several ensuing decades, the mission of educating the person for a fulfilling life served as a key value proposition for students: “In the early 1970s, nearly three-quarters of freshmen said [a college education] was essential for them to develop a meaningful philosophy of life. About a third felt the same about being very well off financially” (Berrett, 2015, n.p.).

In 1967 then-Governor of California Ronald Reagan challenged the egalitarian policies of his predecessors. He declared that government should not provide free higher education, as California did, and “should not subsidize intellectual curiosity.” Further, Reagan argued,

because the purpose of learning was to prepare individuals for the workplace—a personal benefit—the public should not have to pay for it. Consequently, universities’ role in developing new knowledge and the associated time invested by their faculty began to be viewed with skepticism, “in some quarters making the term ‘research’ synonymous with self-indulgence” (Zemsky & Wegner, 1997, p. 25).

For the last 40 years, as public funding for higher education has decreased and private costs have increased, market forces have played bigger roles in institutional missions. Broader participation as well as the change in payee has brought with it a corresponding change in the value proposition for higher education. Students now seek utilitarian outcomes in credentials rather than intellectual growth. Governments, accrediting agencies, and the public reiterate those values by focusing on outcome measures such as degrees awarded and jobs obtained. The impact of changing expectations has been widely observed in reduced enrollments in the liberal arts.

Perhaps the greatest impact, however, has been seen in institutions traditionally identified as liberal arts colleges. At the beginning of the 20th century, approximately two-thirds (66 percent) of college students enrolled in liberal arts colleges, with the percentage dwindling to 25 percent by the 1950s. In 1970, the United States had 721 liberal arts colleges, according to the Carnegie Commission on Higher Education, serving only eight percent of postsecondary students. By 1976, the number of such colleges had dropped to 583, with only 228 colleges categorized by Carnegie as Bachelor’s Degree – Liberal Arts by 2000. While some liberal arts colleges closed or merged, many others revised their missions to include professional programs, such as business and health care, and established new identities as comprehensive colleges and universities.

Changes in mission have also been impacted by declining public funding for research which has raised institutions’ interest in business-funded research and outcomes such as patents

and intellectual property ownership. As a result, research parks, business incubators, and technology transfer offices have become ubiquitous at universities, while workforce development and “corporate colleges” have grown in importance at community colleges.

The corporatization of American higher education prompts Zemsky, Wegner, and Massy to caution that “American colleges and universities have been sliding down an increasingly slippery slope.. [and]... have virtually given up defining themselves in terms of their social and economic contributions to the community, state, or nation” (2005, p. B6). Other observers, including Janet Napolitano, president of the University of California, continue arguing for the public good of higher education:

We are not degree factories. Our business, if you will, is to transform individual lives and to transport new knowledge into the world. As university leaders, we must strive to convince the general public that higher education is a common goal worthy of public investment. This is our grand challenge. (2015, p. B5)

Organizational Structure and Decision Making

For centuries, shared governance and faculty tenure have been intrinsic parts of American higher education. According to the American Association of University Professors, shared governance is “inextricably linked” (Gerber, 2001, p. 32) to academic freedom, and academic freedom is similarly linked to faculty tenure. These characteristics—which are unique to American higher education—reflect both the values and pragmatics of institutions as they have evolved.

American higher education has its roots in the medieval faculty and student guilds of Paris and Bologna. In the former, faculty governed the institution; in the latter, the students. As higher education transitioned to the American colonies, it adapted to the New World’s culture and values.

While the purpose of colleges remained largely the same—instructing the elite to become teachers, lawyers, and public leaders—the governance structure changed. Boards and presidents were put in positions of leadership with the intent of limiting faculty power in institutional decision making. This power shift also altered institutional focus. Stoessel cites Zusman’s observation that “instead of focusing inward on ‘core values,’ governing boards incorporated the democratic value of social consciousness” and differentiated American colleges from those in Europe that were “archaic cloistered institution[s] with no connection to the outside world” (2013, n.p.).

This redistribution of power lasted until the 19th century when faculty at Harvard University negotiated the terms of shared governance:

Following several years of heated debate over faculty involvement and discontent with the administration of college affairs and the traditional curriculum, a new set of statutes for the governance of the college was introduced in 1826. This statute provided faculty with control over the admission of students, student discipline, and the conduct of instruction (Brubacher & Rudy, 1997, cited by Jones, 2012, p. 119)

During this period Harvard also resurrected the employment concept of tenure, which had originated in the 12th century by edict of the Holy Roman Emperor but lain dormant in the American higher education landscape. By the middle of the 20th century, the growing higher education industry responded to faculty shortages by offering the benefit of tenure, and tenure became the norm in faculty employment terms. Although often criticized as a benefit affording lifetime employment without accountability, tenure is credited with attracting highly qualified faculty who might receive more lucrative offers outside of higher education. It is also seen as a stabilizing force, generating opportunities for individuals and institutions to invest in long-term research as well as creating a workforce that demonstrates

pride in and responsibility for the institution. That responsibility includes selecting new faculty; tenure lessens any employment threat felt by existing faculty, freeing them to hire the best and the brightest newcomers.

Over time, the tradition of shared governance has manifest differently at different institutions and different institutional types. In recent decades, tenure and shared governance have drawn criticism, within and outside the academy, as contributing to colleges’ inability to change and respond to new expectations. According to a common assumption, shared governance is a major factor in the intransigence of colleges and universities to transform themselves more rapidly in response to environmental changes. Observers of higher education cite the difficulties of negotiating timely decisions and undertaking institutional innovation given the many voices that must be considered in a shared governance environment. They argue that the shared governance structure impedes the responsiveness and evolution required of higher education if it is to maintain relevancy in a fast-changing, technologically complex market. Interestingly, research does not support these ad hoc observations, at least not consistently. Per Jones (2012):

Perhaps the most interesting finding of this literature review is the lack of scholarship on the impact of faculty governance on institutional performance. Given the current push for efficiency and accountability around higher education, it was expected that more scholarship would have attempted to address the question of whether faculty governance has a positive or negative impact on the institution’s performance. . . . Among those few studies which have looked at this relationship, there appears to be mixed findings. (p. 130)

One of shared governance’s unintended consequences has been the division of roles. Typically, shared governance makes faculty responsible for the institution’s products, instruction, and research, while

assigning responsibility for resource inputs to administrators. Per Cameron (2010), a tenured faculty does not share directly in the profits of the college or university and is more motivated by a need to preserve academic excellence than a need to maintain enrollment. The idea of a tenured faculty has deep roots in academic tradition. (p. 5) Distanced from resource discussions but proximate to evidence of the global success of American higher education, faculty rationally focus on academic excellence and desire to preserve the structures that have created past success.

Further exacerbating the divide between administration and faculty is the vertical organizational structure of institutions that often leads to “silos.” Colleges and universities have adopted, from the German model of higher education, the disciplinary model for departments and schools. Departments and schools, in turn, function within colleges, whose deans typically report to the chief academic officer or provost. Consequently, the only official linkages among an institution’s financial and business operations, student services, and academics often occur in the “C-suite,” with communications and resource allocations functioning according to this hierarchical structure.

The disciplinary model also results in unique norms regarding curriculum, pedagogy, faculty role and outcomes, and, consequently, different production functions. Institutions that emphasize research often align faculty recognition and rewards to the specific discipline, a factor originally described by Gouldner in 1957 as a newly evolving segmentation of faculty into “cosmopolitans” and “locals.” Faculty expectations and behaviors shaped by disciplinary allegiances further reduce the overall institution’s influence and its ability to develop consensus around vision and strategy. Significant challenges then arise in closing the gap between college administrators and faculty and in effectively allocating power and roles.

Expectations for leaders have changed as well. College presidencies developed as a means to corral faculty and establish colleges as separate from their traditional ruler and benefactor, the church. Traditionally drawn from academic ranks, college presidents played largely internal roles; they focused on providing academic leadership of their institutions and representing internal constituencies and positions to external stakeholders. In recent times, these external stakeholders—boards, donors, politicians, and others—have begun exerting more influence and power. The decentralized nature of the higher education industry, combined with increasing regulation and competition for resources, accentuates the power of external agents.

These agents often expect a pace of change at odds with the deliberative evolution of colleges and universities. This has led, in some instances, to confused and somewhat chaotic institutional leadership where presidents, subject to disparate authorities and competing goals, are seen by faculty and staff as “creating distracting and inauthentic processes rather than authentic shared governance” (Kezar & Laster, p. 7). As a result, faculty are increasingly removed from decisions about substantive campus issues. At a time when institutions are subject to substantial pressures to change, the absence of faculty at this level may be problematic.

Changing power structures and evolving views of higher education’s role have impacted the type of people hired as institutional leaders. With the mid-20th century’s rapid expansion of higher education, particularly the community college sector, leadership ranks attracted a broader spectrum of individuals. Community colleges looked to professionals in local school systems, while four-year colleges and universities drew from a range of administrative roles within their institutions, ranging from student affairs to development to business operations. Mitchell (2015) asserts that these leaders operated their institutions “as ‘Mom and Pop’ shops, based on old financial assumptions” (n.p.).

Recently some colleges have begun to draw leaders from a variety of other industries as well as governmental agencies. Guthrie asserts that “this shift stems from the need of higher education institutions to run more like a business and to use skills of management and finance that are not as prevalent in academe.” (2002, n.p.) Ignoring Guthrie’s apparent assumption that the necessary skill base is rare in higher education, the trend to draw leaders from other industries appears to acknowledge higher education’s need to adopt new economic paradigms.

Institutional Competencies and Processes

As a “credence good,” higher education has enjoyed centuries of uncontested positioning as the purveyor of post-secondary knowledge and, more recently, of basic research. U.S. colleges and universities, building on, but modifying, European models to fit the values and expectations of a young and growing nation, were eventually heralded around the world for their successes. They unquestioningly pursued growth—of enrollment, of programs, and of facilities—while seeing downturns as natural counterparts to economic booms and assuming the successes of the past would accurately predict the future. Thus, the industry expanded, increasing from fewer than 2,000 colleges and universities in 1950 to more than 4,400 by 2012.

During the past half century, competitors of traditional degree-granting institutions have introduced options—such as online learning, competency-based credentials, nanodegrees, and badging—that appear to produce similar, if not the same, outcomes faster, easier, and less expensively. Distance education, which had its origins in correspondence programs in the 19th century, has grown as technology expands its capabilities and reach. In 1989 John Sperling started the University of Phoenix online program to address the needs of working adults who had been attending the institution’s on-site classes. Since then, online education has gone from novel to the norm and impacted nearly all colleges and universities. In fact, by 2012 nearly 70 percent

of chief academic officers stated that online education is critical to their institutions’ long-term strategy, and nearly seven million—or 32 percent of all students—were taking at least one online course (Allen & Seaman, 2013, p. 4).

Along with online classes, hybrid courses and the “flipped classroom” have changed the faculty role. Many believe these developments have increased the faculty workload, leading some institutions to separate the responsibilities for content from delivery and assessment. The unbundling of the faculty role has increased the number of people in supporting roles and created myriad new positions, such as curriculum developer and instructional designer. Although intended to leverage faculty time, a valuable and costly resource, unbundling has distributed work across numerous functions. Finkelstein, Frances, Jewett, and Scholz (2000) have observed that technology has not reduced, but rather, increased faculty work by adding tasks ranging from converting to online tools and environments to staying current with evolving knowledge bases to responding to student expectations for 24/7 communications. Because most colleges and universities lack activity-based costing systems, the actual costs of these new frameworks typically remain unknown.

While the 1980s saw a dip in the amount of faculty time spent in instruction, more recent studies (Schuster & Finkelstein, 2006) show that faculty are spending significant amounts of time in instructional work, often with undergraduates. The 1980s dip was ascribed to increased attention to research, and that focus has not abated. The offsets to resumption of the faculty time spent on teaching are increased time at work and less time spent on administrative tasks. The latter has been particularly noticeable at the institution level; in other words, faculty members’ focus on their discipline, where research and recognition systems are in place, retains their interest in governance at the department level but reduces their interest in institutional governance.

While changes in pedagogy and technology have changed the instructional process, the increasing

use of contingent faculty has changed the delivery medium. As reported by Kezar, Maxey and Eaton in their report for the Council for Higher Education Accreditation (2014), in 1969, tenured and tenure-track faculty represented 78 percent of the instructional workforce at colleges and universities. Forty years later, only 34 percent were tenured or tenure-track; of the remaining 66 percent, the majority was part-timers. Research attests to both the quality of adjunct teaching as well as the deficiencies of relying on individuals with tenuous relationships to the institution for this primary function. In a 2013 report to the Association of Governing Boards, Kezar and Maxey (2013) outline the negative impacts of this change in the higher education workforce on student outcomes, including reduction in student completion.

In addition to disrupting the instructional norms of higher education, several of these competitive models are engendering questions about accreditation, which currently serves as the gatekeeper for federal financial aid. Begun in the 1880s as membership organizations intended to identify legitimate higher education institutions, the regional accreditors have maintained their focus on self-assessment accompanied by peer review of entire institutions. As accrediting organizations developed, they

Embraced many of the essential elements of American higher education, including the role of the governing boards, the place of general education in the curriculum, the centrality of academic freedom for faculty and students, and opportunity for student development outside as well as inside the classroom (Brittingham, 2009, p.17).

The introduction of competency-based credentials and badging that affords individuals access to disaggregated knowledge components, with outcomes assessed by specified metrics, further challenges the traditional accreditation model. As students, employers, and the federal government exert pressure on institutions to recognize the value of these innovative models,

the gatekeeping function of accreditation will need to adapt to allow student access to financial aid. New paradigms of higher education quality will inevitably result.

While new models of teaching and learning are being piloted and instituted across the higher education spectrum, the research function is also evolving. Opportunities to commercialize research place increased importance on patentable products. Offices of technology transfer have become common, as universities attempt to manage the implementation and value of faculty research.

The model of the lone researcher toiling in a solitary lab has also evolved. Collaborative endeavors, across disciplines and institutions, and, increasingly, across countries, have become the norm. David Leeboorn, president of Rice University, attributes these collaborations to reduced federal funding for research and the associated challenges this places on universities (Flaherty, 2015). The University of Michigan recently announced a \$100 million investment in interdisciplinary research in research computing and data science, and several other universities have announced research initiatives focused on the “grand challenges” fostered by the White House Office of Science and Technology Policy. In addition to changing the scope of research projects, these initiatives reflect profound change in the leadership of research on campus, transitioning from individual faculty members to administration and an expanding class of research professionals.

As the size and complexity of projects have grown, funding has tightened. Such reductions have had serious implications for institutions as well as researchers. Colleges and universities find themselves further underwriting their research mission with resources garnered from other activities. Meanwhile, faculty researchers must put more time into securing grant funds. And both institution and researcher question whether the “larger awards more often created superfluous

overhead than the synergies that greater size and internal diversity are supposed to produce” (Bell, Hill & Lehming, p. 10).

In sum, the products and processes of the “multiversity” are undergoing significant change. How those changes will impact the fundamental structures of colleges and universities is yet to be seen.

Conclusion

Higher education institutions in the United States reflect both their European heritage as well as a uniquely American character. For the past 400 years, change has been a cornerstone, as colleges and universities have responded to the social, political and economic environments in which they exist. However, such change has often occurred at a slow and deliberate pace, ever respectful of industry and institutional tradition, and frequently at the margins. A key question in the 21st century is – with the rapidly escalating rate of change around them, can colleges and universities remain relevant and vital without escalating their rate of change and without changing core elements? If managing around the edges simply means that colleges are managing their decline, new paradigms of institutional change are required. If colleges and universities are to thrive, change must be proactive and strategic and match the pace of the rapidly evolving world around them. The NACUBO Higher Education Economic Models Project is an effort to answer those questions and to provide strategies and pathways for institutions to adapt to their missions and goals.

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