

A Review of the U.S. Higher Education System: Its Structure, Funding, Quality and the Future

The differences between higher education institutions around the world are indicative of a country or culture's approach to three factors: the role of government, competition and quality management. This paper will examine five aspects of higher education in the United States – university structure and governance, funding, accreditation, outcomes and impact, and future development – through these factors and will serve as a review of the U.S. higher education system historically and as it is today.

1. A Short History of U.S. Higher Education with a Focus on University Structure and Governance

One of the most defining features of the U.S. higher education space is that it is at once fragmented and integrated. Most American universities offer many different majors and faculties under one roof, but there are many different types of universities – public, private non-profit and private for-profit – that are managed by different states with different rules. In order to understand U.S. higher education, it is important to understand how the current university structure and governance came to be.

The first universities in the U.S. – Harvard, Dartmouth, and the College of William and Mary, among others – were chartered before the founding of the republic, when the United States was still an English colony. Thus, they were modeled after the English faculty structure, in which there were many colleges under one degree-granting entity (Thelin 2011), but the Scottish governance method, with an independent board and a president (not necessarily chosen from the faculty) who presided over management decisions. Because they were chartered by the King of England, they were privately managed and maintained.

This general structure has endured, and at most American universities today, students can enroll in colleges of engineering, liberal arts, science, management, agriculture or another field; they can move freely between the colleges and still get their degree from the university which they are associated with. But despite this integrated approach to the role of individual universities, the whole of the higher education space is in fact quite fragmented due to the United States' particular view on the role of government.

After the founding of the United States as a republic, the law of the land shifted from centralized, monarchical rule to one in which what is not directly included in the Constitution as a role of the federal (national) government is left to the states. This is true of higher education and education in general. Thus, contrary to England and the rest of Europe, where there are ministries of higher education that manage goals, quality and funding at a national level, in the U.S. there is no such national oversight. Each state charters its own universities; each state manages funding; each state determines what outcomes – if any – are necessary for graduates to have (Thelin 2011).

But this law alone does not explain the growth from a few selective, private universities chartered by the King of England to an industry serving nearly 21 million students. That transformation took a landmark Supreme Court decision and a few new laws.

In 1819, in the case *Trustees of Dartmouth College vs. Woodward*, the Supreme Court upheld the charter of Dartmouth's college and allowed it to continue operating as a private institution. What this meant in practice was a codification of the hands-off attitude of the federal government toward universities, which sparked a college building boom in the early 1800s. Knowing that the federal government would not interfere and that they did not need to provide funding, the states could charter universities at will, an early example of how the role of government and competition distinguished American universities from their European counterparts. This market approach – rather than a centralized management approach – allowed universities to orient themselves toward the needs of the community, leading to a diversification of majors beyond the liberal arts to engineering, science, law, and medicine. Over the next decades, almost anyone with money was permitted to start a school, with churches and private philanthropists taking the greatest advantage.

In 1862, a major change occurred with respect to the federal government's role in higher education with the passage of the first Morrill Act. As the United States was expanding west, the federal government established a policy „whereby states received profits from the sale of an allotted portion of western lands if used to establish programs of agricultural, mechanical, and military sciences, along with liberal arts. [...] In some cases, states attached their new engineering or agricultural programs to historic colleges. In others, they opted to create new state colleges” (Thelin et al.). The second Morrill Act, of 1890, further expanded university access by allowing former Confederate states to take advantage of the „land-grant” policy, as it came to be known.

Growth continued over the next decades, with surges after the Morrill Acts, World War I and World War II; in 2011, it stood as such: Nearly 21 million students were enrolled in a degree-granting institution of higher education, an increase of 6 million in the last 10 years. 15.1 million students were enrolled in public, non-profit institutions, 3.9 million in

private, non-profit institutions and nearly 2 million in private, for-profit institutions. There were 7,021 post-secondary institutions, including 4,599 degree-granting institutions (U.S. Department 2012).

These institutions are divided into multiple types: 2-year public colleges known frequently as community colleges, e.g. City Colleges of Chicago, Houston Community College, and Westchester Community College; 4-year public non-profit universities, e.g. State University of New York, Purdue University, and The University of California system; 4-year private non-profit universities, e.g. Stanford, Harvard, and MIT; and private, for-profit universities, e.g. The University of Phoenix, Western International University and Liberty University.

There are generally three main governance structures, according to the report „The Top American Research Universities”: universities with a single governing board for a campus-based research institution with direct authority and responsibility for institutional operation and management; multiple-campus public institutions with a common statewide board; and a public campus institution which has a governing board that has separate responsibilities from a statewide board, which also exists (Lombardi 2002, 6-7).

The boards can operate in many different ways but in general, the public boards are often politically appointed or elected and serve to regulate the university on behalf of public constituencies; private boards are generally seen as supporting rather than controlling the institution (Lombardi 2002, 8). Different views of the role of government – supporting or controlling, managing directly or managing indirectly – have influenced the development of the different governance structures.

2. Funding

More importantly, different views of the role of government have influenced the funding available to different universities. Historically, the federal government provided very little money to universities for everyday management and operation (Heller 2009, 73), though it is largely responsible for the funding and grants that support research at institutions. It also is responsible for improving access to university for all students by way of grants, scholarships and loans which defray or defer the cost of higher education. In Fiscal Year 2014, total federal grants to students were projected at \$26.3 billion and new loans to students were expected to reach \$101.3 billion (CBO links). Federal research funding for universities, as administered by the National Science Foundation, reached \$5.5 billion (Sargent 2013, 35).

Most operational funds are allocated to universities at the state or even local level, as in the case of community colleges. During the appropriation cycle, each state

or locality determines the level of funding which it will provide to its public universities, and each university is left to make up the difference between its appropriations and its operating costs.

What results is a budget that is made up of state or local appropriations, federal research funding, student tuition, private donation sand endowments, and other funding sources. Private, non-profit research institutions are generally ineligible for state funding, though they are eligible for federal research funding; in general, they must rely more heavily on private donations and endowments, as well as student tuition. Private, for-profit institutions are generally entirely dependent on tuition and private donations.

With regards to public institutions, state allocations have decreased as a percentage of total funding in the last 25 years, it has increased in real numbers; states combined provided \$33.3 billion in direct support for universities in 1987 and \$81.2 billion in 2012, down from a high of \$88.8 billion in 2008. Public institutions also collected tuition revenues of \$59.9 billion in 2012 (State 2012).

It should also be noted that residents who choose to attend public universities in their state receive a discounted rate of tuition for those universities. The discounts can be as high as 70% per year – for example, at the University of California at Berkeley, in-state students pay \$13,200 in tuition while out-of-state students pay more than \$36,000. At Purdue University, in-state students pay roughly \$10,000 while out-of-state students pay \$28,800. State governments do not set tuition and fees directly, nor do they regulate maximum absolute levels or increases. This goes to the market-based design of higher education in the United States; states believe that increased competition will lead to a regulation of prices as universities compete on multiple factors, including degree programs offered, price, and amenities.

The biggest concern about funding is not that states are providing less and less, but that programs are costing more and more. As universities compete on more non-academic factors, such as dormitories, athletic facilities and extracurricular activities, while maintaining and expanding a full slate of academic programs, the question has become whether university is worth the increased cost or whether there should be a push to lower the cost of university attendance and increase accessibility. A recent study shows that in fact, even at higher prices, university is valuable, but there must eventually be an upper limit (Leonhardt).

3. Accreditation

Accreditation is one of the most fragmented areas of U.S. higher education and it shows no signs of becoming nationalized. Currently in the U.S., institutional management

and oversight operates with three owners: the states, which are responsible for and grant institutional licensure; the federal government, which oversees the use of federal funds for the right purposes; and private, non-profit regional accrediting agencies that are designed to make judgments about quality (Amaral, et al.2009, 30).They play distinct, mutually exclusive roles in a very broad way. One of the biggest problems with regional accreditation as identified by Amaral, is that it operates without common standards for quality and accepts a wide range of institutional differences within the same agency.

There are have been attempts at reform and nationalization, in order to codify certain standards of quality; however, the most recent attempts were failures due to the uniquely U.S. approach to quality management and competition – namely, that it is the responsibility of schools themselves to promote quality in order to ensure that students continue attending. Universities that provide low quality for the price are expected to struggle and ultimately close. In fact, however, this has not happened as the demand for higher education has risen. Despite attempts in 1992 and 1997 to impose stricter standards, pushback came as universities felt their autonomy being threatened, and the proposals never moved beyond discussion. Yet, accreditation remains a distinctive symbol or indicator of quality in American higher education (Bogue 2010, 11).

4. Outcomes and Impact

Related to accreditation, whose purpose is to indicate that there is some standard of quality being met at the university, is the actual evaluation of student outcomes. One of the most difficult parts of quantifying the university experience is identifying what the outcomes should be, how well the university supports their pursuit and how well students are achieving them. In the United States, students are not required to pass any final exams showing cumulative lessons learned, nor are they universally required to complete capstone research. Transcripts with student grades can be requested by employers, but there is no standard of grading across universities and the problem of grade inflation has been brought up repeatedly. In short, outcomes are hard to quantify.

In a study of performance funding – funding tied directly to performance outcomes – in Tennessee, among the most important questions identified were: To whom is higher education accountable? Will accountability policy highlight economic development and workforce readiness goals but neglect other important purposes of higher education, such as personal discovery, civic awareness and responsibility, the pursuit of social justice and search for new and basic truths? The answer proved difficult to find and it may be that there is no one right answer (Bogue 2010, 11).

As a result of no clearly defined goals or outcomes other than „attract the best students” and „achieve top 10 within external rankings”, colleges have begun to look more and more similar. According to Eckel (2009), the cumulative effect of all schools doing more to attract better students does harm to affordability and access. He describes it as a winner-take-all environment, as in an auction, but instead of only the winner paying the stakes, the losers also pay, as all progress is relative. This is very clearly a result of the American competitive streak, which values winning above all. It also allows each school to define quality in a relative way or in its own way, making it harder for students to identify real quality.

To redefine competition constructively, it would be worth revisiting Clark Kerr’s *The Uses of the University*, while Eckel suggests developing new indicators of quality instruction, identify real needs within a region, and considering further specialization rather than everyone competing on all factors.

5. Future Development

There are many ideas already put forth in this paper about future development, including a shift toward specialization, a clearer definition of outcomes, and a push for more meaningful accreditation procedures. But a relatively recent development of U.S. higher education, which encompasses perfectly the American spirit of competition, is the entrepreneurial university. Linked to many of the above topics – especially university structure, funding, and outcomes – the entrepreneurial university is a university which is quicker at adapting its programming to changing needs, a university which is engaging in high levels of knowledge transfer with its surrounding area, both in the traditional sense as well as through university-business partnership (Gibb, Haskins and Robertson 2009, 8).

Some of the earliest iterations of entrepreneurship and knowledge transfer came as cooperative education programs, in which students spent alternating semesters attending school and working, and as internship programs, which were similar but shorter – one or two semesters, perhaps in the summer (Wilson 1996). Increasingly, however, universities have turned to commercialization of their own research. This market-based approach serves to confirm the quality of the research being produced and provides another platform on which to compete.

The spirit of competition manifests itself not only in schools aiming to attract better students and researchers, but also in cooperating with businesses and creating spin-off businesses (Gibb, Haskins and Robertson 2009, 8). It is necessary for universities to be autonomous in the pursuit of this goal as the benefits, the profits, can then accrue to the

universities themselves rather than to the state or national government. Finally, becoming more entrepreneurial is increasingly looked to as a solution to reduced state funding. However, there are limits, as there are several necessary and sufficient conditions for a high-functioning entrepreneurial university, which can be found by reading Gibb and Hannon (2006); Etzkowitz and Leydesdorff (2000); and Clark (1998).

6. Conclusion

The U.S. approach to higher education values a limited role for the federal government, high competition, and non-invasive quality management, with the U.S. Department of Education having never taken direct federal oversight of higher education management nor its quality. Rather, institutions look to the market to monitor and manage quality and access. What has resulted is an often-changing market with limited oversight or outcome measures. But what has also resulted is a level of higher education innovation not as present in foreign universities. As universities have had to get creative to attract students, expand funding, and progress toward the future, many have created many different programs and faculties that are responsive to the needs of the workforce today and in the future. They have also come up with innovative approaches to funding that are beginning to be adopted worldwide. While it would be nice to see continued broader federal and state support for education, perhaps the restrictive environment of reduced funding and high autonomy has led to innovations that would otherwise not have come and will lead to as-yet-unseen innovations in the future.

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