

UNSETTLING TIMES:

HIGHER EDUCATION
IN AN ERA OF CHANGE

STRATEGIC QUESTIONS
FOR COLLEGE AND
UNIVERSITY LEADERS

Report of the
University of Denver
Strategic Issues Panel
on Higher Education

September 2014



UNIVERSITY of
DENVER

STRATEGIC ISSUES PROGRAM



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Letter from the Board Chair and Chancellor

DEAR FRIENDS,

The forces of change affecting higher education today are far stronger and moving more swiftly than ever before, and there is little doubt that much of higher education will be substantially different within a decade. A rapid confluence of forces tied to economics, demographics and technology will make it so, and colleges and universities must be prepared to respond.

Times of great change, though daunting, are also times of tremendous opportunity, and the next few years will provide opportunities of a kind not seen in decades—for those institutions with the ability and will to act.

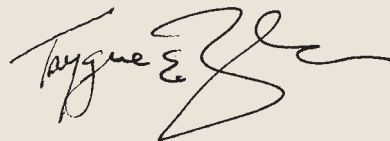
The work of the DU Strategic Issues Panel presented in this report is the first step of a broader institutional effort to capitalize on change. The panel members were charged with producing a framework for change that identifies and evaluates the principal forces at work and the challenges and opportunities their synthesis will produce for institutions of higher education. The report is intended to appropriately define the urgency of the moment, and also to stimulate the collective creativity of the academic community. As you will see, it does an admirable job at both tasks.

We are indebted to the members of the panel for the time, energy and hard work spent on this project, and to professor and DU trustee Jim Griesemer for the intellect and grace with which he managed it. Consistent with the University of Denver's commitment to support the public good, we are sharing this report with other colleges and universities in the hope that they may find the information contained herein to be useful as they develop their own strategies to deal with these unsettling times in higher education.

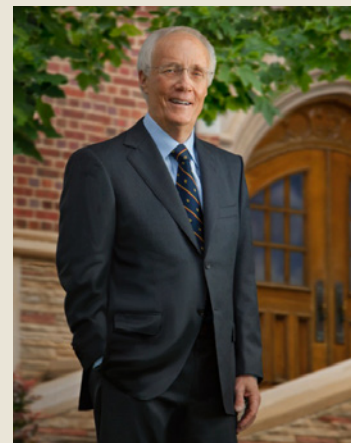
Sincerely,



Robert D. Coombe
Chancellor
University of Denver



Trygve Myhren
Chair, Board of Trustees
University of Denver



Introduction from the Panel Chair

As a part of its commitment to support the public good, the University of Denver periodically convenes a group of individuals, referred to as a Strategic Issues Panel, to examine issues of significance to Colorado and the nation. The process is organized by DU's Strategic Issues Program and reflects the values of informed civil discourse, academic freedom, open communication and intellectual rigor that guide the University of Denver.

Whatever the topic, the Strategic Issues Panel begins by gaining an in-depth understanding of the issue. Over a period of months the panel receives presentations on the topic from experts, advocates and others. After examining the topic from a variety of perspectives, panel members focus on developing consensus findings on the issue.

The charge given to the 2013–14 Strategic Issues Panel on Higher Education was to examine the environment of higher education and consider a strategic framework that might be used to address the challenges facing colleges and universities. The process involved nearly a year of effort and was conducted in a transparent environment with panel meetings and research materials open to University of Denver faculty and staff.

The panel's efforts resulted in two reports, an

internal University of Denver document and this report, with the latter intended as a resource for colleges and universities. While the environmental analysis and strategic framework presented here are virtually identical to that contained in the DU document, this report frames the panel's findings in terms of questions that colleges and universities may find useful in the formulation of strategy for their own institutions.

The 60 questions offered in this report are intended as a point of departure for strategy development. Some of the questions presented herein may not be relevant to the conditions faced by a particular college or university. Yet, it is the panel's hope that these questions will stimulate useful discussions among trustees, administrators, faculty and staff. In making this report available to colleague institutions, the University of Denver hopes that it may be of value as they develop strategies to deal with this era of change in higher education.

Sincerely,



James Griesemer
Chair, Strategic Issues Panel on Higher Education
University of Denver



REPORT OF THE UNIVERSITY OF DENVER STRATEGIC ISSUES PANEL ON HIGHER EDUCATION

UNSETTLING TIMES

These are unsettling times for colleges and universities. Rising costs, declining affordability, disruptive technologies, for-profit competitors and other concerns have created a growing sense of unease among academic administrators, trustees, faculty and staff. These concerns are not unfounded. The changes that lie on the educational horizon are likely to be profound.

In certain respects, concern about upheaval in higher education seems at variance with the sense of permanence traditionally associated with institutions of higher learning. Colleges and universities are, after all, among the world's oldest, most stable institutions. The longest-lived center of higher learning in the western world, the University of Bologna, has been in continuous operation for more than nine hundred years since its founding in 1088. Bologna is not alone in its longevity. Oxford (1167), Cambridge (1209), Salamanca (1218) and nearly a score of other European universities that were founded during the Middle Ages are still in operation today.

The American experiment in higher education began with small colleges offering courses adapted from medieval universities with a principal purpose of educating ministers. The first was Harvard College, founded in 1636. By the time the Articles of Confederation were ratified in 1781, the ranks of institutions of higher learning had swelled beyond Harvard to include Princeton, Yale, William and Mary, Columbia, Brown, Dartmouth, Rutgers and Pennsylvania. Even the University of Denver, youthful by institutional standards, is a century and a half old, antedating Colorado's founding as a state.

Given their long histories, it is not surprising that universities exude a sense of permanence to visitors, students and employees.



It begins with the institution itself. The intellectual achievements of faculty and the impressive accomplishments of alumni present, quite appropriately, a sense of enduring value. Substantial buildings, often imposing and frequently embracing collegiate gothic or classical design elements, reinforce the timeless value of learning. Campus landscapes with classic structures, statuary, plaques honoring alumni and donors, esplanades, open spaces and towering trees create an undeniably strong sense of place. Being on a university campus creates a feeling of stability, a perception of permanence.

GROWING SKEPTICISM

Notwithstanding the long history and stability associated with institutions of higher learning, change is in the wind. In recent years, one publication after another has chronicled a growing list of perceived shortcomings in American higher education. Foremost among these concerns are the rapidly rising cost of tuition and the alleged failure of colleges and universities to actually provide a meaningful education for students. Institutions of higher education are assailed for creating a resort-like atmosphere that focuses as much or more on athletics, student services and the campus environment as on academics. This has led some critics to conclude that colleges and universities are under-accountable rather than under-resourced.

Frustration with the high cost of a degree is matched by concerns about results. A recent study indicated that some 45 percent of college students failed to demonstrate any statistically significant improvement in the Collegiate Learning Assessment (an evaluation of student learning used by more than 700 institutions) during their first two years at college. While the study may be debated, this is but one in a long list of indictments directed at higher education institutions. Even prominent educators such as Derek Bok, former president of Harvard University, lament that many students graduate from college without the ability to write well enough to satisfy employers, reason clearly or analyze complex nontechnical problems.

Some observers attribute the failure of institutions to produce significant gains in student learning to a lack of focus and rigor on the part of faculty and students themselves. Faculty who are more interested in research than teaching, professors who seldom see students outside of class, inept instructors, too many part-time faculty and courses that require little reading or writing are among the litany of complaints directed at higher education. Others believe that students who spend only a few hours each week on homework, along with college environments focused more on social activities than academic pursuits, are among the issues that impede college learning.

“Being on a university campus creates a feeling of stability, a perception of permanence.”

Even in the face of such criticism, given the history of stability enjoyed by many colleges and universities, it might be difficult to imagine changes so powerful that they could rapidly disrupt established institutions. Recent events, however, provide evidence that disruptive change can transform long-established industries with remarkable speed. To see how this can happen, one need look no further than the Fourth Estate: print media. While newspapers and higher education differ in a number of respects, they share several important characteristics. Higher education and print media are institutions of great longevity, play significant roles in society and—of particular importance in terms of the potential for disruptive change—operate in the realm of intellectual property.

A VIEW OF DISRUPTIVE TRANSFORMATION

Newspapers have a venerable history. The first organizations to produce printed sheets using moveable type date from the early 1600s, making print media a 400-year-old institution. From modest beginnings, the number of newspapers continued to grow, so much so that by the mid-18th century newspapers were widespread throughout Europe and America. For nearly two hundred years thereafter, newspapers evolved slowly in what was, from an industry perspective, a relatively stable environment.

The 20th century, however, brought with it a series of significant

innovations. Radio, then television, changed the way people received the news. At first wary of these technological “gimmicks,” print media ultimately adapted the way it presented news and began to rely more heavily upon advertising revenue, including classified advertising. These modifications allowed newspapers to maintain readership levels in the face of competing innovations, but left the business model ripe for disruption.

Then came the Internet.

To appreciate the speed and power of fundamental technological change, consider the astonishing decline in print advertising revenue after the introduction of the Internet. Websites and search-engine companies such as Google offer display ads tailored to user interests while Craigslist and other online services provide free classified ads. In a span of little more than a decade, Internet advertising has depleted the major revenue source of a 400-year-old industry. Figure 1 depicts the catastrophic decline in print advertising revenue and the largely unsuccessful attempts by newspapers to replace the loss with their own online advertising.

The Internet also introduced new competition for delivery of the news. No longer are consumers tied to one source for information—news aggregators and amateur reporters have become popular sources. The combination of greatly reduced

advertising revenues and expanded competition from online providers has produced tumultuous changes in the newspaper industry. Gone after 150 years of operation is the Rocky Mountain News, founded in 1859. Gone, too, among others, are the Tucson Citizen after 138 years of publication and the Cincinnati Post, in operation for 126 years.

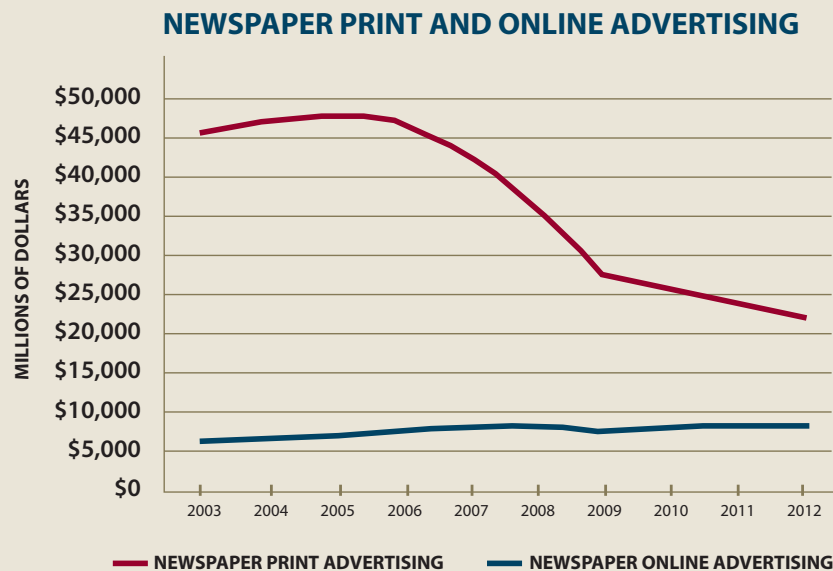


FIGURE 1: NEWSPAPER ADVERTISING REVENUE

Sources: *The Atlantic* and Newspaper Association of America

Some papers have received cash infusions from outside sources such as the 2013 purchase of the Washington Post by Amazon founder Jeffrey Bezos at a price that would have been unthinkable even a few years earlier. Others ceased to exist as newspapers: the Seattle Post-Intelligencer stopped printing after 146 years and transformed itself into an online-only publication. Responding to financial pressures, a number of major metropolitan dailies have reduced staff and made operational changes as they struggle to redefine their business models.

Newspapers are not alone in being forced to deal with the effects of profound change. The music industry, book publishing, land line telephone companies, and broadcast and cable television are among many industries feeling the pressure generated by a range of disruptive forces. A common theme, at least among these industries, is information. All are related to the transmission of information in some form and all are dependent upon information technology.

Some make the argument that the conditions facing higher education today are not analogous to those experienced by the print media a decade ago. That may be true. But a sea change in higher education—one that occurs with unexpected rapidity—is certainly possible. Indeed, the historic stability associated with

“A sea change in higher education—one that occurs with unexpected rapidity—is certainly possible.”

institutions of higher learning may make colleges and universities more vulnerable by buffering the sense of urgency necessary to capitalize on change rather than being consumed by it. This raises a question to be considered by colleges and universities:

- *Could higher education go through a shattering transformation such as that experienced by the newspaper industry?*

FORCES OF CHANGE

For those seeking to understand the shifting landscape of higher education the basic question is: “Where does one begin?” It is an important query because, in the face of a maelstrom of concerns, there is a temptation to begin with strategy, reaching out with whatever ideas are at hand to address issues that appear to be of immediate concern. Developing strategy, however, should be the last step in dealing with disruptive change, not the first.

The place to begin is with an understanding of the forces driving change. That is where the University of Denver Strategic Issues Panel on Higher Education began its work. Panel members identified six broad forces that they believe are among the more important drivers of change in higher education. These forces are shown in Figure 2 and summarized below.

Economic Forces

Economic forces include the general condition of the economy, the economic value of a college degree, the price and affordability of higher education and similar factors. They can exert a powerful influence over markets.

Demographic Changes

The growth, decline and changing characteristics of various demographic groups present both opportunities and challenges as colleges and universities seek to identify viable markets and serve students.

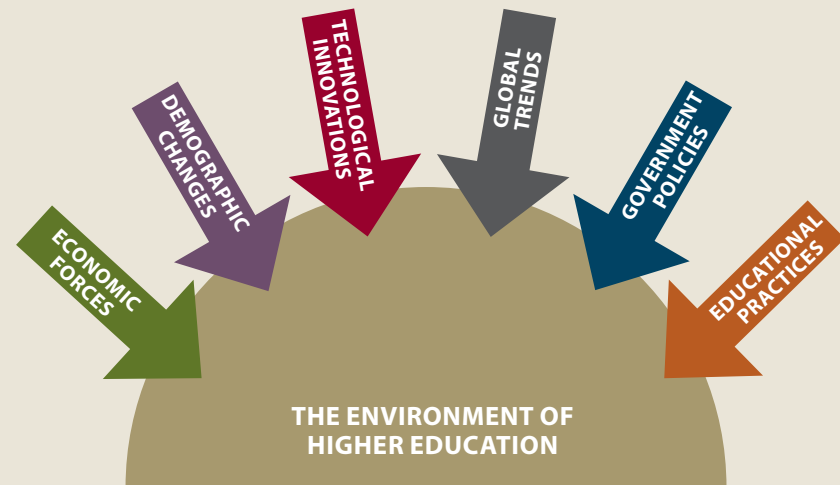


FIGURE 2: FORCES SHAPING THE ENVIRONMENT OF HIGHER EDUCATION

Technological Innovations

Inexpensive, powerful computer technology, the expansive reach of the Internet, mobile computing, educational software and other technological innovations all have the ability to disrupt the status quo.

Global Trends

The rise of a global knowledge society, worldwide technological innovation, collaborative programs, global student markets and international educational experiences are shifting education from a local to a global enterprise.

Government Policies

States and the Federal Government have a profound impact on higher education through tax support to public universities, student financial aid, funding university research, and regulatory decisions.

Educational Practices

Accepted practices in higher education shape the environment and constrain institutional decisions by establishing norms of operation such as accreditation, shared governance and tenure policies.



Cappy Shopneck
Higher Education Panel Member

SHAPING THE LANDSCAPE

The way in which forces such as those described in Figure 2 shape the environment can be illustrated by the growth of higher education during the post-war era. After World War II, higher education in the United States entered a golden era of growth. In 1939, total enrollment at colleges and universities stood at 1.5 million. By 1947, enrollment had grown to more than 2 million students. Enrollment grew to nearly 3.6 million by 1960 and then doubled in a decade, reaching 7.4 million students by 1970. Over the next forty years, enrollment continued to soar, reaching more than 20 million by 2011. The growth of college enrollment during this period is shown in Figure 3.

This remarkable growth was the result of forces that shaped higher education in positive ways. In terms of economic forces, the post-war economy was expanding, incomes were rising, the cost of higher education remained relatively modest and a college degree was seen as a ticket to a higher standard of living. The demographic stars also were aligned as the baby boom generation appeared, bringing with it strong population growth and ultimately leading to a robust college market.

COLLEGE ENROLLMENT 1947–2011

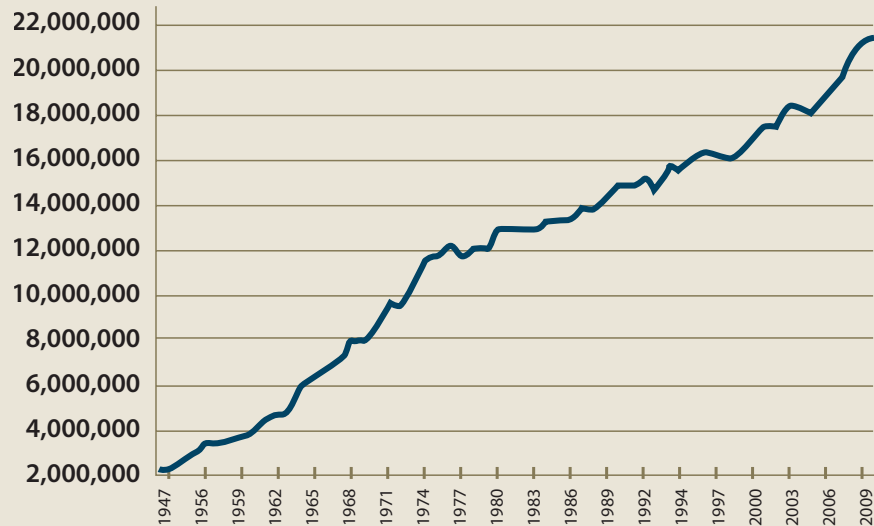


FIGURE 3: COLLEGE ENROLLMENT 1947–2012

Source: U.S. Census Bureau

Technological innovation, while improving the quality and efficiency of research methods, was largely quiescent in terms of pedagogy as teachers continued to lecture students in classrooms as they had for centuries. As globalization began to emerge, its impacts were almost entirely favorable to American higher education, bringing new students from around the world but

generating little in the way of international competition.

Government policies, too, shaped the environment of higher education in very constructive ways. After the war, students were assisted in meeting the costs of education—first through the GI Bill and later through a variety of financial aid programs. In addition, government support for research at universities became an important revenue source for a number of institutions, strengthening and expanding the scale of research activities at many universities. State tax support for public universities, too, was generous, providing the necessary foundation to finance a growing number of students, new programs and an expanded research agenda.

In retrospect, the alignment of forces after World War II created a remarkably favorable situation for higher education that prompted enrollment growth, new campuses, enhanced facilities, expanded institutional missions, larger budgets and a host of other growth-related changes. These conditions remained in place for many decades, testimony to the ability of such forces to change the environment in powerful and long-lasting ways. Although the forces driving change are always in flux to some degree, they can remain reasonably stable for long periods. At other times, these forces can be quite disruptive, provoking upheaval and discord as they reshape the landscape. For higher education, this is one such unsettling time.

“After World War II, higher education in the United States entered a golden era of growth.”

THE ENVIRONMENT OF HIGHER EDUCATION

Identifying the underlying forces of change is an essential, but insufficient, first step. It is essential as a means to understanding the underlying drivers of change, but insufficient because no single institution can alter such forces. For example, neither technological innovation nor the forces of globalization are amenable to challenge by any college or university. Monitoring underlying drivers of change is important, however, because those forces create the environmental conditions in which educational institutions must operate. It is these environmental conditions on which strategy is focused.

Environmental conditions are seldom inherently good or bad. Rather, conditions tend to impact institutions differentially, being supportive for some and disruptive for others. Whether a given condition impacts a particular college or university favorably or unfavorably depends largely on the unique characteristics of the institution and the markets it chooses to serve.

In assessing environmental conditions, it is useful to recognize that the issues with which an institution must grapple may be a result of multiple conditions. In these situations, the environment more closely resembles the choppy pattern created by pebbles thrown simultaneously into a pool, each creating waves that intersect with those from the other pebbles. Similarly, the waters an institution

must navigate often reflect an environment that is shaped by the intersection of multiple conditions. Such compound conditions are described at various points in this report.

As an institution identifies conditions that represent particular opportunities or threats, it creates, in effect, a framework for strategy. Therefore, the Strategic Issues Panel concludes that the development of effective institutional strategy should begin with an understanding of conditions that characterize the environment. The conditions considered by the panel to be of significance to colleges and universities are shown in Figure 4 and followed by a discussion of each component.

The need to understand the environment of higher education as a prerequisite to developing strategy raises a question for consideration by colleges and universities:

- *Does our institution have an ongoing means to monitor conditions in the environment of higher education?*

INFORMATION UBIQUITY

Information ubiquity—the commodification of information—is reshaping the environment of higher education. Information is now a global commodity, accessible to large swaths of the world's population. Big data, a pure information product, is driving business and creating competitive advantage. 3-D printers create

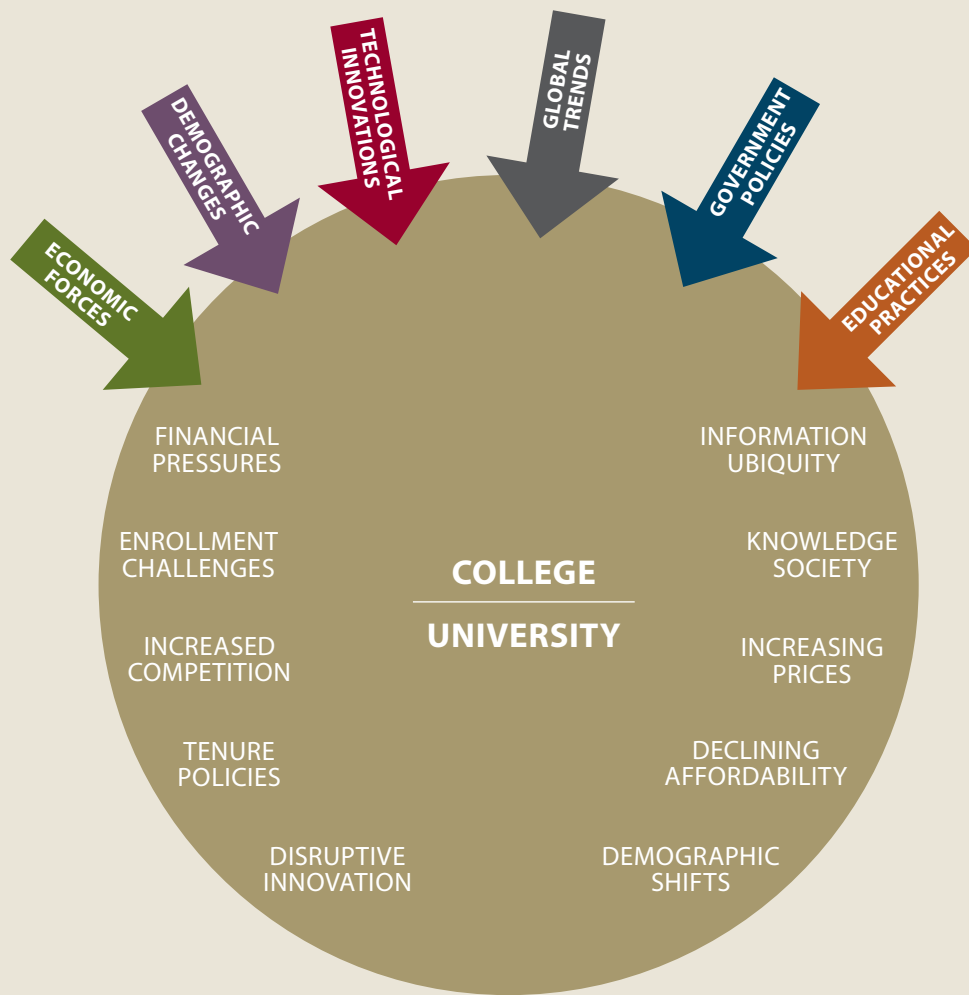


FIGURE 4: THE ENVIRONMENT OF HIGHER EDUCATION

physical products from digital information. Machines that were previously sold as physical things now often have information attributes that add value. Advances in biotechnology are making customized medicine possible based upon genetic information, while telemedicine systems stream information to remotely located physicians.

Information is everywhere, used for almost everything imaginable and available to much of the world's population, often at little or no cost. The fact that anyone can produce content lends to the seemingly endless supply. Detailed information on academic topics such as medicine, aeronautics, philosophy, literature and almost any other subject is instantly available to anyone with an Internet connection. Information is no longer a private treasure owned by scholars and a few students with sufficient time and money to gain access to the knowledge held by the academy.

The questions that the commodification of information raises for colleges and universities are fundamental, even existential, and include those such as:

- *What strategy will allow our institution to succeed in a world where others are giving away information for which colleges and universities charge high prices?*



Craig Woody
Higher Education Panel Member

A KNOWLEDGE SOCIETY

The emergence of a global economic order based on knowledge—the so-called “knowledge society”—is supported by the vast supply of information discussed in the previous section and reflects a growing emphasis on understanding and using information as a factor for competitive advantage. A key characteristic of the knowledge society is the shift from manual labor to work requiring higher levels of education and/or technical skills. This is a condition of fundamental importance to institutions of higher learning because they provide the raw material for the knowledge society—education, technical and professional training, and research.

While the evolution of a knowledge-based economic system is uneven due to the variable distribution of wealth among countries, over the long term it is difficult to imagine a more favorable condition for higher education. Expanding international demand for higher education, including advanced degrees and certifications, fostered by a global knowledge-based society has the potential to generate robust, long-term markets for educational institutions. This growing market will also attract competitors, including domestic public and private nonprofit institutions, as well as international universities and for-profit organizations.

The emergence of a knowledge society raises a number of strategic questions for institutional leaders, such as:

- *Can our institution capitalize on a growing global market for higher education?*
- *In what areas might the institution compete internationally and what level of investment would be required to do so?*
- *What are the opportunity costs or other risks that may make program expansion into global markets a less desirable strategy?*

INCREASING PRICES

For decades, college and university budgets have been expanding to support new programs, more buildings, upscale dorms, advanced technology, additional student services, more competitive athletic teams, better bookstores, increasing layers of bureaucracy, higher salaries for professors and administrators, and more. To fund growing institutional budgets, colleges and universities turned to tuition and fees which, over the past several decades, have increased at multiples of the inflation rate. Indeed, college tuition and fees have increased at a rate 30 percent faster than health care costs. Figure 5 shows the growth of average college tuition and fees over the 30 year period from 1983 to 2013.

“Information ubiquity—the commodification of information—is reshaping the environment of higher education.”

In Figure 5, it is interesting to observe the rapid increase in tuition at public colleges and universities beginning around 2004 as many states began to pull back their financial support of public institutions. It should also be noted that this chart shows the percentage rate of increase, not the absolute cost. Tuition and fees at traditional nonprofit institutions, while rising more slowly in percentage terms, are typically substantially higher in dollar terms than in-state tuition at public colleges and universities. The growth in the cost of attendance at both public and private institutions raises central questions:

- *Can our institution find a way to control rising tuition and fees while still maintaining educational quality?*
- *Can cost reductions be achieved without materially impacting the student experience in an adverse way?*

DECLINING AFFORDABILITY

Notwithstanding magazine articles and talk show commentaries to the contrary, the financial benefit of a college education—both in terms of opportunities for employment and lifetime earnings—is clear. Figure 6 shows the relationship between education and median family income.

PERCENT GROWTH OF AVERAGE COLLEGE TUITION AND FEES

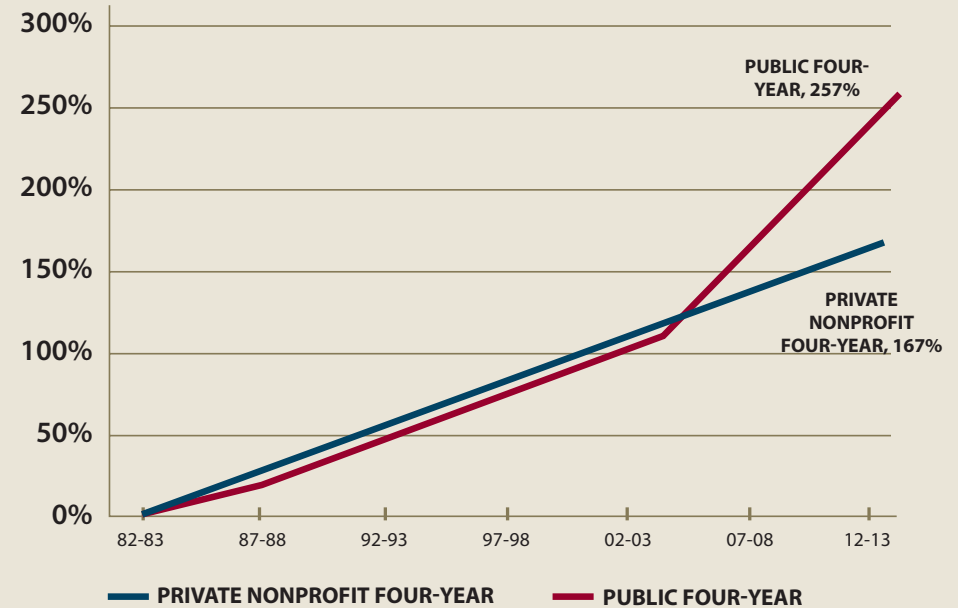


FIGURE 5: GROWTH OF COLLEGE TUITION AND FEES

Source: The College Board and the U.S. Census Bureau

“There is a striking disparity between the rising cost of higher education and family income.

MEDIAN FAMILY INCOME BY SELECTED CHARACTERISTICS, 2012

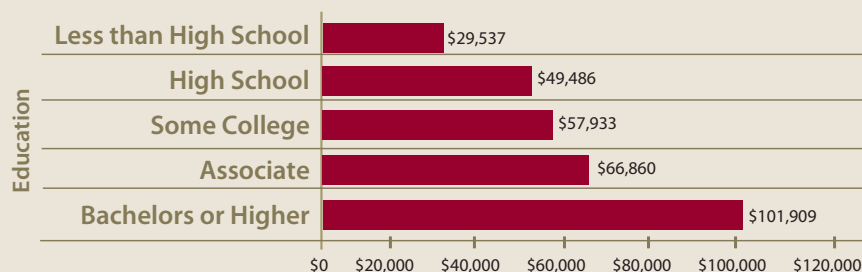


FIGURE 6: INCOME AND EDUCATION

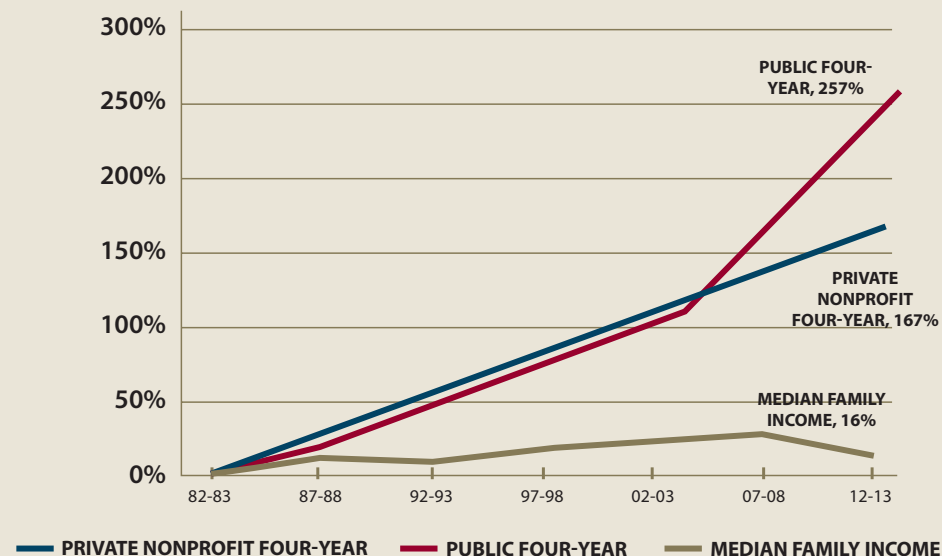
Sources: The College Board and U.S. Census Bureau

While the economic benefits of higher education are apparent, it is equally clear that affording college is increasingly difficult for all but a relatively small percentage of the population. Figure 7 adds the median income for all U.S. families to the chart presented in Figure 5. It clearly depicts the fact that there is a striking disparity between the rising cost of higher education and family income.

The combination of two conditions in the environment of higher education—rapidly increasing college prices and stagnating

family incomes—has reduced the affordability of college for large and growing segments of the population. The issue of declining affordability raises an urgent economic question for all institutions of higher learning:

PERCENT GROWTH OF AVERAGE COLLEGE TUITION AND FEES AND MEDIAN FAMILY INCOME



**FIGURE 7: GROWTH OF COLLEGE TUITION
AND MEDIAN FAMILY INCOME**

Source: The College Board and the U.S. Census Bureau



Clara Villarosa
Higher Education Panel Member

- *How do colleges and universities stay in business when their costs of attendance are rising at a rate 10–15 times greater than family income?*

To this point, students and families have relied on a variety of sources, including student loan programs, to finance educational expenses. The dependence on loans has become so great that the

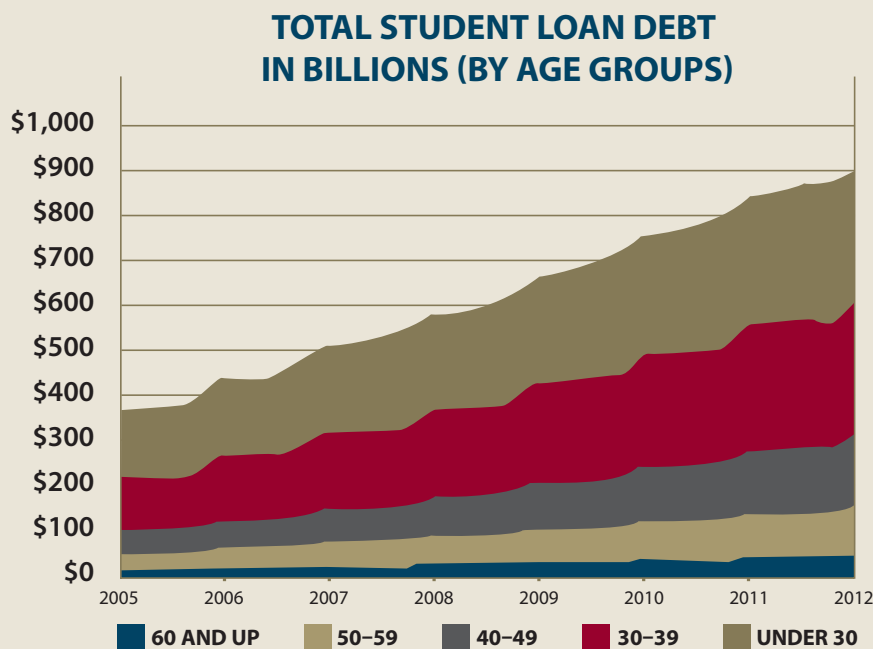


FIGURE 8: GROWTH OF STUDENT DEBT

Source: Federal Reserve Bank of New York

outstanding balances of student loans have eclipsed both auto loans and credit card debt. By 2012, student loans were the largest form of consumer debt outside of mortgages. Figure 8 shows the dramatic increase in student debt by age group since 2005.

The growing student debt burden raises additional questions related to the economic environment of higher education:

- *How long will families be able and willing to assume significant debt burdens to send a child to college?*
- *Are there other models that might be considered to help students afford the cost of higher education?*

DEMOGRAPHIC SHIFTS

The implications of declining affordability are compounded by changes in the ethnic and racial mix of high school graduates. Figure 9, which shows the cumulative percent change in high school graduates by race and ethnicity, highlights the demographic shifts that are occurring. Minority students, particularly Hispanic students, will experience dramatic growth between now and 2027–28. By contrast, the number of non-Hispanic white high school graduates, long the principal source of college attendees, will decline. Indeed, by 2019–20, the Western Interstate Commission for Higher Education (WICHE) projects that high school graduates

“How do colleges and universities stay in business when their costs of attendance are rising at a rate 10–15 times greater than family income?”

in Arizona, Florida, Georgia, Maryland, Nevada, California, the District of Columbia, Hawaii, Mississippi, New Mexico and Texas will reach “majority-minority” status, where public high schools graduate more minority than non-Hispanic white students.

CUMULATIVE PERCENT PROJECTED CHANGE IN U.S. PUBLIC HIGH SCHOOL GRADUATES RELATIVE TO 2008-09, BY RACE/ETHNICITY

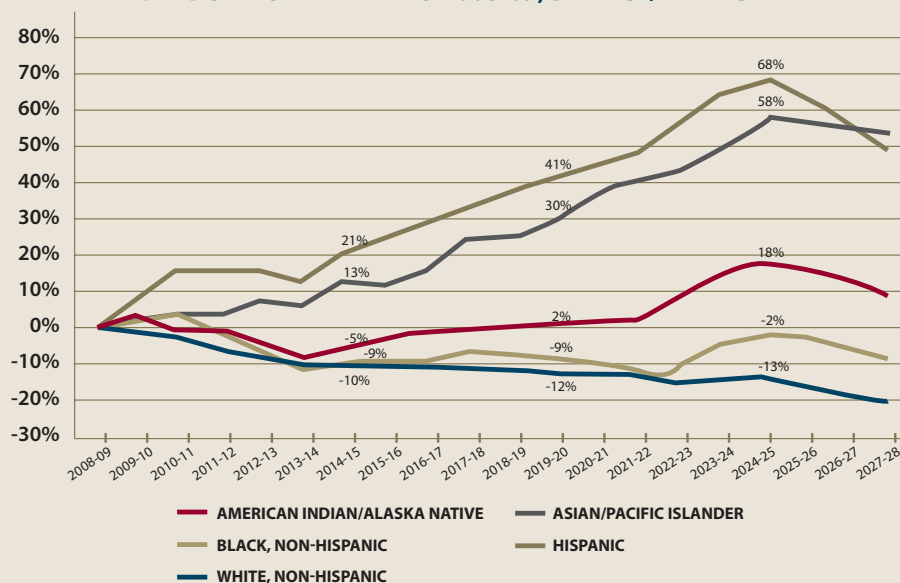


FIGURE 9: HIGH SCHOOL GRADUATES BY RACE/ETHNICITY

Source: WICHE Report, Knocking at the College Door

Even as some minority populations are experiencing robust growth rates, the high price of tuition and historically lower median household income levels of minority families limit the number of students who can afford to attend college. Figure 10 shows the median family income for U.S. families by race and ethnicity. In the top income brackets are Asian families, followed by white families at more than \$71,000. Next to those groups are black and Hispanic families with a median family income under \$41,000, which is less than 60 percent of the median income levels of white families.

One would hope that economic growth would reduce the disparity of opportunity between families at the top of the economic spectrum and those at lower levels. There is, however, scant evidence that this is happening. Recent studies suggest that the vast majority of the economic gains resulting from the current economic recovery have accrued to the wealthiest 1 percent of the U.S. population.

The combination of declining affordability and shifting demographics have effectively reduced the ability of many colleges and universities to benefit from expanding markets as rapidly increasing college prices have reduced affordability for the fastest growing segments of the population. At the same time, students

from white families, who enjoy much higher median family incomes, are a narrowing market. The result is a misalignment between expanding demographic markets and the price point of a traditional college education. This misalignment could have profound consequences in terms of how, and in what markets, institutions are able to gain competitive advantage, meet enrollment goals and, ultimately, sustain financial viability.

Beyond economic and market considerations, shifting demographics create additional challenges related to college preparation and graduation. College readiness and completion rates for lower income populations, which disproportionately include

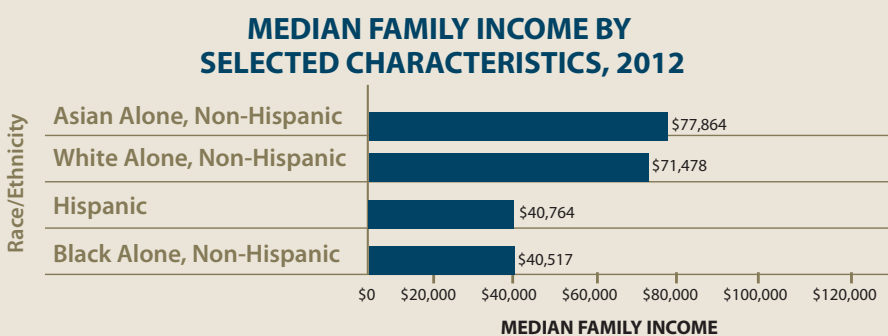


FIGURE 10: RACE, INCOME AND EDUCATION

Sources: Adapted from The College Board and U.S. Census Bureau

racial and ethnic minorities, are significantly lower than for non-Hispanic white students. Moreover, the academic achievement gap between students from lower income families and students in higher income groups is now 30–40 percent larger than in 1970, a matter of serious concern for all institutions of higher learning.

While economic, market and educational attainment issues present challenges to colleges and universities, shifting demographics also provide institutions with an opportunity to grow enrollment by reaching out to previously under-represented groups. For many institutions, however, achieving that goal is easier to express than to achieve. The following questions touch on but a few of the demographically related issues facing institutions of higher learning.

- *Can our institution manage the net cost of tuition in order to attract rapidly growing demographic groups?*
- *Has our institution considered adjustments in recruitment, messaging, financial aid, student support, academic programs and other activities and processes necessary to attract and retain minority students?*
- *Is the culture of our institution supportive of students with minority ethnic and racial backgrounds?*



Gregory L. Moore
Higher Education Panel Member

DISRUPTIVE INNOVATION

Although colleges and universities manage many operations, their core functions are education, research and knowledge creation, all of which are information-based activities. As a consequence, the power of innovation to disrupt and reshape the environment of higher education is profound. As tuition and fee increases have driven the costs of a college degree beyond the reach of many, technological and pedagogical innovations have acted as a safety valve, offering competing educational products, often at far lower costs. The most visible example is online learning.

It has been argued that online education is of lower quality than that offered in traditional classroom settings. Whether or not that argument is accurate, it misses the point. As Clayton Christensen observed in his book *The Innovator's Dilemma*, disruptive innovations nearly always begin with products or services that are characterized by lower quality and/or poorer performance than mainline offerings. They appeal to markets that have been overlooked or dismissed by major providers.

While a disruptive technology may not perform as well as established products or services, the new, less expensive innovation is “good enough” for those in markets that have been ignored or priced out by mainstream providers. Over time, however, the quality

of the innovation improves and it becomes more broadly accepted.

History is full of examples of disruptive innovation: portable transistor radios replacing stationary cabinet units, microcomputers displacing minicomputers, online retailers challenging brick-and-mortar stores, digital photography virtually eliminating chemical photo processes, cell phones replacing land lines, digital music and streaming video supplanting CDs and DVDs. In these examples, established providers faced the dilemma of whether to compete with poorer-performing innovations that produced lower margins than existing products. For perfectly logical reasons, mainstream producers often declined to do so. However, as the quality of the innovation improved to a point where it became the new standard, some established providers found themselves squeezed out of markets they had once dominated.

While the pattern followed by disruptive innovations requires that a number of conditions exist, the concept is important for understanding dynamic environments such as those facing higher education. This leads to a question relating to organizational understanding:

- *Do those in positions of leadership at our institution, including leaders of academic units, have a solid understanding of the way in which disruptive innovations emerge?*

“In higher education, the most visible example of disruptive innovation is in the area of online education.”

Educational Technology

In higher education, the most visible example of disruptive innovation is in the area of online education. The impact of online educational programs is remarkable. During the fall of 2012, a total of 7.1 million students reported that they were taking at least one online course. Massive open online courses (MOOCs), sometimes offered through collaborative arrangements involving public or nonprofit universities and private for-profit delivery agents, may enroll tens of thousands of students. The cost of attendance for such courses? Zero—enrollment is free.

For example, as of November 2013, Coursera, a leading for-profit online course provider, offered some 542 courses in collaboration with 107 partner universities from around the world. Schools working with Coursera included Duke, Johns Hopkins, Vanderbilt and many others. Collectively, online providers offer thousands of free courses on the Internet. In addition to for-profit providers, some of America's most highly regarded universities— including MIT, Harvard, Yale, Stanford— have a number of their courses available for viewing online at no charge. The reach of online learning may be further expanded by technologies such as mobile computing, which holds the potential to further reshape higher education.

The impact of technological innovation on higher education is by

no means limited to online courses, as significant as they may be. Computerized learning management systems such as Blackboard, Canvas, Moodle and others support the administration, documentation, tracking, reporting and delivery of courses and have become an essential part of the educational infrastructure for most institutions. In a similar fashion, software designed to facilitate assessment of academic programs or manage student and faculty video collections are becoming widely used tools. Data analytics allow schools to collect and analyze information about student performance and track patterns in order to allow more personalized advising and course delivery. Adaptive learning systems use computers as interactive teaching devices, tailoring the presentation of learning materials to the student's progress and needs. All these innovations, and more, require close monitoring, raising the following question:

- *Does the institution have a means to identify and evaluate educational innovations at an early stage and assess their potential ability to enhance academic and operational outcomes?*

Competency-based Learning

As noted earlier, the intersection of environmental conditions can combine to produce powerful effects. This is the case with online competency-based learning, which combines technology and

pedagogical innovations. The combination of these factors creates alternatives to traditional education that have the potential to alter the landscape of higher education in significant ways.

Competency-based education assesses student learning rather than measuring time spent in the classroom. By definition, a competency-based approach replaces the seat-time credit hour with an assessment that verifies skill and/or comprehension. Competency can be recognized through standardized examinations, certifications, badges and other means. Advocates claim that competency-based education can improve quality and consistency, reduce costs, shorten the time required to graduate and provide more accurate measures of student learning.

Competency-based learning moves higher education from an industrial model to a mass-customization approach. In online competency-based programs, course delivery moves from a rigid, institutionally centric structure built around fixed time

frames—semesters or quarters—to a system of flexible pacing based on student progress and demonstrated capabilities. With this approach, assessment and intervention can start at any time. In a competency-

based system, because tuition is not driven by credit hours, fees can be structured in a number of ways, including an “all you can eat” approach that allows students to take and retake assessments during a six month term.

The pricing of most online competency-based programs is significantly lower than the tuition levels of traditional colleges and universities. The table shown in Figure 11 shows the fixed costs of tuition by term for several providers of competency-based programs. The financial advantage to students of online competency-based programs can be seen when one compares the average annual tuition of \$6,056 for the programs shown with an average annual tuition of \$28,989 for a four-year private college in 2012–13. The cost advantage of competency-based programs is further enhanced when schools offer scholarships and students are eligible for federal grant programs, as is the case with Western Governors University (WGU).

The potential impact of competency-based education extends well beyond financial issues, as important as those may be. Whether and how to accept online competency-based credits from a student who wishes to transfer to a traditional institution raises potentially complex issues. If the transfer of competency-based credits becomes commonplace, the pattern of students attending



Denise O'Leary
Higher Education Panel Member

several colleges and universities on their way to a degree could be accelerated. Student pacing is another area that may be impacted by competency-based programs. Self-paced competency-based education has the potential to add further uncertainty to the once-predictable time from student matriculation to graduation.

Online competency-based curricula have the ability to change faculty roles as well. In some competency-based programs, the comprehensive teaching role traditionally filled by tenure track professors is disaggregated into specialized tasks. Instead of having each professor develop his or her own course, at Western Governors University courses are developed by program councils comprised of content experts and industry representatives. Where a traditional professor interacts with students throughout the course, WGU breaks that role into two parts: student mentors and subject matter mentors. In a traditional setting, the professor who teaches a course also designs and administers tests, quizzes and a final examination, while at WGU assessment is handled by independent evaluators.

There is little question that online competency-based programs, as they currently exist, do not create an educational experience comparable to that of a traditional, four-year residential undergraduate program. Personal interaction in the classroom

WESTERN GOVERNORS UNIVERSITY
PROGRAM: STARTED: 1997
TUITION: \$2,890 PER SIX-MONTH TERM
DEGREES: B.A., M.A., M.S. IN EDUCATION; B.S., M.S. IN INFORMATION TECHNOLOGY; B.S., B.S.N., M.S.N. IN NURSING (\$3,250-\$4,250); B.S. IN BUSINESS; M.B.A. (\$3,250)
NORTHERN ARIZONA UNIVERSITY
PROGRAM: (PERSONALIZED LEARNING) STARTED: MAY, 2013
TUITION: \$2,500 PER SIX-MONTH TERM
DEGREES: B.A. IN LIBERAL ARTS, BUSINESS, COMPUTER/INFORMATION TECHNOLOGY
SOUTHERN NEW HAMPSHIRE UNIVERSITY
PROGRAM: (COLLEGE FOR AMERICA) STARTED: SEPTEMBER 2013
TUITION: \$1,250 PER SIX-MONTH TERM
DEGREES: A.A. IN GENERAL STUDIES
UNIVERSITY OF WISCONSIN
PROGRAM: (FLEXIBLE OPTION) STARTED JANUARY, 2014
TUITION: \$2,250 PER THREE-MONTH TERM
DEGREES: B.S.N. IN NURSING; B.S. IN DIAGNOSTIC IMAGING, INFORMATION SCIENCES, TECHNOLOGY; A.A.S. IN GENERAL EDUCATION; CERTIFICATE IN TECHNICAL COMMUNICATION
CAPELLA
PROGRAM: (FLEXPATH) STARTED OCTOBER, 2013
TUITION: \$2,000 PER THREE-MONTH TERM
DEGREES: B.S. IN BUSINESS ADMINISTRATION; M.B.A. (\$2,200 PER TERM)

FIGURE 11: ILLUSTRATIVE COMPETENCY-BASED DEGREE PROGRAMS

Source: New York Times

“The disruptive effects of online competency-based education could be significant in both the near and long term.”

or laboratory between students and professors, learning how to learn, an appreciation of the larger world, lifelong friendships and professors who serve as role models are just several of the many benefits a traditional college experience provides. Nevertheless, there should be no mistaking the disruptive potential of online competency-based programs as they become increasingly sophisticated and the cost of a traditional education continues to rise. Competency-based learning has the potential to shift a centuries-old paradigm, dramatically lower costs, strand educational assets, intensify competition and redefine the professorial role.

The panel concludes that the disruptive effects of online competency-based education could be significant in both the near and long term. It is an approach that accommodates part-time adult learners, a market segment that is important for both undergraduate education and graduate professional programs. The broad disruptive potential of competency-based education raises a question to be considered by institutions of higher learning:

- *Has our institution examined the opportunities and risks associated with competency-based education in terms of markets currently served by the school and as a potential mechanism for enrollment growth?*

TENURE POLICIES

The traditional practices of academic institutions represent an important condition in the environment of higher education. Among such practices, tenure is often identified as a major problem facing higher education in the U.S. Others see the situation quite differently, viewing tenure as providing an important educational and societal benefit. In actuality, the topic of tenure is considerably more complex, and more important, than many of the generalities offered would suggest. It is interwoven with issues of academic freedom, research, scholarship and curriculum development. Determining what to do about tenure, therefore, begins by appreciating its nature.

Tenure is at one time both a public and private good. As a public good it aligns with the tradition of a marketplace of ideas. It is a notion embodied in John Stuart Mill's essay "On Liberty" in which he argues that free speech, including unpopular ideas, should be allowed because a competition among ideas, through unrestricted public discourse, will allow the best to come forward. The notion that society benefits from the interaction of many ideas underlies the First Amendment concept of free speech and underpins the democratic process. Protecting professors from being removed from their positions as a result of the ideas they bring forward supports this widely accepted public good.

“While a well-designed system of tenure can benefit professors, the institution and society, tenure can become problematic if it is used to shield ineffective teachers or researchers.

The notion of public good was extended by the hallmark “Report on Academic Freedom and Tenure” promulgated by the American Association of University Professors (AAUP) in 1915. The AAUP report argued that “The responsibility of the university teacher is primarily to the public itself and to the judgment of his own profession ...” The idea was that administrators and trustees had no power to sanction professors for their views because professors worked for the public, not the trustees. Since teaching, like medicine or law, is a self-regulating profession, the upshot of the AAUP argument was that professors were to be judged by their academic peers according to standards set by the profession.

From the panel’s perspective, there is little doubt that a system of tenure can bring with it a number of advantages. Tenure protects intellectual inquiry and free speech, provides a means of attracting and retaining qualified faculty, and establishes a process for assessing the ability of newly hired professors. Tenure protects professors against summary dismissal and, through post-tenure review, can provide a mechanism to monitor the continued effectiveness of faculty.

While a well-designed system of tenure can benefit professors, the institution and society, tenure can become problematic if it is used to shield ineffective teachers or researchers. Depending upon the

specific provisions of the tenure contract at a particular institution, tenure can also make it difficult to reallocate faculty resources in response to changing market conditions. In years past, when the pace of change in higher education was much slower, the inability to redeploy faculty talent may not have been a significant problem. In the rapidly changing environment of higher education today, however, institutional rigidity and organizational inflexibility can have adverse economic consequences for the institution.

Whatever one’s view of the benefits or potential drawbacks of tenure, the fact is, in today’s world, tenure is disappearing. Between 1975 and 2011, the percentage of tenured and tenure-track professors at institutions nationwide declined from 57 percent to 30 percent of all faculty as shown in Figure 12. According to The Chronicle of Higher Education, some professors speculate that the percentage of tenure and tenure-track professors may fall as low as 15 percent or 20 percent of all instructors.

If one limits the analysis only to institutions with formal tenure systems, the percentage of tenured and tenure-track faculty has declined from 56.2 percent in 1993-94 to 48.7 percent in 2009–10. Comparing only



Gregg Kvistad
Higher Education Panel Member

doctoral institutions, the average percentage of tenure/tenure-track professors declined from 51.1 percent to 42.7 percent over the same period. Although most doctoral institutions continue to offer tenure systems, that is not the case across all institutions of higher learning. The percentage of institutions that have tenure systems declined from 62.6 percent in 1993–94 to 45.3 percent in 2011–12.

On balance, it is the panel's belief that tenure, while it may be an imperfect process, is not the most significant threat facing higher education. The panel views tenure as an academic practice that should be examined in the face of a changing environment and optimized to balance the free expression of ideas—a vital public good—with reasonable protections for the professoriate. The process of optimizing tenure to meet today's higher education environment will vary from institution to institution, and finding the right balance may be challenging. Yet, if tenure is to be viewed as more than an economic anachronism, subject to erosion until it is no longer a consequential element in institutional decision

making, the following question is worth considering:



Doug Scrivner
Higher Education Panel Member

PERCENTAGE OF TENURE AND TENURE-TRACK EMPLOYEES 1975-2011

ALL INSTITUTIONS, NATIONAL TOTALS

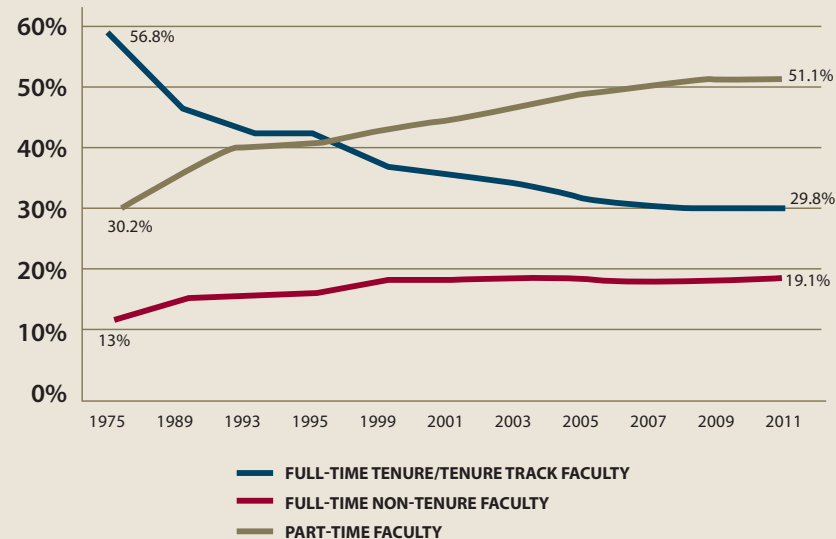


FIGURE 12: TENURE AND TENURE TRACK FACULTY

Source: American Association of University Professors

- *Has our institution initiated a dialogue among trustees, the administration and faculty on optimizing tenure in a way that balances freedom of academic expression with a process that requires high-quality professorial performance and provides for necessary institutional flexibility?*

INCREASED COMPETITION

It has been noted that the rising cost of tuition and fees and demographic shifts have reduced the affordability of higher education for a number of students. In addition, the panel observed that disruptive technologies and pedagogical innovation can create alternatives to traditional models of education. The combination of these conditions—declining affordability and educational alternatives—has the potential to redefine the landscape of higher education and expand the number and nature of the educational competitors.

Educational competitors will come from various sectors and multiple directions. Institutions lacking clear differentiation, a demonstrable value proposition, organizational flexibility and a strong balance sheet will face severe difficulties. Those stuck in traditions characterized by procedural inertia, inward focus and market insensitivity will be compromised—targets for consolidation or closure. This is not speculation. As noted in the opening sections of this report, it is a scene being played out in other intellectual property-based industries: newspapers, book publishers and retailers, and recording companies. It is a drama currently unfolding in broadcast and cable television as the Internet continues to reshape those industries as well.

Academic competitors will appear from locations scattered around the world. Unlike the post-war years where the forces of global development provided students, but were otherwise benign, globalization today also means competition. For example, in just 10 years, from 1999 to 2009, the total number of higher education institutions in China doubled, growing from 1,071 to 2,305. China is by no means alone in appreciating the importance of strong universities. From Australia to the European Union, governments see universities as instruments of economic growth, key national assets for developing intellectual talent to compete in the global knowledge economy.

In addition to competition from public and nonprofit institutions around the world, traditional colleges and universities are facing competition from for-profit companies that enrolled nearly 2 million students in 2012. While for-profit organizations held only about three percent of the degree-granting college market in 2000, by 2012 their share of post-secondary enrollment had tripled, rising to nine percent. Whether this trend will continue remains to be seen. Between 2010 and 2012 enrollment in for-profit schools fell by ten percent while total college enrollment only dropped by two



Andrei Kutateladze
Higher Education Panel Member

percent during the same period. Nevertheless, the prospect of increased competition from for-profit entities and innovative joint ventures remains a real possibility in higher education.

As with traditional colleges and universities, attendance at for-profit institutions is supported by federal loans and grants. During the 2009–2010 school year, profit-seeking institutions received \$32 billion in federal grants and loans, representing some 25 percent of the total Department of Education student aid programs funds for that year. In recent years, a combination of market sensitivity and access to students qualifying for grants and loans have helped several for-profit institutions achieve impressive scale.

Given the growth of a knowledge society and the market opportunities it provides, the coming years are likely to see the emergence of a broad range of entities competing in the higher education arena. These organizations will include traditional domestic public and nonprofit institutions, international universities, for-profit organizations, Web startups, consultants, corporate learning centers, public-private partnerships, global consortia, online universities and others.

It is easy to suggest that such nontraditional organizations are not really competitors to traditional institutions. Such a conclusion would be in error. In a disruptive environment, competitors are

not limited to members of an institution's peer group; they include those outside the traditional field of view. In the area of competitive strategy, the panel's discussions raised several questions for consideration by institutional leaders, including:

- *Does our institution, and each of its academic divisions, have an ongoing process to identify both existing and new, potentially disruptive competitors?*
- *Do we have a means to identify the strategies being followed by nontraditional competitors and assess changes in market share?*

ENROLLMENT CHALLENGES

In the current educational environment, institutions rely on tuition as a major, often the major, source of revenue. This is true for virtually all colleges and universities—public institutions, private nonprofits and for-profit providers. Consequently, obtaining a sufficient level of enrollment becomes a financial imperative for most institutions. For traditional public and private institutions concerned about academic reputation as well as financial issues, the recruitment process can be challenging indeed. An increasingly competitive environment, driven by declining affordability and educational alternatives, exacerbates the already challenging process of achieving enrollment goals.

“The coming years are likely to see the emergence of a broad range of entities competing in the higher education arena.”

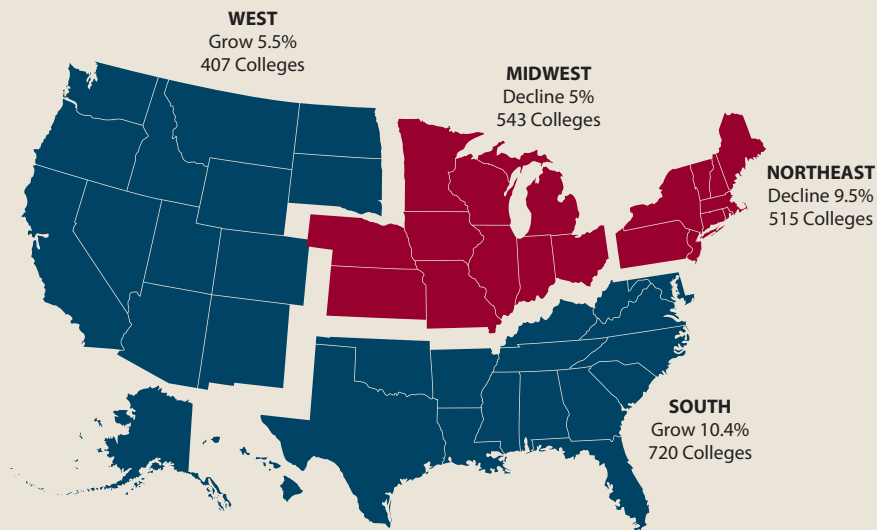


FIGURE 13: DISTRIBUTION OF HIGH SCHOOL GRADUATES 2010-11 TO 2021-22

Sources: NCES, College Board College, Thomas Willoughby and Dr. Richard Whiteside

After several years of decline, the number of college-bound students is expected to expand somewhat beginning in 2015. However, as shown in Figure 13, the expansion will be uneven, with the number of high school graduates expanding in some sections of the U.S. and declining in others. With 70 percent of all students attending a college or university within 200 miles of home, this

variable geographic distribution will produce disparate impacts on institutions based upon their location.

Issues of geographic dispersion present an important questions to be considered by college and university leaders:

- *Is our institution located in a region that is likely to see a decrease in the number of high school graduates?*
- *If so, are strategies in place to deal with prospect of reduced enrollment?*

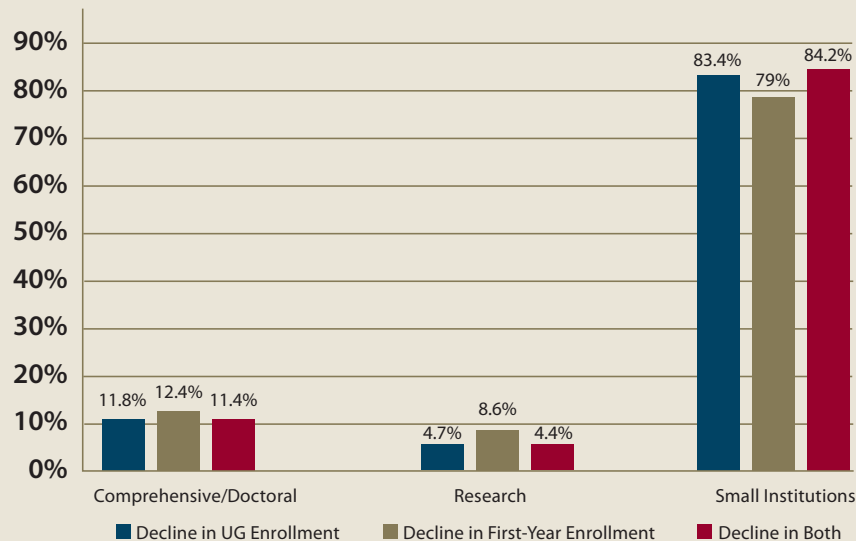
Notwithstanding the anticipated increase in the total number of U.S. high school graduates and the reality of a global knowledge society creating worldwide demand for higher education, the enrollment challenges facing colleges and universities are significant. Figure 14, drawn from data provided by the National Association of College and University Business Officers (NACUBO), shows the percentage of four-year institutions, self-reporting by type of institution, that experienced a decline in (i) total undergraduate enrollment, (ii) enrollment in first-year students and (iii) both new and total undergraduate enrollment. It is a sobering situation from any perspective, but especially worrisome



Susan Schulten
Higher Education Panel Member

INSTITUTIONS THAT LOST UNDERGRADUATE ENROLLMENT

FALL 2010 TO FALL 2011 BY TYPE



**FIGURE 14: INSTITUTIONS LOSING
UNDERGRADUATE ENROLLMENT**

Source: 2012 NACUBO Discounting Study

to smaller institutions, where the majority of those reporting are losing enrollment.

Endowed Scholarships

In response to growing enrollment pressure, institutions employ a number of strategies. While colleges and universities use many tools to recruit students, common approaches include building endowment to create scholarships, discounting tuition, and enrolling international students. Creating endowed scholarships, the approach favored by many schools, is a long-term undertaking. Indeed, large endowments—those of sufficient size to significantly lower tuition for substantial numbers of students—are limited to a small number of institutions, as shown in Figure 15.

Clearly, building an endowment to a level where a school is able to compete with well-endowed institutions nationally is no small undertaking. Moreover, for every dollar of endowment a college or university raises, scholarships are typically able to pay out only about four or five cents annually. Thus, as important as attracting quality students is to the long-term success of an institution, creating an endowment that materially increases enrollment is not a short-term effort. This raises the question:

- *Does our institution have an effective development program in place designed specifically to build endowment for scholarships?*



Scott Leutenegger
Higher Education Panel Member

CUMULATIVE DISTRIBUTION OF ENDOWMENTS BY INSTITUTION

\$391 BILLION IN TOTAL ASSETS



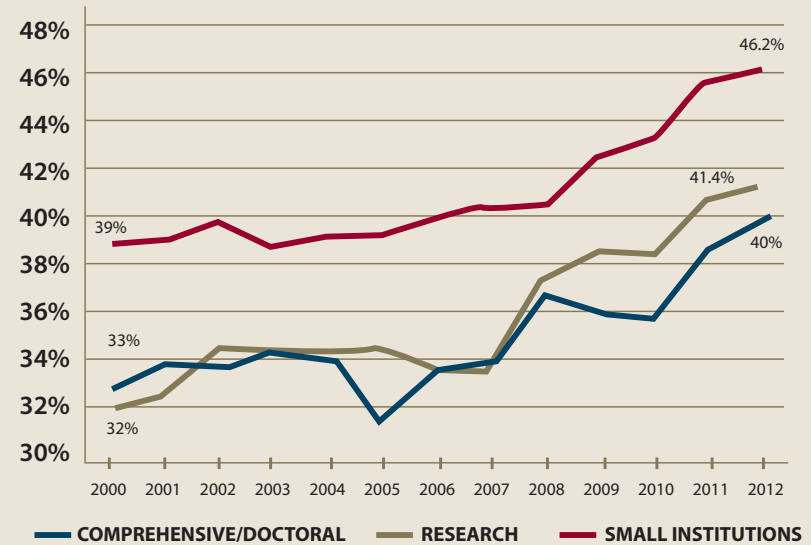
FIGURE 15: ENDOWMENTS BY INSTITUTION

Source: 2012 NACUBO/Commonfund Survey of Endowments

Tuition Discounting

In order to compete with better-endowed institutions, many colleges supplement endowed scholarships with university-funded financial aid, a practice known as discounting tuition. While seen

AVERAGE DISCOUNT RATE: FIRST-TIME, FULL-TIME FRESHMEN



**FIGURE 16: TUITION DISCOUNT RATES FOR PRIVATE
COLLEGES AND UNIVERSITIES**

Source: NACUBO Tuition Discounting Survey 2000–2012

by many schools with limited endowments as a necessary substitute for endowed scholarships, discounting tuition directly reduces a school's net income and can weaken its operating margins, potentially contributing to a negative financial spiral. These fiscal

F-1 STUDENT VISAS 2003–2012

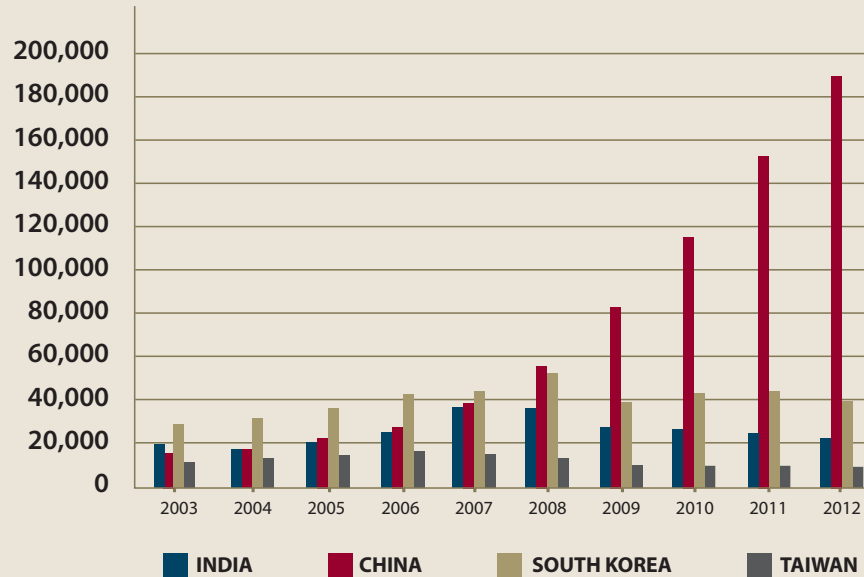


FIGURE 17: F1 STUDENT VISAS BY COUNTRY

Sources: Washington Monthly and U.S. Department of State

dangers notwithstanding, the practice of discounting tuition continues to grow as shown in Figure 16.

In thinking about enrollment strategy, it is useful to remember that both endowed scholarships and tuition discounting affect only one-half of the value equation: perceived cost. If tuition-reduction strategies like scholarships or discounting are to be successful, the other dimension of value—perceived benefit—must remain strong as well. For many students and parents academic quality is a key concern. Thus, reducing the net cost of attendance through scholarships or discounting is not fully effective unless educational quality—as assessed by students, parents and other stakeholders paying tuition—remains high. The issue of tuition discounting raises several questions:

- *Does our institution have a formal policy on tuition discounting?*
- *If so, is the discounting policy financially sustainable in terms of the overall impact on the institution's balance sheet?*
- *How does our institution compare to peers and other competitors in terms of its tuition discount rate?*

International Students

In the face of increased competition and declining pools of domestic students who can afford college, institutions are understandably attracted to full-pay international students. In less



Peter Gilbertson
Higher Education Panel Member

than six years, from 2006 to 2012, the number of international students studying at U.S. institutions rose by nearly 200,000, 80 percent of whom were from China. As a leading source of international students, China has increased the number of students it sends to the U.S. by 20 percent every year since 2008. Figure 17 shows the dramatic growth of F-1 student visas from China. This is a trend that could reverse itself quite rapidly and therefore requires close attention to global markets as well as to immigration policy.

The rapid growth of international students, particularly those from China, raises several questions:

- *To what extent does our institution as a whole, or specific academic units within the institution, depend upon international students to meet overall enrollment goals?*
- *Do international students at our institution come from a limited number of countries?*
- *If our institution or specific units are dependent on international students from a limited number of countries, are plans in place to mitigate the potential enrollment volatility associated with such concentration?*

FINANCIAL PRESSURES

Even as increased tuition and fees are reducing college affordability

for growing segments of the population, many institutions of higher education are experiencing significant financial stress themselves. The emergence of educational alternatives has heightened competition for students, creating enrollment challenges and increased financial pressures on many colleges and universities.

To cope with increased competition, institutions have constructed new buildings, invested in a variety of student amenities, increased tuition discount rates and taken other steps. These investments and tuition discounts made to bolster enrollment can weigh upon the net income and balance sheets of colleges and universities, exacerbating the fiscal stress being experienced by an institution. Concerned about the financial situation of some colleges and universities, Moody's, the bond rating agency, began to express a negative outlook on certain segments of the higher education sector in 2009. By 2013, Moody's issued a negative outlook for the entire higher education industry, a view which has continued into 2014.

For public universities, financial pressures have been compounded by falling levels of governmental financial support for higher education. The onset of the 2008 recession brought an abrupt end to earlier growth in state and local tax support. Figure 18 provides a graphic illustration of the extent of appropriation reductions to public educational institutions between 2008 and 2013, with the

“Discounting tuition directly reduces a school's net income and can weaken its operating margins.”

EDUCATIONAL APPROPRIATIONS PER FTE PERCENT CHANGE BY STATE, FISCAL 2008-2013

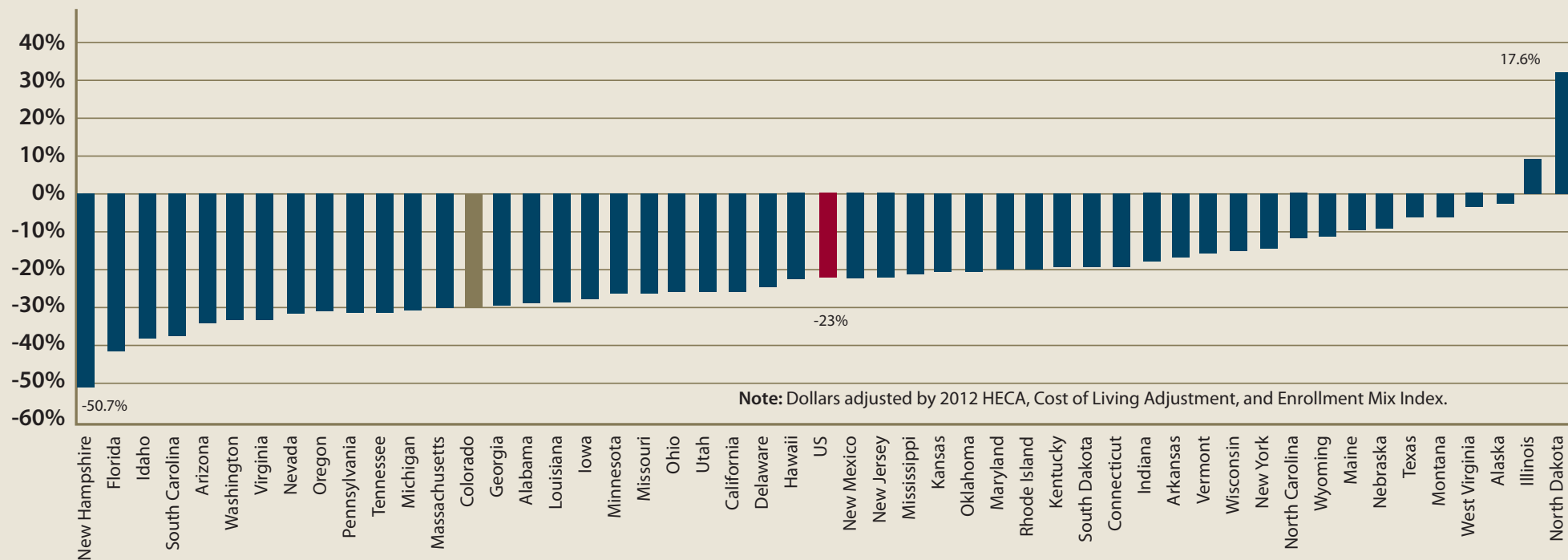
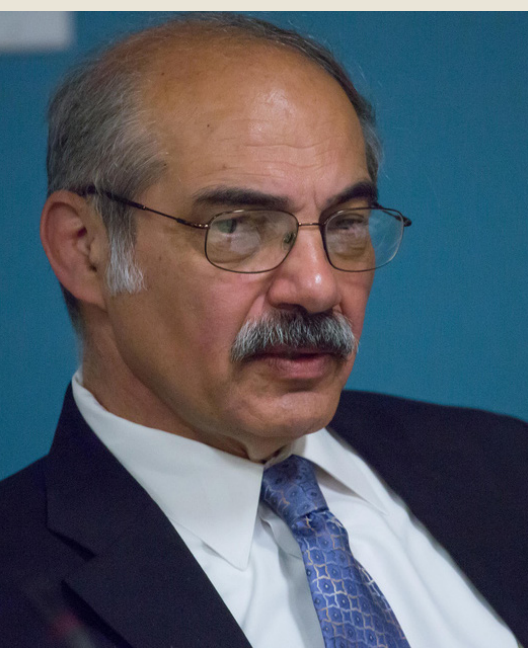


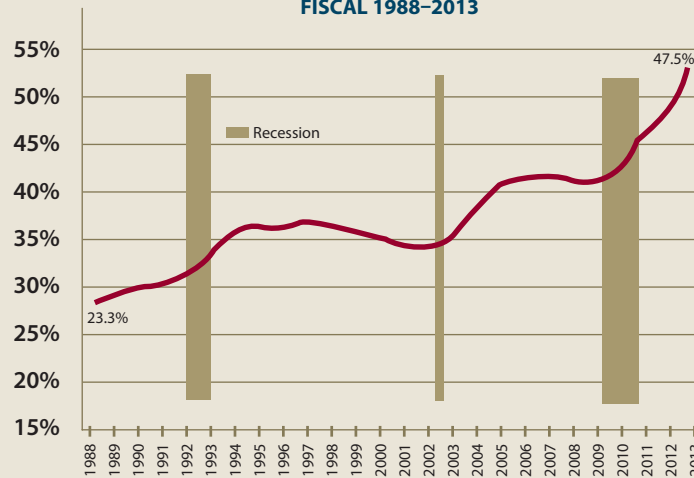
FIGURE 18: CHANGE IN STATE EDUCATIONAL APPROPRIATIONS PER FTE

Source: State Higher Education Executive Officers



Ron Rizzuto
Higher Education Panel Member

NET TUITION AS PERCENT PUBLIC HIGHER EDUCATION REVENUE FISCAL 1988–2013



**FIGURE 19: TUITION AS A PERCENT OF PUBLIC HIGHER
EDUCATION REVENUE**

Source: State Higher Education Executive Officers

red bar showing the U.S. average. While thirty states did see some increase in 2013, overall per-student state and local support still remains lower than in 2009.

State funding cutbacks led many public colleges and universities

to raise tuition and fees at unprecedented rates. From 1987 to 2012 public institution reliance on tuition as a source of income doubled, from 23 percent of total educational revenue to 47 percent, with the steepest increases occurring after 2002, as shown in Figure 19. On average, over the past several decades, tuition at public four-year institutions has increased at 3.5 times the rate of inflation. Although public and private tuition increases moderated somewhat in the 2013–14 academic year, they continue to remain well above the general rate of inflation.

Managing tuition increases and controlling costs are challenges for nearly every college and university. Nevertheless, dealing with increased competition, enrollment challenges and the resulting financial pressures requires institutions to address some difficult questions:

- *Does our institution have an ongoing process of assessing financial results and analyzing such results in terms of the school's overall strategy?*
- *Does our institution use a system of uniform pricing for tuition or do tuition rates vary by program or college?*



Steve Halsted
Higher Education Panel Member

- ## CIRCULAR STRATEGY

As declining affordability, educational alternatives, increased competition, enrollment challenges and reduced state support have generated pressures on institutions, many colleges and universities have tried to support enrollment through discounting tuition, constructing new buildings, expanding student facilities, and making other investments. In taking such actions, these institutions have relied on a strategy that is primarily financial in its focus rather than being oriented principally toward value creation. As noted earlier in Figure 16, tuition discounts have increased for virtually all types of schools, which have the effect of reducing net revenue. At the same time, many institutions have expanded or modernized educational facilities and increased student amenities, all of which increase expenses. The result of these actions creates, in effect, a circular strategy as shown in Figure 20.

- *Does our institution follow an enrollment strategy that relies on discounting tuition while increasing expenditures on facilities and amenities as a means of attracting students?*

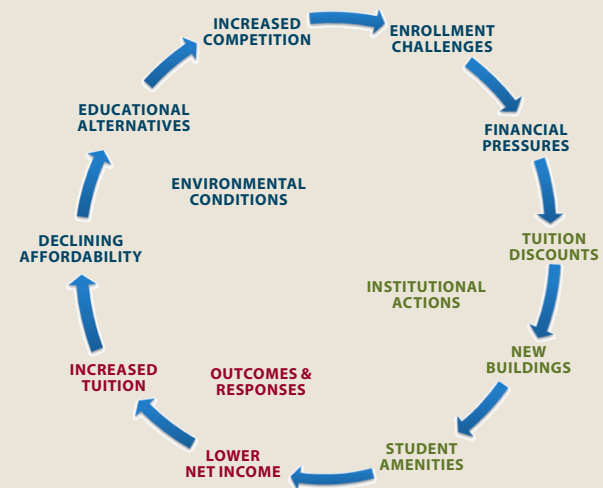


FIGURE 20: CIRCULAR FINANCIAL STRATEGY

36

THE STRUCTURE OF STRATEGY

The challenging conditions described in the preceding section raise the obvious question: “What does an institution do in the face of profound environmental change?” It is a question to which there is no uniform or singular answer. Each college or university must develop an overall strategy that is consistent with the unique mixture of values, resources, history and culture of that institution. In the course of its work, the panel identified a three-part strategic model. The model used by the panel recognizes three basic components of strategy: institutional perspectives, institutional assets and strategic options.

Institutional perspectives serve as the compass of strategy while institutional assets provide the power for strategic actions. Grounded on this foundation are strategic options, areas of action intended to leverage favorable circumstances and mitigate adverse conditions in the higher education environment. The basic components that define the structure of strategy are shown in Figure 21.

While the model used by the panel is certainly not the only approach an institution might choose, it is important that strategy be developed within an overall conceptual framework. Thus, a primary question to be considered in developing strategy relates to the model that guides strategy formulation:



FIGURE 21: THE STRUCTURE OF STRATEGY

- *Has our institution identified a conceptual model that will be used to guide the school as it embarks on the creation or refinement of strategy?*

INSTITUTIONAL PERSPECTIVES

Institutional perspectives shape the culture of the organization. They reflect the values, norms and principles embedded in the fabric of the institution. In many colleges and universities, these perspectives are expressed in the institution’s statement of

mission, vision, values and goals. While important to the success of the institution, such statements have multiple dimensions, a characteristic that adds complexity to their development.

On one hand, statements describing institutional mission, vision and goals must reflect long-lasting values of the organization. At the same time, they must be relevant to the resources available and the realities of the current environment. This is not to say that such statements are transient or that they should be subject to frequent revision. In fact, they should be described in terms that encourage longevity. However, they can neither exist in a vacuum nor be cast in stone. The institution's grounding statements must be reexamined from time to time to determine whether college or university strategies remain consistent with the principles and whether the guiding principles are encouraging effective strategy. This raises the question:

- *Are our institution's statements of mission, vision, values and goals consistent with the changing environment of higher education and realistic in terms of the resources available?*

INSTITUTIONAL ASSETS

In order to respond effectively to the challenges and opportunities facing the institution, strategies must be developed that are consistent with the assets available to the college or university. These include human and financial resources as well as reputation,

location and other institutional characteristics. Assets also embrace the institution's unique blend of academic capabilities and competencies. The value of a particular resource or capability is situational, varying based upon the environmental condition being addressed and the nature of the strategy being developed.

In assessing assets it is important that the institution do so in relation to the competitive environment. In business, health care, education, community service, government and other fields, many organizations believe they are aware of their resources and capabilities. Less frequently do they appreciate the way in which their blend of competencies and capabilities distinguish them from similar organizations—or fail to do so.

For colleges and universities developing strategy in an increasingly competitive environment, a number of key questions relate to institutional assets:

- *Has our institution undertaken a careful examination of its unique blend of assets—financial resources, competencies, capabilities and other resources—as a prerequisite to the development of strategy?*
- *Which, if any, of the institution's assets are rare or unique?*
- *Can our institution's resources be deployed in a manner that creates a value proposition that distinguishes the institution from its competitors?*

“Institutional perspectives serve as the compass of strategy while institutional assets provide the power for strategic actions.”

STRATEGIC OPTIONS

As institutional perspectives and assets establish the parameters for strategy and conditions in the environment determine its direction, strategic options are the tools of strategic management. They are applied differentially based upon the conditions being addressed, the characteristics of the institution and the scope of the strategy, i.e., whether developed for the university as a whole or for a particular college, program or department.

Identifying strategic options that appear to be consistent with the institution's perspectives and culture as well as its resources and capabilities is a key step in the development of institutional strategy. This is not a casual undertaking. In thinking about strategic options, institutional leaders might consider the following question:

- *Has our institution undertaken a formal process to identify a range of strategic options that are consistent with the school's vision, values, mission and goals as well as its resources and capabilities?*

In the course of its work, the panel identified eight strategic options that members felt might be worthy of consideration by colleges and universities. The options are generic in the sense that they, or any number of others that might be identified, can be applied to competitive environments in business, health care, law or many

other fields. These particular strategic options, shown in Figure 22, were selected because they appear to be relevant to higher education and thus merit consideration as elements in an overall college or university strategy. Each of these options is briefly discussed in the sections that follow.

MARKET PERSPECTIVE

For some in the academy, the word “market” has been associated with commercial transactions. As a result, the term was not frequently used in discussions related to higher education. For the purposes of this report, however, the term “markets” refers not to the transactional purchase of services, but to groups of individuals whose members have common characteristics and share similar needs. Examples of markets might include parents who desire a residential undergraduate experience for their children, working adults seeking additional education to advance their careers, companies that desire advanced management training for executives and so on. Thus, thinking in terms of markets becomes a useful means of identifying groups of individuals that the institution can serve. As such, examining potential markets is a critical component in formulating strategy.



David Thomson
Higher Education Panel Member

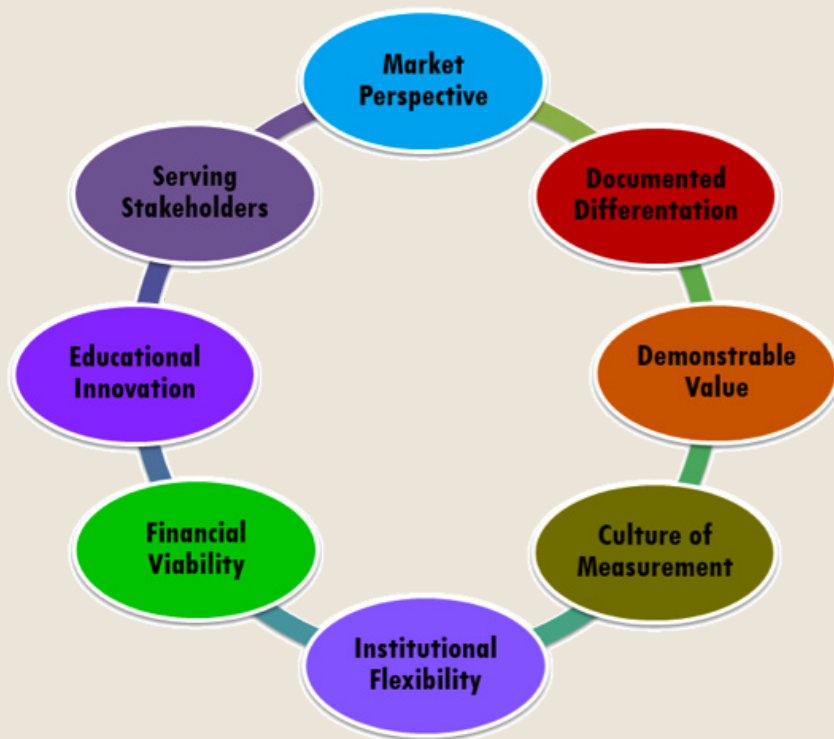


FIGURE 22: STRATEGIC OPTIONS FOR EDUCATIONAL INSTITUTIONS

A market orientation requires, by definition, a perspective that looks outside the institution. In practical terms, a market focus means that employees in academic units and departments think in terms of student segments that the college or university currently serves, as well as those that it might serve in the future.

For an institution to succeed in a turbulent, competitive environment, a market orientation must be embedded in the culture of the institution, a part of the college or university's DNA. This raises important, market-related questions:

- *Do our institution's administrators, faculty and staff share a consistent market orientation that will be necessary to compete successfully in the changing environment of higher education?*
- *Has our institution made a careful assessment to determine whom it will serve and, equally important, identify markets in which it chooses not to compete?*

DOCUMENTED DIFFERENTIATION

In a competitive environment, clear differentiation is an absolute necessity. Although virtually every institution believes it is distinctive, a scan of colleges and universities will reveal relatively few that can be considered differentiated in anything but superficial ways. The characteristic on which an institution chooses to differentiate itself must be meaningful to customers.



Kay Norton
Higher Education Panel Member

Notwithstanding an institution's promotional materials, a college or university is differentiated only when its customers say it is. To be effective, differentiation must also be durable—not easy for competitors to duplicate. Finally, the basis for differentiation needs to be clear; one either differentiates on cost or distinctive attributes. Organizations that try to differentiate on both cost and attributes, with very few exceptions, fail on both counts.

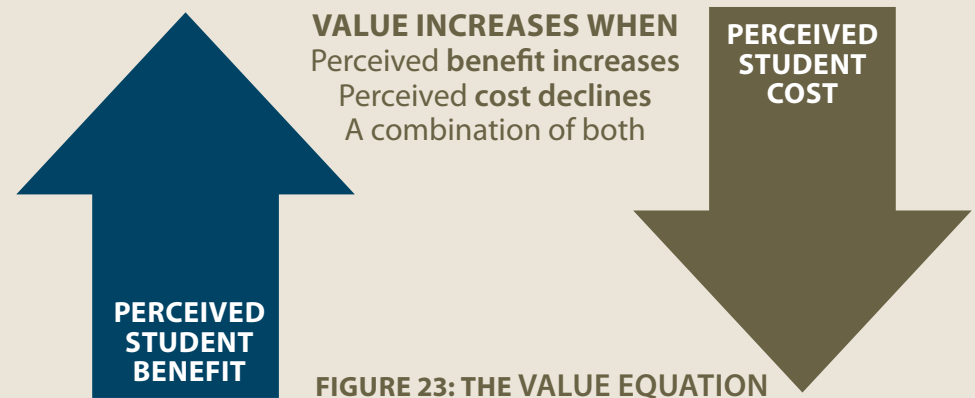
Many institutions try to distinguish themselves on the basis of quality. Where institutions have been able to document quality—through rankings, scores on standardized tests, job placement and/or other relevant measures—the financial and reputational outcomes have sometimes been quite favorable. The appropriate metrics to document differentiation are those that focus on outcomes and are relevant to current and prospective students, parents, alumni and employers.

A key question for college and university leaders relates to differentiation:

- *Have we undertaken a process of differentiating the institution and each of its academic units in a clear and verifiable manner, and done so as a matter of the highest priority?*

DEMONSTRABLE VALUE

Although “value” is a word that appears frequently in this report, it is not overused. Value is the relationship between perceived cost and perceived benefit. When perceived benefit rises and/or perceived cost falls, value increases. The value equation is depicted graphically in Figure 23.



In terms of value, the “perceiver” is not the university, not a college, not an academic discipline and not a media commentator, although all of those may influence external views. The perception that defines value is that held by the customer who is purchasing the product or service. For a college or university, those paying tuition

“A market orientation requires, by definition, a perspective that looks outside the institution.”

and fees—students, parents or employers—are the ones who assess the adequacy of the institution's value proposition.

Value propositions are not homogeneous across markets. What constitutes value for an undergraduate can be, and usually is, quite different from the desired value proposition for a graduate student. For a college undergraduate, intellectual exploration, personal maturation, socialization and educational experiences abroad may be important components of the value equation. Graduate students, by contrast, may place high value on the academic reputation of their professors, opportunities for professional networking and connections with desirable employers. While there may be some expectations that apply to both undergraduate and graduate markets—such as successfully preparing students for careers—the university needs to create value based on the differential needs and desires of various markets.

For institutions of higher education, the creation of value is necessary, but not sufficient. To assist stakeholders in assessing perceived costs and benefits, value must be documented. In higher education, where outcomes are often complex, intangible, qualitative in nature, and realized over a long period of time, surrogates for value are often used. It is for this reason that college rankings, employment data, starting salary comparisons and other

independent measures are useful as a means of demonstrating value. The importance of focusing on value raises a number of questions for college and university leaders:

- *To what degree is our institution focused on creating academic and professional value that helps students create lives of meaning, purpose and accomplishment?*
- *Has our institution and each of its academic units established and disseminated clear and demonstrable value propositions on which each will compete?*
- *Does our institution consistently verify the value created by every academic program and enforce a policy that programs failing to create demonstrably high levels of value over time should be revitalized or terminated?*

CULTURE OF MEASUREMENT

A culture of measurement suggests that every academic program and support function should actively employ appropriate metrics to (i) validate the university's value proposition, (ii) confirm effectiveness in achieving desired educational outcomes and (iii) assess operational efficiency. These data can be used to support decision making that enhances the university's performance across multiple dimensions. Data-driven management is important to undergraduate and graduate education, research activities and the operation of staff departments.

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In a competitive environment, clear differentiation is an absolute necessity.

It is not sufficient for an institution to convince itself that it creates value, produces superior learning outcomes or operates efficiently. These are propositions that must be substantiated through the use of metrics that can be verified. In terms of value creation the appropriate metrics are those that have meaning to students, parents, alumni, employers and other institutional stakeholders. Measures of learning outcomes should be relevant to students and employers as well as to faculty and academic leaders who use empirical data to improve the quality of education. Efficiency measures should support those with responsibility for operational and policy decisions.

While not always possible to achieve, relevant and credible quantitative and qualitative assessments that are produced or verified by independent third parties can be highly useful in verifying value and differentiating the university. The significance of independent validation can be seen in rankings of colleges and academic programs. Rankings by U.S. News & World Report and other publications are extremely influential in determining the way in which institutions of higher learning are perceived by prospective students, parents and others.

Also important, although less widely known, are standardized assessments such as the Collegiate Learning Assessment, the Educational Testing Service Proficiency Profile and the Collegiate

Assessment of Academic Proficiency, all of which provide an excellent opportunity to document value. Other means of independent verification might include reputational assessments by academic associations, faculty awards and recognition, external certifications, employer attestations and other third-party measures. There are, in short, a wide range of independently developed vehicles through which an institution can affirm the value it creates for students.

Questions that might be raised concerning a culture of measurement at an institution include the following:

- *Is there a strong culture of measurement across all academic units and key departments to support the documentation of value, outcomes, effectiveness and efficiency throughout our institution?*
- *Does our college or university encourage the use of independently verified metrics from credible sources as a part of the institution's overall assessment strategy?*

INSTITUTIONAL FLEXIBILITY

Organizational flexibility has not been an area in which colleges and universities have historically excelled. Yet, if institutions of higher learning

Francisco Garcia
Higher Education Panel Member



are to compete effectively with nontraditional providers, they must have the ability to reshape structure, reallocate resources and redeploy talent effectively with minimal disruption to organizational momentum and employee morale. Institutions will also need to reduce process-bound routines, streamline bureaucracy, and give authority and responsibility to those closest to various student markets. Recognizing that institutional flexibility is central to an organization's ability to respond to a rapidly changing environment, the question arises:

- *Does our institution create a culture that supports institutional flexibility by examining governance and operating policies to be certain they support timely and informed decision making?*

FINANCIAL VIABILITY

Successfully dealing with the changing environment of higher education means acquiring new technology, instituting new programs, adopting new processes and taking other actions—all of which require funding. Because implementing strategic options requires financial resources, the strength of a college or university's balance sheet needs to be a primary consideration for institutional leadership.

A strong balance sheet requires, among other things, that the institution generate positive return from its academic programs while controlling costs. If margins decline over time, the institution will be limited in its ability to maintain the high academic quality so essential to differentiation and value creation. Declining margins can also lead to lower credit ratings, which raise the cost of borrowing, further weakening the institution. Whatever the challenges facing an institution, maintaining financial viability is essential to implementing a successful strategy to deal with adverse conditions and capitalize on opportunities. Questions that institutional leaders should consider in terms of financial viability include:

- *Does our institution have a process for examining the financial contribution margin of each academic unit and program?*
- *While not all academic units may generate a positive net return, is there a formal process to balance financial viability across the entire portfolio of programs offered by our institution?*
- *Do trustees, administrative leaders and faculty have an understanding of our institution's balance sheet and other key indicators of financial condition?*
- *Has our institution's balance sheet become stronger over the past five years?*

“

It is not sufficient for an institution to convince itself that it creates value, produces superior learning outcomes or operates efficiently.

EDUCATIONAL INNOVATION

In the course of its work, the panel received information on a wide range of technical and operational innovations sweeping higher education. Massive open online courses, computer-mediated instruction and peer-to-peer learning platforms are a few of the many innovations reshaping the educational landscape. Operational developments include competency-based education, third-party providers, global scale educational delivery, program collaboration between institutions and other innovations.

From a technological perspective, the range of innovations, some with significant disruptive potential, is growing at amazing speed. The importance and impact of technological and operational innovations on the environment of higher education raise several key questions:

- *Does our institution encourage the use of pilot programs to judge the feasibility of new technologies and promptly adopt innovations that can add demonstrable value to students and/or the school?*
- *Does our institution provide ongoing support to faculty in the development and implementation of selected technologies?*
- *Does the leadership of our institution use educational technology to achieve competitive advantage?*

SERVING STAKEHOLDERS

Colleges and universities serve many constituents: students, faculty, staff, alumni, donors, neighbors, employers, professional groups, governments, the larger community and other stakeholders, all of whom would like to receive high value. What constitutes value, however, differs among various audiences. Maximizing value for one group can reduce it for other constituents.

Thus, a key question facing all institutions of higher learning is one of priorities, “For whom is value first maximized?” The definition of value—perceived benefit relative to perceived cost—provides a guide. An effective value strategy first focuses on those groups providing the largest share of resources to the university. In a tuition-driven institution, this means that value is first maximized for students. While satisfying other stakeholders is always important, students should be the initial focus of an institution’s value strategy. Given the always challenging task of balancing the interests of stakeholders, a question arises:

- *Relative to other stakeholders, does our institution place its highest priority on students who, taken as a whole, provide the largest share of financial resources to the institution?*



Floyd Ciruli
Higher Education Panel Member

A CALL TO ACTION

Risks of Uncertainty

The theme of this report is that colleges and universities are facing a period of disruptive change driven by forces that have the power to transform the environment of higher education in profound ways. The growth of a global knowledge society, information ubiquity, declining affordability, demographic changes, technological innovation, tenure policies, increased competition, enrollment challenges, and financial pressures are conditions that provide both opportunities and challenges for all colleges and universities.

In the face of change, no college or university can remain static and survive. Each institution must not only assess the changing environment, but also it must be ready to take timely action when required. This can be more difficult than it sounds, especially in the face of uncertain conditions.

The understandable apprehension that accompanies a shifting environment is not simply a disquieting emotional experience—it carries with it significant and tangible risks. Conditions of uncertainty can result in inaction at a time

when definitive steps are required. Apprehension can encourage incrementalism, which, while appropriate at times, can leave an organization far behind the curve of change. While uncertainty may seem to be an amorphous concept, the strategic risks that flow from inaction and indecisiveness are real indeed. This raises several questions to be considered by those in positions of institutional leadership:

- *Has our institution established a formal process to communicate with faculty and staff to build a community-wide understanding of the challenges facing intuitions of higher learning?*
- *Is there a process whereby faculty and staff can actively engage with our institution's leaders to discuss strategy in the face of a changing higher education environment?*
- *Has our institution actively engaged alumni in discussions about the challenges facing the institution?*

Aspirations and Opportunity

In spite of the pressures brought about by disruptions in the higher education environment, some institutions will not only survive, but will prosper. They will use environmental change as a vehicle to channel their aspirations and leverage newfound opportunities. They will recognize that the stability long-associated



Lynn Gangone
Higher Education Panel Member

with educational institutions may have reduced the necessity to innovate and thereby inhibited changes necessary to raise the level of institutional excellence. These institutions will clarify their vision, examine goals, assess resources and deploy them in a focused way. They will honor traditional virtues of the academy while recognizing the benefits of some new and potentially quite different curricular, pedagogical and business models.

This report is a call for colleges and universities to build upon their aspirations. The panel encourages leaders of educational institutions, in partnership with their campus communities, to develop a shared understanding of the changing environment of higher education, create processes to identify opportunities, and marshal strategies to capitalize upon them. It is the panel's hope that this report might be of value to colleges and universities as they develop strategies for these unsettling times.



Summary of Questions for Educational Institutions

A View of Disruptive Transformation

1. Could higher education go through a shattering transformation such as that experienced by the newspaper industry?

The Environment of Higher Education

2. Does our institution have an ongoing means to monitor conditions in the environment of higher education?

Information Ubiquity

3. What strategy will allow our institution to succeed in a world where others are giving away information for which colleges and universities charge high prices?

A Knowledge Society

4. Can our institution capitalize on a growing global market for higher education?
5. In what areas might the institution compete internationally and what level of investment would be required to do so?
6. What are the opportunity costs or other risks that may make program expansion into global markets a less desirable strategy?

Increasing Prices

7. Can our institution find a way to control rising tuition and fees while still maintaining educational quality?
8. Can cost reductions be achieved without materially impacting the student experience in an adverse way?

Declining Affordability

9. How do colleges and universities stay in business when their costs of attendance are rising at a rate 10–15 times greater than family income?
10. How long will families be able and willing to assume significant debt burdens to send a child to college?
11. Are there other models that might be considered to help students afford the cost of higher education?

Demographic Shifts

12. Can our institution manage the net cost of tuition in order to attract rapidly growing demographic groups?
13. Has our institution considered adjustments in recruitment, messaging, financial aid, student support, academic programs and other activities and processes necessary to attract and retain minority students?
14. Is the culture of our institution supportive of students with minority ethnic and racial backgrounds?

Disruptive Innovation

15. Do those in positions of leadership at our institution, including leaders of academic units, have a solid understanding of the way in which disruptive innovations emerge?
16. Does the institution have a means to identify and evaluate educational innovations at an early stage and assess their potential ability to enhance academic and operational outcomes?
17. Has our institution examined the opportunities and risks associated with competency-based education in terms of markets currently served by the school or as a potential mechanism for enrollment growth?

Tenure Policies

18. Has our institution initiated a dialogue among trustees, the administration and faculty on optimizing tenure in a way that balances freedom of academic expression with a process that requires high-quality professorial performance and provides for necessary institutional flexibility?

Increased Competition

19. Does our institution, and each of its academic divisions, have an ongoing process to identify both existing and new, potentially disruptive competitors?

20. Do we have a means to identify the strategies being followed by nontraditional competitors and assess changes in market share?

Enrollment Challenges

21. Is our institution located in a region that is likely to see a decrease in the number of high school graduates?
22. If so, are strategies in place to deal with the prospect of reduced enrollment?
23. Does our institution have an effective development program in place designed specifically to build endowment for scholarships?
24. Does our institution have a formal policy on tuition discounting?
25. If so, is the discounting policy financially sustainable in terms of the overall impact on the institution's balance sheet?
26. How does our institution compare to peers and other competitors in terms of tuition discount rate?
27. To what extent does our institution as a whole, or specific academic units within the institution, depend upon international students to meet overall enrollment goals?

Gail Klapper
Higher Education Panel Member



- 28. Do international students at our institution come from a limited number of countries?
- 29. If our institution or specific academic units are dependent on international students from a limited number of countries, are plans in place to mitigate the potential enrollment volatility associated with such concentration?

Financial Pressures

- 30. Does our institution have an ongoing process of assessing financial results and analyzing such results in terms of the school's overall strategy?
- 31. Does our institution use a system of uniform pricing for tuition or do tuition rates vary by program or college?
- 32. Are our institution's tuition and fee levels established on the basis of achieving general parity with peer institutions?
- 33. Are our institution's tuition and fee levels established on the basis of demonstrated value of the school's academic programs vis-à-vis those of competitors?

Circular Strategy

- 34. Does our institution follow an enrollment strategy that depends on discounting tuition while increasing expenditures on facilities and amenities as a means of attracting students?

The Structure of Strategy

- 35. Has our institution identified a conceptual model that will be used to guide the school as it embarks on the creation or refinement of strategy?

Institutional Perspectives

- 36. Are our institution's statements of mission, vision, values and goals consistent with the changing environment of higher education and realistic in terms of the resources available?

Institutional Assets

- 37. Has our institution undertaken a careful, objective examination of its unique blend of assets—financial resources, competencies, capabilities and other resources—as a prerequisite to the development of strategy?
- 38. Which, if any, of the institution's assets are rare or unique?
- 39. Can our institution's resources be deployed in a manner that creates a value proposition that distinguishes the institution from its competitors?

Strategic Options

- 40. Has our institution undertaken a formal process to identify a range of strategic options that are consistent with the school's vision, values, mission and goals as well as its resources and capabilities?

Market Perspective

- 41. Do our institution's administrators, faculty and staff share a consistent market orientation that will be necessary to compete successfully in the changing environment of higher education?
- 42. Has our institution made a careful assessment to determine whom it will serve and, equally important, identify markets in which it chooses not to compete?

Documented Differentiation

- 43. Have we undertaken a process of differentiating the institution and each of its academic units in a clear and verifiable manner, and done so as a matter of the highest priority?

Demonstrable Value

- 44. To what degree is our institution focused on creating academic and professional value that helps students create lives of meaning, purpose and accomplishment?
- 45. Has our institution and each of its academic units established and disseminated clear and demonstrable value propositions on which each will compete?
- 46. Does our institution consistently verify the value created by every academic program and follow a policy that programs failing to create demonstrably high levels of value over time should be revitalized or terminated?

Culture of Measurement

- 47. Is there a strong culture of measurement across all academic units and key departments to support the documentation of value, outcomes, effectiveness and efficiency throughout our institution?
- 48. Does our college or university encourage the use of independently verified metrics from credible sources as a part of the institution's overall assessment strategy?

Institutional Flexibility

- 49. Does our institution create a culture that supports institutional flexibility by examining governance and operating policies to be certain they support timely and informed decision making?

Financial Viability

- 50. Does our institution have a process for examining the financial contribution margin of each academic unit and program?
- 51. While not all academic units may generate a positive net return, is there a formal process to balance financial viability across the entire portfolio of programs offered by our institution?
- 52. Do trustees, administrative leaders and faculty have an understanding of our institution's balance sheet and other key indicators of financial condition?

53. Has our institution's balance sheet become stronger over the past five years?

Educational Innovation

54. Does our institution encourage the use of pilot programs to judge the feasibility of new technologies and promptly adopt innovations that can add demonstrable value to students and/or the school?

55. Does our institution provide ongoing support to faculty in the development and implementation of selected technologies?

56. Does the leadership of our institution use view educational technology to achieve competitive advantage?

Serving Stakeholders

57. Relative to other stakeholders, does our institution place its highest priority on students who, taken as a whole, provide the largest share of financial resources to the institution?

A Call to Action

58. Has our institution established a formal process to communicate with faculty and staff to build a community-wide understanding of the challenges facing intuitions of higher learning?

59. Is there a process whereby faculty and staff can actively engage with our institution's leaders to discuss strategy in the face of a changing higher education environment?

60. Has our institution actively engaged alumni in discussions about the challenges facing the institution?



Tom Willoughby
Higher Education Panel Member

Acknowledgments

PANEL PRESENTERS

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Stuart Butler, Distinguished Fellow and Director, Center for Policy Innovation, Heritage Foundation

Robert Coombe, Chancellor, University of Denver

Julanna Gilbert, Director, Center for Teaching and Learning, University of Denver

Richard Green, Founding Chairman, Cable Labs

Gregg Kvistad, Provost, University of Denver

Paul LeBlanc, President, Southern New Hampshire University

David Longanecker, President, Western Interstate Commission for Higher Education

Stacey Ludwig Johnson, Associate Provost, Academic Services, Western Governors University

Sylvia Manning, President, Higher Learning Commission

Rita McGrath, Professor, Columbia Business School; Author, *The End of Competitive Advantage*

Tryg Myhren, Chair, Board of Trustees, University of Denver

Cary Nelson, Professor, University of Illinois at Urbana-Champaign; Past President, American Association of University Professors

Donald Norris, President and Founder, Strategic Initiatives, Inc.

Jonathan Rees, Professor of History, Colorado State University-Pueblo

Jeffrey Selingo, Editor, *Chronicle of Higher Education*; Author, *College (Un)bound*

Tom Willoughby, Vice Chancellor, Enrollment, University of Denver

Craig Woody, Chief Financial Officer, University of Denver

MEMBERS OF THE STRATEGIC ISSUES PANEL ON THE FUTURE OF HIGHER EDUCATION

James Griesemer, Chair – Trustee; Professor and Dean Emeritus;
Director, Strategic Issues Program, University of Denver

Floyd Ciruli – Founder, Ciruli Associates

Lynn Gangone – Dean, Colorado Women’s College; Associate
Professor, Morgridge College of Education, University of Denver

Francisco Garcia – Trustee; Founder and President, Garcia
Companies

Peter Gilbertson – Trustee; Chairman, President and CEO,
Anacostia & Pacific Company, Inc.

Steve Halstedt – Managing Director, Centennial Ventures

Gail Klapper – Member/Director, Colorado Forum

Andrei Kutateladze – Professor and Dean, Natural Sciences and
Mathematics, University of Denver

Gregg Kvistad – Professor and Provost, University of Denver

Scott Leutenegger – Professor, School of Engineering and
Computer Science; President Faculty Senate, University of Denver

Gregory L. Moore – Editor, The Denver Post

Kay Norton – President, University of Northern Colorado

Denise O’Leary – Trustee; Private Investor; Director, Calpine Corporation,
Medtronic, Inc., and US Airways, Inc.

Ron Rizzuto – Professor, Daniels College of Business, University of Denver

Susan Schulten – Professor and Chair, History Department, University of
Denver

Doug Scrivner – Trustee; Retired General Counsel, Accenture

Cappy Shopneck – Trustee; Principal, South Woods Financial LLC

David Thomson – Professor, Lawyering Process, Sturm College of Law,
University of Denver

Clara Villarosa – Trustee; Business Coach and Author; Founder and
Former Owner, The Hue-Man Bookstore New York

Tom Willoughby – Vice Chancellor for Enrollment, University of Denver

Craig Woody – Vice Chancellor for Business and Financial Affairs,
University of Denver

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As part of its commitment to serve the public good, the University of Denver's Strategic Issues Program periodically convenes a panel of accomplished citizens to examine a policy issue that is important to the people of Colorado and the nation. Whatever the topic, the purpose of all strategic issues panels is to provide a nonpartisan basis for informed public discussion while raising awareness about the issue. To achieve this, panel members gain an in-depth understanding by receiving presentations from experts, advocates, public officials and others and through an extensive review of the literature on the topic. After examining the issue from a variety of perspectives, panel members engage in a consensus-based process, seeking practical solutions to issues rather than ideologically-oriented outcomes.

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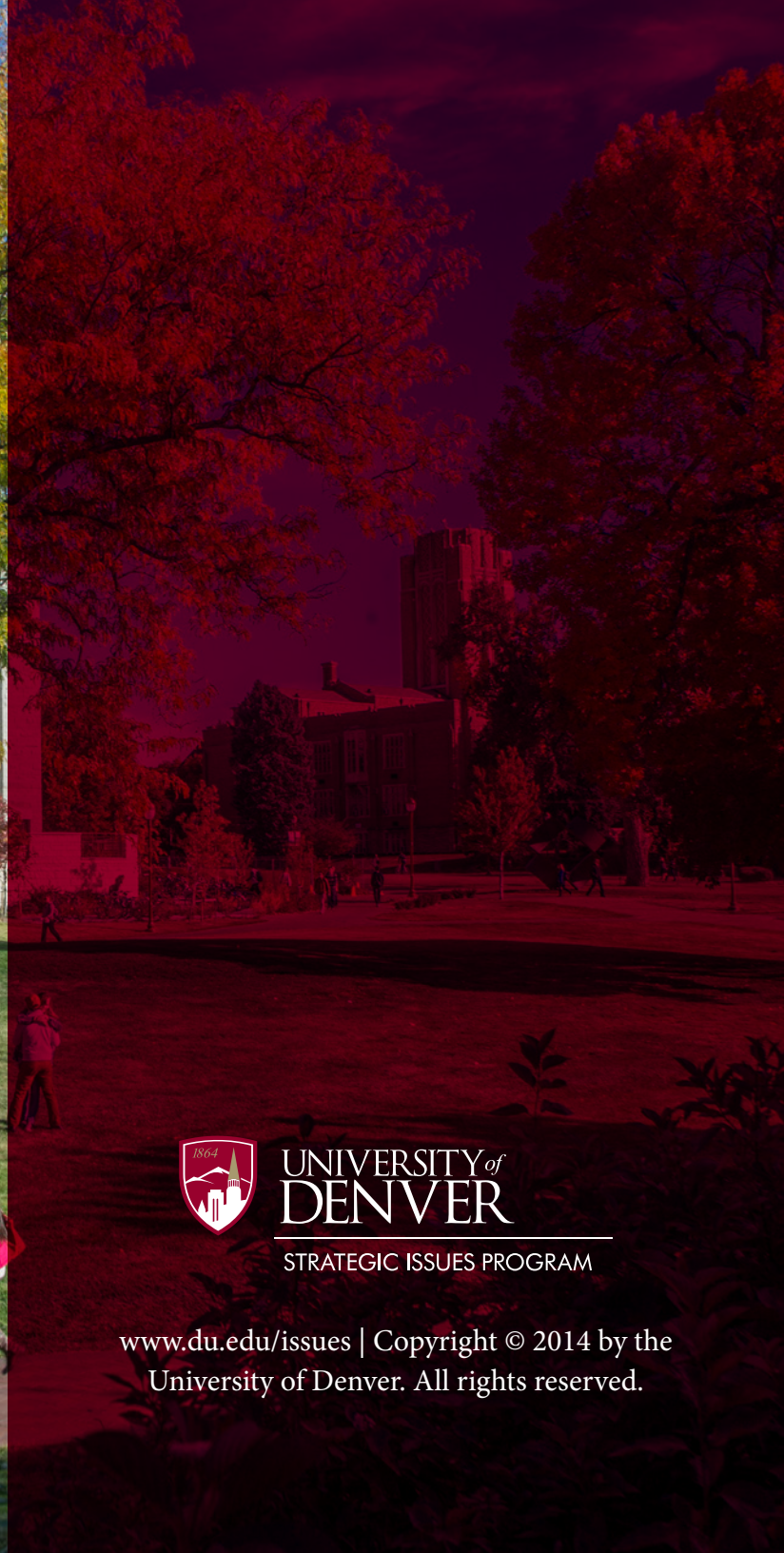
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