UNSETTLING TIMES:

HIGHER EDUCATION IN AN ERA OF CHANGE

A STRATEGIC FRAMEWORK FOR THE UNIVERSITY OF DENVER

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

February 2014





Contents

Letter From Board Chair and Chancellor	
Overview From the Panel Chair	
Report of the University of Denver Strategic Issues	
Panel on Higher Education	(
Unsettling Times	(
Growing Skepticism	
A View of Disruptive Transformation	
Preparing for Change	
The Structure of Strategy	1
Guiding Principles	1
Resources and Capabilities	1
Components of Strategy	1
The Environment of Higher Education	2
Forces of Change	2
The Current Environment	2
A Strategic Framework for the University of Denver .	2
A Knowledge Society	2
Information Ubiquity	2
Declining Affordability	2
Financial Pressures	3
Increased Competition	3
Enrollment Challenges	4
Technological Innovation	4
Competency Assessment	4
Tenure Policies	5
A Call to Action	5
Summary of Findings and Conclusions	5
Strategic Foundations	5
Strategic Components	5
Strategic Framework	5
Panel Presenters	6
Panel Members	6

Figure Contents

ligure 1 – Decline of Newspaper Advertising	
igure 2 – The Structure of Strategy	. 1
igure 3 – Key Components of a DU Strategy	. 15
igure 4 – Value Equation	. 17
Figure 5 – DU Operating Margin FY 2000 – FY 2013	. 2
Figure 6 – Gainshare Transferred to DU Departments	. 2
Figure 7 – Forces Shaping the Environment of Higher Education	. 24
igure 8 – College Enrollment 1947 - 2012	. 25
igure 9 – The Environment of Higher Education	. 27
gure 10 – Growth of College Tuition and Median Family Income	. 30
igure 11 – Growth of Student Debt	. 30
igure 12 – Race, Income and Education	. 3
Figure 13 – DU Endowment Relative to Peer Group	. 32
Figure 14 – Tuition Discount Rates for Private Colleges and Universities	. 33
Figure 15 – DU Endowment Relative to Other Colleges and Universities	. 34
igure 16 – Change in State Educational Appropriations per FTE – 2007-2012.	. 36
Figure 17 – Tuition as a Percent of Public Higher Education Revenue	. 37
igure 18 – DU Tuition Increases and Consumer Price Index	. 38
igure 19 – DU Inflation-adjusted Net Price for First-Year, Full-Time Students	. 38
Figure 20 – High School Graduates by Race/Ethnicity	. 4
igure 21 – F1 Student Visas by Country	. 42
igure 22 – DU Fully Qualified Market Size	. 43
igure 23 – DU Enrollment 2005 - 2013	. 44
Figure 24 – Illustrative Competency-Based Degree Programs	. 50
igure 25 – Tenure and Tenure Track Faculty	. 53
gure 26 – Tenured/Tenure Track Faculty, DU and Peers	. 54
igure 27 – DU Credit Hours Taught by Appointment Type	. 54

Letter from the Board Chair and Chancellor

DEAR FRIENDS,

It seems at times that much of America thinks of its higher education establishment as immutable, a set of institutions deeply rooted in a constant culture since the earliest colonial times. In fact, nothing could be farther from the truth. Colleges and universities in the United States have been buffeted by the winds of change for centuries, just as American culture itself has changed dramatically. The current "traditional" model for higher education, with its heavy dependence on federal funding, is in fact a distinctly post-World War II phenomenon.

Today those winds of change have reached gale-force, and there is little doubt that much of higher education will be substantially different within a decade. A confluence of forces tied to economics, demographics, and technology will make it so. Our University, the University of Denver, must prepare itself to respond.

We are fortunate to be in a strong position to do so. Twenty-four consecutive years of balanced budgets, two successful fundraising campaigns in that period, substantial improvements in the absolute quality of our academic enterprise, and a dramatic extension of our reach nationally and internationally provide us with a solid platform from which we can reach for still greater quality and impact. 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. Panel members were not charged with producing a strategic plan, but rather a framework for change that identified and evaluated the principal forces at work and the challenges and opportunities their synthesis would produce for our University. The report is intended to appropriately define the urgency of the moment, but also to stimulate the collective creativity of the DU 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 University Trustee Jim Griesemer for the intellect and grace with which he managed it. At this moment, no greater gift could be given to our University.

Robert D. Coombe

Chancellor, University of Denver

Robert S. Combe

Trygve Myhren

Chair of the Board of Trustees





Overview from Panel Chair

Higher education is facing a period of great change. A number of forces—technological innovation, demographic changes, rising costs, declining affordability, new competitors and other disruptive factors—are challenging the traditions, roles, pedagogy and economic models of colleges and universities. To prepare the University of Denver for the changes facing higher education, the Chair of the DU Board of Trustees and the Chancellor of the University established a Panel on Higher Education. The panel's work was organized through the university's Strategic Issues Program utilizing a consensus-based strategy development process. The panel's findings, conclusions and recommended strategic framework for the university are the subject of this report.

STRATEGIC THEMES

The panel's report contains over thirty findings and conclusions that appear throughout the text and are summarized at the end of the document. Every member of the panel contributed to these observations, and each suggestion is worthy of careful consideration.

Among the panel's conclusions, several recurring themes emerge. These themes are important because they are applicable to multiple issues in a framework that can guide the university's overall strategy. Seven cross-cutting strategic themes identified by the panel are described below.

Value – Creating verifiable value in academic and professional programs should be the foundation of the University of Denver's overall strategy. A value-based ethos should pervade every activity at the university.

Differentiation – As increasing tuition reduces affordability and non-traditional providers take advantage of innovations to lower costs, it is essential that DU clearly differentiate the university and its academic units from competitors.

Quality and Breadth – The university can differentiate itself by providing superior quality and by leveraging its breadth of undergraduate and professional graduate offerings through program linkages that create exceptional value for students.

Market Perspective – In a global, innovation-driven, rapidly-changing higher education environment that is attracting new competitors, identifying educational markets where DU can add significant value is essential.

Institutional Flexibility – Capturing opportunities for new programs, improved pedagogy and enhanced outcomes requires institutional flexibility in order to make thoughtful decisions in a timely manner.

Financial Viability – The financial strength of the university, built largely on strong annual operating margins, is one of DU's most



important assets and will be a pivotal element in the success of the University of Denver's overall strategy.

Measurement – A strong culture of measurement throughout the university is essential as a means to verify value creation, document differentiation, confirm learning outcomes, and substantiate the efficiency of university operations.

STRATEGIC FRAMEWORK

The panel's goal was to lay the groundwork for a detailed strategy that will allow the University of Denver to deal successfully with the changes facing higher education. In considering a foundation on which to build such a strategy, the panel identified three critical elements. The first of these involves the values and principles that ground the university and shape its culture. To meet challenges and capture opportunities facing the university, strategy must also be consistent with the resources available, a second key element. Components of strategy, the third element, are the tools for strategic management at the university. Together, these elements provide a structure for strategy for the university as a whole and each of its academic units.

The strategies that are developed for the university and its academic units must respond to conditions in the environment of higher education. These conditions are external to the university, but have the ability to profoundly shape DU's future. Some of these conditions represent opportunities to be leveraged while others may be adverse

trends that need to be mitigated. The panel identified nine areas that members believed were of particular importance to the university, as shown below. Taken together, they create a framework for strategy at the University of Denver.

KNOWLEDGE SOCIETY	INFORMATION UBIQUITY	DECLINING AFFORDABILITY
FINANCIAL PRESSURES	INCREASED COMPETITION	ENROLLMENT CHALLENGES
TECHNOLOGICAL INNOVATION	COMPETENCY ASSESSMENT	TENURE POLICIES

Within each area of the framework, the report presents findings and conclusions that the panel believes can guide the university as it develops strategies to address changing conditions. The Panel on Higher Education hopes that the university community will find the strategic framework and perspectives offered in this report useful as the University of Denver navigates the challenging environment of higher education.

James Griesemer, Chair

University of Denver Strategic Issues Panel on Campaign Finance

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

UNSETTLING TIMES

These are unsettling times for colleges and universities across America. 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.

Not all colleges and universities will survive these changes. If the experience of other industries is any guide, procedural inertia, organizational sclerosis and limited resources will lead to institutional retrenchment, downsizings, consolidations and a general thinning of the ranks of traditional schools. A few universities with very large endowments will be shielded—for a while. For the vast majority of schools with more limited endowments, like the University of Denver, the coming years promise to be challenging indeed.

In some ways, 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, the University of Bologna, has been in continuous operation for over 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 signed in 1781, the ranks of institutions of higher learning had swelled beyond Harvard to include Princeton,

"The changes that lie on the educational horizon are likely to be profound."

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. Masonry 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 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 at least 45% of college students failed to demonstrate any statistically significant improvement in the Collegiate Learning Assessment, a benchmark evaluation of student learning used by over 700 institutions, during their first two years at college. 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 non-technical 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

"Frustration with the high cost of a degree is matched by concerns about results."

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.

Even in the face of such criticism, given the long history of many colleges and universities, it might be difficult to imagine changes so powerful that they could rapidly disrupt established institutions. Recent history, however, provides 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: the print media. While newspapers and higher education differ in a number of respects, they share several important characteristics. Higher education and the print media are institutions of great longevity, play significant roles in society and, of particular importance in terms of the potential for disruptive change, both 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 the 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. By any standard, the print media has been an institution of remarkable durability.

Then came the Internet. Over the past 15 years the newspaper industry has been shaken by tumultuous change. Gone, after 150 years of operation, is the Rocky Mountain News, founded just five years before the University of Denver. Gone, too, are the Tucson Citizen after 138 years of publication and the Cincinnati Post, in operation for 126 years, along with other American newspapers. Some papers have received cash infusions from outside sources such as the 2013 purchase of the Washington Post by Amazon at a price that would have been unthinkably low 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.

To appreciate the speed and power of technological change, consider that websites such as Craigslist have been able to cannibalize a huge percentage of newspaper classified advertising. In a span of barely 10 years these websites depleted one of

"Over the past 15 years the newspaper industry has been shaken by tumultuous change."

NEWSPAPER PRINT AND ONLINE ADVERTISING

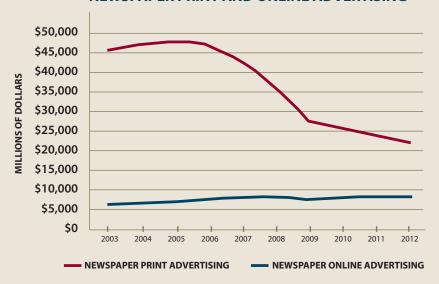


FIGURE 1: DECLINE OF NEWSPAPER ADVERTISING
Sources: The Atlantic and Newspaper Association of America

the major revenue sources of a 400 year old industry. Since 2000, newspapers have lost more than three-quarters of print classified revenue as Craigslist and other online websites offered information, often at little or no cost to the advertiser, about household items, real estate, autos and other goods and services. 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. Will higher

education go through a shattering transformation such as that experienced by the newspaper industry? No one knows for certain. Some make the argument that 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.

PREPARING FOR CHANGE

Given the prospect of significant change in higher education, the Chair of the DU Board of Trustees and Chancellor of the University of Denver jointly convened a panel to examine the environment of higher education. Members of the University of Denver Panel on Higher Education were drawn from the DU board of trustees, administration and faculty, along with several community members familiar with the university. Panel members spent over six months receiving presentations from higher education experts and advocates, reviewing a wide range of books, articles and research materials, and discussing the changing landscape of higher education and potential impacts on the University of Denver.

In undertaking its work, the panel was mindful of values that underlie the University of Denver: teaching, research, knowledge creation and service in support of the public good. The panel

Gone, after 150 years of operation, is the Rocky Mountain News, founded just five years before the University of Denver."

recognized the need for the university to be successful in an economic sense and to operate on a sound, businesslike basis. At the same time, panel members agreed that the academic and public service purposes on which the University of Denver was founded 150 years ago should ground the university's strategy and that those fundamental values remain compatible with an economically viable University of Denver.

The panel was not charged with developing a detailed strategic plan for the University of Denver—that responsibility rests with the administrative leadership of the university with the direction and oversight of the Board of Trustees. Rather, the panel's task was to develop a framework around which a detailed strategy could be fashioned. Thus, this report represents a first step in developing a strategy for dealing with the fundamental changes facing higher education in general and the University of Denver in particular. Given the disruptive potential of changes facing higher education, the panel offers two conclusions related to the

strategic management process at the University of Denver:

The University of Denver and each of its academic units and departments should undertake an in-depth

assessment of its strengths, weaknesses and competitive position in order to develop and implement a detailed strategy to address the opportunities and challenges in the external environment of higher education.

The strategies that are developed should be used to guide the resource allocation process, be assessed and updated on a regular basis, and be shared with the university community through periodic progress reports.



Cappy ShopneckHigher Education Panel Member

THE STRUCTURE OF STRATEGY

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. Strategy, however, should be the last step in dealing with disruptive change, not the first.

Effective strategy is grounded on principles that guide the University of Denver and values that shape the university's culture. To be implemented successfully, strategy must be consistent with the resources available to the university and the capabilities possessed by the institution. Strategic components—actions intended to leverage opportunities and mitigate adverse conditions in the higher education environment—are the building blocks of strategy. They are applied differentially based upon the conditions being addressed and whether the strategy is being developed for the university as a whole or for a particular college, program or department. The relationship among elements that define the structure of strategy is shown in Figure 2.

GUIDING PRINCIPLES

Guiding principles reflect the values and perspectives embedded in



FIGURE 2: THE STRUCTURE OF STRATEGY

the culture of the University of Denver. As such, the panel decided that an appropriate way to begin thinking about strategy was to reflect on principles that anchor the institution, particularly DU's existing vision, values, mission and goals. The panel also identified several principles and perspectives that members believe could help guide the development of the university's future strategy.

Effective strategy is grounded on principles that guide the University of Denver and values that shape the university's culture."

Guiding principles have multiple dimensions, a characteristic that can make their establishment a challenging undertaking. On the one hand, principles 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 principles are transient or that they should be subject to frequent revision. In fact, principles should be described in terms that encourage their longevity. However, principles can neither exist in a vacuum nor be cast in stone. They must be reexamined from time to time to determine whether university strategies remain consistent with the principles and whether the guiding principles are encouraging effective strategy.

DU Vision, Values, Mission and Goals

Articulated in 2001, and revised in 2007, the university's vision, values, mission and goals are based on principles that have served the University of Denver for many years. These guiding perspectives are set out below.

Vision – The University of Denver will be a great private university dedicated to the public good.

Values – In all that we do, we strive for excellence, innovation, engagement, integrity, and inclusiveness.

Mission – The mission of the University of Denver is to promote learning by engaging with students in advancing scholarly inquiry, cultivating critical and creative thought, and generating knowledge. Our active partnerships with local and global communities contribute to a sustainable common good.

Goals

Community – We will create a diverse, ethical, and intellectually vibrant campus community to provide a challenging and liberating learning environment.

Learning – We will provide an outstanding educational experience that empowers students to integrate and apply knowledge from across the disciplines and imagine new possibilities for themselves, their communities, and the world.

Scholarship – We will invigorate research and scholarship across the university to address important scientific, sociopolitical and cultural questions of the new century.

The panel concludes that the University of Denver's strategic direction should be based upon its vision, values, mission and goals as well as guiding principles that provide a foundation for strategy development.

"The University of Denver will be a great private university dedicated to the public good."

Principles for Strategy

As the university begins to develop specific strategies in response to opportunities and challenges in the environment, the panel offers several principles that members believe will help guide strategic planning. These principles are summarized below.

A Commitment to Quality – In fulfilling its vision, values, mission and goals the University of Denver should be committed to providing students and stakeholders with educational and experiential outcomes of the highest quality.

Focus on Opportunities – While strategy needs to mitigate adverse trends, the primary focus of DU's strategic plan should be on capturing opportunities that result from a changing higher education environment.

Leverage Knowledge – The university should instill students with the capacity to create, interpret and use knowledge as a lifelong means to support personal enrichment, foster social betterment and build professional capability.

Lead from Strength – In creating strategy, the University of Denver should build upon its areas of strength while addressing weaknesses.

Consider Collaboration – The University of Denver has significant strengths, but it cannot be exceptional in all fields. Where opportunities exist, DU should consider mutually beneficial partnerships.

Supporting Academic Freedom – In its strategy and policies, the University of Denver should support the intellectual freedom of all faculty to create and distribute knowledge.

The panel offers the foregoing items as an initial list of principles to be considered in the development of the University of Denver's strategy. As the process of developing a detailed strategy proceeds:

The panel urges the administration and trustees to further articulate guiding principles as the university develops plans and policies to address change in higher education.

RESOURCES AND CAPABILITIES

Where guiding principles provide direction to strategy, resources

and capabilities are the engine that powers strategy and allows it to succeed. To capture opportunities and respond to challenges, strategies must be consistent with the resources and assets available to the university.



Craig WoodyHigher Education Panel Member

Those developing strategy must also recognize constraints on resources that limit the range of strategies that may be undertaken.

There is little doubt that the University of Denver has significant resources and capabilities. DU benefits from a dedicated and competent faculty and staff, high quality academic programs, a strong residential undergraduate experience, a broad array of graduate and professional programs, a desirable location in Colorado, a well-regarded athletic program, a beautiful campus with exceptional facilities and other resources. These assets are resources that can propel the University of Denver's strategy.

The university also faces some important limitations. For example, the University of Denver's endowment is well below that of others in its peer group. This limits the university's ability to award endowment-funded scholarships at a competitive level. In terms of recognition, while several DU colleges have attained national visibility, a number of others are not as well known. Only in the past two decades or so has the University of Denver begun to achieve a truly national profile as a high quality educational institution of higher learning. These and other limitations act to constrain DU's overall strategy.

On balance, while the University of Denver's strengths are significant, they are not unlimited. Nor are they literally unique.

Each of the university's assets and capabilities can be found in other institutions. What is unique, however, is the particular admixture of resources that the university enjoys. As a result, the strategic question to be answered is: "How can the university's available resources be arrayed in a manner that creates a *blend* of capabilities that distinguishes DU from its competitors?"

In assessing resources and constraints it is important that the university do so in a realistic manner. In business, health care, education, community service, government and other fields, many organizations believe they are aware of their resources and limitations. Less frequently do they appreciate the way in which their blend of capabilities and constraints distinguish them from similar organizations—or fail to do so. In practice, the finest organizations examine their net capabilities relative to competitors, and do so in a disciplined way. With this in mind:

The panel believes the University of Denver should undertake a realistic examination of its unique blend of resources and capabilities—as well as identifying other resources that may be required—as an integral part of the development of university strategy.

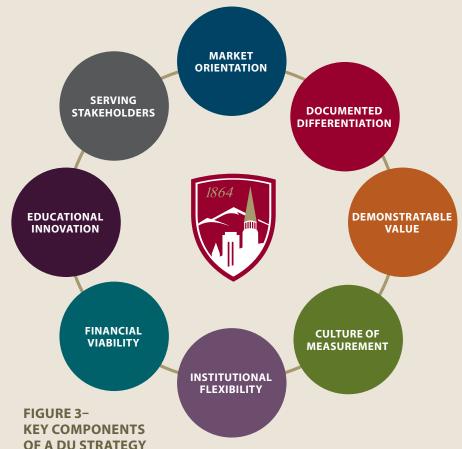
"There is little doubt that the University of Denver has significant resources and capabilities."

COMPONENTS OF STRATEGY

As the University of Denver's guiding principles and resources establish the parameters for strategy, conditions in the environment of higher education determine the direction of strategy. As with any organization, the University of Denver's overall strategy will be comprised of a number of components as shown in Figure 3. These components 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 components, however, were selected by the panel because they relate to the environment of higher education and they appear to be especially relevant for the University of Denver. Panel members believe the strategic components described below deserved consideration as key elements in an overall DU strategy.

Adopting a 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 who share similar needs. Examples of markets might include parents who





Gregory L. Moore Higher Education Panel Member

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 University of Denver can serve. As such, examining potential markets is a critical component in formulating strategy.

A market orientation requires, by definition, a perspective that looks outside the institution. In practical terms, a market focus means that employees in DU academic units and departments think in terms of student segments that the university currently serves, as well as those that DU might serve in the future. For the University of Denver to succeed in a turbulent, competitive environment, a market orientation must be embedded in the culture of the institution, part of the university's DNA.

The panel believes that a consistent market orientation will be

necessary for the University of Denver to compete successfully in the changing environment of higher education.



Documenting 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. 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.

The University of Denver has often tried to distinguish itself on the basis of quality. Where DU academic units 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 usually been quite favorable. The appropriate metrics to document differentiation are those that focus on outcomes and are relevant to current and prospective students as well as to alumni. Key among these are the quality and value that

Clara Villarosa Higher Education Panel Member

a University of Denver education creates for students. With the relationship between differentiation, quality and value in mind:

The panel believes the University of Denver should undertake an aggressive effort to differentiate the university and each of its academic units in a clear and verifiable manner, and do so as a matter of the highest priority.

One of the great strengths of the University of Denver is its enviable blend of an excellent undergraduate program and a number of highly regarded professional schools. The combination of undergraduate and professional graduate programs offers the potential to link the undergraduate experience—intellectual exploration, learning to learn for lifetime enrichment, critical thinking, maturation and socialization—with professional education and the acquisition of skills necessary for successful practice. Indeed, the university already has several programs that combine undergraduate and professional graduate learning. The panel, however, feels that DU's current interrelated undergraduate/ graduate programs are only a beginning. Much more may be possible and the integration of undergraduate and graduate education may represent an extraordinary basis for differentiation.

The panel believes that the University of Denver should increase its efforts to integrate undergraduate and professional graduate education programs as a means of differentiating the university and providing exceptional value to students.

Focusing on Value

Although "value" may be the word that appears most 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. This value equation is depicted graphically in Figure 4.

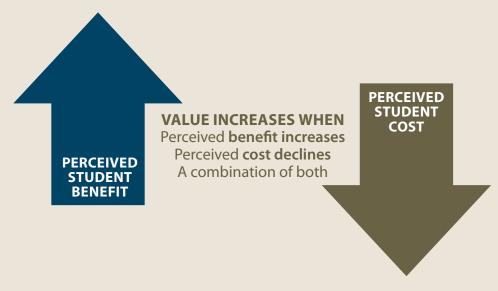


FIGURE 4: VALUE EQUATION

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

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 the University of Denver this means, first and foremost, that the students, parents or organizations that are paying tuition and fees define value. They are the ones who assess the adequacy of the value proposition offered by the university.

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 an undergraduate at the University of Denver, 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 multiple markets—such as successfully preparing students for professional careers—the university needs to create value based on the differential needs and desires of various markets.

For a private, tuition-driven institution like the University of Denver, the creation of value is necessary, but not sufficient. To assist customers in assessing perceived costs and benefits, value must be documented. In higher education, where outcomes are complex, intangible, qualitative in nature, and are 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 of value are popular as a means of demonstrating value.

The panel considers a focus on value to be a matter of highest priority for the University of Denver. As a central element in effective differentiation and a key means of gaining competitive advantage, the panel offers two observations concerning a strategy based on value creation:

The panel concludes that the University of Denver's primary focus should be on creating academic and professional value that helps students live lives of meaning, purpose and accomplishment.

The panel asserts that DU should consistently verify the value created by every academic program and that programs failing to create demonstrably high levels of value over time should be revitalized or terminated.

"The panel considers a focus on value to be a matter of highest priority for the University of Denver."

Creating a 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.

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 DU stakeholders. Measures of learning outcomes should be relevant to external stakeholders such as students and employers as well as to faculty and academic leaders who use empirical data to improve the quality of education at DU. Efficiency measures should support those with responsibility for operational and policy decisions.

The University of Denver already employs metrics with considerable success in a number of areas. The university uses

sophisticated modeling techniques in its budgeting process. Many of DU's academic units are actively engaged in formally defining and measuring student learning outcomes. A number of staff departments have long utilized a balanced scorecard approach to assess efficiency and effectiveness. The panel applauds the use of such metrics and urges their extension into the full range of university activities through a process that encourages transparency through dissemination of results to interested and affected parties.

The panel concludes that a strong culture of measurement across all academic units and departments is necessary to support the documentation of value, outcomes, effectiveness and efficiency throughout the university.

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. For all their shortcomings, 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 and others.

"In terms of value creation the appropriate metrics are those that have meaning to students, parents, alumni, employers and other DU stakeholders."

More relevant than rankings, although less widely known, are standardized assessments such as the Collegiate Learning Assessment, ETS 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 the University of Denver can affirm the value it creates for students.

Wherever practicable, the panel encourages the use of independently-verified metrics from credible sources as a part of the university's overall assessment strategy.

Achieving Institutional Flexibility

Organizational flexibility has not been an area in which colleges and universities have historically excelled. Yet, if traditional institutions of higher learning are to compete effectively with non-traditional providers, they must have the ability to reshape structure, reallocate resources and redeploy talent quickly, effectively and 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 panel encourages the University of Denver to create a culture that supports institutional flexibility by examining DU's governance and operating policies to be certain they support timely and informed decision making.

Preserving Financial Viability

The University of Denver has been the beneficiary of excellent financial management for over twenty years. After experiencing extremely serious fiscal problems in the late 1980s, the financial turnaround of the university has been truly remarkable. Moody's, the national bond rating company, agrees. In 2013, Moody's offered the following observation: "The University's healthy financial standing is attributable to management's strong oversight and multi-year planning." Figure 5 depicts the annual university operating margins of the university since FY 2000. During the 14-year period shown, the university generated an aggregate operating margin of about \$350 million.

"The University of Denver has been the beneficiary of excellent financial management for over twenty years."

DU OPERATING MARGIN 2000-2013



FIGURE 5: DU OPERATING MARGIN FY 2000–2013

Source: University of Denver, Vice Chancellor of Business Affairs Office

The university's operating margin has allowed gainsharing funds to be distributed each year to DU academic units and departments to support a wide range of new initiatives. Funds were also transferred to improve DU's physical plant, build program reserves and fund quasi-endowment for the university. These

GAINSHARE TRANSFERRED TO DU DEPARTMENTS



FIGURE 6: GAINSHARE TRANSFERRED TO DU DEPARTMENTS

Source: University of Denver, Vice Chancellor of Business Affairs Office

transfers, particularly gainsharing, have been essential to the progress of the university. Gainsharing has given academic units the ability to institute innovations, create pilot programs directed at new markets, support faculty and help fund a range of physical improvements. Figure 6 provides a history of the University of Denver's gainsharing program since its inception in 1991.

"The university's operating margin has allowed gainsharing funds to be distributed each year to DU academic units and departments to support a wide range of new initiatives."

Going forward, a key component of the University of Denver's strategy should be the preservation of strong operating margins as a means of funding innovations, capital expenditures and pilot projects. The panel noted that the university has seen declining operating margins since 2011 which has been reflected in gainshare distributions. If margins were to continue to decline over time, the university could be limited in its ability to maintain the high academic quality so essential to differentiation and value creation. Declining margins could also lead to a lower credit rating which would raise the cost of borrowing, further weakening the university.

The panel concludes that the ability to achieve strong annual operating margins is an essential strategic component for dealing with disruptive change and continuing the remarkable gains made by the University of Denver over the past 20 years.

Leveraging 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 (MOOCs), computermediated 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. Most visible are the number and variety of online courses available at little or no cost, some of which enroll tens of thousands of students from around the world. Technological innovation, however, goes far beyond online delivery. Computerized learning management systems, program assessment software, data analytics and adaptive learning systems are just some of the developments that have the potential to alter higher education in significant ways.

Among the many innovations being introduced, competency-based education may be of particular importance. The fact that online competency-based education can be offered by reputable public and non-profit universities at a fraction of the cost of a traditional college degree highlights the possibility for upsetting the status quo. This cost advantage is enhanced by the fact that a competency-based program provides prospective employers with documentation of student learning and/or acquired skills.



Denise O'Leary Higher Education Panel Member

Given the importance and impact of technological and operational innovations on the environment of higher education, the panel offers the following observation:

The panel concludes that technological and operational innovations should be viewed as strategic resources to be evaluated in terms of the ability to add value to students and utilized as appropriate to enhance academic and professional learning outcomes at the University of Denver.

Serving Stakeholders

The University of Denver, like most colleges and universities, serves 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 the University of Denver and all organizations 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 like the University

of Denver, this means that value is first maximized for students. While satisfying other stakeholders is always important, students should be the initial focus of DU's value strategy. Given the always-challenging task of balancing the interests of stakeholders, the panel offers two observations:

The panel concludes that the University of Denver's value strategy should focus first on students who, as a group, provide the largest share of financial resources to the university.

The panel believes the University of Denver has a stewardship responsibility to its many stakeholders including, but not limited to, providing an active process of engagement in order to understand the interests and concerns of various stakeholder groups.

"...the range of innovations, some with significant disruptive potential, is growing at amazing speed."

THE ENVIRONMENT OF HIGHER EDUCATION

Guiding principles, resources and capabilities and strategic components are the tools of strategy. Where and how DU employs those tools is determined by conditions that exist in the higher education environment and the unique characteristics of the University of Denver. Understanding the environment begins with an appreciation of the forces shaping higher education.

FORCES OF CHANGE

In the course of its work, panel members received presentations from 17 experts, advocates, consultants and others with experience

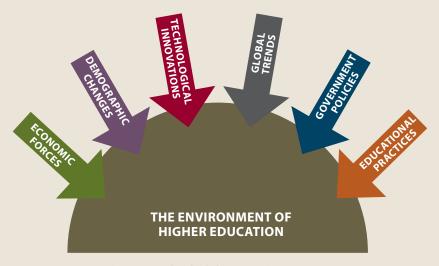


FIGURE 7: FORCES SHAPING THE ENVIRONMENT OF HIGHER EDUCATION

in higher education, change and strategy. Panel members also reviewed an extensive body of literature and discussed the higher education environment in broad terms and with a specific focus on the University of Denver. After considerable discussion, panel members identified six broad forces shaping the current environment of higher education. These forces are shown in Figure 7 and summarized below.

Economic Forces – Economic forces include the general condition of the economy, the economic value of a college degree, 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 presents both opportunities and challenges as colleges and universities seek to identify viable markets and serve students.

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

"Understanding the environment begins with an appreciation of the forces shaping higher education."

markets and international educational experiences are shifting education from a local to a global enterprise.

Government Policies – State and Federal governments have a profound impact on higher education through tax support to

COLLEGE ENROLLMENT 1947–2011



FIGURE 8: COLLEGE ENROLLMENT 1947-2012

Source: U.S. Census Bureau

public universities, student loans and other 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.

Shaping the Landscape

The way in which forces such as those described above 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 by nearly half to over 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 over 20 million by 2011. The growth of

This remarkable growth was the result of forces that shaped higher education in positive ways. In terms

college enrollment during this period

is shown in Figure 8.



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 were also aligned as the baby boom generation appeared, bringing with it strong population growth leading ultimately to a robust college market. 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. Government

support for research at universities became an important revenue source for a number of institutions. State tax support for public universities 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. The conditions established during the post-war period 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.

THE CURRENT ENVIRONMENT

Although identifying the underlying forces shaping change is an essential first step, strategy cannot be directed at these underlying drivers 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 these forces is important, however, because they create conditions that characterize the environment in which educational institutions such as the University of Denver must operate. It is these environmental conditions on which strategy is focused.



Doug Scrivner Higher Education Panel Member

FORCES OF CHANGE

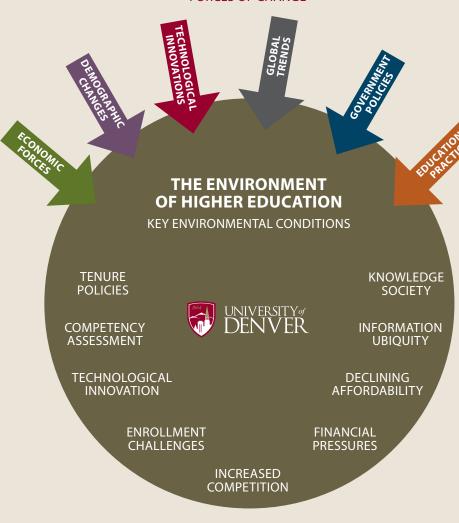


FIGURE 9 - THE ENVIRONMENT OF HIGHER EDUCATION

The conditions created by forces of change are seldom inherently good or bad. Whether a given condition impacts a particular institution favorably or unfavorably depends largely on the unique characteristics of the institution and the markets it chooses to serve. The purpose of strategy is to build upon favorable conditions and minimize the impact of adverse conditions in the environment. Environmental conditions considered by the panel to be most important to the University of Denver are shown in Figure 9 and discussed in detail in the following section of the report. They form a framework around which the university can create a strategy to address the changing landscape of higher education.

Environmental conditions directly affect the health and success of the University of Denver. As such, periodic monitoring of the environment is essential. In recent years, the University of Denver has used sophisticated tools to produce financial forecasts in connection with budget development. The university has also been committed to sharing fiscal and budgetary information with the DU community in an open,

forthright and understandable manner. The same approaches can be applied to monitoring the environment of higher education.



Andrei Kutateladze Higher Education Panel Member

A STRATEGIC FRAMEWORK FOR THE UNIVERSITY OF DENVER

As panel members examined the environment, they identified conditions that present both opportunities and challenges to the university. In the sections that follow, the conditions deemed by the panel to be most important are discussed in some detail. In each case, the report offers conclusions and suggested strategies based upon the panel's assessment of the university's guiding principles, available resources and appropriate strategic options.

A KNOWLEDGE SOCIETY

The emergence of a global economic order based on information, the so-called "knowledge society," is a condition of fundamental importance to institutions of higher learning. The knowledge society reflects a growing emphasis on information as a factor for competitive advantage along with a shift from manual labor to work requiring higher levels of education and/or technical skills. Educational institutions like the University of Denver provide the raw material for the knowledge society— education, technical and professional training and research.

While the evolution of a knowledge-based economic system will be 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. An expanding 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 the University of Denver and other institutions of higher learning. This growing market will also attract a great many competitors including traditional domestic public and non-profit institutions as well as international universities and for-profit organizations.

The panel concludes that the University of Denver should create the capability to monitor opportunities offered by a global knowledge society and capitalize on those where the university can provide superior value that merits the cost of attendance.

INFORMATION UBIQUITY

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. 3D printers create physical products from digital information. Machines that were previously sold as physical things now often have information components that add value. For example, aircraft engines are now marketed largely as services—complex pieces of equipment that will be maintained for 15 years based on a flow of information.

"Information is now a global commodity, accessible to large swaths of the world's population."

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. 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. Information is now literally a commodity freely available to all. The issues that the commodification of information evoke for colleges and universities are fundamental.

As an expensive private university, understanding the implications of global information ubiquity and developing strategies for capitalizing on this phenomenon is an important matter for the University of Denver. It may well be an existential one as well. Offering a detailed strategy to deal in this area is beyond the scope of this report. From the panel's perspective, however, a core competency centered on understanding, using and creating knowledge—not simply the transmission of information—will be

among the elements required to address the challenges attendant to information ubiquity. Consistent with that view:

The panel concludes that the university must differentiate itself from commodity information providers through educational experiences centered on understanding, applying and creating knowledge in ways that provide students with a foundation for insight, critical judgment and originality to successfully navigate a lifetime of change.

DECLINING AFFORDABILITY

For decades, college and university budgets have been expanding to support new programs, more buildings, upscale dorms, advanced technology, expanded 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. This stands in sharp contrast with median family income which has grown far more slowly than the cost of attending college. Figure 10 shows the striking relationship



between the rising cost of higher education and family income.

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

PERCENT GROWTH OF AVERAGE COLLEGE TUITION AND MEDIAN FAMILY INCOME

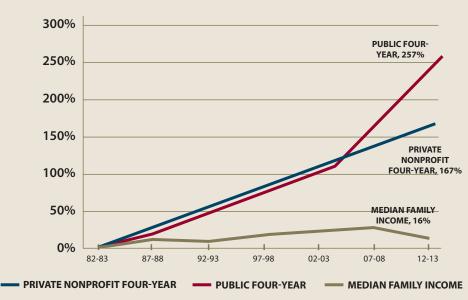


FIGURE 10: GROWTH OF COLLEGE TUITION AND MEDIAN FAMILY INCOME

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

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 11 shows the growth of student debt by age group since 2005.

TOTAL STUDENT LOAN DEBT IN BILLIONS (BY AGE GROUPS)

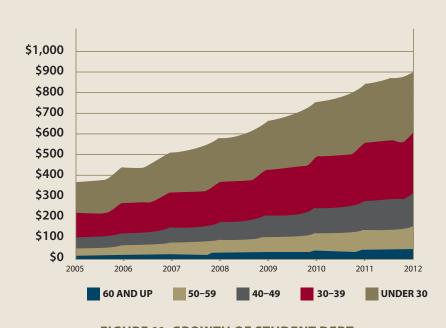


FIGURE 11: GROWTH OF STUDENT DEBT

Source: Federal Reserve Bank of New York

"By 2012, student loans were the largest form of consumer debt outside of mortgages."

Demographic forces are likely to exacerbate the affordability problem for the University of Denver and other private universities. These challenges involve college readiness rates and the economic wherewithal to afford post-secondary education. College readiness and completion rates for lower income populations, which disproportionately include racial and ethnic minorities, are significantly lower than for White students. While lower rates of college readiness among minority students affect all institutions, private colleges and universities have an additional demographic challenge.

Although the Hispanic population is experiencing robust growth, the high price of college and historically lower median household income levels of Hispanic families limit the number of students who can afford to attend private universities like the University of Denver. This limited pool of potential applicants increases the level of competition for students who are academically qualified and possess the requisite financial resources to attend traditional colleges and universities. The relationships between income, race and education are illustrated in Figure 12.

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% of the U.S. population. This disparity, coupled with an academic achievement gap for students from lower income families that is now 30–40% larger than in 1970, presents serious issues for all institutions

MEDIAN FAMILY INCOME BY SELECTED CHARACTERISTICS, 2012

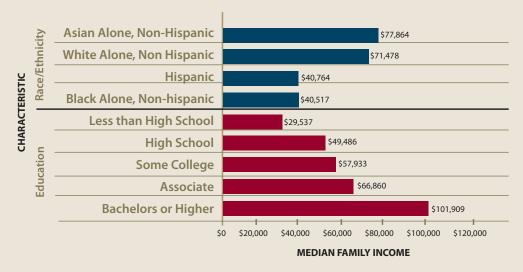


FIGURE 12: RACE, INCOME AND EDUCATION

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

of higher learning. The dilemma is particularly challenging for private institutions like the University of Denver that must balance a strong commitment to diversity and opportunity with the maintenance of economic viability.

In an effort to make college more affordable to a wider range of capable students, the University of Denver has undertaken a major fundraising initiative: the Ascend capital campaign. A significant portion of the funds raised through Ascend are being directed to building endowed scholarships. This is a positive step because, in spite of recent gains, the University of Denver's endowment is modest compared to many other institutions. Figure 13 shows the position of DU's endowment compared to its peer institutions. The University of Denver has the second lowest endowment per student FTE of the entire group.

Endowed scholarships are successful in attracting capable students and carry clear recognition of the student's ability and

achievements. However, DU's relatively small endowment means that the university cannot offer as many endowment-funded scholarships as some competing institutions. In order to compete



FY2012 ENDOWMENT PER STUDENT FTE			
UNIVERSITY OF DENVER	\$35,598		
PRIVATE SCHOOL COMPARISON GROUP			
AMERICAN UNIVERSITY	\$36,585		
BOSTON UNIVERSITY	\$43,157		
COLORADO COLLEGE	\$266,870		
GEORGE WASHINGTON UNIVERSITY	\$61,820		
GONZAGA UNIVERSITY	\$16,625		
SANTA CLARA UNIVERSITY	\$80,453		
SOUTHERN METHODIST UNIVERSTIY	\$127,524		
SYRACUSE UNIVERSITY	\$48,849		
UNIVERSITY OF MIAMI	\$43,977		
UNIVERSITY OF PUGET SOUND	\$92,731		
UNIVERSITY OF SAN DIEGO	\$44,604		
UNIVERSITY OF SOUTHERN CALIFORNIA	\$100,473		
AVERAGE	\$80,306		
MEDIAN	\$55,335		

FIGURE 13: DU ENDOWMENT RELATIVE TO PEER GROUP

Source: University of Denver, Office of Institutional Research and Analysis

Peter Gilbertson Higher Education Panel Member with better-endowed institutions the alternative is university-funded financial aid—in other words, discounting tuition. Discounting tuition, however, reduces the university's net income and lowers operating margins which can weaken the university financially and potentially lead to a negative financial spiral. DU is not alone in this dilemma. Figure 14 shows the rising tuition discount rate among private colleges and universities nationally. For 2012, the Research category (which includes DU) had an average tuition discount rate for first-year, full-time students of 41.4% compared to the University of Denver's rate of about 44.5%.

Building the University of Denver's endowment to a level where DU is able to compete with well-endowed schools nationally is no small undertaking. Figure 15 graphically illustrates the university's position relative to all college and university endowments. As can be seen, DU has a considerable challenge ahead if it is to join the ranks of highly-endowed schools. Moreover, it should be recognized that for every dollar of endowment the university raises, scholarships are able to pay out about 4.5 cents annually. As important as it is to the long-term success of the University of Denver, creating an endowment that materially changes the fiscal dynamics of the university is not a short-term undertaking. It is neither a panacea nor a substitute for other strategies.

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

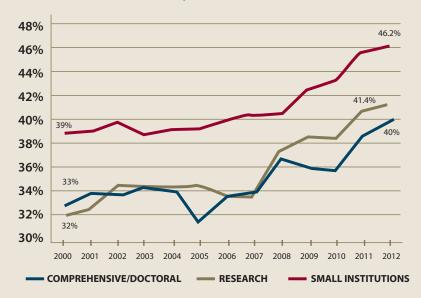


FIGURE 14: TUITION DISCOUNT RATES FOR PRIVATE COLLEGES AND UNIVERSITIES

Source: NACUBO Tuition Discounting Survey 2000 to 2012

"A significant portion of the funds raised through Ascend are being directed to building endowed scholarships."

In considering the matter of endowment it is also useful to remember that endowed scholarships, like discounting the price of tuition, affect only one-half of the value equation: perceived cost. If tuition-reduction strategies like endowed scholarships are to be successful, the other dimension of value—perceived benefit—

CUMULATIVE DISTRIBUTION OF ENDOWMENTS BY INSTITUTION

\$391 BILLION IN TOTAL ASSETS

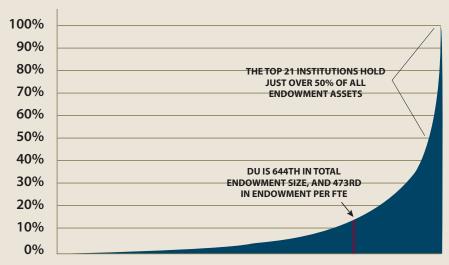


FIGURE 15: DU ENDOWMENT RELATIVE TO OTHER COLLEGES AND UNIVERSITIES

Source: 2012 NACUBO/Commonfund Survey of Endowments

must remain strong as well. For a majority of those enrolling at the University of Denver, academic quality is the most important benefit. Thus, reducing the net cost of attendance cannot improve value unless academic quality—as assessed by students, parents and other stakeholders paying tuition—remains high.

Notwithstanding the challenges involved, there is little question that the University of Denver should continue building its endowment through annual giving and capital campaigns such as Ascend. Given the university's commitment to high academic quality and providing educational opportunities for students from a broad range of economic and ethnic backgrounds, the panel offers several observations:

The panel believes that the University of Denver should increase its fundraising activities for endowment and other purposes by fostering an environment where fundraising becomes an integral part of the culture of the university.

The panel believes the university should encourage a strong sense of philanthropy among students, alumni and friends of the University of Denver.

Central to successful fundraising is an ongoing program to build strong networks connecting alumni and friends to the university.

"Central to successful fundraising is an ongoing program to build strong networks connecting alumni and friends to the university." These key relationships have value well beyond gifts to the university, although that role is certainly important. In addition to providing financial support, alumni and friends act as mentors for students, facilitate student employment opportunities, build the reputation of the University of Denver, provide valuable advice through service on academic and operational advisory boards and help the university in many other ways.

The relationship between the university and alumni is a continuum, embracing an individual's years as a student and extending decades beyond graduation. To be successful, DU's relationship with alumni must be reciprocal; one in which the University of Denver receives support from and provides ongoing value to its graduates. The university can support alumni through activities such as professional skill updates, educational enrichment programs, ongoing career counseling, encouraging alumni networking and other programs. To keep alumni engaged, it is important for the university to create value for DU graduates throughout their lives.

The panel believes the University of Denver should strengthen its efforts to build effective and durable relationships with alumni and friends through active national and international programs of outreach and stewardship.

FINANCIAL PRESSURES

Even as the rising cost of higher education is reducing affordability for growing segments of the population, especially the middle class and minorities, colleges and universities are experiencing significant financial pressures of their own. To cope with increased competition for students who can afford the rising price of college, institutions have constructed costly new buildings, invested in a variety of student amenities and increased tuition discount rates. These investments and discounts weigh upon the net income of institutions, contributing to the fiscal stress being experienced by many public and private institutions of higher learning.

Public Institutions

For public universities, financial pressures have been compounded by falling levels of governmental financial support for higher education. The decade of the 2000s was characterized by steep cuts in tax support for public universities and moderating levels of research funding. Figure 16 provides a graphic illustration of the extent of appropriation reductions in many states between 2007 and 2012.

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

EDUCATIONAL APPROPRIATIONS PER FTE PERCENT CHANGE BY STATE, FISCAL 2007-2012

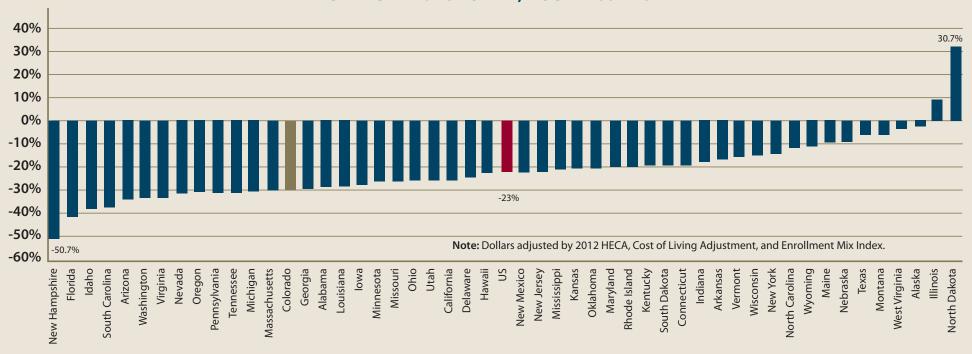


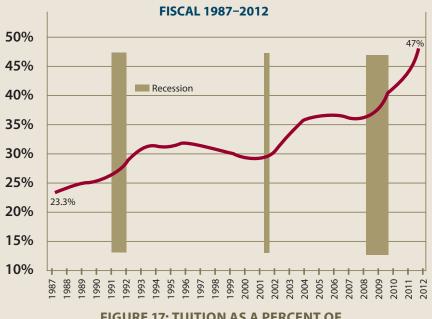
FIGURE 16: CHANGE IN STATE EDUCATIONAL APPROPRIATIONS PER FTE - 2007-2012

Source: State Higher Education Executive Officers

"Even as the rising cost of higher education is reducing affordability for growing segments of the population, colleges and universities are experiencing significant financial pressures of their own."

doubled, from 23% of total educational revenue to 47%, with the steepest increases occurring after 2002, as shown in Figure 17. On average, over the past several decades, tuition at public four-year institutions has increased at 3.5 times the rate of inflation.

NET TUITION AS PERCENT PUBLIC HIGHER EDUCATION REVENUE



PUBLIC HIGHER EDUCATION REVENUE

Source: State Higher Education Executive Officers

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.

The University of Denver

As with other higher education institutions, the University of Denver has raised tuition and fees over the years. While DU's tuition increases were generally in line with tuition hikes at other private universities, they were (with one exception) consistently above the rate of inflation as shown in Figure 18.

Notwithstanding tuition increases above the inflation rate, the university continues its efforts to provide access to students. Figure 19, which requires careful interpretation, shows the inflation adjusted, net tuition (after all financial aid) for incoming first-year full-time undergraduate students at the University of Denver who received institutional financial aid. Students who did not receive financial aid are excluded from this calculation. While nominal tuition rate increases have been well above the inflation rate, DU has been able to hold the inflation-adjusted net cost of attendance for students who receive institutional aid fairly stable in recent years through the use of discounting and other tools.

Although University of Denver expenditures have risen consistently over the past twenty years, DU did not increase tuition and fees simply to finance unbridled spending. In many respects,

"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."

the return on investments made by the university have been excellent. New programs, growing enrollment, the ability to recruit talented students and high-quality faculty, a greatly enhanced academic reputation, programs supporting the public good, a

beautiful college campus with remarkable buildings, a strong fundraising capability and a well-regarded athletic program are tangible outcomes of the investments made by the university.

DU TUITION INCREASES AND CPI



FIGURE 18: DU TUITION INCREASES AND CONSUMER PRICE INDEX

Source: Data from University of Denver, Office of Institutional Research

DU NET PRICE – ADJUSTED FOR INFLATION

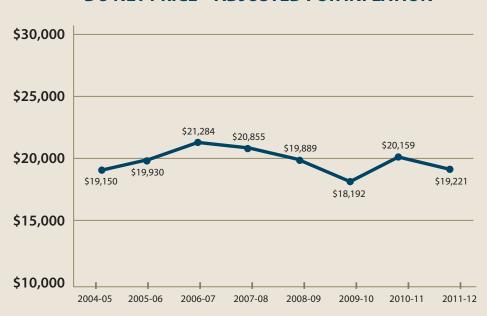


FIGURE 19: DU INFLATION-ADJUSTED NET PRICE FOR FIRST-YEAR, FULL-TIME STUDENTS

Source: University of Denver, Office of Institutional Research and Analysis

The superior return on past DU investments notwithstanding, demographic, economic and other forces may well create additional financial pressures for the University of Denver. The challenge in years to come will be the ability to provide sufficient financial aid to attract high quality students and support DU's commitment to diversity while maintaining a strong financial profile. To achieve this, the panel believes the university should adopt a value-based approach to tuition and fees, extend its compensation practices to recognize value creation, and continue its operational cost management practices, all as suggested below:

The panel concludes that University of Denver tuition and fee levels should be market-based and established on the basis of the demonstrated value of DU programs vis-à-vis those of competitors.

The panel encourages the university to continue its practice of controlling costs in a thoughtful manner while making strategic investments that are in the University of Denver's long-term interests.

INCREASED COMPETITION

The intersection of growing global markets, rising costs, declining affordability and technological innovation has the potential to

expand the number and nature of the University of Denver's competitors. While traditional colleges and universities will continue to compete, new competitors with business savvy and financial backing are challenging the status quo. In the competition to come with for-profit providers, the contests are unlikely to be governed by the level of cordiality that has characterized academic rivalries in the past.

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. It is a scene that has played out in recent years in other intellectual property-based industries: newspapers, book sellers, 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



David Thomson Higher Education Panel Member

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 resources for the development of intellectual talent to compete in the knowledge economy.

In addition to competition from public and non-profit institutions around the world, traditional colleges and universities are facing increasing competition from for-profit companies, which enrolled some 2.4 million students in 2011. Enrollments at for-profit companies offering post-secondary education are growing dramatically. For-profit colleges held about six percent of the college market in 2004; by 2012 their share of post-secondary enrollments doubled to 12%.

As with traditional colleges and universities, attendance at forprofit institutions is supported by federal loans and grants. During

> the 2009-2010 school year, profitseeking institutions received \$32 billion in federal grants and loans, including \$7.5 billion in Pell Grants. Market sensitivity and access to

grants and loans have helped several for-profit institutions achieve impressive scale. For example, Apollo, the company that owns the University of Phoenix, now enrolls more students in the U.S. than the 10 largest non-profit institutions combined.

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 non-profit institutions, international universities, for-profit organizations, web start-ups, consultants, corporate learning centers, public-private partnerships, global consortia, online universities and many others. It is easy to suggest that such non-traditional organizations are not DU's competitors. The panel feels 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. With that in mind, the panel offers the following suggestions:

To deal with an increasing range of competitors, the panel believes the University of Denver will first need to determine whom it will serve and, equally important, identify markets in which it chooses not to compete.



Kay Norton Higher Education Panel Member

The panel considers it essential that DU clearly differentiate itself vis-à-vis identified competitors in its selected markets in a way that can be verified by students, employers and other stakeholders in the marketplace.

The panel concludes that the university and each of its academic units will need to establish and broadcast clear and demonstrable value propositions on which each will compete.

ENROLLMENT CHALLENGES

In the current environment of higher education, institutions rely on tuition as a major, often the major, source of revenue. This is true for virtually all colleges and universities—public, private non-profits and for-profit providers. For traditional public and private institutions concerned about academic reputation and financial realities, the recruitment process can be challenging indeed. Demographic forces, notably the numbers and demographics of high school-age students, play a major role in shaping enrollment strategy and tactics.

Market Characteristics

After several years of decline, the number of college-bound students is expected to expand somewhat beginning in 2015. The expansion, however, will be uneven, with the number of high school graduates

expanding in some sections of the U.S. and declining in others. Since 70% of students attend a college or university within 200 miles of home, this demographic shift will produce disparate impacts on institutions based upon their location.

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

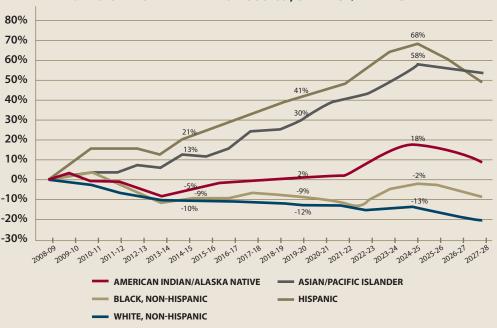


FIGURE 20: HIGH SCHOOL GRADUATES BY RACE/ETHNICITY

Source: WICHE Report, Knocking at the College Door

"While traditional colleges and universities will continue to compete, new competitors with business savvy and financial backing are challenging the status quo."

Geographic variation will be compounded by the ethnic and racial mix of high school graduates. Figure 20 shows the projected change in U.S. public high school graduates by race/ethnicity, highlighting the relative decline of White, non-Hispanic high school graduates and the growth of Hispanic graduates. By 2019-20 the Western Interstate Commission for Higher Education projects that high school graduates in Arizona, Florida, Georgia, Maryland, Nevada California, the District of Columbia, Hawaii, Mississippi, New Mexico, and Texas will reach "majorityminority" status, where public high schools graduate more minorities than White, non-Hispanics.

These demographic changes will impact the way in which institutions approach recruitment, messaging, financial aid, retention, and student programs. For the University of Denver, changing demographics represent both an opportunity and a challenge. As the number of minorities increase, the university has an opportunity to reach out actively to previously underserved

groups. To do so, however, DU will need to make an ongoing commitment to managing costs, building endowment for scholarships, focusing on educational outcomes that are responsive to

the needs of new student populations, and perhaps creating new programs to better serve expanding markets.

In the face of increasing expenses, cutbacks in government support and declining pools of domestic students who can afford college,

F-1 STUDENT VISAS 2003-2012

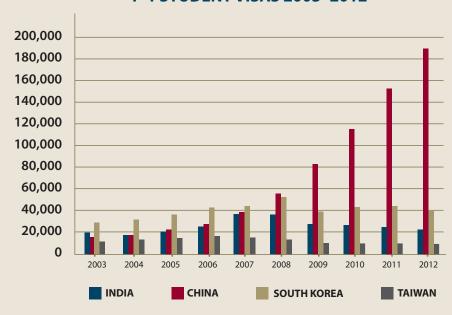


FIGURE 21: F1 STUDENT VISAS BY COUNTRY

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



Francisco GarciaHigher Education Panel Member

institutions are understandably attracted to full-pay international students. In less than six years, from 2006 to 2012, the number of international students studying at U.S. institutions has risen 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 21 shows the dramatic growth of F-1 student visas from China. This is a trend which could reverse itself quite rapidly and therefore requires close attention to global markets.

Undergraduate Enrollment

For a tuition-driven institution such as the University of Denver, adequate enrollment is an existential issue. It is not simply a matter of enrolling the requisite numbers of students, although that is essential to be sure, but also attracting students of high potential with strong academic credentials. Achieving numeric and qualitative enrollment goals is an area in which DU has done well in recent years, although the future may be less certain.

The challenge facing the university is depicted in Figure 22. Of over 2 million high school graduates enrolling in college in the fall of 2012, less than one-third met DU's standard of a minimum SAT score of 1100. Of those, only 17 thousand could afford to attend the University of Denver without financial aid. In other

words, the number of students who met DU's academic standards and could afford to attend without financial aid represented only eight-tenths of one percent (0.008) of all high school graduates attending college. That very narrow market segment characterizes the enrollment challenges facing the University of Denver in years to come.

ONLY 17,336 (0.5%) OF COLLEGE-BOUND STUDENTS NATIONWIDE HAVE SAT SCORES ABOVE 1100 AND CAN AFFORD TO ATTEND DU WITHOUT AID

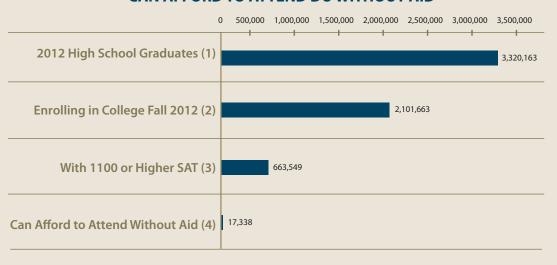


FIGURE 22: DU FULLY QUALIFIED MARKET SIZE

Source: University of Denver Undergraduate Admissions Office

"For a tuition-driven institution such as the University of Denver, adequate enrollment is an existential issue."

There is no question that the net price of attending DU is one of the greatest challenges facing the university. Affordability and lower financial aid are often cited as the most common reasons

UNIVERSITY OF DENVER UNDERGRADUATE ENROLLMENT GROWTH

ENROLLMENT VOLUME: ENTERING CLASSES 2005-2013

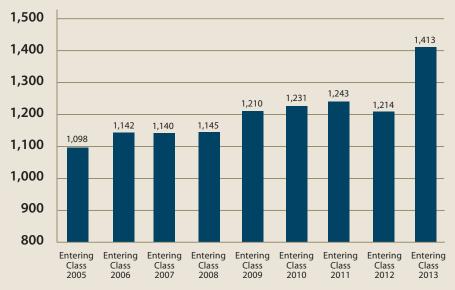


FIGURE 23: DU ENROLLMENT 2005-2013

Source: University of Denver Undergraduate Admissions Office Value and Enrollment

for not attending the University of Denver. In terms of income, only the top 2.5% of families can afford the University of Denver without significant financial assistance. In 2012, 35 percent of accepted students who did not enroll at DU indicated that they would need at least half of their tuition cost covered by a financial award in order to consider attending the university. In surveys of students who were admitted to DU, the number one reason for not enrolling was the overall cost of attendance.

In spite of cost and demographic headwinds, the University of Denver has been very effective in its undergraduate recruiting program. At a time when other schools have struggled, the University of Denver has been able to expand undergraduate enrollment, sustain the academic quality of admitted students and stabilize or reduce its discount rate. This is a remarkable accomplishment. It has been achieved in part by substantially expanding marketing efforts on a nationwide basis to reach greater numbers of prospective students at an early stage in their high school careers. The results of these efforts are evident in Figure 23.

Value and Enrollment

As prospective students consider the University of Denver, they balance the net costs they will incur with the benefits they

"In spite of cost and demographic headwinds, the University of Denver has been very effective in its undergraduate recruiting program."

believe they will receive from attending the university. In 2012, a substantial number of undergraduate applicants who were admitted to the University of Denver chose to attend. However, of those who did not enroll, 60% felt the value they would receive at DU was not commensurate with the cost of attendance. It is important to understand this does not suggest that non-enrolling students thought the quality of university programs was low. It means, rather, that those students did not think the quality justified what they perceived as a high net cost of attendance.

The concern about value expressed by prospective undergraduate students is particularly significant in light of the declining yield rates being experienced by the university. In 2011, the undergraduate yield rate of the University of Denver was tied for last place (lowest) among DU's peer institutions. Even given this difficult position, however, the university has continued to enroll adequate numbers of high quality students. This achievement is the result of a remarkably effective recruiting program coupled with the highest acceptance rate among peer institutions. But, as the limits of DU's marketing net are reached, if low yields and increasing acceptance rates continue, the result will likely be a decline in the number or quality of new undergraduate students, possibly both.

The University of Denver currently has several major initiatives that could support additional enrollment, notably construction of a new building for the Daniel Felix Ritchie School of Engineering and Computer Science and the Knoebel Center for Study of Aging. These initiatives align with a growing interest in science and engineering among high school graduates and the employment market. In addition, a major addition to the Josef Korbel School of International Studies will expand the capacity of its programs as well. All of these building plans appear well-conceived, and offer the potential to expand undergraduate and graduate enrollment in some measure.

It is important, however, not to confuse additional capacity with a stronger value proposition. If new facilities significantly increase the national reputation of the affected programs, if graduate placement and starting salaries are strong relative to competitors and if DU's costs are well managed, then the university's value equation may indeed be strengthened by these initiatives. If those conditions do not obtain, however,

the university's value proposition will remain unchanged and existing value and affordability issues will remain.



Floyd Ciruli Higher Education Panel Member

DU's enrollment challenges are compounded by the fact that, although the university is managing resources carefully, it is unlikely that the cost of attending DU will actually decline to any significant degree. The University of Denver is not likely to become an inexpensive place to attend college. Thus, it is important that the university focus on the strategic elements of careful market selection, clear differentiation, demonstrable value and confirming metrics. With this in mind, the panel offers the following suggestion concerning enrollment strategy:

The panel concludes that, in years to come, the ability to enroll an appropriate number of high quality students will require the University of Denver to select markets judiciously, become clearly differentiated, provide student financial support and develop strong value propositions that can be externally validated.

Graduate Enrollment

Maintaining the university's strength and building its national

reputation requires strong graduate programs supported by a recruiting effort that is as effective as the university's undergraduate enrollment program. Like a number of graduate professional schools across the country, several of DU's larger graduate programs have recently been experiencing a degree of difficulty in reaching enrollment goals. The challenge facing graduate professional programs nationally is illustrated by the severe pressures being experienced by law schools across the country.

For some years, economic forces have encouraged corporations and other large consumers of legal services to scrutinize costs and apply pressure on law firms to reduce charges. The deep recession of 2008 accelerated this trend, resulting in a softening of the market for law school graduates even as law school tuition continued to rise. Graduates found it increasingly difficult to obtain a goodpaying position in the field of law even after investing in an expensive legal education and often incurring student debt. As the perceived value of a law degree declined, so did the size of the law student market. As a result, law school applications declined in 2013 by 17.6% compared to 2012, down some 36% from 2010.

Where undergraduate recruiting is essentially centralized at the University of Denver, the recruiting and admission of graduate students is handled on a decentralized basis, by the academic units responsible for various graduate programs. Unlike undergraduate recruiting, which has a substantial professional staff and



Lynn Gangone Higher Education Panel Member

significant marketing capability, graduate programs typically have fewer personnel and resources. However, both graduate and undergraduate programs share the issues of affordability and perceived value. If the University of Denver is to capitalize upon its extraordinary blend of high quality undergraduate and professional graduate programs it must have effective recruiting programs at both levels. With this in mind:

The panel believes that targeted university resources are required to support recruiting and placement efforts for graduate programs in various University of Denver academic units.

TECHNOLOGICAL 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 technological innovation to disrupt and reshape the environment of higher education is profound. Drivers of technological innovation include inexpensive, powerful and ubiquitous computer technology, the Internet and the powerful network effects it generates, mobile computing, the development of interactive learning software, etc. Recognizing that disruptive innovation can present itself in unexpected ways is prerequisite to developing effective strategy.

Online Education and Learning Software

The most immediate and visible impact of information technology is seen in the area of online education. The impact of online education is remarkable: during the fall of 2011, a total of 6.7 million students reported that they were taking at least one online course, an increase of 570,000 students over the previous year; 32% of students now take at least one online course. Inexpensive online undergraduate degree programs from schools like Western Governors University and online graduate programs from long-established institutions such as Georgia Tech have the potential to shake the pillars of traditional higher education.

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 include Duke, Johns Hopkins, Vanderbilt and many others. Education Connection, Open Culture and other online providers offer thousands of free online courses. 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 breadth of online education may be expanded by emerging technologies such as advanced mobile computing which hold the potential to further reshape the higher education environment.

"The power of technological innovation to disrupt and reshape the environment of higher education is profound."

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, Moodle, Desire2Learn, Sakai, etc. support the administration, documentation, tracking, reporting and delivery of courses and have become an essential part of the educational infrastructure for many colleges and universities. 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, adapting the presentation of learning materials according to the student's progress and needs.

The Nature of Innovation

As tuition and fee increases have driven the costs of a college degree beyond the reach of many, technological innovation has acted as a safety valve, offering competing educational products, often at far lower costs. 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. 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 traditional providers. Over time, however, the quality of the innovation improves and it becomes more broadly accepted. The reaction of academic leaders to online education illustrates the way in which the quality of an innovation improves and becomes more widely accepted. In 2003, 57 percent of academic leaders rated the learning outcomes of online education as equal or superior to that of face-to-face classroom situations. Ten years later, in 2013, that number was 77 percent.

History is full of such cycles of disruptive innovation: transistor radios, microcomputers, computer disk drives, steel mills, automobiles, motorcycles, discount retailers, digital photography, etc. In each case, established providers faced the dilemma of whether to compete with poorer-performing innovations that produced lower margins than existing products. For perfectly

"The breadth of online education may be expanded by emerging technologies such as advanced mobile computing."

logical reasons they declined to do so. However, as the quality of the innovation improved to the point that it became the new standard, some established providers found themselves squeezed out of markets they had once dominated.

For the University of Denver, monitoring technological innovation and applying new technologies where they can add value—by increasing effectiveness or reducing costs—is a matter of great importance. To date, the university appears to have been quite effective in the adoption and implementation of educational technology. Through the efforts of DU's Office of Teaching and Learning, the university has been able to keep abreast of innovation and support faculty in the use of new technologies.

Given the potential to reshape higher education in profound ways, technological innovation is one of the most significant conditions to be considered as the University of Denver develops strategy for the institution and its academic units. With that in mind, the panel offers three observations:

The panel concludes that leveraging technological innovation as a strategic resource will require an ongoing assessment and in-depth understanding of educational technology as well as potentially disruptive competitors.

The panel encourages the use of pilot programs to judge the feasibility of new technologies and the prompt adoption of innovations that can add demonstrable value for students in DU's selected markets.

The panel believes that continued support for faculty in the development and implementation of selected technologies will be essential if DU is to serve its existing markets effectively and reach out to new markets where the university can add particular value.

COMPETENCY ASSESSMENT

The use of competency assessment, in traditional classroom settings and in online education, represents an educational innovation of potentially major significance, one that the University of Denver would be well-advised to watch carefully. 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 accurate measures of student learning.

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 24 lists the tuition

of courses at Western Governors University and several other providers of competency-based programs. The

> FIGURE 24: ILLUSTRATIVE COMPETENCY-BASED DEGREE PROGRAMS

> > Source: New York Times



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)



Scott Leutenegger Higher Education Panel Member potential disruptive impact of online competency-based programs can be seen when one compares the tuition of schools shown in the table (multiplying by two or three to approximate a full year's cost) with the average annual tuition of \$26,789 for a mid-priced private college. The cost advantage of such schools is further enhanced when online competency-based programs offer scholarships and students are eligible for federal grant and loan programs, as is the case with Western Governors University.

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 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 tenured professors is disaggregated into specialized tasks. Instead of having each professor develop his or her own course, at Western Governors University (WGU) 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 part-time, independent faculty evaluators.

There is little question that online competency-based programs do not bring all of the benefits of a traditional, four-year residential undergraduate experience. Substantive knowledge, 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, particularly as 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. Given the disruptive potential of competency-based education:

"There should be no mistaking the disruptive potential of online competency-based programs..."

The panel concludes the University of Denver should undertake a process to assess the risks and opportunities inherent in competency-based learning in classroom settings and, especially, as utilized in online education programs.

If such an assessment warrants further consideration of a competency-based approach, the panel believes the university should institute one or more pilot program(s) to explore the concept in detail.

TENURE POLICIES

In public discussions and magazine articles, tenure is often criticized as one of the major problems facing American higher education. Others view the situation quite differently, viewing tenure as 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, including unpopular ones, 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.

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. In practice, those standards sometimes made it difficult to dismiss a professor, even for poor performance.

From the panel's perspective, there is little doubt that a system of tenure can bring with it a number of advantages. Tenure protects

"From the panel's perspective, there is little doubt that a system of tenure can bring with it a number of advantages."

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

TENURE AND TENURE TRACK EMPLOYEES 1975-2011 ALL INSTITUTIONS, NATIONAL TOTALS

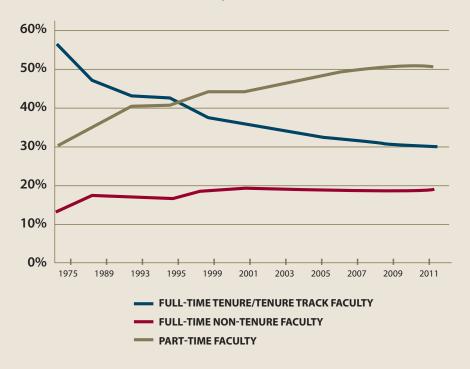


FIGURE 25: TENURE AND TENURE TRACK FACULTY

Source: American Association of University Professors

professors against summary dismissal and, through post-tenure review, can provide a mechanism to monitor the continued effectiveness of faculty.

Tenure can become problematic if procedures designed to protect the professoriate shield ineffective teachers or researchers. Tenure also has the potential to inhibit organizational flexibility if an institution's rules and procedures constrain the ability to deploy faculty resources in terms of numbers, degrees and programs. In years past, when the pace of change in higher education was much slower, a lack of flexibility may not have been as significant a problem. In the rapidly-changing environment of higher education today, however, institutional rigidity and procedural paralysis are potentially terminal conditions.

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% to 30% of all faculty as shown in Figure 25. 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 or 20 percent of all instructors.

If one limits the analysis only to institutions with formal tenure

PERCENT FT TENURED/TENURE-TRACK FACULTY UNIVERSITY OF DENVER AND PEERS

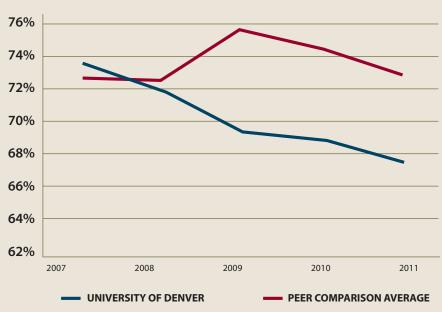


FIGURE 26: TENURED/TENURE TRACK FACULTY, DU AND PEERS Source: University of Denver, Office of Institutional Research and Analysis

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 doctoral institutions, the average percentage of tenure/tenure-track professors declined from 51.1 percent to 42.7

UNIVERSITY OF DENVER CREDIT HOURS TAUGHT BY APPOINTMENT TYPE

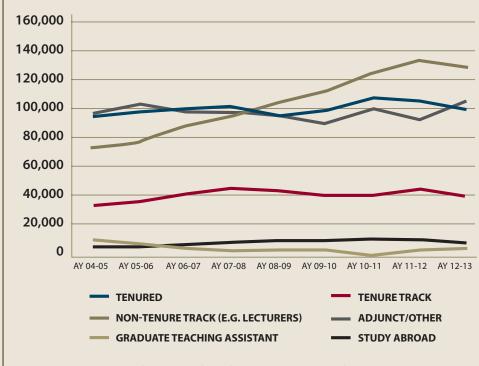


FIGURE 27: DU CREDIT HOURS TAUGHT BY APPOINTMENT TYPE

Source: University of Denver, Office of Institutional Research and Analysis

"Whatever one's view of the benefits or potential drawbacks of tenure, the fact is, in today's world, tenure is disappearing."

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 47.8 percent in 2009-10. In 2011-12 the percentage of schools with tenure systems fell again, to 45.3%.

The University of Denver has a long-standing tenure system. As of the fall 2011 term, 67.5 percent of DU's full-time faculty were tenured or tenure-track employees. This is significantly higher than the national average for doctoral universities and somewhat lower than DU's peer group average of 73 percent. Between 2007 and 2011, the utilization of full-time tenured and tenure-track faculty has declined for both the University of Denver and its peer group, although DU's percentage has dropped somewhat more quickly. This relationship is shown in Figure 26.

The corollary of this trend is reflected in Figure 27 which shows growth in the number of credit hours taught at the University of Denver by full-time, non-tenure track lecturers from 2004-05 through 2012-13. DU's overall use of part-time faculty in the form of adjuncts and graduate teaching assistants has remained relatively flat during the period.

The University of Denver is not immune to the economic pressures that are reducing the use of tenured faculty at colleges and universities across the nation. In coming years, it will be important for the university to develop a workable approach to tenure that embraces the strengths of the system while permitting institutional flexibility in the face of changing conditions. Indeed, such an examination needs to extend beyond tenure and tenure-track professors to include other "appointed" instructors such as clinical professors, lecturers and others who have an essentially full-time teaching relationship with the University of Denver.

The panel concludes that the University of Denver would be well-served by a dialogue among trustees, the administration and appointed faculty on means to optimize tenure in a way that preserves high quality standards, academic freedom and other key benefits while providing necessary institutional flexibility.

A CALL TO ACTION

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, financial pressures, increased competition, enrollment challenges, technological innovation,

"In the face of disruptive change, no institution, including the University of Denver, can remain static and survive." competency-based learning, and tenure policies are conditions that provide both opportunities and challenges for the University of Denver. These conditions define the framework for DU's strategy to deal with fundamental change now occurring in the environment of higher education.

In the face of disruptive change, no institution, including the University of Denver, can remain static and survive. The university must not only assess the changing environment, 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.

The leadership of the University of Denver is aware of the changing environment in higher education. DU has taken steps to communicate concerns to faculty and staff and has taken tangible actions to manage resources in the face of shifting conditions. Yet, as the story of disruptive change in the newspaper industry illustrates, once a tipping point is reached, things can change very quickly. This report is intended as a call to action to the University of Denver community to ensure that DU survives and prospers in these unsettling times.

The panel believes that the University of Denver community should embrace changes in higher education with a clear sense of urgency and purpose; one that will allow the university to capitalize on opportunities and minimize risks by taking timely action, well before critical tipping points are reached.



Tom Willoughby Higher Education Panel Member

Summary of Findings and Conclusions

STRATEGIC FOUNDATIONS

Developing a DU Strategy

- 1. The University of Denver and each of its academic units and departments should undertake an in-depth assessment of its strengths, weaknesses and competitive position in order to develop and implement a detailed strategy to address the opportunities and challenges in the external environment of higher education.
- 2. The strategies that are developed should be used to guide the resource allocation process, be assessed and updated on a regular basis, and be shared with the university community through periodic progress reports.

DU Guiding Principles

3. The panel concludes that the University of Denver's strategic direction should be based upon its vision, values, mission and goals as well as guiding principles that provide a foundation for strategy development.

4. The panel urges the administration and trustees to further articulate guiding principles as the university develops plans and policies to address change in higher education.

DU Resources and Capabilities

5. The panel believes the University of Denver should undertake a realistic examination of its unique blend of resources and capabilities—as well as identifying other resources that may be required—as an integral part of the development of university strategy.

STRATEGIC COMPONENTS

Market Orientation

6. The panel believes that a consistent market orientation will be necessary for the University of Denver to compete successfully in the changing environment of higher education.

Documented Differentiation

7. The panel believes the University of Denver should undertake an aggressive effort to differentiate the university and each of its academic units in a clear and verifiable manner, and do so as a matter of the highest priority. 8. The panel believes that the University of Denver should increase its efforts to integrate undergraduate and professional graduate education programs as a means of differentiating the university and providing exceptional value to students.

Demonstrable Value

- 9. The panel concludes that the University of Denver's primary focus should be on creating academic and professional value that helps students live lives of meaning, purpose and accomplishment.
- 10. The panel asserts that DU should consistently verify the value created by every academic program and that programs failing to create demonstrably high levels of value over time should be revitalized or terminated.

A Culture of Measurement

11. The panel concludes that a strong culture of measurement across all academic units and departments is necessary to support the documentation of value, outcomes, effectiveness and efficiency throughout the university.

12. Wherever practicable, the panel encourages the use of independently-verified metrics from credible sources as a part of the university's overall assessment strategy.

Institutional Flexibility

13. The panel encourages the University of Denver to create a culture that supports institutional flexibility by examining DU's governance and operating policies to be certain they support timely and informed decision making.

Financial Viability

14. The panel concludes that the ability to achieve strong annual operating margins is an essential strategic component for dealing with disruptive change and continuing the remarkable gains made by the University of Denver over the past 20 years.

Educational Innovation

15. The panel concludes that technological and operational innovations should be viewed as strategic resources to be evaluated in terms of the ability to add value to students and utilized as appropriate to enhance academic and professional learning outcomes at the University of Denver.

Serving Stakeholders

- 16. The panel concludes that the University of Denver's value strategy should focus first on students who, as a group, provide the largest share of financial resources to the university.
- 17. The panel believes the University of Denver has a stewardship responsibility to its many stakeholders including, but not limited to, providing an active process of engagement in order to understand the interests and concerns of various stakeholder groups.

STRATEGIC FRAMEWORK

The Environment of Higher Education

18. The panel believes that the annual budget development process should be expanded to include an environmental assessment which, like the budget, should be shared with the DU community.

A Knowledge Society

19. The panel concludes that the University of Denver should create the capability to monitor opportunities offered by a global knowledge society and capitalize on those where the university can provide superior value that merits the cost of attendance.

Information Ubiquity

20. The panel concludes that the university must differentiate itself from commodity information providers through educational experiences centered on understanding, applying and creating knowledge in ways that provide students with a foundation for insight, critical judgment and originality to successfully navigate a lifetime of change.

Declining Affordability

- 21. The panel believes that the University of Denver should increase its fundraising activities for endowment and other purposes by fostering an environment where fundraising becomes an integral part of the culture of the university.
- 22. The panel believes the university should encourage a strong sense of philanthropy among students, alumni and friends of the University of Denver.



23. The panel believes the University of Denver should strengthen its efforts to build effective and durable relationships with alumni and friends through active national and international programs of outreach and stewardship.

Financial Pressures

- 24. The panel concludes that University of Denver tuition and fee levels should be market-based and established on the basis of the demonstrated value of DU programs vis-à-vis those of competitors.
- 25. The panel encourages the university to continue its practice of controlling costs in a thoughtful manner while making strategic investments that are in the University of Denver's long-term interests.

Increased Competition

26. To deal with an increasing range of competitors, the panel believes the University of Denver will first need to determine whom it will serve and, equally important, identify markets in which it chooses not to compete.

- 27. The panel considers it essential that DU clearly differentiate itself vis-à-vis identified competitors in its selected markets in a way that can be verified by students, employers and other stakeholders in the marketplace.
- 28. The panel concludes that the university and each of its academic units will need to establish and broadcast clear and demonstrable value propositions on which each will compete.

Enrollment Challenges

- 29. The panel concludes that, in years to come, the ability to enroll an appropriate number of high quality students will require the University of Denver to select markets judiciously, become clearly differentiated, provide student financial support and develop strong value propositions that can be externally validated.
- 30. The panel believes that targeted university resources are required to support recruiting and placement efforts for graduate programs in various University of Denver academic units.

Technological Innovation

- 31. The panel concludes that leveraging technological innovation as a strategic resource will require an ongoing assessment and in-depth understanding of educational technology as well as potentially disruptive competitors.
- 32. The panel encourages the use of pilot programs to judge the feasibility of new technologies and the prompt adoption of innovations that can add demonstrable value for students in DU's selected markets.
- 33. The panel believes that continued support for faculty in the development and implementation of selected technologies will be essential if DU is to serve its existing markets effectively and reach out to new markets where the university can add particular value.

Competency Assessment

34. The panel concludes the University of Denver should undertake a process to assess the risks and opportunities inherent in competency-based learning in classroom settings and, especially, as utilized in online education programs.

35. If such an assessment warrants further consideration of a competency-based approach, the panel believes the university should institute one or more pilot program(s) to explore the concept in detail.

Tenure Policies

36. The panel concludes that the University of Denver would be well-served by a dialogue among trustees, the administration and appointed faculty on means to optimize tenure in a way that preserves high quality standards, academic freedom and other key benefits while providing necessary institutional flexibility.

A Call to Action

37. The panel believes that the University of Denver community should embrace changes in higher education with a clear sense of urgency and purpose; one that will allow the university to capitalize on opportunities and minimize risks by taking timely action, well before critical tipping points are reached.

Acknowledgments

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The DU Strategic Issues Panel on the Future of Higher Education wishes to extend its sincere appreciation to the following individuals whose expertise, information and viewpoints contributed to the panel's process and to this report. Titles shown reflect the positions held by individuals at the time of their presentation to the panel.

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