The Higher Education Landscape

A thousand year old industry on the cusp of profound change

University of Puget Sound
Professional Development and Enrichment Conference
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Dennis Hopwood
The Agenda

1. Strategic Imperatives
2. Higher Ed Market Segmentation
3. Drivers, Trends, Indicators of Change in Higher Education
Strategic Imperatives

“If you don’t know where you’re going, any road will take you there.”

Lewis Carroll, Alice in Wonderland
Context Matters

**Key Questions**

1. What are the discontinuities and long term trends emerging in the current landscape?
2. Are we systematically anticipating?
3. What’s the big picture that few see?
4. How can we position UPS for agility and success in a changing future landscape?
Environmental Scan
PESTLE Analysis

- **P** Political Factors
- **E** Economic Factors
- **S** Socio-Cultural Factors
- **T** Technological Factors
- **L** Legal/Regulatory Factors
- **E** Environmental Factors
Existential Brand

Key Questions

1. What distinguishes and differentiates UPS from other institutions? Why does UPS matter in this world?
2. What is it about UPS that other institutions seek to emulate? What does UPS do better than any other institution?
3. What are the undiscussable issues that hold UPS back from moving forward and realizing its full potential?
4. Is UPS focused on its best opportunities?
Competitor Analysis

Key Questions

1. Which rivals are we most worried about?
2. What special capabilities do they have that we cannot match? Where are they vulnerable?
3. What strategies are they pursuing that will affect us? What will be our counter responses?
4. How will our best competitors respond to our strengths and weaknesses, and our strategies?
“Dear Small College President...

You have to differentiate. Small, student-focused, and a beautiful campus are not differentiators. Hundreds of small liberal arts colleges also have these characteristics. These aren't truly distinctive—they aren't competitive advantages....You don't have a marketing problem. It's a problem with your value proposition as a college....Focus is key. You need to prioritize and focus. What are you going to discontinue? Where can you make focused investments that will set your institution apart from others?...”

Amit Mrig, President, Academic Impressions (Oct 13, 2015)
“In the U.S., an undergraduate education used to be an option, one way to get into the middle class. Now it’s a hostage situation, required to avoid falling out of it. And if some of the hostages having trouble coming up with the ransom conclude that our current system is a completely terrible idea, then learning will come unbundled from the pursuit of a degree just as songs came unbundled from CDs.”

Clay Shirkey, *Napster, Udacity, and the Academy*, November 12, 2012 (Blog)
Five Market Forces Model
Michael Porter

1. Existing competitive rivalry between suppliers
2. Threat of new market entrants
3. Bargaining power of buyers
4. Power of suppliers
5. Threat of substitute products (including technology change)
Sustainable Competitive Advantage
Michael Porter

Operational Effectiveness Strategy

Differentiation Strategy

Cost Leadership Strategy

Innovation Strategy
“The final barrier to new entrants is the sheer power of the incumbents. In this market, perhaps more than any other, history counts – a degree from Oxford, Cambridge or Harvard counts in part because it always has....The incumbents have other advantages too, not least endowments, famous alumni and active alumni Committed to ensuring that their alma mater’s reputation – and by implication their own – remains intact.”

“Universities are adding honors programs to try to recreate the intimate educational experience of a liberal arts college on a much larger campus, luring away extremely bright and talented students...Public institutions are also doing a better job of recruiting wealthy students, which is causing an upper income melt on liberal arts campuses. Due to the high sticker price at these institutions, full pay students are crucial to their funding strategy and not enrolling these upper-income students has a profound effect on the institutions’ ability to subsidize the education of other more financially needy students.”

The Landscape of Higher Education
“Our major competitor in ten years time will be Google...if we’re still alive!”

Australian University Vice-Chancellor
Ernst & Young, University of the Future, 2012
“There is nothing global anymore, because in two or three years’ time we will become singular. There’ll be no old world and new world, there will just be survivors. If we don’t partner with the communication industry our universities are going to close.”

Stavros Xanthopoylos, Executive Director
Fundação Getulio Vargas (Brazil)
Higher Education
Market Segmentation*

Degree Granting Institutions

Dominant **public** sector (39%; 74% of all students), composed of state universities and community colleges.

Varied **private** sector of nonprofit colleges and universities (38%; 20% of all students), including elite research universities, elite liberal arts colleges, and small obscure religiously-oriented schools.

Rapidly growing private enterprise **for-profit** sector (23%; 6% of all students), which includes universities and non-degree-granting post-secondary vocational schools.

And They Compete (Globally)

- For students.
- For tuition dollars (revenue).
- For federal financial aid resources.
- For philanthropic donations.
- For governmental research grants.
- For corporate research support.
- For star athletes.
- For star academics.
- For market share and mind share.
Inherent Tensions*

Overarching Social Missions

• Teaching undergraduates.
• Performing basic research (vs. applied).
• Public service, to the larger community.
• Increasingly...political pressure to solve economic/social problems.

Generating Revenue

• Patent development, licensing, technology transfer to private sector.
• Internet-based learning programs.
• Licensing of school symbols, logos, and mascots to manufacturers.
• Investment in profitable intercollegiate sports and facilities.
• Global brand-name development and integrated marketing plans.
• Conflict with tax-exempt status and corporate profits taxation.

Four Mega-Trend Forces Transforming Higher Education

- Economic
- Socio-Cultural
- Technological
- Global
Eight Drivers of Irreversible Change

1. Democratization of knowledge and access.
2. Disaggregation (time, content, function).
3. Contestability of markets and funding.
4. Broken antiquated financial models.
5. Digital technologies and innovation.
7. Integration with industry.
9. Decentralization and demand for local autonomy.
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Economic Trends

1. Growing cost of higher education.
2. Disinvestment by government and privatization.
3. Unsustainable funding models.
4. Contingent labor.
5. Emerging competition and alternatives.
6. Affordability and access issues (democratization).
7. Prolonged economic recession.
8. Challenges to tax exempt status.
"If colleges were businesses, they would be ripe for hostile takeovers, complete with serious cost-cutting and painful reorganizations."

Brian Kelly, Editor U.S. News & World Report 2010 college rankings
“Most college leaders live in a bubble in which the costs of ever more elaborate facilities, expanding administrative bureaucracies, and high-profile professors with light teaching loads can simply be passed on to customers in the form of higher tuition.

But those days are about to end. Underneath the surface, upstart institutions are perfecting radically new education technologies and business plans at the same time that young people and their parents are becoming more frustrated with the traditional higher-ed model, and more open-minded about alternatives.”

"I think higher education is just on the edge of the crevasse. Generally, universities are doing very well financially, so they don’t feel from the data that their world is going to collapse. But I think even five years from now these enterprises are going to be in real trouble...Fifteen years from now more than half of the universities will be in bankruptcy, including the state schools. In the end, I am excited to see that happen.”

Clayton Christensen, Harvard Business School Professor and author of *The Innovator’s Dilemma*, who conceived the term ‘disruptive innovation’.
State Support for Public Higher Education

Young Invincibles indexed over 40 variables for each state, including per student spending, average tuitions, state financial aid programs, and attainment equity.
Princeton generates $115M+ in annual patent royalties, $35M of it shared with faculty; $500M+ alone has been accrued from the invention of the blockbuster cancer drug, Alimta, licensed to Eli Lily.

For the seventh consecutive year, the U. of Texas has been named the top seller of licensed college merchandise, generating over $12M in royalties per year as part of the $4.6B annual college merchandise business.

Developed at the University of Florida and field tested by its football team in the 1960’s, Gatorade generates licensing revenue of $8M per year, and over $150M since 1973.

For the fifth year, Northwestern U. topped all other colleges with more than $122M in annual royalty revenue from inventions, like Lyrica, a blockbuster drug developed by a chemistry professor that is used to treat fibromyalgia, epilepsy and other seizures.
University of Michigan
2015 NIKE Contract

$169 M OVER 15 YEARS

BREAKING DOWN THE NIKE DEAL

UPFRONT $12 M
CASH $76.8 M
APPAREL $80.2 M
Cornell NYC Tech
First project of the Applied Sciences NYC Initiative designed to dramatically transform the City’s economy. The City donated Roosevelt Island and $100M in City capital to build a two-million-square-foot applied science and engineering campus through a consortium of Cornell University and Technion-Israel Institute of Technology.
“So let me put colleges and universities on notice. If you can’t stop tuition from going up, the funding you get from taxpayers will go down. Higher education can’t be a luxury. It is an economic imperative that every family in America should be able to afford.”

President Obama
2012 State of the Union Address
“Contingent academic labor, as non-tenure-track faculty, part-time and full-time, are formally known, is cheaper to hire and easier to fire...Over the past twenty years in other words – or really, over the past forty – what has happened in academia is what has happened throughout the American economy. Good, secure, well-paid positions – tenured appointments in the academy, union jobs on the factory floor – are being replaced by temporary, low-wage employment...The answer is to hire more professors: real ones, not academic lettuce-pickers.”

“Rich kids subsidize poor kids. Out-of-state students subsidize in-state students. Humanities majors subsidize science majors. Freshmen and sophomores subsidize juniors and seniors. Undergraduates subsidize graduate students. And international students subsidize everyone. Schools have become more aggressive in this income redistribution aspect of higher education...there’s always a small class of students who have a lot of money, and the income-maximizing enrollment manager wants to zap it to these kids.”

Richard Vetter, Economics Professor at Ohio University and Director of the Center for College Affordability and Productivity, Washington, DC
“Recruiting high quality students increases a college’s prestige. The students go on to lucrative careers, enabling them to give lots of money back to the alma mater, thus enabling the college to continue buying the best students.”

Victor E. Farrell, Jr., former Beloit College President and author of *Liberal Arts at the Brink*, 2011
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Free Speech Movement
1968 Paris Uprising
Sexual Revolution
Second Wave Feminism
Chicano Movement
Environmental Movement
Anti-Apartheid South Africa
Arab Spring
Socio-Cultural Trends

1. Demographics, immigration.
2. Challenges to the quality of education.
3. Aging academic workforce vs. supply of PhD’s.
4. Evolving and competing educational models.
5. Turbulent shared governance; disruptive intervention.
6. Profs as content curators/navigators/designers vs. experts.
7. Degree disaggregation (unbundling); alternative micro-credentialing, competency-based programs.
8. Higher education outcomes, accountability, and ROI.
10. Diversity vs. affordability and access.
12. The student (not the institution) at the center... ‘a la carte.
13. Role of Government: Regulator/Provider vs. Investor/Partner.
“Instead of treating higher education as a commodity, we need to treat it as a right. Instead of seeing it in terms of market purposes, we need to see it once again in terms of intellectual and moral purposes. That means resurrecting one of the great achievements of postwar American society: high-quality, low- or no-cost mass public higher education. An end to the artificial scarcity of educational resources. An end to the idea that students must compete for the privilege of going to a decent college, and that they then must pay for it.”

"A child born into a family in the highest quartile of income (in the U.S.) has a roughly 85 percent chance of earning a college degree. A child born into a family in the lowest quartile of income has a less than 8 percent chance of earning a degree."

Brit Kirwan, retired Chancellor of the University System of Maryland
Meaning of Middle Class

- 95th percentile: $206,568
- 90th percentile: $157,479
- Median income: $53,657
- Bottom 20%
- Top 5%

Source: U.S. Census Bureau, 2014
Federal Free/Reduced-Price Lunch
K-12 Local Eligibility*

- Boston: 80%
- Chicago: 85%
- Los Angeles Unified: 59%
- Miami Dade: 73%
- New York City: 67%
- Washington, DC: 53%

*Source: Wisconsin HOPE Lab and federal Common Core.
Projected Percent Change in Public and Nonpublic High School Graduates, by State, 2008-09 to 2019-20

- **Dwindling Production** (Decrease > 15%)
- **Slowing Production** (Decrease 5% - 15%)
- **Manageable Decline** (Decrease < 5%)
- **Manageable Growth** (Increase < 5%)
- **Accelerated Expansion** (Increase 5% - 15%)
- **Swift Expansion** (Increase > 15%)

Source: Western Interstate Commission for Higher Education
Population Growth in America
Percent Population Change from 1 April 2000 to 1 July 2009
“In this era of heightened accountability and increasingly fierce competition, we must be even better at critiquing and improving our performance in all we do, while scrutinizing the performance (and, where helpful, adopting the best practices) of our peers and rivals...Anticipating national demographic shifts, Carleton needs to strategically reshape its student body toward areas with growing numbers of prospective students ...this will require us to continue to place greater recruitment emphasis on the West Coast (Washington, Oregon, and California), which is already an area of growing strength, and in the Southeast (Florida, Georgia, South Carolina, and North Carolina), an area of current relative weakness.”

2012 Strategic Plan, Carleton College
“Pundits and hand-wringers love to claim that universities are the only path to a successful life. In truth, an inquisitive mind, rigorously applied to a deep-rooted problem can change the world as readily as the plushest academic lab. In 1665 when Cambridge University closed due to the plague, Isaac Newton used his time away to pursue self-directed learning and ended up inventing calculus. The drive to make a difference is what truly matters.”

Peter Thiel, the billionaire cofounder of PayPal and Thiel’s “20 Under 20” reverse-scholarship program which provides selected students with $100,000 grants to drop out of college and undertake an entrepreneurial venture.
“Imagine a system that places the student, instead of the institution, at the center. In such a scenario, students might attend a network of institutions, being accepted at one ‘home’ college but taking courses both in person and virtually from any of a group of a dozen or so...Some students might operate outside the college network, mixing learning experiences in an `a la carte approach, taking MOOCs, studying abroad, engaging in apprenticeships and internships, interspersing blocks of time off, all the while collecting the credentialed results of learning in an electronic portfolio.”

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Technological Trends

1. Global ‘community of learners’.
2. Proliferation of high quality open source content.
3. Rise of real-time social, local, mobile (SoLoMo) technologies.
4. Redesign of learning spaces; makerspaces (DIY fablabs).
5. Digitally-supported teaching approaches and paradigms; blended learning; digital literacy; the ‘embedded for-profit’.
9. Increasing cross-institution collaboration.
10. Growing focus on measuring learning.
Ed Tech Categories*
Emerging Technologies, Tools, Strategies

- Consumer Technologies
- Digital Strategies
- Internet Technologies
- Learning Technologies
- Social media technologies
- Visualization technologies

“According to the National Venture Capital Association, $146 million was invested in education technology in 2002...In 2011, some $429 million was invested in ed-tech companies. A year later, according to CB Insights, a venture capital database, that number was $1.1 billion.”*


*Update since 2012: At year-end 2015, a total of $6.54 billion was invested in Ed-Tech companies (not all higher ed), per market research firm, Ambient Insight.*
“So what should we tell a prospective student about why it is best to have an experience at MIT? There are at least three reasons, all of which have always been in place, none of which has to do with skill acquisition. First, you will be around people who are off-scale smart, just like you, which is humbling while you are here and empowering afterward. Second, you will develop a network of off-scale smart people you will carry with you for the rest of your life. And third, something or someone will inspire you in a way that will change your life. MITx will not, after all, deliver the benefits of human-to-human interaction via late-night talks, camaraderie-developing activities, accidental conversations, in-the-office critiques...probing debates, intellectual wrestling, and other on-site elements of a university education in general and an MIT education in particular.”

Editorial Subcommittee
MIT Faculty Newsletter, Jan/Feb 2012
Four Mega-Trend Forces Transforming Higher Education

Economic

Socio-Cultural

Technological

Global
Global Trends

1. Rising economic expectations.
2. The globalization of higher education.
4. Access to ubiquitous knowledge content (commodification).
5. Transnational cooperation and competition.
6. Industry as customers/partners/competitors.
8. Diverse and catastrophic demographic scenarios.
9. Transition to knowledge and service-based economies.
"At the very moment when China and some European nations are seeking to replicate our model of broad education in the humanities, social sciences, and natural sciences ... we are instead narrowing our focus and abandoning our sense of what education has been and should continue to be."

American Academy of Arts and Sciences
Berklee College of Music, Valencia, Spain

Johns Hopkins SAIS Bologna, Italy

Yale NUS College, a collaboration between Yale and the National U of Singapore.

Berklee College of Music, Valencia, Spain

Carnegie Mellon Qatar
“St. Andrews has 1,230 Americans among its 7,200 students this year, compared with fewer than 200 a decade ago.

The large American enrollment is no accident. St. Andrews has 10 recruiters making the rounds of American high schools, visiting hundreds of private schools and a smattering of public ones. With higher education fast becoming a global commodity, universities worldwide — many of them in Canada and England — are competing for the same pool of affluent, well-qualified students...”

Going Off to College for Less (Passport Required), New York Times, November 30, 2008
“We have agreements with German, French, UK and Spanish institutions who transfer their curricula, allow us to copy their equipment and even bring over their experts for three years...We’ve addressed human resource challenges by developing two educational city hubs: one with seven international institutions, such as the UK’s Newcastle and Southampton universities, and the other based around Kuala Lumpur University.”

Professor Mazliham Mohd Su’ud, President Malaysia’s University of Kuala Lumpur
“At the heart of the Scottish Government’s approach to higher education are two core principles. The first is that we invest in education as a societal good. Secondly, we believe that access to education should be based on the ability to learn, not the ability to pay...universities are incubators of talented people and new ideas.

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Questions
https://www.ted.com/talks/ken_robinson_changing_education_paradigms