

“When Industries Change” Revisited

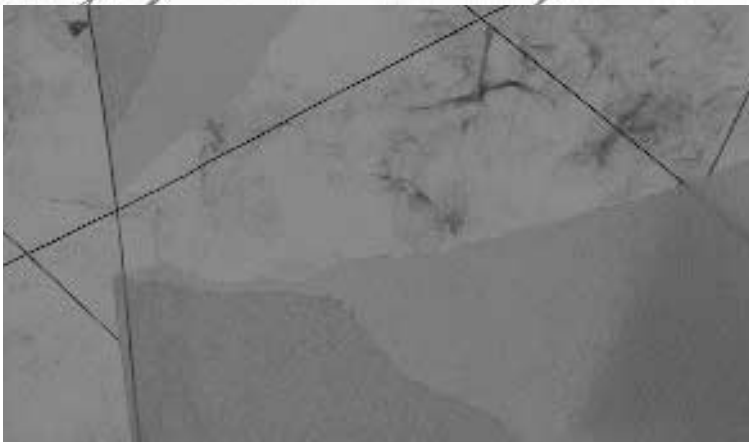
New Scenarios for Higher Education

David Collis

Yale School of Management

Higher education, defined as all post-secondary education, represents a market of \$237 billion in the United States, of which only \$5 billion is currently served by the for-profit sector. Historically, the primary deterrents to private sector entry into higher education have been the huge start-up costs and unprofitability of the traditional university. Today, however, advances in technology and increases in the demand for higher education facilitate focused, low cost, and profitable private sector entry. David Collis, visiting professor of management at the Yale School of Management, returned to the Forum's 1999 symposium to revisit his forecasts about the changing higher education marketplace and strategic responses to it.

of this species which is similar to the size and
in the form of the pided brant. they weigh
the wings are not as long nor so pointed as
of the common pided brant. the following is a
map of its head and beak. a little distance a
to the base of the beak is white and is suddenly success
a narrow line of dark brown. the balance of
neck, head, back
at the tips of
bluish brown
gooses. the breast and
in an irregular mixture
it gives that part a pided appearance. from the
back underneath the tail, and around the junction
same with the body above, the feathers are white
tail is composed of 18 feathers; the longest of which
in the center and measure 6 inches with the barbed
the quills; those on the sides of the tail are something
ten and bend with their extremities inward toward
center of the tail. the extremities of these feathers
white. the beak is of a light flesh colour. the
and feet which do not differ in structure from
is of the goose or brant of the other species an
in orange yellow colour. the eye is smaller; the



“ what might two centuries of development on the Internet, or even two decades or two years, do for improvement in delivering courses through that channel of distribution? ”

Technology

The first of the two key drivers facilitating entry into higher education by the private sector is technology, which can be employed in many different ways to expand or improve the educational experience. Those who disregard technology-based education as inferior to today's traditional classroom are making a classic mistake of underestimating the development trajectory of a new technology. Even if Internet-based education is lacking today, what might it look like in a few years, after faculty have had the opportunity to work with it? Viewed the other way, how much potential is there for advances in traditional pedagogy, as pursued for the last several centuries? What might two centuries of development on the Internet, or even two decades or two years, do for improvement in delivering courses through that channel of distribution?

Today's four-year undergraduate residential colleges and universities may well protest that distance learning and the Internet are no substitute for what they offer on campus. But all the other potential students who cannot afford the time, expense, or relocation disturbance of such an approach might well embrace the new technology as satisfying their needs, at an attractive price. Within a few years, entrants employing the new technology and exploiting its inherent scale economies and innovation trajectory could offer a product as good as current residential degree courses at a lower cost. And who knows what might be possible just a few years after that?

Technology has the potential to deconstruct the traditional university. At one level, the Internet breaks down the usual tradeoff between richness and reach: historically, to communicate with millions of people, companies had to vastly simplify their message—such as in the typical 30-second television commercial. Today, however, the Internet can reach a large number of students at once, and allow the depth and customization of content required for an effective educational experience.

At another level, technology also breaks down some of the traditional rationales for vertical and horizontal integration of higher education. Eliminating the need for joint provision of many activities and services, most obviously dormitories and cafeterias, but also classroom space and even libraries (books have a very rich content), reduces entry barriers enormously and opens the door for credible competitors.

Demand

If technology has the potential to supplant traditional entry barriers, changes in demand provide the market opportunity for new entrants. Current data project a roughly 20 percent increase in the number of 18 year-old students entering higher education by 2010. This group appears to be a captive market for traditional colleges and universities. Consider, however, the broader market: today, 43 percent of students in higher education are over 25 years old. By 2010, such mature students are expected to be in the majority due to ever-increasing requirements of the economy for a more educated workforce, and the desire of individuals to bridge the widening income gap between college and high school graduates.

Mature students' needs are very different from those of 18 year-olds. Generally, they are looking for part-time degree programs that are easily accessible from their homes, affordable, and offered at convenient times and dates. Traditional colleges and universities do not offer such programs, yet the size of this potential market is huge—75 percent of Americans over age 25 lack degrees. This unserved market is incredibly attractive to private sector entrants that can exploit technology to deliver the convenient, low-cost product these customers demand. Beyond offering degree programs, there is also a powerful drive for extending adult education, both for current workers maintaining and upgrading their skills and for the growing population of retirees.

This shift in the composition of demand for higher education foreshadows a fundamental change in the nature of the industry by inducing new private sector companies to serve the emerging markets. Given this entry path, companies that build scale and a reputation in these segments should be able to move upmarket into more traditional degree programs.

Effects of New Entrants

The primary threat posed by entrants serving new markets is that of a *disruptive technology*. Over time, the entrants' attractive price and features will begin to draw traditional students, most likely at first from smaller, non-research state schools. Higher end residential research and liberal arts institutions will be the last to face



“ the most important strategic imperative is to quickly form alliances with credible new entrants ”

competitive pressures, but numerous examples from industries affected by their own relevant disruptive technologies indicate that the period of protection for high end colleges and universities might be just twenty years at the very most, and may well be substantially shorter.

The second threat might simply be price pressure. It will become increasingly difficult to justify large tuition differences between traditional degree programs and those that may even include some of the same courses taught remotely by the same professors. Cost pressures will be worsened by the fact that the new entrants' primary strategy will be to pick off the more profitable parts of higher education (such as executive education), which in turn would increase fixed costs for remaining students and put upward pressure on tuition.

Entry Strategies

New markets and technologies can be exploited by both new and current participants in higher education. An established, elite university, for example, could leverage its brand name to expand market share and revenues at the high end by offering courses and self-teaching materials to other institutions or companies to use in their programs. Several top business schools, for example, already are making huge profits by reselling existing courses beyond their campuses. Joint ventures with private sector companies could prove to be extremely successful, as such alliances combine the unique resources of the partners and reduce competition between them.

The mature market could possibly be tapped by firms pursuing a hybrid model of distance learning that mixes on-line tutoring, self-study, and campus time. While this may sound like an inferior product, consider that the United Kingdom's Open University, with over 100,000 students, typically spends \$1.5 million to develop each course it offers via this model. On the other hand, I would guess that most top U.S. colleges and universities currently allocate none of their budgets specifically to course development, and instead expect research faculty to develop their own courses. The Open University already has announced its entry into the U.S. market, and is pursuing joint ventures with two-year colleges here.

Other possible entrants include publishers and corporations. Publishers have a ready supply of course materials, and relationships with faculty with demonstrated expertise in course development. On-line, they could pick off the low end of the market by reselling courses based on their textbooks. Many corporations already have well-developed in-house training programs. Should they choose to open their enrollment to third parties, they could readily tap the burgeoning executive and corporate education markets.

Many other entrants are possible. The cumulative result is the disappearance of huge chunks of the traditionally captive market for universities, and the deconstruction of the industry as we know it today.

Conclusion

How might colleges and universities respond to the threat of private sector intervention and deteriorating industry structure? The most important strategic imperative is to quickly form alliances with credible new entrants. The mutual benefit of joining forces and cooperating in new ventures appears to be so compelling that we can only anticipate their increased formation. In this regard, early movers will achieve sustainable advantages. The supply of good partners is limited, and in the winner-take-all higher education market, the downward spiral that a late mover can get locked into suggests that the penalty for complacency is high.

Colleges and universities should attach great urgency to debates about their future. Rather than sitting back and observing how the market develops, university presidents and administrators should proactively determine the future of their institutions. Otherwise, they will be condemned to be bystanders swept away in the tides of change. The biggest mistake established institutions can make today is one of omission, not commission.

David Collis is visiting professor of management at the Yale School of Management. Prior to joining Yale, he was associate professor of business administration at Harvard Business School, where he taught for 11 years. Collis has authored numerous articles and books on organizations, competition, strategy, and management, and prepared dozens of Harvard Business School case studies.