

## Reining in College Costs

Higher-education costs are spiraling out of control, and quality leaves much to be desired. The surprising solution, argues a college president: online learning

By [Michael Bassis](#)

Even before the current [economic downturn](#), the issue of cost had become the dominant public concern about American [higher education](#). Over the past several decades, [tuition has increased](#) at a faster rate than inflation and faster than the growth in family incomes. Too many students graduate with [staggering debt](#), leading many to avoid critical but low-income careers. The cost of attendance has discouraged many students from groups typically underrepresented in higher education from even thinking about going to college. In a global economy that is increasingly knowledge-based, reduced access to higher education is a problem because of its potential impact on economic growth and on the social and cultural well-being of this country.

Concerns that colleges cost too much are accompanied by claims that we deliver too little. In national surveys, employers say that too many college graduates lack the skills they need to be successful in the rapidly changing workplace. Groups such as the Business-Higher Education Forum and the Partnership for 21st Century Skills point out that there is a profound gap between the knowledge and skills most students learn in school and those they will need in the communities and workplaces of the 21st century. Just as disturbing, employers point out that our primary method of "certifying" the competence of our graduates—a transcript—is not seen as a meaningful measure of their skills and abilities as potential employees.

While almost every industry has made great strides over the last two decades in lowering its costs and increasing its productivity, our colleges and universities have not. The problem is that conventional wisdom in academia posits a direct relationship between cost and quality. We know we can reduce costs by increasing the size of classes and faculty teaching hours, hiring more adjuncts in place of full-time faculty, and eliminating merit-based aid. Three-year degrees, no-frills programs, and [online learning](#) can also reduce costs. But all of these measures are seen as threats to quality. Traditional indicators of quality such as small classes taught by distinguished faculty, grand campuses with impressive libraries and laboratories, and bright, heavily recruited students are all costly. There is no way to break the link between cost and quality when quality is defined only by those things that require substantial resources.

### THE POTENTIAL OF ONLINE LEARNING

There is another way to define quality that actually makes more sense. That entails thinking of quality in terms of outcomes rather than resources—focusing on student learning instead of the size of the endowment. Research conducted by Dennis Jones and Jane Wellman suggests that we would be able to break the link between cost and quality if we measured quality in terms of performance outcomes. They found that "there is no consistent relationship between spending and performance, whether that is measured by spending against degree production, measures of student engagement, evidence of high-impact practices, students' satisfaction with their education, or future earnings."

Are there instructional designs that have the capacity to lower costs and enhance the outcomes of the educational experience? Let's return to the case of online learning. This design began as an inexpensive way to deliver the standard curriculum. While it did provide increased access to many students, it was widely regarded as inferior to traditional degrees delivered by faculty in the classroom. But online learning is proving to be a classic example of a disruptive technology.

As described by Clayton Christensen, a highly regarded professor at the [Harvard Business School](#), disruptive technologies are innovations that transform expensive, complicated products and services into ones that are so affordable, convenient, and simple that many more people can own and use them. Christensen's research reveals that disruptive innovations always start at the bottom of their markets, picking off simple applications first. He writes, "They then move relentlessly upmarket, becoming progressively more capable of doing sophisticated things, until they completely displace the companies that formerly had dominated their industries. For example, online advertising and news distribution have disrupted print newspapers, and wireless phones have disrupted landline telecommunications."

## **OPEN-SOURCE COURSEWARE**

New and powerful digital technologies with the potential to transform the online experience in ways that significantly reduce costs and enhance student learning are now driving online learning upmarket into some of the best institutions in the country. Perhaps the biggest breakthrough comes in the form of open-source instructional resources. Prominent research universities, major corporations, and venture capital-funded startups are now producing a vast array of open-source materials—online instructional resources that can be freely used, distributed, and modified. More than 200 institutions in 32 countries have posted courses online at the Open Courseware Consortium. Many of these courses are enhanced with multimedia features and interaction elements such as social networking technologies, contextually rich simulations and animations, and electronic gaming. The Open Learning Initiative at [Carnegie Mellon University](#) is putting together teams of content experts, learning scientists, and software engineers to develop online courseware they intend to freely distribute. Built on up-to-date research on how people learn, such courseware holds enormous promise for improving student learning outcomes, particularly as we think about the challenge of educating the latest generation of young people who have spent all of their lives plugged into a wide variety of digital technologies.

Some online models are moving away from the traditional course-based curricula that don't take into account that students learn at different rates. Competency-based models provide a way for students to learn at their own pace, some demonstrating required competencies and moving ahead much more rapidly or slowly, as the case might be, than they could in a course-based system. Problem- and project-based learning takes us a step further by moving beyond a focus on how much students know about a particular subject to a focus on what they can do with what they know. And now a student's demonstration of what they have learned can be captured in an e-portfolio—a far more revealing record of achievement than the traditional transcript.

At my institution, Westminster College in Salt Lake City, faculty have developed a low-residency, competency- and project-based instructional model that they designed explicitly to reduce costs as well as enhance learning. They began with an [undergraduate degree completion program in business](#). Here students don't take courses or earn grades. The requirements for the degree are for students to complete a series of projects, captured in an electronic portfolio, that mirror core activities in the business world. To complete each project successfully, students must acquire and apply specific competencies—the knowledge and skills necessary to function effectively in a modern business. The list of competencies also includes those things that employers tell us they are looking for: critical and creative thinking, writing and speaking, leadership and teamwork, global consciousness, social responsibility, and ethical awareness. Students acquire the competencies by accessing a rich repository of multimedia learning activities that our faculty have compiled and made available online. Faculty spend their time coaching students, providing them with feedback on their projects, and running two-day residencies that bring students to campus periodically to learn through intensive face-to-face interaction.

## **ONLINE PLUS FACE-TO-FACE INSTRUCTION**

Although it will take some time to fully evaluate this model, one thing we are learning is that sophisticated online learning materials supplemented with direct faculty-student interaction can be a powerful combination. This was confirmed by a report recently released by the U.S. Education Dept. that presented the results of a meta-analysis conducted on more than 1,000 empirical studies of online learning. The analysis showed that instruction combining

online and face-to-face elements (called hybrid or blended learning) was more effective than either purely face-to-face instruction or purely online instruction. In short, the report documented that high tech plus high touch works best.

We are also learning that to deliver a powerful brand of high-tech, high-touch education that lowers costs and enhances learning, institutions need to make a fundamental shift in their underlying educational paradigm.

It has been well-established in a host of settings that digital technology, all by itself, rarely boosts productivity. The same is true for higher education. Ultimately, it is not the technology but the new practices that the technology enables which will revolutionize learning. These new practices entail a shift in attention away from what is taught (the "teaching" paradigm) to what and how a student learns (the "learning" paradigm). What are the critical differences?

The academic world has been operating out of the teaching paradigm since the founding of the first universities in the Middle Ages. Here professors are "subject matter experts" responsible for selecting and presenting material to students; specifying what students should read; assigning papers and developing exams; and, finally, giving each student a grade. Students expect the teacher to give them information and to tell them how to think about it—in other words, to teach them. Exactly what students are expected to learn in the class is rarely communicated.

### **THE "LEARNING" PARADIGM**

In the "learning" paradigm, the teacher is not the expert provider of knowledge, but rather a guide who first specifies what students are expected to learn and then lays out pathways they can follow to meet the learning goals. The teacher becomes a supporter, a collaborator, and a coach for students as they learn to evaluate and gather information, test ideas, and explore their application to different issues and problems. Students begin to learn how to develop and pose their own questions and to explore alternative ways of finding and framing answers. So instead of working only to master the subject matter of a course, students are developing the skills to learn on their own. They no longer wait to be taught—they come to realize that, if they are to succeed, they must take a good deal of responsibility for their own learning.

The learning paradigm changes the traditional roles and relationships that have defined higher education for so long. Since technology can provide students with access to more and better learning resources than they could ever get from a lecture, faculty can let go of the full weight of being the "subject matter expert." Freed from the burden of being the sole source of subject-specific information, they can function as learning guides, facilitators, and mentors, placing more emphasis on helping students master those critical intellectual skills and attributes that transcend academic disciplines. And once released from the responsibility to deliver all of the content, faculty can work effectively with more students, thus reducing the cost of the learning experience and increasing its quality.

Arthur Levine, president of the Woodrow Wilson Foundation, is not optimistic about how traditional higher education in the U.S. will adapt to the mounting pressures for change. He writes, "Higher education is unprepared for a global information economy. ... This era will bring increasing competition from for-profit postsecondary educators and international universities. Meanwhile, some of these same competitors are already taking advantage of the gap between our students' extensive use of digital learning technologies and our institutions' continuing reliance on traditional methods of teaching and learning." Clayton Christensen goes a step further. He believes that increasingly sophisticated online learning models will ultimately transform higher education into an enterprise that is much more affordable, convenient, and effective and that many more people will have access to it than ever before. He also claims that these new models will ultimately topple many of the universities that today seem to be so unassailable.

### **VARIED IMPACT**

I'm not quite as pessimistic about the continued viability of our colleges and universities. I do believe that advances in digital technology will lower costs and enhance learning and fundamentally change the way postsecondary education is done in this country. If the Obama Administration is successful in its efforts to spend \$500 million commissioning the development of high-quality online coursework that would then be distributed free to any institution that wants to use it,

higher education would be transformed almost overnight. But whether it happens quickly or more gradually, I suspect that this transformation will impact the different sectors of higher education in different ways.

It's likely that the elite institutions will find no shortage of families willing to pay large tuition bills so their children can reap the benefits of a prestigious degree. And the research programs and athletic teams of public flagship universities probably lend enough prestige to their degrees that they will continue to attract students whether or not their instructional systems change. But it's the community colleges, comprehensive public universities, and private colleges without national reputations—schools that enroll 95% of the 19 million students attending accredited institutions across the country—that may be the most vulnerable.

I suspect, as well, that few colleges and universities will have the luxury of using a slow, evolutionary strategy that entails transforming their courses one by one. There are enough for-profit and not-for profit institutions that are quickly putting the pieces together to be in a position to mass-market multiple, high-quality, low-cost degree programs that students of all types will find enormously attractive. Some of these programs may appear at residential colleges where students and their parents will be willing to pay an extra premium to gain the social maturation, independence, and self-reliance benefits that come with being a full-time residential student. Others will be aimed at the huge market of potential students who, for one reason or another, can't or won't choose to live in a campus residence hall.

### **TRANSFORMING ACADEMIC CULTURE**

To achieve success in this environment, colleges and universities, at least those that have no immunity from the winds of change, will need to begin to develop high-tech/high-touch programs as a means to lower costs and improve quality. To do so, presidents must convince their governing boards and their faculties that change is necessary and that it will require a shift from "teaching" to "learning." This will be no easy task, for shifting from one paradigm to another is to radically transform the academic culture of an institution, an entity that has proven to be remarkably resistant to change.

As they work to prepare their institutions for an uncertain future, the leaders of our colleges and universities might well heed the wisdom of Charles Darwin, who wrote, "It is not the strongest of species that survive, or the most intelligent, but the ones most responsive to change."

*Michael Bassis is the president of Westminster College in Salt Lake City.*