Online Learning 101

By Brenda Bautsch   *November 2011*

Technology has transformed virtually every aspect of our lives, and higher education has not been untouched. Online learning is rapidly growing in both availability and popularity. Legislators play an important role in designing the environment in which online learning will operate. Policymakers can help establish, fund and grow online programs within their public higher education systems. This brief defines online learning, identifies opportunities and concerns for policymakers, and offers strategies for evaluating it. The brief also highlights new and creative models for online learning and discusses state and federal regulation of the industry.

Online Learning Defined

 Colleges are using online technology in courses in a variety of ways. Broad categories frequently are used in discussing this topic. "Online" learning is defined as courses where at least 80 percent of the content is delivered through online technology. These courses usually have no face-to-face interaction between students and the professor. "Blended" or "hybrid" learning refers to courses where students learn partly in a face-to-face setting and partly through online forums and coursework. "Traditional" learning is the typical label for face-to-face courses that take place in a traditional classroom where no online technology is used.[1]

Rapid Growth

In 2009 and 2010, the poor U.S. economic climate led to an increased student demand for college courses of all types as more people turned to education to help them secure jobs. Notably, the demand for online courses outpaced the demand for traditional courses, according to surveyed institutions. Eighty-five percent of public colleges reported an increased demand for online courses in 2010, compared to 70 percent that reported increased demand for traditional courses.[2]

This demand is reflected in the overwhelming increase in the number of students enrolling in online classes. From 2009 to 2010, the number of college students taking at least one online course increased by 1 million, from 4.6 million to 5.6 million students. This represents a growth of 21 percent for online learning, compared to the overall college enrollment growth of 1.2 percent. Figure 1 depicts the increase in online enrollment as a percent of total college enrollment. In 2002, about 10 percent of college students participated in at least one online course; now, 29 percent of students do so.

Figure 1. Online Enrollment as a Percent of Total Enrollment
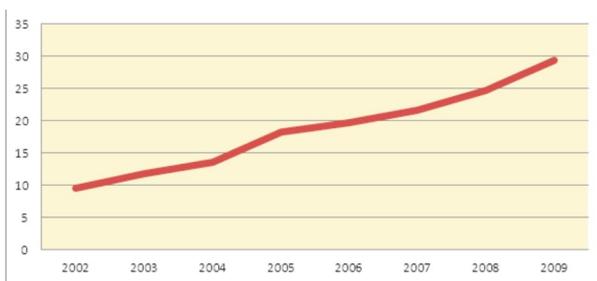
Source: Allen and Seaman, *Class Differences: Online Education in the United States*, 2010.

As online learning gains a larger presence at postsecondary institutions, more college leaders are including online education in their institutions' long-term strategic plans. This is particularly the case at for-profit institutions. While public colleges were the first to embrace online learning, in the last few years for-profits have significantly enlarged their online course offerings to the extent that they now compete with public institutions for online students. The rapid growth of students enrolling at for-profit institutions (in both traditional and online courses) has contributed to the recent attention focused on for-profits by Congress, the U.S. Department of Education and numerous state legislatures.

Online Learning Opportunities and Concerns

Arguably the greatest benefit of online learning is that it constitutes another form of access to higher education. Online learning provides the opportunity for students to take classes at times that fit their schedules. This is important for so-called "nontraditional" students—busy adults who have work and family responsibilities that may prevent them from taking classes on campus. Online courses also are beneficial to colleges where face-to-face classes are overflowing; offering online courses does not require classroom space and can help meet student demand. The book *DIY U: Edupunks, Edupreneurs and the Coming Transformation of Higher Education* argues that online learning is continually expanding the options available to students and the quality of such programs is improving. Author Anya Kamenetz states, "For some people, it will mean going from a good education to a great one. For others, it will mean getting some kind of education, instead of nothing."[3]

Because online learning does not require classroom space, the perception exists that it is a less expensive form of education. There are significant start-up costs, however, and experts warn that colleges should not offer online education solely to make money. Online courses require substantial upfront investments to design and develop the host technology and to train faculty. Even though faculty members need not physically be in a classroom to teach, they still must post lectures, moderate online discussion forums, and provide constant student feedback—all skills that require professional development. In the long-term, however, experts say online education potentially can pay dividends.

At the University of Central Florida, for example, 30 percent of enrolled students take blended and online courses. Without accounting for faculty salaries, blended learning courses generate $20 for every $1 invested.[4] In fact, pointing to Central Florida's success, the Bill and Melinda Gates Foundation launched a $20 million grant program, Next Generation Learning Challenges, which focuses on innovative education technology that has blended learning as a core focus.

One concern with online learning is how difficult it is to assess the effectiveness and quality of courses. In general, not enough good data exists to measure the quality of any type of college course. Because online learning is a newer and rapidly growing sector, however, many want to ensure that the courses are as effective and enriching as traditional courses. A 2010 survey that asked college leaders about their perceptions of online courses found that two-thirds consider them to be the same or better than traditional courses. In a different survey taken in 2011, one-half of college presidents said online courses provide the same value as courses taken in the classroom.[5] Those who question the quality of online learning are concerned that students do not learn as much from a computer as they would from human interaction; they also are concerned about the potential for cheating. Others point to the marketing of such programs, which seem to emphasize how quickly students can earn an online degree rather than how much knowledge that degree will provide.

The problem with any surveys on the topic, however, is that they are based on perceptions rather than on hard data from student experience. As demonstrated in just the two surveys above, a wide variance exists in perceptions of quality—50 percent versus 66 percent of leaders approve of online courses. Concrete data is difficult to gather, and institutions of higher education have struggled for some time to measure the amount of learning in any course, whether taken online or face-to-face.

Evaluating Online Learning

Nonetheless, several studies have sought to evaluate online learning and assess whether it improves or impedes student success. The National Center for Academic Transformation conducted a research project to redesign introductory courses with high student failure rates at 30 postsecondary institutions. The project focused on using technology to make large, impersonal classes more interactive in order to improve students success and reduce instruction costs. Some colleges, for example, redesigned their courses by reducing lecture time and increasing time for Web-based learning using online quizzes, tutorials, and practice problems (essentially implementing a blended learning model). After evaluating the newly designed courses, the center found that 25 of the 30 colleges showed significant improvement in student performance in class, and all cut costs by an average of 37 percent.

Cost savings are realized because some tasks become more efficient when technology is used. Quizzes and assignments can be administered and graded through automated computer programs, thus increasing feedback to students and freeing time for faculty and teaching assistants. At the same time, due to the increased number of quizzes and practice problems, students covered the material more thoroughly than before. Their grades rose, and they were more likely to pass the class.[6]

Another example of evaluation is demonstrated in the 2009 report by the U.S. Department of Education, which compiled and analyzed the findings from hundreds of research studies on the effectiveness of online or blended learning courses compared to face-to-face courses. Overall, the re-port found that students in online or blended learning courses fared better than students taking the same course in a traditional, face-to-face setting. However, the report cautions that the online courses in the studies tended to have increased learning time and more robust course materials. Those factors—not the fact that the course was online—may be the reason for better student performance. The report states that the "findings do not support simply putting an existing course online, but they do support redesigning instruction to incorporate additional learning opportunities online."[7]

In contrast to the Department of Education's study, 2011 research conducted by the Community College Research Center at Columbia University found negative results for online learning when considering course completion and graduation rates. The study found that students who took an online course were less likely to complete that course than students who took the course in a face-to-face setting. Students who took multiple online courses were less likely to remain in college or to graduate compared to other students. On a positive note, the study found that students in hybrid or blended courses were just as likely to complete the class as students in traditional courses. Researchers say reasons why students are less likely to succeed in online classes include having trouble with the technology, being in an unstructured course that requires strong time management skills, being isolated, and having few online student support services. Researcher-recommended strategies to improve student success in online courses include increasing student supports such as around-the-clock tutoring; providing better faculty training; and requiring students to take a test measuring their technological capabilities before allowing them to enroll. [8]

Models of Online Learning

Some colleges have already incorporated those online learning best practices into their process. Western Governors University (WGU), a national, online nonprofit university, operates at lower costs than average institutions. WGU offers bachelor's and master's degree programs that are competency-based rather than focused on seat time and credit hours. Students complete subject area assessments at their

own pace and can advance to new courses when they pass required tests. Even though the program is entirely online, students receive individualized and thorough attention from an assigned mentor. Because there are no set class times, students can begin a six-month term at the beginning of any month. The flexible program design attracts nontraditional students such as adults, military employees, and low-income and first-generation students.[9]

After graduating, students perform well on career certification exams and receive positive reviews from employers, 93 percent of whom rate WGU alumni as good or excellent employees. Robert Mendenhall, president of WGU, says "Policymakers must recognize there are new models of higher education that are more effective, more affordable, more flexible. They need to embrace these new models rather than consider them the enemy."

In 2010, Indiana partnered with Western Governors University to create WGU-Indiana, a state version of the college that is targeted to Indiana students. In 2011, WGU-Texas and WGU-Washington were established. The benefit to states is the low cost of expanding the capacity to enroll and graduate more adults students. Branding WGU a state school offers it more publicity and attracts more in-state students. Shortly after WGU-Indiana launched, enrollment rates tripled, and it continues to add 100 new students each month. The branch follows the WGU model of operating from tuition revenues, so states do not have to appropriate money for the college. Some administrative start-up costs are necessary to incorporate the WGU state college into the state higher education system. As an official state school, for example, WGU-Indiana now reports student data to the Indiana Commission for Higher Education.

Rio Salado Community College, like WGU, is an entirely online college. The public college, based in Tempe, Ariz., offers more than 600 online courses and 60 certificates and associate degrees to about 63,000 students from several states. Rio Salado has offered online learning for more than 15 years. In that time, it not only has refined its operations to be efficient and low-cost, but also has maintained quality and promoted student success. Rio Salado's costs are 27 percent lower than the average cost of the county's 10 community

colleges. Rio Salado uses high-tech data systems to monitor student engagement and performance in order to ensure that all students remain on track for course and program completion. Classes begin 48 weeks out of the year—almost every Monday—providing the ultimate schedule flexibility for students. As the largest online public community college in the country, Rio Salado can be a model to other states that want to expand low-cost, public online education.[10]

A new and different model of online learning is offered by a company called StraighterLine, which offers online, introductory college classes for $99 a month. The company's courses are evaluated and approved by the American Council on Education, and they use the same textbooks as the more expensive courses at two- or four-year campuses. Students are provided with 24/7 tutoring, video lessons, an advisor, online study groups and other resources to promote success. A key distinction of StraighterLine is that it is not a college—it offers only entry-level classes, so students must transfer the credits to an accredited college to obtain a degree. Students are guaranteed that course credits will transfer to one of the more than 20 partner colleges (that include WGU), and 80 percent of students have successfully transferred credits to other colleges.[11]

For those who are not concerned about transferring credits but instead want to gain new skills or learn for learning's sake, Peer2Peer University may be an intriguing option. It provides free, online courses where students learn from one another through discussions and tasks monitored by a "facilitator." There is no teacher or professor. As it says on its website, "P2PU is teaching and learning by peers for peers." Aimed at the lifelong learner, class topics run the gamut from parenting to news writing to computer programming. Students currently cannot earn academic credit for taking the classes, but Peer2Peer University is working to create certifications—especially for its Web developer program—that employers would value and use to assess a potential employee's ability.[12] A new program for K-12 teachers, launched in September 2011, provides free professional development on topics such as the Common Core Standards and differentiating instruction. Although Peer2Peer University is a new and untested model, it possibly could be a way to enhance

future teacher professional development. It represents just one example of unique, new online learning providers—many similar companies are entering the market.[13]

All these different models of online higher education broaden the possibilities for learning. The smaller, less expensive models will provide competition for the larger, more expensive for-profit colleges that are beginning to dominate the online market. Clearly, a major role exists for public universities in online education—they already enroll a significant number of students online, and models such as Western Governors University and Rio Salado Community College serve as a few examples of how online learning can augment a state's higher education offerings to provide more education to more students.

State and Federal Regulations

One hurdle for the burgeoning world of online education is current state and federal regulations. The U.S. Department of Education released new higher education regulations in 2010, one of which greatly affects online learning. The regulation, referred to as the "state authorization rule," requires that colleges must have legal approval to operate in every state in which it has students. This affects all colleges—public and private, nonprofit and for-profit—that have online programs that enroll students from several states. For example, if a college has a physical campus in Oklahoma, but also enrolls students through its online program from Kansas and Texas, it must have authorization from all three states. If colleges are not in compliance with the regulation, they risk losing federal financial aid.

The rule was scheduled to go into effect July 1, 2011, but a U.S. District Court struck down the provision because the U.S. Department of Education did not give colleges sufficient time to review and comment on the rule.[14] The court decision has already been appealed by the Department of Education, however. Further, even if the rule never goes into effect at the federal level, states currently have laws that require authorization, and they have the right to enforce them. Now that state authorization has garnered national headlines, many states are suddenly aware that online colleges are operating in their state without proper approval.

The process for obtaining approval to operate varies greatly state by state. In some states, the process is fairly simple and low-cost; in others, it is burdensome and costly. This is causing some colleges to reassess where they will offer online programs. Colleges may withdraw their program from states where the approval process is burdensome and costly. One survey found that 59 percent of institutions probably will not accept students from some states, frequently citing Massachusetts, Minnesota and Arkansas.[15] Massachusetts, at the high end, charges $10,000 per application plus $2,000 for each degree program, as well as a $4,000 annual fee for the first five years. Minnesota, the next costliest state, charges $2,000 to $3,000 per application and up to $1,000 for each degree program, as well as a $1,200 annual renewal fee. Minnesota also requires copies of all marketing materials, all financial statements and the course catalog. On the low end, Alaska and Wyoming charge $100 per application.[16]

If colleges pull their programs from states where it is difficult to obtain authorization, it could affect student access. On average, U.S. colleges enroll students in 34 states through online programs. The survey stated that 111 institutions predict that about 19,000 students will not be able to enroll in their programs because of the regulation's effects.

Only 30 percent of institutions have yet to apply for approval in any state. Many are waiting to see if the federal regulation will be upheld. Either way, colleges remain accountable to state laws, some of which have significant penalties for noncompliance. The state-by-state variations in obtaining approval make for a cumbersome and costly process to keep track of for online education providers. To help in this process, the National Association of State Higher Education Executive Officers (SHEEO) and the National Center for Higher Education Management Systems (NCHEMS) maintain an up-to-date list of state laws, regulations and procedures for seeking authorization.[17] In addition, a group of higher education leaders are working to establish reciprocal agreements among states to ease the process of authorization and standardize the requirements.[18] This is an area for legislator involvement, because reciprocal agreements that alter state laws will have to be enacted through legislation.

Conclusion

Online learning is here to stay. More models will emerge to continue to push the limits of how higher education can be delivered. Many students who take online classes are non-traditional—they are older, they work full-time, and they have families. Their busy lives prevent them from attending traditional classes to earn the degrees they need to advance in their careers. Online learning is their solution, their way to obtain a degree that can better their career possibilities. Implementing best practices can ensure that students who take online courses receive the same quality education as students in a classroom.

Legislators are key to designing the environment in which online learning will operate. They can help establish, fund and grow online programs within their public higher education systems. Legislators also will be involved in decisions regarding state authorization regulations in the coming months and years. While state regulations play the important role of monitoring program legitimacy and quality to protect consumers, they also should be flexible enough to allow for online innovation and growth. The more legislators can collaborate with online education providers to develop balanced and effective policies, the better the higher education landscape will be. The demand for higher education is growing, the pressure to improve completion rates is mounting, postsecondary budgets are being slashed, and options for adult students are not prolific. Quality online education can help legislators and states solve these problems.

Resources

NCSL, *State Legislatures*, Online U, May 2011
Washington Monthly, The College For-Profits Should Fear, Sept. 2011
New York Times, Online Enterprises Gain Foothold as Path to a College Degree, Aug. 2011
The Chronicle of Higher Education, Ambitious Provider of Online Courses Loses Fans Among Colleges, Sept. 2011
HCM Strategists, Lower Cost Options: Public Online Learning in Arizona, May 2011

Notes

1. Elaine Allen and Jeff Seaman, *Class Differences: Online Education in the United States, 2010* (Babson Park, Mass.: Babson Survey Research Group, 2010), 5.
2. Allen and Seaman, *Class Differences*, 14.
3. Tamar Lewin, "Online Enterprises Gain Foothold as Path to a College Degree," *New York Times*, Aug. 25, 2011.
4. Marc Parry, Think You'll Make Big Bucks in Online Ed? Not So Fast, Experts Say," *Chronicle of Higher Education*, March 30, 2011.
5. Kim Parker, Amanda Lenhart and Kathleen Moore, *The Digital Revolution and Higher Education* (Washington D.C.: Pew Research Center 2011).
6. Carol A. Twigg, *Increasing Success for Underserved Students: Redesigning Introductory Courses* (Saratoga Springs, N.Y.: The National Center for Academic Transformation, 2005).
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10. HCM Strategists, Lower Cost Options: Public Online Learning in Arizona, May 2011.
11. Sara Lipka, "Ambitious Provider of Online Courses Loses Fans Among Colleges," *Chronicle of Higher Education*, Sept. 18, 2011; Kevin Carey, "College for $99 a Month," *Washington Monthly* (September/October 2009). For more information on StraighterLine see its website: http://www.straighterline.com.
12. Peer 2 Peer University's School of Webcraft is running a pilot project on "badges" in collaboration with Mozilla. Learn more at openbadges.org.
13. For more information on Peer2Peer University, see its website: p2pu.org.
14. Kelly Field, "Judge Sides With For-Profit Colleges in Challenge to 'State Authorization' Rule," *Chronicle of Higher Education* (July 12, 2011).
15. Russell Poulin and Jim Fong, *What Are Colleges Doing (or Not Doing) about State Authorization?* (Boulder: University Professional and Continuing Education Association and WICHE Cooperative for Educational Technologies, 2011).
16. Kelly Field, "As Costs of New Rule Are Felt, Colleges Rethink Online Course Offerings in Other States," *Chronicle of Higher Education* (July 1, 2011).
17. For more information, see SHEEO State Authorization Resources: http://www.sheeo.org/stateauth/stateauth-home.htm.
18. For more information, see Presidents' Forum Multi-State Reciprocity Project: http://presidentsforum.excelsior.edu/projects/multi-state-reciprocity.html.