

CURRICULUM
Marketplace
Mashup 16

CAMPUS
Beyond the Physical
Boundaries 36

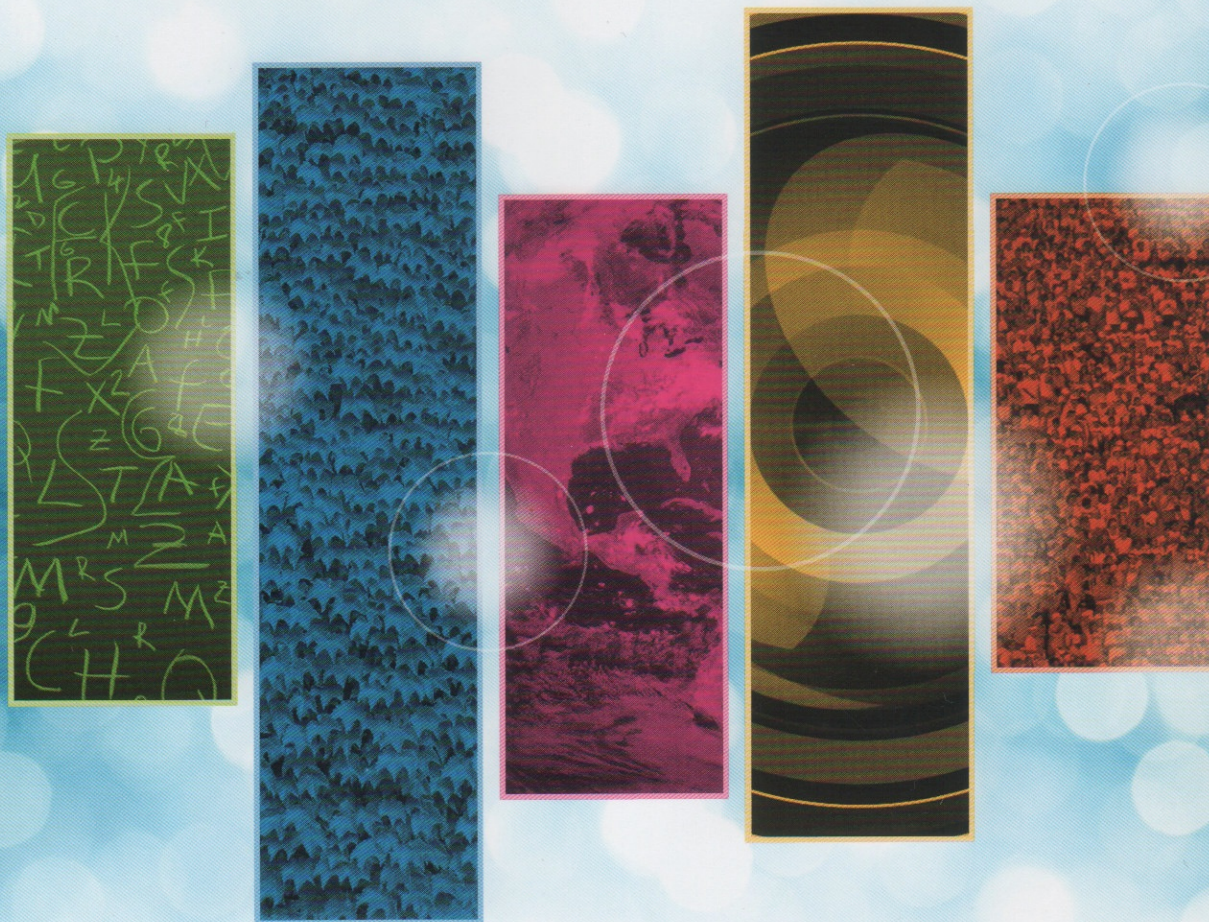
WORLD VIEW
Wooing Foreign
Students 56

PERCEPTION
Making the Case
With the Public 76

DEMOGRAPHICS
Serving a Transformed
Population 94

BUSINESS OFFICER

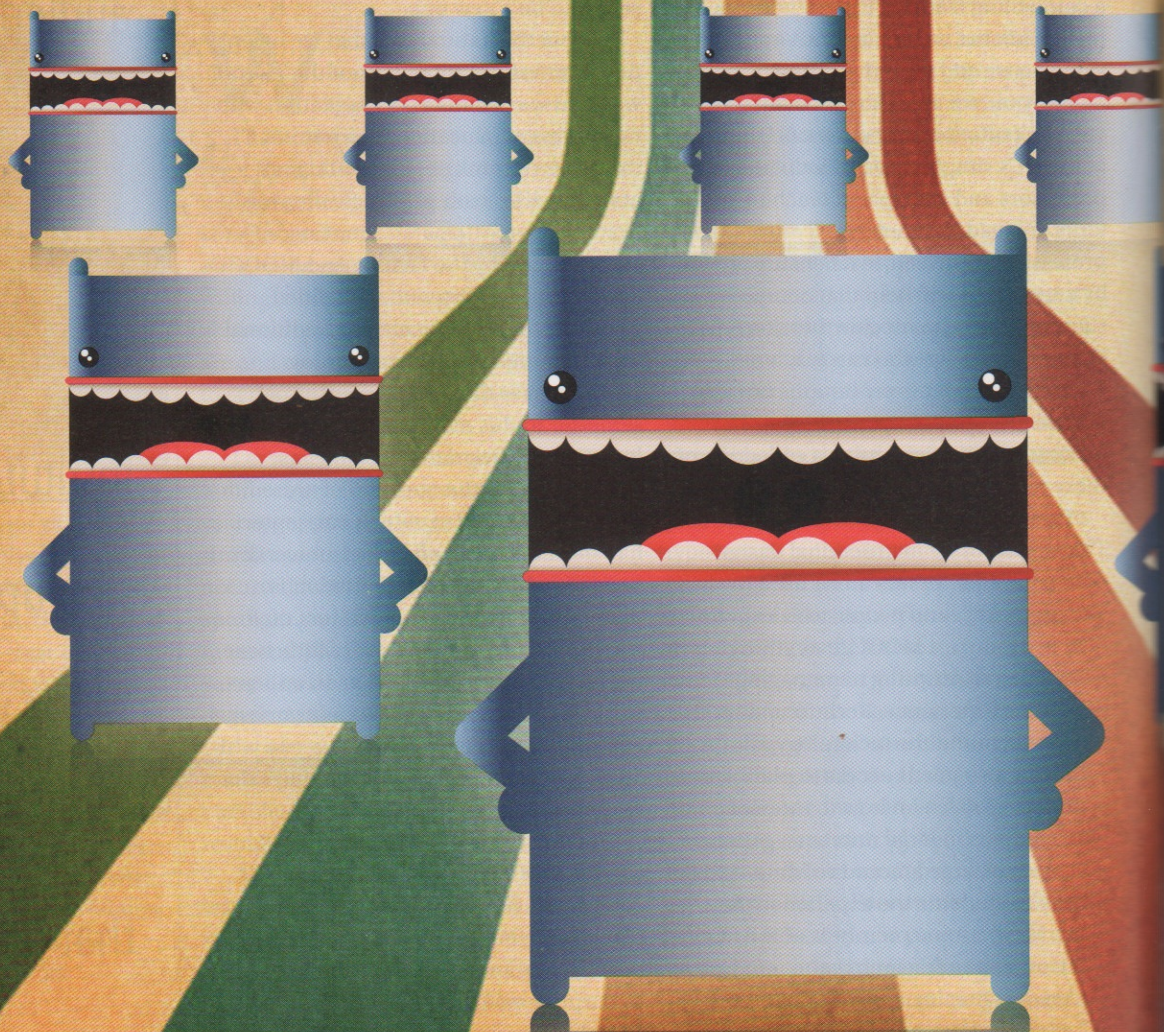
NACUBO
JULY-AUGUST
2013



What Shapes the Future?

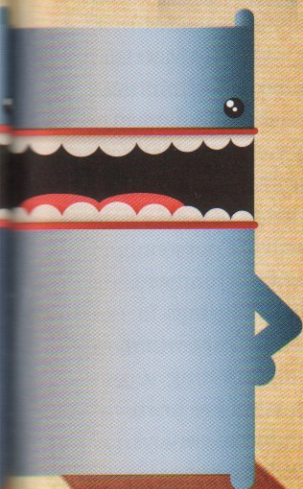
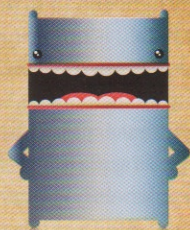
Channel these **five forces**
to drive innovation at your institution.

Mind the MOO





MOOCs



As institutions increasingly embrace massive open online courses, business officers must make sense of how this innovation can affect the bottom line.

By Nancy Mann Jackson

Just a couple of years ago, massive open online courses—MOOCs—burst upon the educational scene, seemingly out of nowhere, to capture the attention of campus administrators, media outlets, and students of all ages.

In relatively short order, more than 60 leading universities signed contracts with Coursera, the largest provider of MOOCs, and a dozen partnered with edX, a leading competitor. Numerous other colleges and universities now offer MOOCs or have joined partnerships to take advantage of them.

While schools far and wide have jumped on the MOOC bandwagon in the name of academic experimentation and democratization, there is little evidence yet that the trend is making a positive difference in the business office. As MOOCs become a widespread component of higher education, college and university business officers must make sense of how the courses, typically offered for free, could affect the bottom line.

“There is a fear that if a university does not join the MOOC movement now, it will be left behind,” says Ray Schroeder, associate vice chancellor for online learning and director of the Center for Online Learning, Research, and Service at the University of Illinois–Springfield. “There is some anticipation that a lucrative business model will evolve. Anytime you have 30,000 to 50,000 or more customers, there surely is money to be made.”

As colleges and universities—and the big-name MOOC providers—seek the business model that will pay off for MOOCs, much experimentation and lesson-learning is happening along the way.

Making a MOOC

Before a MOOC can be offered to the public, a university must create it—and that can be a costly process. The average cost for developing a MOOC ranges from \$50,000 to \$100,000, Schroeder says. Each university has a different approach to funding. Some are simply absorbing the costs associated with MOOCs, offering stipends to faculty who develop MOOCs, or relieving instructors of some other obligations to free up their time for MOOC development. Others are seeking support from foundations and donors, Schroeder says; Harvard University is asking alumni to volunteer their time to help develop MOOCs.

Some institutions have been able to cut development costs by utilizing existing materials. For instance, the University of Washington (UW) was one of the first 16 universities to join Coursera, but it has been offering free online courses since 2002. Rather than starting from scratch, UW reformatted some of its existing online courses to meet Coursera's criteria, bringing the cost per MOOC down to about \$25,000, says David Szatmary, vice provost for UW Educational Outreach.

Others have taken a less-expensive, do-it-yourself approach. The College of St. Scholastica (CSS), based in Duluth, Minnesota, realized it had a "MOOCster" on campus when popular anatomy professor Gerald Cizadlo posted his audio lectures on iTunes for student access, and the files became consistently ranked in the top 10 iTunes educational offerings, says Patrick Flattery, vice president of finance. "We decided to create our own low-budget MOOC with our own superstar professor," he says. "Since the lectures were already out there, the work we did to MOOC-ify

it took about a month of labor, maybe about \$10,000."

While Flattery admits the St. Scholastica MOOC "isn't something you would expect from Coursera or edX," it works. The first offering drew 250 students by word of mouth, and the current class has 2,500 students. The class is free, but students who want to earn two credits can pay \$250 to take a competency exam at the conclusion of the course.

Options are growing for institutions like St. Scholastica that want to create their own MOOCs. "Coursera and edX are composed mostly of institutions among the top 100 R1 [research] universities in the United States and a few from abroad," Schroeder says. "The thousands of other colleges and universities have been left to their own devices to enter into the MOOC movement."

But two initiatives have broadened opportunities for smaller institutions, Schroeder adds. CourseSites is the free, open online platform offered by Blackboard, a popular learning management system, that enables universities to make existing courses available as MOOCs. A second alternative platform, Canvas, is available through Instructure, another learning system. Canvas now has 33 MOOCs available, Schroeder says.

Benefits Accrue

A clear revenue stream may not yet be evident with MOOCs, but that doesn't

mean institutions aren't realizing benefits. Public relations and goodwill are some of the most powerful results so far. For example, only a small percentage of St. Scholastica MOOC students have opted to pay for the credit option, but thousands of people are now familiar with the college and its offerings.

"Having this course out there in front of 2,500 people who wouldn't normally think of CSS has created more interest in our programs," Flattery says. "While interest is hard to measure, we have had a spike in inquiries, particularly in health information sciences. [The MOOC] is not bringing in a lot of revenue yet, but we recognize the value that it brings to the college."

MOOCs, especially those offered by Coursera and other leading platforms, have been widely popular among international students. This raises awareness in the global arena of the universities providing the MOOCs, says John Meerts, vice president for finance and administration at Wesleyan University, Middletown, Connecticut, which launched six MOOCs with Coursera this year. "And if Wesleyan expands its online offerings beyond Coursera, the great reach of Coursera will be a great advertisement for these Wesleyan online offerings," he says.

At Houston's Rice University, where a Python computer programming MOOC offered via Coursera has been highly ranked in a number of surveys, "reputational" rewards have been substantial, says Kathy Collins, vice president for finance at Rice. Student surveys have yielded many positive comments, including one course participant who said "he wished he'd been able to learn from professors like that when he was in college, and he will definitely tell his daughter, 17 years from now, to apply to Rice," Collins says. "It was another smart person who'd never heard of Rice, and through the MOOC, he didn't just learn a new skill but came to know our institution in a new way—a way that our alums know Rice."

READ AN ONLINE EXTRA

Why might your institution consider developing MOOCs targeted to high school students? Find out in *Business Officer Plus* at www.nacubo.org.

Flashback ... 12 Years Ago

In an October 2001 *Business Officer* article about whether to offer online courses ...

"Web-based courses have existed for less than a decade. As a result, the business officers at many institutions of higher education may not fully understand the costs—whether tangible or perceived—of online education. ... Decision makers within higher education institutions often begin offering online courses without realizing the extent of their start-up costs as well as ongoing expenses."

BRIAN M. MORGAN, assistant professor of integrated science and technology, Marshall University, Huntington, West Virginia

Creating goodwill and positive PR has been a primary goal for the University of Miami's Global Academy (UMGA), which launched its first MOOC last November. The three-week course—the first MOOC created specifically for high school students—focused on preparing students to take the SAT subject matter test in biology. After initially planning to cap the MOOC at 200 participants, UMGA ended up with almost 1,000.

"When we set out to deliver our live MOOC in a STEM [science, technology, engineering, and mathematics] subject area, we purposely made it available free of charge, despite an institutional investment of human and technological resources. We felt it was a worthwhile investment for the good of students across the country," says Craig Wilson, associate dean of the University of Miami's division of continuing and international education. "We continued on the STEM path for high schoolers with a second live MOOC that helped prepare them for the Advanced Placement calculus exam. The University of Miami wants to give back to the community and to the body of knowledge."

Models With Potential

But at about \$50,000 a pop, MOOCs are expensive public relations efforts. And most institutions involved in MOOCs expect to benefit monetarily as well. How they will

get there is the question; different MOOC platforms have different models for making money. Udacity, for instance, is pursuing a model that connects the top 5 percent of its students with employers, for a standard personnel recruiting fee, Schroeder says. Among Coursera's monetization strategies is the plan to charge for certification exams upon completion of a MOOC.

Additionally, "there is a significant potential to sell advertising space within the classroom, such as Google does on the right column of its search engine," Schroeder says. "Other business models include disaggregating content and selling it to community colleges and others as content to include in their general education classes."

At Rice, leaders are content to wait until MOOC partners Coursera and edX begin making money. "Both Coursera and edX have revenue formulas for their partners," Collins says. "We expect that we will charge for courses, or for credit, at some point."

THE COST OF CREATION

- The average cost for developing a MOOC from scratch ranges from \$50,000 to \$100,000.
- Reformatting existing material for a MOOC might cost \$10,000 to \$25,000.

But some institutions are taking matters into their own hands. "After speaking with Coursera, we realized that they would take time to monetize the classes," says UW's David Szatmary. "We figured we'd have to develop [monetization options] on our own as well." For the past two quarters, UW has offered both a free version and an enhanced version of its MOOC—with additional content and instructor interaction—for pay. Only a small number of students have transitioned to the paid course thus far, so UW is considering additional options for monetizing its MOOCs.

In an effort to reduce bottlenecks in courses that are often overenrolled, frequently repeated, and required for graduation, California's San Jose State University (SJSU) has latched onto a revenue-producing use for MOOCs. Partnering with Udacity, SJSU developed San Jose State Plus, a group of MOOCs available for credit to veterans, current SJSU students, or students in high school or community college. San Jose State Plus makes online, accessible, affordable, engaging, and highly effective courses created by SJSU faculty available at a very affordable price, says Catheryn Cheal, associate vice president and senior academic technology officer at SJSU.

At \$150 per course, Plus allows students to take entry-level math, college algebra, or elementary statistics at a lower price and without actually being on campus. While the idea was to give another option to students who must retake the courses, or couldn't get into the on-campus versions, the majority of students taking these MOOCs are not SJSU students. "So [much of] that revenue is all new," Cheal says.

Whatever the best revenue model turns out to be, some expect it will yield staggering results. With 50,000 registered students in a MOOC, "if one is able to charge or generate advertising revenue of only \$10 per student at the start of the course, that could be a cool half-million dollars," Schroeder says. "If one charges \$100 or \$200 for a certifying exam of the



10 percent who complete the course, that is another half-million to a million—for one course offering.”

Making a Difference in Higher Ed

In addition to the institutional benefits that MOOCs bring to their individual colleges and universities, these open courses are also leading to important changes in the traditional model of higher education. First, this new method of online education has instructors rethinking their pedagogical approaches.

Online courses have been around for years, but a MOOC is significantly different from a standard online course. “With tens of thousands of students, it is not possible for one instructor to engage students as one might in a class of 25 or 30,” Schroeder says. “Machine grading and peer grading are common in MOOCs. Many of the early MOOCs, as a result, are in quantitative areas rather than the humanities.”

The search for ways to engage classes of thousands is bound to lead to new realizations and changes in instruction, both online and in person. “Experimenting with a completely different kind of course online is prompting discussion across campus about pedagogy, both in the classroom and online,” says Wesleyan’s John Meerts. “We don’t know what we will have learned two or five years from now, but we are pretty certain some of our thoughts and practices will have changed in unexpected ways because of the MOOC experiment.”

Rice University, for example, is approaching MOOCs as a learning lab for teaching and learning in general. “We see MOOCs as a way to innovate our classroom experience,” says Caroline Levander, vice provost for interdisciplinary initiatives at Rice. “The professors developing these courses are utilizing the skills and content in their on-campus courses as well, and there are tremendous benefits to our students. Because more content is available

to students outside the classroom, they come to class more prepared, enabling the in-class experience to be more innovative; it gets away from data download.”

Scott Rixner, coinstructor of Rice’s Python programming MOOC, says the MOOC experience convinced him never to lecture in a classroom again. By watching course videos before class, students in the MOOC were prepared when class began, Rixner says. “A lot more learning went on the classroom than if I had been lecturing,” he says. “That’s why I am committed to teaching this way from now on, whether I’m teaching for 80,000 people online or 20 people in a Rice classroom.”

MOOCs have paved the way for such “flipping” of the classroom experience at other universities as well. At Wesleyan, several professors developing the open courses “plan to use recorded lectures from their MOOC in their undergraduate courses at Wesleyan,” Meerts says. “Lectures can be viewed as part of the homework, leaving more time for interactive activities and discussion during class meetings.”

Giving Credit Where Due

While MOOCs aim to offer high-quality education to everyone, they also enable instructors at all levels of education to take advantage of rich content. EdX recently partnered with two community colleges to offer “hybrid” courses, which include instruction from MIT professors via a MOOC, accompanied by in-classroom instruction from community college professors.

The opportunity—a special project funded by the Bill and Melinda Gates Foundation—allowed Boston’s Bunker Hill Community College (BHCC) to offer a class that was not part of its usual course offerings, enabling students to learn Python programming from MIT professors, along with classroom facilitation by their own instructors, says Jesse Thompson, BHCC’s executive vice president and CFO. And because it is a hybrid course, unlike most MOOCs, the students receive BHCC credit for taking it. ➤

Who’s Who in MOOC Development

Four major players have emerged in the world of developing MOOCs, and each one offers partnering universities a slightly different experience:

■ **Coursera.** A Silicon Valley company with 3.5 million registered users, Coursera debuted in 2012 and currently contracts with 70 universities and other educational entities. The Coursera platform is highly structured, requiring video lectures or lessons interspersed with exams or quizzes. This platform is largely restricted to the largest 100 research universities in the United States and a few overseas universities.

■ **Udacity.** Also based in Silicon Valley, Udacity was started by Stanford University professors in 2012. The company has enrolled more than 753,000 students; it offers courses primarily in the areas of computer science, mathematics, programming, and entrepreneurship.

■ **edX.** Unlike Coursera and Udacity, edX is a nonprofit organization launched by Harvard University and the Massachusetts Institute of Technology. Based in Cambridge, Massachusetts, the organization has 675,000 registered users and partnerships with 12 universities. EdX is known for its open access policies, including a research component that encourages all partners to share their research and development with one another for the greater good.

■ **Udemy.** Founded in 2010 and based in San Francisco, Udemy is less focused on partnering with top-tier universities. Its format allows more creativity; using Udemy’s content platform, instructors can upload video, PowerPoint presentations, PDFs, audio, zip files, and live classes to create courses.

A QUESTION OF ACCREDITATION

- The American Council on Education recently announced the first five MOOCs recommended for credit as part of the ACE Credit program.
- Most major universities are not accepting MOOCs for credit.

At SJSU, where general education courses are available for credit as MOOCs, the idea is catching on, and course grades and retention in the statistics MOOC are in line with the historical data for the same course on campus, Cheal says.

The shift toward awarding credit for MOOCs is likely to continue. The American Council on Education (ACE) recently announced the first five MOOCs that are recommended for credit as part of the ACE Credit program, which many universities use to determine whether nontraditional classes should be granted transfer credit, says Ray Schroeder, who serves on the research committee for the ACE project. While most major universities are not accepting MOOCs for credit, there is much speculation about what that potentially could mean for higher education. For instance, if enough MOOCs were offered for credit, students might someday string together enough MOOCs to earn a degree, if not for free, then dangerously close.

In addition to prompting colleges to rethink the ways they teach students and award credits, MOOCs also are leading to more interaction with private partners. For instance, a major employer recently asked the University of Washington to create a MOOC for it, Szatmary says. The private company will fund the MOOC's development and offer the course on its own proprietary platform. It will also allow the university to offer the MOOC via Coursera.

Such agreements are similar to one of Coursera's monetization strategies: licensing its entire platform on a proprietary

basis to a private company, to allow companies to offer the MOOCs of their choice on their private intranets. Similarly, one of Udacity's planned strategies is to match successful MOOC students with employers who pay a standard recruiting fee.

Some for-profit universities are developing MOOCs with private industry in mind. For instance, Strayer University's Jack Welch Management Institute developed the Welch Way leadership and management courses, a group of training courses on the Udemy platform aimed at working professionals.

"The Welch Way courses hosted on Udemy do not count as academic credit toward a university degree or certificate; however, depending on employer, they may be recognized as part of a professional development effort," says Dean Sippel, senior vice president and general manager of the Jack Welch Management Institute at Strayer University, headquartered in Herndon, Virginia. "The Jack Welch Management Institute does offer other courses that are part of a degree or certificate program, but our Welch Way offerings are intended to address a different need. They are designed entirely with management practice in mind and are meant to provide participants with an immediately actionable playbook."

As for most Udemy courses, participants taking the Welch Way MOOCs pay a standard fee, and Strayer retains a percentage of the fee, Sippel says. While Strayer is not sharing the percentage the university retains, other Udemy courses pay course developers up to 70 percent of the registration fee.

Forecast for the Future

MOOCs remain a colossal experiment, and many of the universities approached for this story were hesitant to predict any results from their MOOC forays and pilot projects. However, there is general agreement that MOOCs have the potential to drastically transform the higher education status quo.

The possibilities are numerous. "No one is flatly denying that Coursera might create a low-cost MOOC university, funded through certifications for each course priced at \$100 to \$250," Schroeder says. "No one is denying that Google may buy Udacity, which was founded by the GoogleX director Sebastian Thrun, and through which Google has offered online classes. Imagine the potential scale and reach of a Google University funded through the Google advertising model.

"Meantime, iTunes U continues to grow, as does Udemy," he continues. "These have the potential to reach MOOC scale. It is possible that we will see very large, new entries into higher education composed of MOOC providers."

While individual universities can develop their own MOOCs, and many have stand-alone initiatives "do not provide the kind of coordinated effort that Coursera can mount with 336 courses and contracts signed by the participating universities that give Coursera wide latitude in their use," Schroeder says. "While nonaffiliated universities may provide some MOOCs, the structure does not yet exist in which they could easily compete with something like a Coursera offering a sub-\$10,000 degree comprising courses provided by the top-rated universities in the country. So, challenges abound."

These ideas are just possibilities, but Schroeder says MOOCs can be sustained through advertising and other revenue strategies, such as the Udacity employment service model. As yet, however, no MOOC provider has found a way to profit substantially; several rely on venture capital to fund their operations. And, traditional colleges and universities are finding ways to offer value that MOOCs can't provide. "Universities are well-served by experimenting with the MOOC delivery model and building upon other cost-effective solutions, such as degree completion for associate degree holders," Schroeder says.

An increased focus on higher-level programming may be an important

STRETCHING CAMPUS BOUNDARIES



approach. For instance, the College of St. Scholastica has already begun seeing fewer first-time freshmen and more transfers, as more students obtain general education credits elsewhere, and MOOCs are likely to further this trend. “Parents are being counseled to take a look at alternative ways to pay for students’ college education, and they are going to insist that kids look at MOOCs and other opportunities,” Patrick Flattery says. “When they get a couple of years of general education under their belts, then they’ll transfer to colleges that offer their major. As a result, we’re looking at ways to adjust our higher-level programs to meet that demand.”

While the possibility of competing with a free degree offered by an organization such as Udacity—in collaboration with Google and supported by advertising—may

seem formidable, forward-thinking institutions are looking for ways to participate in the trend rather than running from it. “The MOOC is still shaping itself as to what its potential will be,” says the University of Miami’s Craig Wilson. In the midst of that shaping, several successful applications of the modality have already been developed, Wilson says, such as his university’s test-prep MOOCs for high school students.

“MOOCs will give universities opportunities to communicate with students who are now showing an interest and might not have considered the university in the past,” Wilson says. “While a university is offering subject matter students are seeking, they learn more about your university in the process. It’s all about providing more resources and more learning experiences to our students.”

Rather than competing with traditional on-campus instruction, MOOCs can be used to complement it, insist many university officials. “While Wesleyan will always be a residential college, online teaching methods are not incompatible with the residential experience,” Meerts says. “While MOOCs may not bring in revenue today, they should generate some revenue in the long run. But, most important, we are in the business of teaching and learning, and if our participation in Coursera furthers that goal, and does so in a responsible and affordable way, then it fits in our business model.”

NANCY MANN JACKSON, Huntsville, Alabama, covers higher education business issues for *Business Officer*.
nancy@nancyjackson.com
