Notes of the Discussion

Present: Dave Broden, Janis Clay (phone), David Clinefelter, Pat Davies, Paul Gilje (coordinator), Randy Johnson, Sallie Kemper, Dan Loritz (vice chair), Dana Schroeder

Summary of Discussion: Online courses, whether Massive Open Online Courses (MOOCs) or classes at colleges and universities taught at least partly online, are poised to change the face of higher education, according to David Clinefelter. A number of colleges are offering free, non-credit online courses to anyone around the world (MOOCs), expanding the scope of learning offered by some of their best professors. It's a growing trend, even though it's not always clear how the colleges are benefitting by offering the MOOCs. Some colleges partner with private nonprofit and for-profit companies to offer the courses. In addition, Clinefelter believes colleges and large university systems could improve the content and quality of certain standard courses and get more productivity from faculty by offering those courses at least partly online. Faculty pay could be differentiated between those who design courses and materials and offer online lectures and those who supplement the online material by working directly with students.

Background

David Clinefelter joined Learning House in October 2011 as chief academic officer. His responsibilities involve improving the processes and services of the Learning House curriculum and professional development departments. The Learning House, Inc., is an online educational services provider that helps colleges and universities develop and grow high-quality online degree programs and courses. Colleges and universities can contract with Learning House for a range of services: from IT staff who host the Learning Management System to curriculum designers, who work with faculty to convert a course for online delivery, to faculty training people to marketing experts and enrollment management specialists. The company partners with over 100 colleges and universities, including Hamline University and Concordia University, both in St. Paul.

Clinefelter’s career spans all levels of education, from K-12 to higher education. He was superintendent for Lamoni Community School in Iowa and principal of Jonathan Alder Local Schools in Plain City, Ohio. At the postsecondary level, he began as professor at the University of Nebraska-Omaha and lecturer at Ohio State University. While serving as the vice president for academic affairs...
at Graceland University in Iowa. He was an ACE Fellow for one year, hosted at Northwest Missouri State University. He then became President of Graceland for six years.

He became provost at Kaplan University in 2002. During his eight years there, the university grew from 1,500 students to more than 68,000, with 4,000 faculty members. He became chief academic officer at Walden University in 2010. He holds a Ph.D. in curriculum and teacher education and an M.A. in curriculum and instruction, both from Ohio State University.

Discussion

Massive Open Online Courses (MOOCs) are a growing trend in education. A new trend in postsecondary education, according to David Clinefelter, is the growing number of Massive Open Online Courses (MOOCs) offered today by colleges and universities and private companies. MOOCs are "massive" (they have large enrollments), "open" (they are free to anyone); "online" (they are 100 percent internet-based) courses. Currently, students don't pay tuition for the courses, nor do they get credit for taking them.

The first MOOC was created by Stanford Professor Sebastian Thrun and his teaching partner in 2011. He and his partner were teaching a course on artificial intelligence as a regular Stanford course with students in class on campus. Thrun had the idea to open up the course for people who might want to sit in and take it online for free. He thought he would get several hundred people from around the country. Instead, 160,000 people from 190 countries signed up for the course. Stanford decided the online, non-tuition-paying students could not receive credit.

Thrun had a couple of months to prepare the course. He and his partner designed the course and prepared video lectures or PowerPoint presentations with a voiceover. At the appropriate time in the course, the students could watch those online and do readings. Students could submit questions to a message board, and Thrun and his teaching partner would try to answer questions that were frequently asked.

Class size in MOOCs doesn't affect professors' workload. The professors could offer an exam or quiz on a digital learning management system (LMS). The students could take the exam and the LMS would grade them and give the students the results. "So grading the exam didn't take any work on the part of the faculty member," Clinefelter said. "It didn't matter to them if there were 2,000 or 100,000 people in the course. The same work load was there for them, basically."

There was no advertising for the course. Thrun just put a notice on the Web and people found it. "It went viral," Clinefelter said. "People in the computer science industry started sharing this with their friends and colleagues."

Thrun was teaching his regular on-campus class, in addition to the online students. Partway through the course, he told those students they could finish the class online. Most did and stopped coming to class. Many of the 160,000 people who originally signed up for the course did a few lessons online and then dropped out. However, about 10,000 people finished the course and did all the required work. "That's a massive amount of people," Clinefelter commented.

Many non-Stanford, online students did better than the top Stanford students. At the end, Thrun graded everybody and ranked the scores. The top Stanford student was about 411th.
In 2011, an inspired Thrun started Udacity, a private educational organization. "Thrun quit his day job and raised about $20 million of venture capital startup funding," Clinefelter said. "He wants to do something good for the world." Udacity offers 14 MOOCs currently, with 20,000 to 30,000 students in each of them. Thrun is recruiting faculty from around the country to offer MOOCs through the organization.

Professors can experiment with different teaching techniques and different materials in the online classes to see what's most helpful to students. Students grade their peers on homework projects or papers, using a rubric. He said research shows peer grading is very close to what the professor would do.

Thrun's faculty partner at Stanford started his own for-profit company, called Coursera. He also got some startup funding. Coursera has gone to various universities and asked if they'd like to offer some of their courses as MOOCs. Today they have about 30 top-tier universities around the country as part of their network.

Each school in the Coursera network has at least three courses they’re offering as MOOCs. The professors volunteer their time and record video lectures of their classes. They build quizzes and tests around the course and they teach it. It's not a lot of work for the professors. Most of the quizzes and tests are objective and self-scoring. The professors do spend time on the discussion forum, or the message board, where they'll respond to some student questions and comments. They don't respond to every question and encourage students to respond to each other. "It's all no cost, no credit," Clinefelter said.

Harvard and MIT have formed edX, another MOOC organization. About the same time, Harvard and MIT partnered and created their own MOOC organization called edX. Harvard and MIT each contributed $30 million to the venture, which is a nonprofit. Now the University of Texas system and the University of California-Berkley have joined them. "They're serious about it," Clinefelter said. "Nobody knows what they get out of it."

People are learning a lot in the MOOCs, he said. "Harvard and MIT and the other schools are really wanting to do something good for the world. Part of their mission is to educate people. It's not necessarily about money. They see this as an opportunity to do something profoundly significant to help educate people across the world. Their mission is not profit."

MOOC courses attract mostly adults. But in one computer programming class, he said, a nine year-old girl in India ranked first in the class. "It's skewed to the adult learners. Most of these students are outside the U.S. It's people who really want to learn and don't have access. A place like MIT is very attractive to them. They want to see if they can do an MIT class." MIT will give a certificate of completion, but not credit, for people completing their MOOCs.

Offering MOOCs has caused controversy among faculty members. Clinefelter said for the professors doing the online courses, "it's a big ego boost." Other professors are feeling very threatened. Some schools think it's a good idea to offer the courses, but some faculty react with skepticism to the idea. There's a debate as to whether the online courses are real and good education and whether the school can make money from them. He said, though, that the MOOCs have changed the discussion from, "Should we do this?" to "Are we going to get left behind?"
Some colleges want to give credit for online courses and then charge lower tuition for online students. Clinefelter noted that the University of Texas system has joined edX and has a goal of offering a $10,000 bachelor's degree. "They want to figure out a way to give credit for these courses, but to make it cheap," he said.

He reported that Antioch University, with campuses in Ohio and Los Angeles, just signed a deal with Coursera, under which Antioch will offer credit for selected Coursera courses. The students can enroll in Antioch, take the Coursera course and get Antioch credit, with an Antioch professor guiding and grading them. The students pay tuition to Antioch and a portion goes back to Coursera. The school can charge a lower tuition rate, because a professor working with the students doesn't need to be paid the full rate for the course, since it's largely being taught by a well-known professor from another university, who also develops the course materials.

Similarly, Learning House is planning to approach Coursera about what it would charge to access courses for a group of 10 to 15 traditional colleges or universities that would like to give credit for Coursera courses. Clinefelter said the Learning House would be the middleman linking Coursera and the schools. He thinks many students would want credit for the online courses and want to earn a degree from a college like Hamline.

It's unclear what benefits universities that offer MOOCs are gaining. "That's the question everybody's asking," Clinefelter responded to a questioner. "Universities are saying, 'We've got to be part of the club. We can't let them get ahead of us.' They don't know why they're doing it. It's getting a lot of attention. They're all jumping on the bandwagon, because they don't want to be left behind. They don't really know."

"This is kind of like a solution looking for a problem," he continued. "The problem is that people want access to a quality education and it's hard to get that. They've found a way for people to get access to some of the best professors in the world for free."

MOOCs are not without problems. Clinefelter asked, "Can these people make money? Can students actually turn this into a degree and get credit for it? What's the benefit to the student?"

"I think these folks might be producing some really good courses and some really good learning materials," he said. "What's missing from the MOOCs is the personal relationship and Q and A with the professor." Some students don't need or want the professor; they'd prefer to study on their own. For students who need more help and more feedback, there is a role for a personal relationship with the professor, where he or she could ask the right question or push a student who needs it.

In Thrun's artificial intelligence course, students formed study groups around the world. "There was a lot of interaction among students, but not as much with the faculty member, which is one of my concerns about these things," he noted.

Thrun said in a recent presentation that MOOCs could be used as a job placement service. He sent resumes of the best students in his online artificial intelligence course to Google, who hired them.

Universities and colleges offer MOOCs in a variety of areas. An interviewer asked what types of classes are offered as MOOCs. Clinefelter responded that Udacity offers mostly computer science
courses, while Coursera has a wider course selection, with about 30 categories of courses, some of them general education requirements.

"It seems like every university in Coursera is offering its own specialties," he said. For example, John Hopkins University specializes in public health. "The schools are cherry-picking some of their best professors who are well known and have written books." He said the universities are looking for a way to make money from offering the online courses.

**For-profit colleges and universities are having serious financial problems.** Responding to a question, Clinefelter said the for-profit colleges and universities are "in difficult times. They're struggling and, in most cases, declining. The for-profits are all having serious financial problems." Walden University is doing better, he said, because it offers a number of graduate degrees. "The nonprofit sector, such as Hamline and Concordia, were slow to move into online education. But now they've seen that it does work and it does make sense. They're moving into this space."

The potential online students are typically adult learners who are working and want to advance professionally. "They would usually prefer a Hamline degree to a University of Phoenix degree," he said. Learning House recently surveyed 1,500 online college students and found that the first thing they are looking for in a school is reputation, or the brand. The second thing they look for is price. The nonprofits can charge less than the for-profits.

**Learning Management Systems help track whether students are doing the work.** An interviewer asked how the schools offering online courses track that students are actually doing the work. Clinefelter answered that students must take tests and submit assignments to the Learning Management System. The student may also be required to participate in a discussion forum each week. The professor can track whether the students were there and whether they made good contributions to the discussion.

The question always comes up about how the school knows if it's the actual student submitting the work. The student must have a unique password and log in and perhaps answer a question about the account owner's past to access the account.

**Course design and course delivery are separate functions and can be divided.** Clinefelter said some professors are good at designing the online courses and materials with a team and some professors are good at teaching them. If the schools can separate these functions, they wouldn't have to pay the teaching professor to design the course.

Across the Minnesota State Colleges and University (MnSCU) system, for example, all the schools teach introductory courses on economics or American literature. "Why do we pay faculty members on each campus to design and teach the same course?" he asked. "Not only do we pay faculty members on each campus to teach these courses, we pay them every semester."

An interviewer countered that MnSCU "is not paying top dollar to faculty members to begin with. It's wonderful to imagine that kind of cost reduction. In practice you're going to end up with poorly skilled employees willing to take lower-salaried jobs or you're going to end up without faculty at all."
"I'm not saying we would pay faculty less," Clinefelter responded. "I think you can get more productivity out of faculty and get more bang for the buck. Why not pick the best course and let everybody teach that same course. You could hire a great lecturer and video that lecturer and design really good courses. You may have to pay 10 times what you pay now for any one of those courses, but that course could be used across the system. Or in the case of MOOCs, you could use it across the world."

**Colleges could differentiate the pay for professors who create and design courses from that of professors teaching those courses.** Clinefelter said some professors might make a lot more money if they're really good at course design and course creation. The schools could differentiate the pay for them and for faculty members who might be great at working with students.

Also, MnSCU could expect faculty members to teach more classes when they're offered online, such as eight classes instead of four. Those professors don't have to do any textbook selection, write any exams or give any lectures. "You can experiment with the workload and what you're getting for your dollars. We're paying for a lot of repetition."

"If you standardize your courses, you can agree on clear outcomes," Clinefelter said. After using good assessments to measure outcomes, the professors can get a good sense of student achievement and then ask if the course is working. If students are not showing the right outcomes, then faculty members can revise the course to aim for improved student achievement. "Standardization of the curriculum really gives you the opportunity to assess performance and to use that performance to drive change," he said.

In response to a concern about whether the standardized online courses would lead to cookie-cutter education, Clinefelter said the faculty would compete to see who could achieve the best outcomes. "Different faculty members are going to be more effective with different students and bring their own style to the class," he said.

**The K-12 education system seems to be ahead of higher education in the use of online learning.** Clinefelter noted that some K-12 schools are requiring students to watch the teacher's lecture before they come to class, which is called "flipping" the classroom. Some schools and states require students to take online classes in order to graduate. Also, high school students can take MOOC classes. He tells colleges they must get ready for students who've already had these online experiences.

**Many colleges are now giving credit for standard courses offered by a company called Straighter Line.** Straighter Line, started by Burck Smith, provides 40 general education courses. They're standard courses and anybody can take them. Many colleges will now give credit for them.

Smith currently charges $49 to sign up for a course and $99 a month for as many courses as a student wishes to take. "He's really trying to change the cost model," Clinefelter said. In the future, Smith is going to let professors who want to teach a course charge whatever they'd like. There will be public ratings and statistics on how many students passed the courses. He's going to let faculty members compete.
Some teachers offering courses through a company called Udemy are now millionaires. Udemy offers online education on all kinds of topics, from yoga to business strategies. The teachers of the courses set their own price. He said a half-dozen really popular faculty members have earned more than $1 million from their Udemy courses.

MOOCs may push higher education more toward competency-based learning. An interviewer asked how the online courses relate to a recent Center for Policy Studies report that recommended basing higher education credits on developing competencies, rather than on time in class. Clinefelter responded that in a MOOC, students must prove competency in order to pass the course. There's a new concept called "badging," in place of a diploma. A badge, which is neither a degree nor a credit, could be a letter or certificate stating that a student completed a course. The question is whether badges will be valuable in the marketplace.

Conclusion
"MOOCs are one way to educate lots of people in a hurry," Clinefelter concluded. "They're for a certain kind of learner, and they're an interesting experiment. MOOCs have validated online learning. It's a good thing for the world. Who knows who might discover a cure for cancer or the next supercomputer as a result? Every month there's a new development in this field."