MOOCs II

Scenario

Matt is a 43-year-old architect who has been with the same firm for 11 years. He enjoys design but is at a point in his career where he wants to move into a management role in the firm. To do this, he needs skills in areas outside his previous academic work in architecture—he needs an understanding of the financial side of the business, including contracts and accounting, as well as training in management and budgeting. With a full-time job and a family, however, going back to school—even as a part-time student—isn't feasible. Instead, he registers for two MOOCs, one on accounting (with a focus on small business) and the other an introduction to management, that are conducted by two different providers and are each taught by highly respected faculty from distinguished institutions.

Matt finds much of the first half of the accounting MOOC vaguely familiar from a course he took as an undergraduate, and he doesn't spend a lot of time on the coursework. Still, he benefits from brushing up on the basics and does well on the quizzes. The latter part of the course takes Matt into new waters, and he devotes considerably more time to the material. More than 500 people are signed up for the course; Matt finds about 10 who live near him, and they get together for informal study sessions.

The management course presents Matt with much more unfamiliar material. He immediately feels somewhat out of his element, hearing references to concepts totally new to him. In order to get comfortable, he finds resources online that help him grasp those basic ideas, and before long he feels like he can keep up with the content of the management MOOC. He even joins a third MOOC for a short time to learn about workplace sociology, though he only participates in the few activities that seem relevant to his other learning.

When the courses are over, he has earned a certificate from each of the MOOCs, and he will use those recognitions of completion as part of the case he hopes to make for advancing in his architecture firm. One of his study partners in the accounting MOOC earns credit for the course as part of an online MBA program she is enrolled in, and Matt is glad to know that if he ends up pursuing a formal degree, he might also be able to apply credits from other MOOCs he takes.

1 What is it?

A MOOC is a model of educational delivery that is, to varying degrees, *massive*, with theoretically no limit to enrollment; *open*, allowing anyone to participate, usually at no cost; *online*, with learning activities typically taking place over the web; and a *course*, structured around a set of learning goals in a defined area of study. The range of MOOCs embody these principles in different ways, and the particulars of how MOOCs function continue to evolve. Still, even without a definitive model of what they are or do, MOOCs have prompted a reexamination of many of the conventions of higher education, including the role of faculty and the institution, accreditation, and criteria for awarding credit.

2 How does it work?

Most MOOCs are structured similar to traditional online higher education courses. A MOOC has a syllabus, and course content typically consists of readings, assignments, and lectures, which are often short (6–12 minutes) "microlectures." Students watch the lectures, read assigned material, participate in online discussions and forums, and complete quizzes and tests on the course material. The online activities can be augmented by face-to-face meet-ups of MOOC participants who live close to one another. MOOCs are conducted by organizations—both nonprofit or for-profit—that include education as at least part of their mission. These organizations decide what to teach and at what level, and they form teams of faculty and support staff to design the MOOC, develop the content, and conduct the course. A MOOC might be offered through an entity such as Coursera or edX, but there is nothing to prevent an institution from offering MOOCs on its own. Aspects of some MOOCs involve a fee, including proctoring and options for students to receive a completion certificate or credit for the course.

3 Who's doing it?

MOOCs are typically provided by higher education institutions, often in partnership with "organizers" such as Coursera, edX, and Udacity. Coursera's consortium currently includes about 70 member institutions, with a diversity that includes the Exploratorium, the California Institute of the Arts, Match Teacher Residency, the New Teacher Center, and three

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museums. edX, whose consortium includes partners from the United States, Germany, Australia, Canada, China, Japan, Korea, France, and Sweden, considers itself a "learning platform" and plans to offer its code as open source in summer 2013. Among consumers of MOOCs are students who participate for a wide range of reasons: informal learning, competency in a particular area (which might only be a subset of the content of a MOOC), and, in some cases, credit toward a formal degree or certification program. In one Coursera MOOC, the average age of students was 35 (with an age range of 16 to 88), the vast majority of whom had at least an undergraduate degree. Although not widespread, some MOOCs are being offered directly by a college or university, such as those associated with NYU, University of Washington, Carnegie Mellon, and McGill University, among others.

4 Why is it significant?

MOOCs arise from the confluence of several important trends: disruptive ideas about the sources and processes of education, major changes to the financial model of higher education, and the development and availability of technologies including consumer hardware, widespread network access, and educational applications. In a relatively short time (even by technology standards), the activity around MOOCs has drawn the attention of senior leadership in higher education, challenging longstanding models and premises about education. The growing interest in openness—in open access and open resources—in higher education brings added interest in MOOCs. Moreover, because of the scale of most MOOCs, vast amounts of data are being generated that, when analyzed and more fully understood, will benefit not only future MOOCs but also education in other delivery models.

5 What are the downsides?

MOOCs represent a considerable investment, both in fees for working with an organization such as Coursera or edX and in local costs. Smaller institutions, working with tighter budgets, may not be in a position to experiment with MOOCs unless they form partnerships. Moreover, given that MOOCs do not require tuition, the financial sustainability of these efforts remains unclear. In some cases, current MOOC offerings include multiple options covering the same material; although this can be an advantage for students, such redundancy might not be sustainable. Also, some faculty will be reluctant to participate. Recently instructors at several institutions expressed reservations about MOOCs, criticizing them for providing a mass-market education and devaluing direct faculty-student interaction. Although MOOCs might be designed around content mastery rather than course completion, some find the completion rates—often less than 10%—troubling. Earning credit for a MOOC also remains uncertain, and few institutions have announced policies for this. Finally, participants enroll in MOOCs for a wide range of reasons, from curiosity about a topic to preparation for credit by examination, and, as a result, the value of peer work such as forums and discussion might be uneven.

6 Where is it going?

The MOOC and its variations will continue to hold higher education's "center stage" for at least the short term. MOOC organizers continue to add partners, and variations and experiments with MOOCs are on the rise. San Jose State University is experimenting with ways to incorporate aspects of MOOCs into its curriculum. The Georgia Institute of Technology recently announced a partnership with AT&T and Udacity to offer a low-cost master's degree in computer science. To this end, Georgia Tech is inventing a new category of personnel, similar in function to teaching assistants but who are not graduate students. Coursera has announced partnerships to make translations of its course lectures available at no cost, extending international reach, and the company recently announced deals to use its tools as a platform for developing credit-bearing courses for students within university systems.

7 What are the implications for teaching and learning?

The MOOC has ushered in an era of global access to higher education to anyone with an Internet connection. Online education in the style of MOOCs has the potential to greatly reduce barriers to education—indeed, many faculty pioneering MOOCs have remarked that with a single MOOC they have reached more students than in all of their previous courses combined. MOOCs offer new and powerful ways to make learning a lifelong endeavor, and they have galvanized much of the senior leadership in higher education into evaluating the strategic role of online education. MOOCs will encourage institutions to seek partnerships and collaborations, facilitating a network of relationships between students and multiple colleges and universities. MOOCs have shown themselves to be valuable as a kind of workspace or lab for innovation, helping uncover new best practices that can be used in other online, blended, or face-to-face settings. Perhaps the MOOC's most important contribution to date has been to raise important questions and spark essential conversations about curriculum design, accreditation, what constitutes a valid learning experience, and who has access to higher education.