

A rush to reinvent learning

MOUNTAIN VIEW, CALIFORNIA

Students flock to Web, but a model that pays the bills remains elusive

BY TAMAR LEWIN

In August, four months after Daphne Koller and Andrew Ng started Coursera, an online education company, its free college courses had drawn in a million users, a faster start than either Facebook or Twitter.

The co-founders, computer science professors at Stanford University in California, watched with amazement as enrollment passed two million last month, with 70,000 new students a week signing up for more than 200 courses, including Human-Computer Interaction, Songwriting and Gamification, taught by faculty members at the company's partners, 33 elite universities.

In less than a year, Coursera has attracted \$22 million in venture capital and has created so much buzz that some universities sound a bit defensive about not leaping onto the bandwagon.

Other approaches to online courses are emerging as well. U.S. universities are increasing their online offerings, hoping to attract students around the world. New ventures like Udemy help individual professors put their courses online. Harvard and the Massachusetts Institute of Technology have each provided \$30 million to create edX. Another Stanford spinoff, Udacity, has attracted about a million students to its menu of "massive open online courses," or MOOCs, along with \$15 million in financing.

All of this could well add up to the future of higher education — if anyone can figure out how to make money from it.

Coursera has grown at warp speed to emerge as the leader of the pack, striving to support its business by creating revenue streams through licensing, certification fees and recruitment data provided to employers, among other efforts. But there is no guarantee that it will keep its position in the rapidly expanding education technology marketplace.

"No one's got the model that's going to work yet," said James Grimmelmann, a New York Law School professor who specializes in computer and Internet law. "I expect all the current ventures to fail, because the expectations are too high. People think something will catch on like wildfire. But more likely, it's maybe a decade later that somebody fig-

ures out how to do it and make money."

For their part, Ms. Koller and Mr. Ng proclaim a desire to keep courses freely available to poor students worldwide. Education, they have said repeatedly, should be a right, not a privilege. And even their venture backers say profits can wait.

"Monetization is not the most important objective for this business at this point," said Scott Sandell, a Coursera financier who is a general partner at New Enterprise Associates. "What is important is that Coursera is rapidly accumulating a body of high-quality content that could be very attractive to universities that want to license it for their own use. We invest with a very long mind-set, and the gestation period of the very best companies is at least 10 years."

But with the first trickles of revenue now coming in, Coursera's university partners expect to see some revenue sooner.

"We'll make money when Coursera makes money," said Peter Lange, the provost of Duke University in North Carolina, one of Coursera's partners. "I don't think it will be too long down the road. We don't want to make the mistake the newspaper industry did, of giving our product away free online for too long."

Right now, the most promising source of revenue for Coursera is the payment of licensing fees from other educational institutions that want to use the Coursera classes, either as ready-made "courses in a box" or as video lectures students can watch before going to class to work with faculty members.

Ms. Koller has plenty of other ideas, as well. She is planning to charge \$20, or maybe \$50, for certificates of completion. And her company, like Udacity, has begun to charge corporate employers, including Facebook and Twitter, for access to high-performing students, starting with those studying software engineering.

Last autumn, Ms. Koller was excited about news she was about to announce: The Los Angeles campus of Antioch University had agreed to offer its students credit for successfully completing two Coursera courses, Modern and Contemporary American Poetry and Greek and Roman Mythology, both taught by professors from the University of Pennsylvania. Antioch would be the first college to pay a licensing fee — Ms. Koller would not say how much — to offer the courses to its students at a tuition lower than any four-year public campus in the state.

"We think this model will spread, helping academic institutions offer their

students a better education at a lower price," she said.

Why would colleges pay licensing fees for material available free on the Web? Because, Ms. Koller said, Coursera's terms of use require that anyone using the courses commercially get a license, and because licensing would give colleges their own course Web site, including access to grades.

Just three days before the announcement, Ms. Koller discovered that the deal would have a very modest start. For the pilot, Antioch planned to have just one student and a faculty "facilitator" in each course. She expressed surprise but took the news in stride, moving right on to greet a delegation from the University of Melbourne that was waiting for her in the conference room.

Coursera recently announced another route to help students earn credit for its courses and produce revenue. The company has arranged for the American Council on Education, the umbrella group of higher education institutions, to have subject experts assess whether several courses are worthy of transfer credits. If the experts say they are, students who successfully complete those courses could take identity-verified proctored exams, pay fees and get ACE Credit tran-

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scripts, a certification that 2,000 universities already accept for credit.

Under Coursera's contracts, the company gets most of the revenue; the universities keep 6 percent to 15 percent of the revenue, and 20 percent of gross profits. The contracts describe several monetizing possibilities, including charging for extras like manual grading or tutoring. (How or whether partner universities will share revenue with professors who develop online courses remains an open question on many campuses, with some professors saying the task is analogous to writing a textbook and should yield similar remuneration.)

One tiny revenue stream has begun flowing into the nondescript Silicon Valley office building where Coursera's 35 employees work to keep up with the demand for their courses: The company is an Amazon affiliate, getting a sliver of the money each time Coursera students click through the site to buy recommended textbooks or any other products on Amazon.

"It's just a couple thousand, but it's our first revenue," Ms. Koller said.

"When faculty recommend a textbook and people buy it on Amazon, we get some money."

Other possibilities around the edges include charging a subscription fee, after a class is over, to continue the discussion forum as a Web community, or perhaps offering follow-up courses, again for a fee.

Advertising sponsorships remain a possibility.

Like the Antioch deal, some early attempts have gotten off to a slow start. For example, the University of Washington in Seattle has already offered credit for a fee in a few Coursera courses.

But while thousands of students enrolled in the free version, only a handful chose the paid credit-carrying option. David P. Szatmary, the university's vice provost, said part of the problem was that the credit option had been posted only shortly before the course started, when most students had already enrolled free.

Some Coursera partners say they are in no hurry to cash in.

"Part of what Coursera's gotten right is that it makes more sense to build your user base first and then figure out later how to monetize it, than to worry too much at the beginning about how to monetize it," said Edward Rock, a law professor serving as the University of Pennsylvania's senior adviser on open course initiatives.

The Coursera co-founders have become oracles of higher education, spreading their gospel of massive open online courses at the World Economic Forum in Abu Dhabi, the Web Summit in Dublin and the Aspen Ideas Festival. They describe how free online courses can open access to higher education to anyone with an Internet connection; liberate professors from repeating the same tired lectures and jokes semester after semester; and generate data, because the computers capture every answer right or wrong, that can provide new understanding of how students learn best.

Many educators predict that the bulk of MOOC revenues will come from licensing remedial courses and "gateway" introductory courses in subjects like economics or statistics, two categories of classes that enroll hundreds of thousands of students a year. Even though fewer than 10 percent of MOOC students finish the courses they sign up for on their own, many experts say that combining MOOC materials with support from a faculty member or a teaching assistant could increase completion rates.