## Top Universities Test the Online Appeal of Free

A few months ago, free online courses from prestigious universities were a rarity. Now, they are the cause for announcements every few weeks, as a field suddenly studded with big-name colleges and competing software platforms evolves with astonishing speed.

In a major development on Tuesday, a dozen highly ranked universities said they had signed on with Coursera, a new venture offering free classes online. They still must overcome some skepticism about the quality of online education and the prospects for having the courses cover the costs of producing them, but their enthusiasm is undimmed.

But at universities that have not yet seized a piece of this action, the response ranges from curiosity to fear of losing a crucial competition. When University of Virginia trustees ousted their president last month — a decision they later reversed — one reason cited was concern about being left behind online. (Virginia was included in Tuesday's announcement.)

"There's panic," said Kevin Carey, director of education policy at the New America Foundation, a nonpartisan research group. "Whether it's senseless panic is unclear."

Massive open online courses, or MOOCs, let colleges reach vast audiences at relatively low cost, but they have not yet made money from them. And if it becomes possible in years to come to get a complete college education from an elite institution online, free or at relatively low cost, experts wonder whether some colleges will find it harder to attract

students willing to pay \$20,000, \$40,000 or even \$60,000 a year for the traditional on-campus experience.

Online classes have been around for years, with technology evolving to include multimedia features and interaction among students and faculty. What is new is the way top colleges are jumping in with free courses — in effect, throwing open the doors digitally.

So far, most people signing up live in foreign countries. But MOOCs will become more appealing to domestic students when they give course credits toward a degree, something the elite universities have not yet done. The University of Washington says it plans to do so, and it may be just a matter of time before earning credits becomes standard.

"The people who should be worried about this are the large tier of American universities — especially the expensive private schools — that are not elite and don't have the same reputation" as the big-name universities now creating MOOCs, said Anya Kamenetz, an author who writes on the future of higher education.

Residential colleges already attract far less than half of the higher education market. Most enrollment and nearly all growth in higher education is in less costly options that let students balance classes with work and family: commuter colleges, night schools, online universities.

Most experts say there will always be students who want to live on campus, interacting with professors and fellow students, particularly at prestigious universities. But as a share of the college market, that is likely to be a shrinking niche.

The elite universities will be best able to compete with low-cost alternatives because their large endowments make them less dependent on tuition income, and they can lower their effective prices through generous financial aid, said John Nelson, a managing director at Moody's Investors Service who analyzes higher education finances.

Analysts say that universities will inevitably try to make money from MOOCs, whether by charging tuition or not. Software companies working with colleges have looked into advertising, or selling information on students to prospective employers.

William E. Kirwan, chancellor of the University System of Maryland, noted that a few public colleges, including his system's University College, already offer mostly online courses. In the future, he said, the standard class will be a hybrid of in-person and online elements, which Maryland is experimenting with.

"We think this approach can cut costs by about 25 percent," he said, "enabling each professor to work with more students, while producing a clear improvement in learning outcomes."

For a decade, Carnegie Mellon University's Open Learning Initiative has created free online courses. But for many educators, Stanford fired the starting gun last fall, with a free online course in artificial intelligence that drew 160,000 students.

The Massachusetts Institute of Technology started a free class project, MITx, in December. The next month, a Stanford professor who helped teach the artificial intelligence class founded Udacity, a company offering free courses in partnership with colleges and professors.

In April, Stanford, Princeton, the University of Pennsylvania and the University of Michigan joined forces with Coursera to offer free classes. In May, Harvard teamed with M.I.T. to create a similar venture, edX.

In the last week, more universities signed on with Coursera.

"Our participation was finalized literally over the weekend," said J. Milton Adams, vice provost at the University of Virginia, which listed five free courses. "I'm going to have some unhappy faculty members saying, 'Why can't my course be on there?'"