Online Education Is College Lite, by the Byte: Norman Matloff

By Norman Matloff

March 13 (Bloomberg) -- For the first time, state legislators in the U.S. may require their public universities to grant students credit for online courses given by outside providers.

A bill introduced in the California Senate would extend this concession only when a required class is full and not offered online at the college. But the legislation, which is expected to be adopted, is being hailed nationally as a leap for "massive open online courses" -- MOOCs, for short.

MOOCs advocates pitch this mode of education as classes for the masses, say enabling a resident of the Gobi Desert to study nuclear physics. Those who oppose the spread of such an idealistic movement are dismissed as Luddites who wish to restrict higher education to a privileged few. But if altruism is the driver, why were two major purveyors of MOOCs, Coursera and Udacity, established as for-profit companies? (A third new venture, edX, is a not-for-profit consortium.)

One can't blame public officials for looking for cheaper modes of instruction, ones that can also generate revenue for colleges that market their content to the online vendors.

But the American university system is one of the country's crown jewels. We should carefully consider the quality of the MOOCs before eviscerating one of our few remaining comparative advantages over our economic competitors for some short-sighted gain. What if, instead of giving more young Americans a quicker path to a college degree, we end up dumbing down the value of that piece of paper?

Even a cursory look at typical Web-based courses shows them to be just that -- cursory. They tend to teach mere outlines of the subject, lacking the thought-provoking nature of a curriculum delivered in person. In exams, MOOCs often replace probing essays or mathematical analysis with simple multiple-choice questions.

In fairness, the MOOC companies offer a number of interesting specialty courses, valuable for nonstudents wishing to acquire an overview of the subject matter. Yet caution is required as the MOOC leaders seek full university credit for many of their courses.

Consider the University of Pennsylvania calculus course offered through Coursera, one of the first MOOCs approved for college credit by the American Council of Education. The material is attractively presented, but there is only a total of

15 hours of lecture for the entire course -- compared with about 45 hours for the regular Penn calculus course. Are the MOOCs advocates really claiming the same quality is achieved? And though the homework problems are good, there are far fewer of them than in a traditional class.

Also disturbing are the grade distributions in the Penn MOOC calculus exams: Instead of the usual bell-shaped curve, the grades are skewed far to the right, with the most common scores being perfect or nearly so. Though Coursera might interpret this as validating the effectiveness of the MOOC approach, the more likely explanation is that it simply reflects the lighter demands placed on the students.

Some proponents of online instruction have claimed that it could act as a leveler for the poor, whose high schools have few or no Advanced Placement courses. This may ease liberal guilt, but it's a cruel hoax. Lacking the academic street smarts of the more privileged students, the disadvantaged young people need the face-to-face interaction even more. For this population, the chances of passing the Advanced Placement calculus exam based on a MOOC are probably very slim.

Being there does matter. If online interaction is as good as claimed, why are chief executive officers of MOOC companies going on road shows to sell their products? Interactive webinars should suffice, shouldn't they? The road shows, I was told by an enthusiastic colleague, provide the MOOC CEOs with "real interaction with the faculty." So professors need "real interaction" with MOOC executives but not with MOOC students?

Yes, placing instructional material online should be encourage. All of my class materials -- homework, exams and full open-source textbooks -- are available on the Web. And I am not defending the age-old system of professors writing on the blackboard while students dutifully take notes, which is certainly not my approach. But I teach in person, not impersonally to thousands of unseen, unknown people across the globe.

An old Woody Allen joke sums it up: "I took a course in speed reading, and I finished 'War and Peace' in 20 minutes. It involves Russia." If you think that the Cliffs Notes version of Tolstoy is quite enough, or that chemistry is little more than memorizing the periodic table, and that economics consists of learning a few acronyms, then MOOCs are for you. I just hope you aren't a university president.

(Norman Matloff is a professor of computer science at the University of California, Davis. The opinions expressed are his own.)

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