Online Learning and Credential Completion

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By
Doug Lederman

ORLANDO -- The discipline of research on online learning is nascent enough, and the body of long-term studies thin enough at this point, that keeping tabs on the state of thinking is a bit like watching a table tennis match. Every study that provides evidence of the effectiveness of online teaching seems to elicit a critical one. And vice versa.

Last week's meeting of the Sloan Consortium's International Conference on Online Learning brought the latest such volley. Peter Shea, an associate professor of education at the State University of New York at Albany, said the study he presented here, "Does Online Learning Help Community College Students Attain a Degree?" was spurred by a series of studies published in the last two years by the Community College Research Center at Columbia University's Teachers College.

Those studies, based on data from community college systems in Virginia and Washington State, found that students who enrolled in online courses -- controlling for various factors that tend to predict success -- were more likely to fail or drop out of the courses than were those who took the same courses in person. (Notably, there was no gap in completion between those enrolled in hybrid and in-person courses.) The research also showed that students who took higher shares of coursework online than did their peers were slightly but statistically significantly less likely either to finish a degree or certificate or to transfer to a four-year institution.

Those findings struck Shea as odd, given his previous research on the topic and his work as the former director of SUNY's online education system. "It seemed counterintuitive to me that a modality of education that is flexible and convenient would have worse outcomes" for a group of students who would seem likely to benefit from an education delivered that way, he said in an interview.

So Shea set out to try to replicate the findings, using a national sample (the U.S. Education Department's Beginning Postsecondary Students Longitudinal Study) rather than data from two states.

His study, which is under review by the journal Computers and Education, sought to replicate as much as possible the design and sample of the Community College Research Center studies, except for broadening it to a national group of students who started out at community colleges in 2004.

Excluding students who did not aim to attain a degree, were not enrolled in degree programs, or did not have a high school diploma, Shea found certain positive and negative effects unrelated to online education; the odds that students attained a degree rose with the number of months they were enrolled full time, fell as the number of interruptions in their enrollment grew, and were not affected by how many institutions they attended.

In contrast to the CCRC studies, the Albany research found that students who had enrolled in at least one online course in their first year did not come into college with better academic preparation than did those who took no courses at a distance.

And students who took online courses at a distance were 1.25 times likelier to earn a credential (certificate, associate or bachelor's degree) by 2009 than were their peers who had not taken any online courses. Those who started college with a goal of attaining a

certificate (rather than a bachelor's degree) and took online courses were 3.22 times as likely to earn a credential than were students who did not take online courses.

What would explain the differences in findings between the two sets of studies?

"The primary distinction here is that we are using a nationally representative data set rather than data from two states," Shea said via email. "It is conceivable that the states [CCRC] studied are outliers and that when we look at the broader U.S. picture, some states do better than others at supporting the success of online students. In other words, the negative outcomes that were found in Washington and Virginia may only apply to those two states, and these disappointing conclusions are not an accurate depiction of the state of online learning in the United States."

Shanna Jaggars, a co-author of the Community College Research Center studies, said that she had difficulty responding to Shea's results, given that at this point they are in PowerPoint rather than paper form, and said she did not have enough evidence to know whether the conclusions "might be overdrawn."

But she speculated that older students may have driven the Albany study's findings.

"For older students who are working full-time and have children, the ability to maintain a full-time load by mixing in one or two online courses per semester may outweigh the negative consequences of performing slightly more poorly in each online course they take," Jaggars said via email. "That's because they need the flexibility more than younger students do, and their decrement in performance in online courses is not as strong as that of younger students."