Online Learning

Online educational platforms have the potential to drastically alter traditional education paradigms by allowing students to engage in a highly personalized course of instruction and to work at their own pace. Online platforms also improve rural students' access to the world's most talented educators.

Online learning can be used to supplement the efforts of a traditional classroom teacher or can obviate the need for a traditional classroom altogether. "Blended learning" involves the use of online materials within a traditional classroom setting, while "virtual schooling" refers to an entire academic course or curriculum delivered electronically.

Key Points

Blended learning is an effective way for students to overcome parental disengagement. A research team at Indiana University tracked the performance of 10,371 students participating in the Cisco Networking Academy – one of the earliest and most uniform blended-learning programs – across 1,641 schools. The scholars found that the "combination of centralized curriculum, standards-based testing, and local instruction worked equally well in a variety of environments and enabled students to reach their own potential" regardless of their socioeconomic or family background.[1]

Further evidence comes from experimentation with the "flipped classroom" model developed at a Detroit-area high school. There, a pilot program was implemented to reverse students' daytime and nighttime tasks. Teachers were asked to record or assign lecture material for students to watch online as homework and then students would spend class time completing assignments traditionally assigned as homework. Teachers now would be able to assist students with problems that parents in the low-income neighborhood were unable to help with.

Within the first year, failure rates plummeted: from 52 to 19% in English, 44 to 13% in math, 41 to 19% in science and 28 to 9% in social studies. The approach has since been adopted school-wide by several schools across the country and has been lauded by Harvard's Graduate School of Education as a means of helping students overcome parental disengagement.[2]

Students perform better in virtual schools than in traditional schools. In 2010, the U.S. Department of Education completed a meta-analysis of virtual schooling in the United States and found that "on average students in online learning conditions performed better than those receiving face-to-face instruction."[3] Superior performance in virtual schools is due to (1) students spending more time on task than in traditional courses, (2) alternative pacing that allows students to spend more time on material they do not understand and (3) a higher level of student-teacher interaction.[4]

Students can succeed in virtual schools regardless of their background. At the Florida Virtual School, the nation's largest, a comprehensive assessment shows that "students consistently outperformed their counterparts in Florida's traditional schools" despite substantially higher enrollment percentages of minority and at-risk students.[5]

Virtual schooling lowers the cost of public education. Virtual schools eliminate almost all the need for transportation, construction, and facilities maintenance – some of the largest expenditures of traditional schools.

Recommendations

Experiment with "flipped classroom" model at low-performing schools. Lawmakers should encourage Nevada

[1] Alan Dennis et al., "Student Achievement in a Blended Learning Environment: Lessons from the Cisco Networking Academy," Indiana University, 2006.
[2] Geoffrey Lawrence, "33 Ways to Improve Nevada Education Without Spending More," NPRI policy study, July 2014.
[3] U.S. Department of Education, "Evaluation of Evidence-Based Practices on Online Learning: A Meta-Analysis and Review of Online Learning Studies," 2010.
[4] Op cit., Lawrence, note 2.
[5] Florida Tax Watch Center for Educational Performance and Accountability, "A Comprehensive Assessment of Florida Virtual School," 2007.

school districts to create a "flipped classroom" pilot program in low–performing schools.

Require students to take at least one online course for graduation. Nevada should join Florida, Idaho and other states to require online courses as this is preparation for the modern working world.

Multi–District Fully Online Schools, by State (2012–2013 School Year)

	Enrollments 2012–13	Annual growth SY 2011–12 to SY 2012–13	5-year growth (2008– 2013)	2013 % of state K–12 population
Alaska	166	95%	–53%	0.14%
Arizona	42,000	8%	40%	4.28%
Arkansas	499	0%	0%	0.12%
California	40,891	76%	289%	0.71%
Colorado	17,289	7%	49%	2.31%
Florida	14,000	45%	1197%	0.58%
Georgia	13,412	27%	212%	0.89%
Idaho	5,213	0%	44%	2.06%
Indiana	6,733	80%	n/a	0.70%
Iowa	302	New in 12–13	n/a	0.07%
Kansas	4,689	18%	51%	1.10%
Louisiana	2,562	28%	n/a	0.42%
Massachusetts	476	–2%	n/a	0.06%
Michigan	7,850	94%	n/a	0.55%
Minnesota	9,196	13%	82%	1.21%
Nevada	10,414	19%	126%	2.61%
New Hampshire	125	21%	n/a	0.07%
New Mexico	498	New in 12–13	n/a	0.16%
Ohio	38,519	9%	42%	2.42%
Oklahoma	6,298	31%	473%	1.11%
Oregon	6,637	19%	n/a	1.27%
Pennsylvania	34,694	7%	56%	2.11%
South Carolina	8,130	2%	310%	1.26%
Tennessee	1,679	–7%	n/a	0.19%
Texas	8,441	36%	323%	0.20%
Utah	3,336	8%	567%	0.63%
Virginia	447	–8%	n/a	0.04%
Washington	2,745	9%	49%	0.29%
Wisconsin	6,721	50%	117%	0.88%
Wyoming	1,377	21%	1277%	1.70%

Source: John Watson et al., "Keeping Pace with K–12 Online Learning: An Annual Review of Policy and Practice, 2013," Evergreen Education Group.