

Stakeholder summary

Online education should bring effective learning and cost savings

Online education has the potential to provide high-quality learning – for some students, in some fields of study – at significantly lower unit costs than traditional forms of instruction and those savings should help fund the cost of improving face-to-face learning, according to a new report from the Higher Education Quality Council of Ontario (HEQCO).

Project description

How Online Learning Affects Productivity, Cost and Quality in Higher Education: An Environmental Scan and Review of the Literature is a comprehensive look at the use of online learning in Canadian and international higher education. While acknowledging the relative dearth of data or experimental studies in this burgeoning field, the report explores the cost, quality and productivity implications of a shift to online learning and concludes with a number of suggestions for government on pathways to expanded use of online learning in the Ontario postsecondary system.

Findings

“The number of well-prepared and motivated students in Ontario is large enough that the provincial government... should have an interest in making sure online learning opportunities are available. These opportunities should serve students’ learning needs, and – if carried out at large scale – should produce cost efficiencies for higher education institutions, the student or both,” say the authors. “However, there is no evidence that all of the learning outcomes expected of postsecondary students in Ontario can be achieved solely by online learning.” The report cites literature demonstrating that non-traditional students in the United States perform less well than traditional students in online learning and require extra supports.

In terms of productivity, there is little empirical literature documenting the costs of online education relative to face-to-face education, say the authors, noting that there is also no consensus about who should or would benefit from the savings. One of the barriers to conducting a proper cost analysis is defining which costs are to be included and over what period of time.

Nonetheless, the authors say that fully online education could provide both effective learning and cost savings, which have the potential to help fund the cost of improving traditional learning, including the costs of introducing hybrid models that blend online and face-to-face instruction. “The purpose of adopting online learning should be to free up resources that can be redeployed to preserve and sustain what we value most in higher education, such as mentoring and coaching that enable learners to develop new ways of knowing, doing and being.”

Among the bricks and mortar learning environments that could be enriched from the online revolution are the University of Toronto and University of British Columbia, both of which have partnerships with Massive Open Online Course (MOOC) providers Coursera and edX. Both institutions expect the learning experience in traditional classrooms to benefit from these initiatives.

Emerging trends in the online learning arena include the potential for improved access and affordability through e-textbooks; adaptive learning systems which – for some topics – can provide personalized learning paths for students; learning analytics tools that allow faculty to better understand and support student performance; and the continued growth of MOOCs – which the authors note were first developed by Stephen Downes of the National Research Council of Canada and George Siemens of Athabasca University. In fact, the term MOOC was coined in 2008 by Dave Cormier of the University of Prince Edward Island.

Conclusions

Fully online education presents opportunities for major economies of scale, say the authors, but only on a large scale, which demands collaboration that extends beyond institutional boundaries. The government should consider setting a three-year goal to create a specified list of high-demand university and college programs that are primarily or entirely online to be available to Ontario students. Within the same time period, a specified list of high-demand courses should be available online and be accepted for credit at all Ontario universities and colleges that offer a program in that discipline.

By working with institutions in Ontario and elsewhere, Ontario colleges and universities can leverage and help shape emerging developments in online learning, says the report. Institutions should be encouraged to work collaboratively to ensure that online initiatives fully support the province's strategic goals for quality and access in a time of constrained funding.

An effective government strategy would begin by adapting the existing regulatory infrastructure to remove unnecessary barriers to high-quality online education. Hybrid courses should also be encouraged where they improve learning outcomes.

“A near-universal system of higher education, operating in an economy that produces limited increases in government revenue and in students' family incomes, needs to find areas where productivity can be improved,” say the authors. “Students, educators and institutions need to take full advantage of emerging advances in online learning in order to sustain the learning experiences that are most valuable in higher education.”

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