

Stakeholder Summary

Technology-Enhanced Learning: Pitfalls and Potential

Seizing the digital vernacular, technology-assisted learning is trending in higher education. But these new and emerging technologies should be positioned as tools – as means to an end rather than as ends in themselves, cautions a new report from the Higher Education Quality Council of Ontario (HEQCO).

Technology will be more beneficial to student learning if it is “rooted in a vision that emphasizes learning *with* technology rather than learning *from* technology,” say the authors of *Pitfalls and Potential: Lessons from HEQCO-Funded Research on Technology-Enhanced Instruction*.

Project description

The report examines 16 studies on technology-enhanced learning commissioned by HEQCO over the last three years to draw broader conclusions about implementation and assessment. The study series is part of HEQCO’s research emphasis on best practices in postsecondary teaching and learning, and evaluation.

Findings

New technologies should be implemented with a specific goal or learning outcome in mind, the authors say, adding that the simple presence of technology will rarely enhance a classroom. Instructors should give careful thought to effective and consistent integration of technology in a manner that is relevant to students and that convinces them of its potential value to their learning experience.

A learning technology is also more likely to be effective if students are given sufficient time to become familiar with it. And the challenges students encounter in navigating these technologies will only be compounded if instructors run into technical difficulties. Consequently, instructors as well as teaching assistants should be trained on the use and implementation of technology.

The report identifies a lack of consensus on key terms often used in the context of research on technology-enhanced learning – among them blended and hybrid learning and even the term technology itself. “There is no clear definition of what ‘technology’ means or what it refers to in many studies that investigate its impact on learning,” the authors write. Overall, the lack of consensus on such terms creates challenges when interpreting study findings and can inhibit system-wide discussion at a policy level. Consensus, applied consistently across all colleges and universities, would be helpful, according to the authors.

The report also acknowledges other methodological challenges including the use of subjective measures of student satisfaction, which have limited value when assessing technology’s direct impact on learning; and difficulties in obtaining and retaining student participation – especially in longer-term studies or those where students were asked to complete numerous assessment materials.

Authors of Pitfalls and Potential: Lessons from HEQCO-Funded Research on Technology-Enhanced Instruction are Valerie Lopes, HEQCO and Seneca College recipient of a 2015 College Sector Educator Award from the Society for Teaching and Learning in Higher Education; and Nicholas Dion, HEQCO.