

Stakeholder Summary

Students Find Online Learning Tools Helpful and Convenient

Combining online teaching tools with in-class instruction, known as blended learning, gives students the flexibility to adapt learning to their schedule and offers a potential cost savings for institutions. A new study by the Higher Education Quality Council of Ontario (HEQCO) examined the impact of blended learning on teaching information and geospatial literacy, two skills identified as critical for 21st century learners. Geospatial literacy is the ability to conceptualize, capture and communicate spatial phenomena, while information literacy is the ability to recognize when information is needed and have the ability to locate, evaluate and use it effectively.

The study found that while calculating potential cost savings was difficult, students did embrace the online learning tools, with more than 80% using the modules. Instructors found no change in grades, but students overwhelmingly felt the online components positively influenced their overall understanding of the material.

Project Description

An Assessment of a Blended Learning Model for Information and Geospatial Literacy examined students in three first-year Social Science courses at McMaster University. Geospatial and information literacy were selected as they were deemed critical skills that are outside of core curriculum and often taught outside of the classroom, which puts a burden on supporting institutions like libraries. Two interactive online modules, one each for geospatial and information literacy, were developed and supported through additional face-to-face activities. Focus groups and interviews were conducted with faculty, instructional staff, teaching assistants and administrators while students were given an online survey.

Findings

Of students who used the online modules, 80% used them on a repeat basis and most often from their personal computers at their leisure. The most common reasons students gave for using the modules was to help better understand the course material (55.9%) and improve their grades (48.6%), but nearly one quarter of surveyed students identified the ability to work at their own pace as a motivator. Prior to using the tools, students commonly acknowledged their skill and knowledge shortcomings, particularly with information literacy, which challenges many assumptions about pre-existing student comfort with all things digital.

Instructors also found the online modules had significant value in a blended learning setting. Instructors felt that by students having the material in advance, in-class time could be better focused on interaction, assignments and assessments and resulted in reduced anxiety in busy lab environments.

Both students and instructors/administrators identified areas for improvement. Several ideas focused on improving the development of the modules, in particular increasing student feedback in the process and making online teaching tools more adaptable to instructor needs. Instructors also expressed concern that by shifting away from face-to-face instruction with library staff the modules placed an increased burden on them to be authority on content without adequate support. Both parties agreed the modules did not enhance or promote additional communication between the instructors and students.

While a cost-benefit analysis of the blended learning model was explored, it proved to be difficult due to challenges estimating both the true cost of traditional instruction and the extensive collaboration involved in module development.

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