The Mobile Information Literacy (MIL) tool is a user-friendly mini-course to help university students hone their information literacy skills that highlights the nexus of mobile devices and information literacy lessons as an innovative pedagogy. Project successes and challenges to overcoming barriers supporting anytime, anywhere student improvement are highlighted.

Academic literature emphasized the value of teaching information literacy skills, clearly linked with critical thinking skills, as part of a comprehensive undergraduate education (Kim, 2013). Undergraduate students often lack the valuable information literacy skills that faculty want them to have (DaCosta, 2010).

Design and development of the MIL mini-course explores the best strategies for delivering and accessing learning content on mobile devices. Testing of the tool determined the effectiveness of using mobile technology to enhance students’ information literacy skills. Information literacy mini lessons are designed to demonstrate how to locate, evaluate, and use information effectively.

Project Overview

**Why is Information Literacy Important?**

Higher education students benefit from support developing information literacy skills (Madlerson, 2004). There is value in teaching information literacy skills as part of a comprehensive undergraduate education (Kim, 2013). Students should have both information gathering strategies and critical thinking skills to select, discard, synthesize, and present information to solve real-life problems (Byrley & Brodie, 1995). Ryblye and Brodie (1995) indicated that, “information literacy is the [key]stone of lifelong learning.”

**Mini Course Modules**

Mixed method (quantitative and qualitative) non-experimental approach, including both pre- and post- literacy tests and student questionnaires.

Learning information literacy skills via mobile devices is an M-Learning mini-course launched with n = 346, undergraduate university students. Thirteen information literacy lessons developed by faculty and the Library demonstrate how to locate, evaluate, and use information effectively. Mini lessons include videos, practical tips, online resources and interactive exercises. Student participants mapping in math, engineering, applied health sciences, social work, psychology and social development studies volunteered to test the MIL Tool: Survey Monkey’s “Analyze tool” (https://www.surveymonkey.com/mp/how-to-analyze-survey-data/) to evaluate lesson effectiveness.

Information literacy lessons are unique to this system. Expanding the sample size to a greater number of students in multiple settings would ensure results that are more robust.

**Why use a Mobile Device to Facilitate MIL Training?**

Great potential for on-going learning, some enhancements to the mini course are needed, such as Free or affordable Internet access for all users would enhance usage; remote access to provide equal access to education in remote Indigenous communities in Canada and impoverished global locations; interactive lessons with teachers and tutors (i.e. Embedded links directly to an online Librarian); Future MIL mini course research would focus on translation of the MIL lessons and delivery of MIL in other countries and multiple languages (i.e. French, Chinese, Japanese & Arabic).

**Future Use Recommendations**

- Use multimedia and games to improve learning experience
- Mobile device to interact with teachers and trainer (e.g. Ask a mobile librarian)
- Internet free, mobile info literacy training in remote areas
- Free up time to teach more complex topics
- Minimum of 213 students would be unique to this system. Expanding the sample size to a greater number of students in multiple settings would ensure results that are more robust.

**Results**

**MIL Fall 2016 data**

- Pre Test Mean = 9.443, Post Test Mean = 9.841
- Std dev = 2.450508
- 95% confidence interval (CI) = (9.3373, 9.7827)

**MIL Winter 2017 data**

- Pre Test Mean = 9.56, Post Test Mean = 10.16
- Std dev = 2.405928
- 95% confidence interval (CI) = (9.3773, 9.7827)

We conclude, with statistical significance, that the lessons help students improve their information literacy knowledge.

**Study Limitations**

Outcomes of this project contribute significantly to the emerging field of m-learning. Inclusion of information literacy in higher education curriculum often remains an aspiration rather than a fully realized ideal and this mini course project addresses one way to incorporate information literacy into higher education classes.

The MIL mini course aims to fill this gap in the research while supporting m-learning at the higher education level and promote mobile learning among undergraduate students, the community and beyond. Questions & developing literacy skills as part of a comprehensive education in learning in any context, why not dedicate learning time.

**Conclusions**

Positive experience with the info literacy lessons and the use of mobile technology “short lessons but to the point.”

“easy to use.”


creative - different text/size/style

Liked the flexibility/availability of any time learning.

“very convenient.”

“learn on my own time, anytime.”

“able to review from time to time.

I can access and learn on Wi-Fi run campus and on the bus.”

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