



Table 1
Promoting Digital Fluency on PSE Campuses

Vicki Squires, USask, Canada

Promoting Digital Fluency on PSE Campuses

Vicki Squires

University of Saskatchewan

vicki.squires@usask.ca

Keywords:

Digital literacy

3E framework

Curriculum

Enhance, extend, empower

Summary:

Digital technology is increasingly being considered an essential skill for workplaces and for participation in a global society (Austin & Jones, 2016). Development of digital literacy is especially urgent given the prediction that almost half of all jobs will be disrupted by technology and automation within the next decade (Royal Bank of Canada, 2018). Universities, as key drivers of research and as critical players in the preparation of global citizens, have noted that students' abilities to use digital technology to "access, evaluate, create and communicate information" are crucial to students' academic and professional success (Universities Canada, 2016, p. 4). A report by the Royal Bank of Canada (2018) concurred and noted that digital fluency will be essential to all new jobs. Digital fluency refers to the skill of digital literacy including the ability to understand how to find information and critically analyze the data that is uncovered. How can post-secondary education (PSE) institutions better prepare their students to engage in a world that is digitally connected, continually evolving and where technological disruption is poised to reframe the world of work as we currently understand it?

This paper explores how e-learning can be critically entwined into the curriculum, problem based inquiry and experiential opportunities provided through PSE programs. This interweaving begins with the design of the course and is reinforced throughout the activities, core content and especially the application of evolving digital literacy skills. The key is that, whether the course has in-person or online delivery, the scaffolding of increasingly complex digital skills assists students in their development of core understandings and in their employment of these skills in real-world applications. Using a conceptual framework, such as the 3E Framework proposed by Smyth, Bruce, Fortheringham and Mainka (2011), can support instructors' course design to accomplish these objectives. This framework categorizes the particular applications of digital skills into three types: Enhance, Extend and Empower. In a qualitative case study by Author (2017), the researchers examined how instructors were implementing e-learning technologies in their classes. Enhance activities include those where e-learning technologies were used to reinforce course concepts and promote further engagement with the material, including videos, online powerpoints, clicker technologies, and discussion forums. Extend activities deepen individual and collective learning by incorporating more independent application of technologies and include activities such as group work on Google Docs, or building group blogs . Empower activities require higher order reflection and learning and promote creative application of the technologies such as building student e-portfolios or creating their own videos. The researchers identified the many exciting opportunities for engaging students in deeper learning and enhanced self-

efficacy through these activities embedded in the coursework. This paper will provide additional examples of the application of this framework and examine what institutions need to consider in developing instructor and institutional capacity for incorporating digital literacy skills into PSE programs.

References

Austin, I., & Jones, G. A. (2016). *Governance of higher education: Global perspectives, theories, and practices*. New York: Routledge.

Author (2017).

Royal Bank of Canada (2018). *Humans wanted: How Canadian youth can thrive in the age of disruption*.

Retrieved from:

<https://discover.rbcroyalbank.com/humans-wanted-canadian-youth-can-thrive-age-disruption>

Smyth, K., Bruce, S., Fortheringham, J., & Mainka, C. (2011). *Benchmark for the use of technology in modules*. Edinburgh: Edinburgh Napier University.

Universities Canada. (2016). *Canadian Universities and our Digital Future: A workshop by Universities Canada (workshop report)* (p. 13). Vancouver. Retrieved from:

<http://www.univcan.ca/media-room/publications/digital-future-report/>