Chapter 10
Indigenizing and Mentoring Technology Usage in Undergraduate Teacher Education

Doug Reid
Thompson Rivers University, Canada

ABSTRACT

As a partnership between a teacher education program and a public school, an introductory course in education was modernized to reflect the current technological and cultural contexts of the teaching profession. This was done to ensure the course would still be a transfer credit at other universities in the region and to ensure undergraduate students would receive a current perspective of teaching in Canada. The result of this initiative was the development of an undergraduate course infused with modeling technology used in classrooms today designed upon an indigenous pedagogical model. In theory, this allowed the students to explore the interaction of technology-enabled learning and indigenous pedagogy. In practice, this allowed the students to learn in a low-risk environment designed to reflect current realities and advances in educational practices.

INTRODUCTION

This research was initiated as part of an investigation into mentoring in a technology rich classroom (Reid & Reid, 2015). The University implementation aspect of the research is what will be presented in greater detail here. The focus of this research project was to explore an implementation of pedagogical approaches to teaching and learning to pre-service teachers that included technology infusion in an indigenous-structured undergraduate education course.

DOI: 10.4018/978-1-7998-1461-0.ch010
Teacher preparation has attempted to keep up with current societal trends and the attrition rate of early career teachers (Greiner, & Smith, 2009; Mee, & Haverback, 2014) shows that more innovative practices need to be developed. In this research, introduction to responsive course design based on digital technology integration, blended learning, and Indigenous pedagogical approaches within a teacher education program to attempt to address perceived limitations in recent education graduates to promote resilience and reduce early career teacher attrition.

Society and teaching environments have continued to change through the years. Early career educators find themselves in a wide variety of school environments have been identified throughout the literature and summarized numerous times (Buchanan, 2012). There are a number of environmental factors presented in the literature that affect early career educators include the cultural & societal transition from pre-service teacher to early career educator, lack of support from the school district and the community, working conditions, and feelings of isolation. The literature also identifies factors that impact success for early career educators including institutional factors like the teacher evaluation process, administrative burdens, the predominance of teacher educators who have never or have barely been teachers themselves. More individualized factors include their contract status, their inexperience in school settings, and the appropriateness of their teacher training (Forret, Fox-Turnbull, Granshaw, Harwood, Miller, O’Sullivan, & Patterson, 2013). The need for mentorship of early career educators in appropriate pedagogy has been argued in the literature (Steinke & Putnam, 2011). The case study for this mentorship approach in a technology and indigenous pedagogy school environment identified factors in three categories including what the early career teachers were strong with, what they were not prepared for and what they identified as overwhelming in their first year of teaching (Reid & Reid, 2015). The identified factors were then integrated into the planning and delivery of a university teacher education program. This is the result of applying the identified factors in a teacher education program.

The final aspect of the larger research endeavour concerned bringing the experiences of the technology, cultural, and mentorship process to the university teacher education program. The research team was concerned for the high attrition rates that exist in the teaching profession especially in the first five years of a teachers’ career. It can be argued that it is important that pre-service teachers be able to experience the unknown and be provided with the opportunities to enable them to make informed decisions about teaching (Trinidad, Sharplin, Lock, Ledger, Boyd, & Terry, 2010). After the initial phase of the research concluded which coincided with the end of the school year, the lessons learned and factors identified were examined. This was done with a view to design a highly practical learning experience particularly focused on aspects of the teacher education program that needed to be present to help provide resilience and insight for early career educators to find success.

BACKGROUND

The entire research project took place in a K-12 school and a postsecondary institute in the same community. The K-12 portion of the research was published previously (Reid & Reid, 2015). The university setting was an undergraduate teaching institution in a Canadian city. The author taught in an undergraduate general education course that was an introductory class that potential education majors could complete for transfer credit to a BEd program at other universities. It was a three-credit course that was based on a complete/incomplete experiential model that allowed students. The course had a long history at the institution and had been taught for well over a decade without major revisions. This course existed in
Related Content

“Conceptual Reverse Engineering” of Online Learning Objects and Sequences for Practical Applications
[www.igi-global.com/chapter/conceptual-reverse-engineering-of-online-learning-objects-and-sequences-for-practical-applications/216302?camid=4v1a](www.igi-global.com/chapter/conceptual-reverse-engineering-of-online-learning-objects-and-sequences-for-practical-applications/216302?camid=4v1a)

Retention of Online Learners: The Importance of Support Services
[www.igi-global.com/article/retention-of-online-learners/244209?camid=4v1a](www.igi-global.com/article/retention-of-online-learners/244209?camid=4v1a)

Effect of Computer Assisted Instructional Package on Students’ Learning Outcomes in Basic Science
[www.igi-global.com/article/effect-of-computer-assisted-instructional-package-on-students-learning-outcomes-in-basic-science/236071?camid=4v1a](www.igi-global.com/article/effect-of-computer-assisted-instructional-package-on-students-learning-outcomes-in-basic-science/236071?camid=4v1a)

Test Design to Assess the Qualities of Science Students’ Prior Knowledge
[www.igi-global.com/chapter/test-design-to-assess-the-qualities-of-science-students-prior-knowledge/177008?camid=4v1a](www.igi-global.com/chapter/test-design-to-assess-the-qualities-of-science-students-prior-knowledge/177008?camid=4v1a)