Chapter 59
Enhancing Professional Learning Through Mobile Devices for Pre-Service Teachers in Remote Communities:
An Aboriginal and Torres Strait Islander Example

Philip Bruce Townsend
Flinders University, Australia

ABSTRACT

This article details the construction of a Grounded Theory to explain the concept of enhancing professional learning through mobile devices. The research data was delimited to the behaviours and beliefs of Aboriginal and Torres Strait Islander pre-service teachers enrolled in two community-based initial teacher education programs in very remote communities in Australia. Four educational uses of mobile devices were identified: accessing content, handling administration, collaborating for academic support and sharing personal encouragement. The use of mobile devices enabled adults to choose times of study, choose places of study, complete assessment relevant to their course and achieve a career goal. Three elements that impact the educational use of mobile devices were identified (i.e. context, precursors and catalyst). Seven categories underlie the concept of enhancing professional learning through mobile devices: fostering access, facilitating customisation, promoting collaboration, supporting relevance, completing the course, empowering agency and enabling networking.

DOI: 10.4018/978-1-7998-1757-4.ch059

1. PROFESSIONAL LEARNING FOR PRE-SERVICE TEACHERS

How can professional learning be defined, particularly for pre-service teachers? Most simply it is what they do as a student teacher: "Preservice student teachers' professional learning is broadly conceived as the interaction between the learner and the student teaching context" (Tang, 2003, p. 484). Moreover, such interactions need to be viewed within the broader contexts of the pre-service teachers' lives. Opfer and Pedder (2011, p. 376) caution against "simplistic conceptualizations of teacher professional learning that fail to consider how learning is embedded in professional lives and working conditions". According to Cheng, Tang and Cheng (2014, p. 154) "Student-teachers' professional learning can be attributed to three major sources of influence, namely pre-training education experiences, teacher education coursework and fieldwork in the teacher education programme" Given these perceptions, for this article, professional learning for pre-service teachers is defined as participation as an undergraduate student in study towards an initial teacher education (ITE) qualification.

The doctoral research on which this article is based took up the opportunity outlined by Vosloo (2012, p. 35), who stated: "There is a significant opportunity to more fully explore how mobile technology can support teachers and contribute to their training, motivation and retention within the teaching profession". The role of mobile devices to assist teachers in various ways had been noted by West (2012, p. 8): "Mobile phones can be used to support classroom instruction, administrative communication and professional development for teachers" UNESCO (2013, pp. 31-32) recommended that educational policy makers at all levels world-wide "…encourage teacher training institutes to incorporate mobile learning into their programmes and curricula" and "…explore the practicability of providing professional development and teacher training via mobile technology"

This PhD research concentrated on one particular segment of Australian Aboriginal and Torres Strait Islander pre-service teachers, namely, those enrolled in community-based ITE programs. Three features define these programs: (1) pre-service teachers live and study in their own communities – they do not leave their communities and live elsewhere for study purposes, (2) support teachers live in communities and (3) tertiary learning centres are provided in communities. Pre-service teachers visit the learning centre to seek help from the support teacher, use desktop computers with Internet services, access other resources and use landline telephones to contact subject tutors, lecturers and administrative staff at their institution. Two such programs in different states of Australia were the focus of the research: one in South Australia and the other in Queensland. Low completion rates in these programs – of 15 per cent or less (Mitchell & Linkson, 2012, p. 26) – were the stimulus to explore how the use of mobile devices might enhance the professional learning of these pre-service teachers in remote communities.

The impact of the use of mobile devices was considered an appropriate area for research because such devices are popular in remote communities. Kral (2014, pp. 6-7) stated "people, predominantly young people, [are] buying laptops, mobile phones and even iPads or Tablets". Another author noted that "Indigenous people have really embraced digital technology; in particular in remote communities" (Telstra, 2014, p. viii). Ganley (2014, p. 15) said that "mobile-based technology appears to be where the future is for remote Indigenous communities: community wifi, smartphones and tablets". Similarly, the most recent Regional Telecommunications Review (Regional Telecommunications Independent Review Committee, 2015, p. 26) stated "Smart phones and tablet devices are the product of choice in remote and particularly Indigenous communities".

No other research, apart from the author's, has focused on the use of mobile devices by Aboriginal and Torres Strait Islander pre-service teachers, nor have any other papers looked at community-based