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Massey
University

**A Study on the Effects of Collaborative Learning with
Mobile Devices**

A Thesis

Presented to

The Academic Faculty

By

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Under the Supervision of

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Master of Information Sciences in Information Technology

ABSTRACT

Many mobile learning (m-learning) systems have been constructed to transform traditional classroom or computer-based learning activities to be more efficient and ubiquitous, such as being able to present learners with a shared learning space. The work of learners is increasingly seen as collaborative by nature, and there is more collaboration between learners who have different learning experiences. Although these m-learning systems have promised positive collaborative learning outcomes, there has been little empirical work done to translate them into the learning outcomes which mobile collaborative learning environments can provide, where learners acquire new knowledge by contributing to each member's existing knowledge.

This thesis investigates both mobile learning and collaborative learning, and the focus is on: learning performance in mobile learning, types of knowledge created by collaboration and perceived learning satisfaction from this mobile collaborative learning experience. Several experiments were carried out to understand the nature of mobile-supported collaborative learning against traditional face-to-face (FTF) collaboration. The results revealed that, firstly, the learning performance was enhanced when the participants were learning collaboratively with the mobile device; secondly, mobile collaborative learning with a shared learning space contributed to shared knowledge generation.

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STATEMENT OF ACADEMIC INTEGRITY

I declare that this research study is entirely my own work and that it has not been copied from other people work. If the work and ideas of others have been used in the study, the work has been properly cited in the text.

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