摘要

近年來隨著網路普及，使得遠距教學的模式在學習上更能快速、有效地使學習者獲得所需的知識與技能，提昇其競爭力。又無線網路科技的成熟，掀起了學習型態的大改變，使得人類的生活加入了「行動」的元素甚而逐漸帶動行動學習(m-learning)的發展。在現今的教育中，各種形態的網路教學都被廣泛的應用，行動學習也隨著網路教育及無線網路的發展而開始快速成長，越來越多的學者投身相關研究，希望以創意及資訊科技提升學習的效率。本研究首先從社會心理學的社會認知理論分析個案教學提昇數位互動、提高學生們對數位教學的學習意願的可能因素，提出教學改善措施；第二部分由社會認知理論，對照課程間數位互動的現象，分析教學改善措施在次一學期教學對學生參與數位學習(e-learning)討論之參與和品質的成效。第三部分將數位學習經驗導入行動學習實施可行性研究探討。最後依研究結果進行討論，以及未來研究取向的建議。研究對象為某大學資工系碩士在職專班、碩士班和大學部學生；其中 75 位學生進行在校生以及碩專班生參與遠距教學的學習意願和 48 位學生進行在校生參與行動學習的學習意願。研究結果顯示：結合非同步授課及同步討論(辦公室時間)的措施，有助於促進學生登入線上同步討論；學生同儕群體同時登入同步討論，有助於教師在數位課程中營造社會互動；數位學習同步討論，初期教師需回應社交功能對話以建立互動關係、並與約定學生對話，藉以示範學習環境中教師期望的師生互動型態。在行動學習上我們也發現在教師上課時間學生使用手持式裝置登入 Android 行動學習平台線上同步討論的高使用率。

關鍵字：遠距教學、數位學習、行動學習、Android

ABSTRACT

With the popularity of the network, it makes learning more quickly and effectively in the distance learning mode. And also make learners to gain knowledge and skills which improve their competitiveness. Due to the mature of wireless network technology, it not only sets off a large change in learning style, but also led mobile learning (m-learning) development.

In this thesis, we firstly analyze the case to enhance the digital interactive teaching, improve the several possible factors of students' willingness to learn, and proposed improvement measures in teaching from the social cognitive theory of social psychology. Secondly, we compare to the phenomenon of digital interactive teaching during the courses and analyze quality of teaching improvement measures implemented in the next semester. Thirdly, we will be applied to the digital teaching experience to explore the feasibility study of the implementation of the m-learning. Finally, we discussed and give the suggestions for future research orientation according to the findings.

In this thesis, the results showed that: the measure which is a combination of asynchronous and synchronous lectures discuss (office hours) to help promote student login online synchronous discussion. It helps teachers create social interaction in the digital curriculum by student peer group logged synchronous discussion at the same time. We also found that the phenomenon of high usage rate which use a handheld device to login online synchronous discussion in the time of courses at Android-based mobile learning platform.

Keyword: distance learning, e-learning, M-learning, Android