

# 以學習等級制建構適性教學之研究

胡祖櫻, 張丁才, 孫煒超

工業工程與系統管理學系

管理學院

dtchang@chu.edu.tw

## 摘要

Taiwan's education has developed into a mature stage. However, with the increasing prevalence of the Internet on the island, education methods are no longer confined to traditional classroom instructions. More and more instructions are now based on e-Learning, and many teaching materials are also accessible in every corner of the world through e-Learning platforms. Nowadays, domestic and foreign enterprises, academic institutes, and information industries are all actively engaged in developing and constructing an e-Learning system, in hope of creating more learning opportunities and additional values. Therefore, it can be inferred that e-Learning is a key element that can assist conventional learning in the present.

Conventional e-Learning is unable to provide adaptive teaching materials and tests according to the individual need of learners. If e-Learning is constructed simply on a text-based interface, it may have limited interactions with users. However, excessive use of texts may also result in fatigue and boredom of users. In this study, an e-Learning framework that is based on adaptive learning and tests is proposed. Through interactive learning, the learning effectiveness of users is recorded and adaptive test questions are provided. At the end of each test, learners are evaluated, so suggestions can be provided according to the evaluation results. This adaptive e-Learning framework is expected to change the teaching methods that view all learners as of equal level, improve learners' acceptance of the course contents through evaluation mechanisms, and increase the prevalence of e-Learning in teaching.

關鍵字：Digital Learning, e-Learning, Adaptive Teaching