Enhancing E-Learning Education with Interactive Software: A Summary Report [1]

利用互动软件加强网络学习教育

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THIS article is a summary report of a curriculum development and a research project conducted by the English Language and Literature Studies Programme, which employed an e-learning toolkit, called Articulate, to develop online interactive modules for 10 undergraduate courses of various subject disciplines, and investigated the practices and the perceived learning effectiveness of the online interactive modules in these courses. The major findings from student and instructor questionnaire surveys, student focus groups, instructor interviews, and iSpace (or Moodle) log data were briefly addressed. Finally, some practices for continually using or developing online interactive modules were suggested.

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本文是英语语言文学专业开展的课程开发与研究项目的摘要报告，该项目使用电子学习工具包Articulate，为10个不同学科领域的本科课程开发在线互动模块，并调查了这些课程中的在线互动模块的实践和感知学习效果。本文简要介绍了学生和教师问卷调查、学生焦点小组、讲师访谈和iSpace（或Moodle）日志数据的主要分析结果。最后，提出了一些继续使用或开发在线互动模块的做法。

Introduction

In response to the call for innovative integration of information and communication technology (ICT) into education in the 13th Five-Year Plan for ICT in education (MOE, 2016), the English Language and Literature Studies (ELLS) Programme, funded by the Department of Education of Guangdong Province's University Innovation and Enhancement Project, conducted a curriculum development and research project in 2018 on promoting the use of interactive software in enhancing students' learning experience and faculty's teaching effectiveness.

Online interactive resources and activities provided in iSpace or Moodle (an e-learning platform or a learning management systems), such as multiple-choice quizzes, drag-and-drop matching exercises, and flash card activities, have been viewed as active-learning instructional strategies to reinforce course concepts (MacKenzie & Ballard, 2015).

The aim of this semester-long project was to research, develop, and share ideas on how best to develop e-learning education with online interactive software. Faculty participants in the project designed and piloted learning modules using online interactive learning tools produced by a software company known as Articulate, while student participants engaged with the online modules as part of the instruction they received in the selected courses.

Objective

In the present study, online interactive modules were developed and implemented in 10 undergraduate courses of various subject disciplines (including seven ELLS major courses and three free-elective/interdisciplinary-foundation courses) during the second semester of 2017-2018. A comprehensive, mixed-methods analysis of instructors' perceptions and implementation, and students' perceptions and practice of these online interactive modules was conducted. The ultimate goal of this project was to identify sustainable and effective practices for developing and implementing online interactive materials that enhance student learning. This is important because it allows innovative e-learning materials to be trailed and evaluated before committing to wide-scale adoption (Hinkelman, 2018).

Major Findings

Students' Perceptions and Practices of the Online Interactive Modules Implemented in Their Classes

A questionnaire survey measuring students' acceptance of the online interactive modules was administered to the participating students in class, and students' iSpace log data concerning the frequencies of views of all online interactive modules throughout the semester were collected. Results indicated that students generally accepted online