

Chapter 4.1

Exploration on E-learning Methods and Factors Hindering their Usage: An Empirical Case Investigation

Chengbo Wang

Glasgow Caledonian University, UK & University of Bolton, UK

ABSTRACT

For supporting the effectiveness and efficiency of the students' learning and the educators' teaching, as a favored approach in recent years, e-learning technology has been widely used in the academic institutes. However, with regarding to the students community, how much they use the e-learning technology, what types of e-learning methods are being mainly used by the students, as well as the barriers for enjoying the advantages of e-technology, remain interesting topics for the educators to explore. This article, by focusing on these issues, through an investigation among the students within a higher education institute, presents an understanding regarding the usage of e-learning methods, and the factors hindering the efficacy of their usage among the students, as well as a primary analysis on the usage dif-

ference between undergraduate and postgraduate students.

INTRODUCTION

E-learning, realized by the development of information technology and the network systems, as a type of information and communication technology (ICT), has become a very popular method in facilitating the educational processes (Siritongthaworn and Krairit, 2006; Bennet & Bennet, 2008) in many institutes. Academic instructors use e-learning methods as a powerful complementary tool to enhance their class teaching effectiveness and the effect of students learning. Even further many institutes currently offer distance learning courses, heavily rely on the e-learning methods as the teaching mechanism.

Researchers have argued that the e-learning methods have positive effect on learning pro-

cess (e.g., Alexander, 2001; Bose, 2003; Duffy & Cunningham, 1996). However, according to the authors' observation in their daily teaching, e-learning methods (hereafter simplified as e-methods, referring to the concrete methods contained in the major e-learning systems currently applied in the academic institutes) seem having not realized the expected benefits to all the students. In order to understand the most frequently used e-methods by the students, and the frequency of these e-methods' usage as well as the barriers for students using e-methods in their learning process, the authors conducted a survey among the students in an education institute. This article presents the findings from this research.

The article is structured in the following way. Next section is a brief description of e-learning and its related issues; followed by the methodology employed in this research; after that is the investigation scenarios and the primary analysis; the conclusions and further research finalize the article.

E- TECHNOLOGY IN FACILITATING LEARNING

E-learning refers to that through the application and deployment of the network and digital technologies to facilitate and conduct the learning and communication process (Bose, 2003; Siritongthaworn & Krairit, 2006; Roffe, 2002; Henry, 2001) in different types of organizations. Among these organizations, educational institutes are the representative ones.

With the advance of the information technology, the conduction of instruction has been improved (Shim, et al., 2007), which gives the education institutes a powerful approach in helping the students' learning process. Within recent years, many higher education institutes have employed e-technology in their academic work (Siritongthaworn & Krairit, 2006; Bose, 2003; Alexander, 2001; Hadengue, 2005). The most

popular e-learning technologies include (Qi, et al., 2009) WebCT, Blackboard and Moodle, etc. The e-methods, such as email, instant chatting, etc., commonly contained by them are the focused elements of this article. And in many institutes, e-methods are also used as a new strategy to enrich the learning effect obtained from former teaching approaches, namely face to face communication, etc.

It has been argued by academics that e-methods as a flexible approach (Bose, 2003; Siritongthaworn & Krairit, 2006) have advantageous aspects in enhancing learning effectiveness. By following the contention from Alexander (2001), Bose (2003) and Roffe (2002), the main benefits of e-learning methods include: 1) Better usage of resources like classrooms, teachers, etc., improvement of the quality of teaching and learning, as well as easing the access of the learners to a wider range of knowledge resources; meanwhile increase the cost-effectiveness ratio of education, namely reducing the cost in education operations and improve the productivity of the learning/teaching process; 2) Through e-medium instantly update course contents and provide recent development of knowledge within the course focused fields; with the opportunity to communicate with others internationally, to gain more insights in the relevant learning areas, and meanwhile increase the skill level and understanding of the application of ICT tools; 3) Indirectly promote the information communication technology (ICT)'s application and further development by deploying the relevant software/hardware and providing corresponding feedback for the ICT developers to make further improvement on their products; 4) Provide more flexibility to the learner regarding the availability of time and places of learning, which better suits for the various individual learners' learning style and resource availability. And also improve students' attitude towards learning more positively; 5) A strong approach to enhance and enrich the learning through face-to-face communication in the classroom lecturing, im-

8 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/exploration-learning-methods-factors-hindering/41380

Related Content

Use of Humanoid Robots for Students With Intellectual Disabilities

Aye Tunaand Emine Ahmetolu (2019). *Educational Technology and the New World of Persistent Learning* (pp. 208-228).

www.irma-international.org/chapter/use-of-humanoid-robots-for-students-with-intellectual-disabilities/220186

A Global Perspective of Classroom Technology Integration and Use

Kelly M. Torresand Aubrey Statti (2021). *Research Anthology on Developing Effective Online Learning Courses* (pp. 79-94).

www.irma-international.org/chapter/a-global-perspective-of-classroom-technology-integration-and-use/271146

The Role of E-Collaboration in E-Learning: Why E-Collaboration Is Crucial

Kelly R. Elander (2019). *Educational Technology and the New World of Persistent Learning* (pp. 75-92).

www.irma-international.org/chapter/the-role-of-e-collaboration-in-e-learning/220180

Defining Multimedia: A Toolkit for Online Education

Caran Kennedy (2023). *Research Anthology on Remote Teaching and Learning and the Future of Online Education* (pp. 654-666).

www.irma-international.org/chapter/defining-multimedia/312750

An Evaluation of E-Learning and User Satisfaction

Vijay Anand Rajasekaran, Kumar K. R., Susi S., Mohan Y. C., Muntha Rajuand Mohammed Waheeduddin Hssain (2022). *International Journal of Web-Based Learning and Teaching Technologies* (pp. 1-11).

www.irma-international.org/article/an-evaluation-of-e-learning-and-user-satisfaction/281237