Chapter 17

Benefits and Challenges of E-Learning: University Student Perspectives

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ABSTRACT

E-learning has altered, and will continue to affect teaching and learning contexts in universities and tertiary education worldwide, including in Taiwan. Many universities in Taiwan have moved to offer courses that include both face-to-face and e-learning but very little research has been undertaken on student perspectives. The issue about whether e-learning can bring benefits to improve student learning or students will face more challenges is a concern of many researchers and educators. This chapter explores the benefits and challenges of e-learning support from student perspectives in a national research-oriented university in Taiwan. An interpretive paradigm with quantitative and qualitative methods was adopted as the basis for the research methodology. This chapter outlines the findings from a survey of nearly 400 different college students and focus group discussions with over thirty students about their perceptions and experiences of e-learning in blended learning courses. SPSS were used to analyze the data of the questionnaires and interviews. The findings suggest that students experience benefits and challenges relating to their personal perception of e-learning, learning attitude, personal expertise with ICT, use and access to the requisite technology. Students perceived the benefits of e-learning as arising from being able to preview and follow up on face-to-face lectures and to discuss ideas and issues with peers and instructors given that class sizes are large, typically over a hundred students. Respondent students indicated e-learning might help them change their learning attitudes to become more active and diligent learners and also improve their personal time management and organizational ability. However, the findings from questionnaires and interviews also identified students face personal and technological challenges. The researcher expects the findings can contribute to enhancing the university e-learning practice and improving instructor teaching and student learning in e-learning. The university and instructors need to identify the perceived benefits and challenges of e-learning and provide practical support for student learning. Students also need to change their perceptions and learning attitude to e-learning.

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I. INTRODUCTION

The use of ICT can remove time and place constraints on teaching and learning to provide the convenience and flexibility that many tertiary students, particularly graduate students, are now demanding (Collis & Moonen, 2001; Lao & Gonzales, 2005; Schrum, 2000; Tallent-Runnels, Thomas, Lan, Cooper, & et al., 2006). E-learning is a key component of blended learning and was the catalyst for the rapid growth in this form of learning (Mackay & Stockport, 2006). Currently many institutions are opting for the blended learning delivery of courses (Stubbs, Martin, & Endlar, 2006).

Broadly speaking, e-learning is a network technology-based mode of education that uses a mix of computer and other ICTs, across time and place constraints to deliver instruction and provide access to information resources (OECD, 2005; Wallhaus, 2000). It can involve delivery systems such as videotape, interactive audio-video, CD-ROMs, DVDs, video-conferencing, Video on Demand (VOD), e-mail, live chat, use of the Web, television and satellite broadcasts. Access to these resources means students can do coursework at a time of their convenience, so learning may happen synchronously or asynchronously (Stuart, 2004; Wallhaus, 2000). Blended learning involves a combination of traditional face-to-face and online technology-based learning (Masie, 2001; Singh, 2003; Stubbs, Martin, & Endlar, 2006; Tallent-Runnels, Thomas, Lan, Cooper, et al., 2006; Welker & Berardino, 2005). Shoniregun and Gray (2004) argue that institutions are opting for the blended learning delivery of courses to the extent that it is ‘the quiet secret’ of e-learning (Masie, 2001). Almost every tertiary institution does more blended learning than is talked about.

Blended courses have been offered in universities in Taiwan but very little research has been undertaken on the perceived benefits and challenges for university students of a blend of e-learning and face-to-face instruction. E-learning allows the delivery of teaching materials electronically and provides students with an anytime/anyplace independent learning environment. This has altered, and will continue to affect, teaching and learning contexts in universities and tertiary education (Salmon & Jones, 2004). The Taiwan government has built up a good ICT infrastructure and encouraged universities to develop e-learning systems but questions such as, “What are the benefits and challenges of e-learning practice for students and instructors?”, and, “What are the factors associated with these benefits and challenges?” are being asked by educators in Taiwan.

All teaching and learning, including that in courses delivered solely through or supported by e-learning, relies on significant student participation (Sevilla & Wells, 2000). What are the factors that influence their participation? Research indicates the range of student personal factors important to student experiences of e-learning include student learning attitude, learning approach, sense of learning community, student personal technical knowledge and skills, and perceptions of the convenience and flexibility of e-learning (Berge, 2005; Crabtree, 2006; Motteram, 2006; Shank, 2005). This chapter outlines the study research design and findings from a survey of 376 different college students and focus group discussions with thirty-three students about their perceptions and experiences of e-learning in blended learning courses.

II. THE RESEARCH STUDY

Research has elaborated the benefits of using e-learning suggesting it has the potential to increase institutional reputations, improve quality of teaching and learning, and provide for more flexibility in student learning (e.g., Henderson, 2003). Daugherty & Funke (1998) considered students had been able to expand their learning and knowledge beyond the limitations of knowledge found in the textbook and presented lectures. Also,