# Chapter 14 Student Intention to Use E-Learning: Effects of Interactivity and Usage Experience

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# **ABSTRACT**

The aim of this study is to investigate how interactivity with e-learning influence learners' consideration to use based on Malaysian settings and the effect relating to the learners' experiences in using e-learning over a period of time. This study uses a multiple regression for data analysis across a sample of 204 respondents. Based on the analysis, the interactivity factor such as two-way communication has significantly affected among perceived usefulness (PU), perceived ease of use (PEOU), and perceived enjoyment (PE) while controllability and personalization affect towards PU and responsiveness on PEOU. Moreover, PE has directly affected the usage intention of e-learning system over time with increased usage experiences. The results could assist schools or universities enhancing the contents of e-learning system in order to encourage learners to strongly engage in utilizing the education materials that is provided, as well as improving the interactivity factors on the system.

DOI: 10.4018/978-1-7998-4772-4.ch014

# INTRODUCTION

Electronic learning (e-learning) has been an education system that ease instructors in transferring knowledge and skills through internet technologies and web-based applications invariably (Baylari & Montazer, 2009). Examples of distinguished global e-learning such as Khan Academy in California (US), Skillshare in New York (US), ChinaEdu (China) Codeacademy, Lynda.com, Drawspace, Skill-crush, Learnable, CodeHs and EdX. Meanwhile in Malaysia, most of the e-learning sites are utilized by university students for the purpose of taking assignments, tutorials and in addition enabling knowledge sharing from lecturers to students or sharing information among the students. Examples of e-learning sites in Malaysia including Internexia, Universiti Sains Malaysia e-learning portal, Universiti Teknologi Malaysia e-learning portal, HELP e-learning portal, and EZLEARN2U portal (Perak).

The enhancement of e-learning could aid in overcoming traditional education barriers. Learners' can still adapt in using e-learning even though with the psychological sense of distance since it was not determined by place. The community of inquiry framework offers broader understanding regarding ways that online interaction able to improve students' and instructors' social presence and learning process (Garrison, Anderson & Archer, 2000). Students who behold elements that correspond with traditional learning materials or remote education relationships or symbolism are more adaptable to respond and require less time to learn and be comfortable with e-learning approach (Edlington, 2007). Students engaged in e-learning to overcome traditional learning barriers by gaining information from online forums or journals, directing questions to and from websites and discussion groups.

E-learning systems derived from the interactional in computer-mediated environments by users' comprehended utilitarian and hedonic values of the information system (IS)/information technology (IT) offered (Yoo, Lee & Park, 2010) to surmount all traditional education barriers. The face-to-face interactional communication changes overtime into electronics by recording all subject matter and broadcast it throughout the internet in e-learning operating system. User could improve the usage of IS/IT by self-learning capability (Chang & Wang, 2008). The interface design of the e-learning approach the interest of user as it fully utilized the communication ways in exchanging information from both parties to meet the satisfaction of e-learning. The attitude of users in approaching e-learning would change the flexibility of the time period of learning in different dimension.

According to Buzzetto-More (2008), most of the students strongly preferred e-learning with the majority of 28.1% compared to traditional face-to-face learning and nearly 29% are interested in taking a full online courses. The statistic report shows that India, China and Malaysia emerged with the top 3 highest growth rates of developing countries that adopt e-learning, while about 41% of Malaysian engaged in e-learning (Pappas, 2015). The fact generalizes that many developing countries all around the world are still in the midst of facing challenges in cultures and technologies, telecommunication facilities, and self-dependability (Deb, 2011). Thus, this study aims to investigate the interactivity that affected learners' intention in using e-learning system and investigate the effect of their usage intention changing over time related to learners' usage experiences.

However, the early engagement in e-learning may not be accurate comparing with advanced e-learning users with those that approach e-learning much later (Kim, Choi & Han, 2009). In addition, Cheng (2014) found that the long term intention in using e-learning would be different as time changes. However, the findings from Taiwan might not be similar with other nations might have the similarity in e-learning engagement especially in Malaysia that are currently slowly taking modest steps in enhancing e-learning to learners'. It also suggests that there could exist different stages of experiences in approaching e-learning

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