Chapter 3

Cloud Computing Assessment for Students’ Social Presence in Relation to Satisfaction and Perceived Learning

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ABSTRACT

Many higher education institutions are hoping to enhance student engagement in learning environment for improving the educational experiences and outcomes. Therefore, providing expectations of learners and using new technology environments to facilitate their teaching and learning activities are prominent to make universities competitive. A solution can be cloud computing which is the newest alternative in current educational environments and has significant impact on teaching and learning. This study explores the cloud-based educational environment and discusses how universities may take advantage of cloud computing in terms of students’ social presence in relation to satisfaction and perceived learning. This study conducted a survey consisting of 13 questions among students from a public university in the southern region of peninsular Malaysia. The total number of respondents is 103 students. Through this study, a basis for the investigation of cloud computing in higher education is successfully established.

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INTRODUCTION

Effective learning environments give students an opportunity to learn better and faster. The sense of community is very prominent in online course because students do not have opportunity to see their lecturers and other students face to face. New generation of students like to socialize and share their thoughts and experience within group environments dynamically. In order to engage them more within learning process educators should understand and work with them by using different delivery methods (Monaco & Martin, 2007). The technology used to support a blended course may affect the frequency and manner in which students and instructors interact with others, course materials, provide and receive feedback (Rubin, Fernandes & Averinou, 2013). Therefore, understanding the expectations of learners and exploring new technologies to facilitate teaching and learning process are prominent phenomena. The technology used to support a blended course may affect the manner and frequency in which students and instructors interact with one another, receive and provide feedback, and interact with course materials. Traditional academic institutions have generally pervasive the presence of technology in life of their students, but currently the same institutions have had to look with new eyes at all of the aspects and consequences of new modes of technological socialization which are sweeping the younger generations in teaching and learning (Jučevičienė & Valinevičienė, 2010).

Universities are always on the lookout to upgrade their hardware and software in order to keep pace with the rapid developments in digital technologies and attract students (Sultan, 2011). Cloud computing could provide those institutions with the means to achieve their ambitions at prices they can afford. Cloud computing is the newest alternative in current educational environments and has significant impact on education (Yadegaridehkordi, Iahad & Ahmad, 2016). The concept of cloud computing has emerged as a promising solution to the challenges associated with escalating IT needs and shrinking IT budgets. Cloud computing is a model for enabling on demand network and convenient access to a shared pool of configurable computing resources that can be rapidly released with service provider interaction (Pardeshi, 2014). For many higher education institutions, cloud computing offers a cost-effective solution to the problem of how to use computing power to a growing number of internet users without investing capital in physical machines which need to be maintained and upgraded on-site (Al-Zoube, 2009). A recent survey of information technology and business executives shows that 75 percent of 625 organizations are using cloud computing to some degree. Because of its popularity and financial significance, cloud computing has been widely researched (Lim, Grönlund, & Andersson, 2015). However, there is still lack of studies on evaluating the effects of cloud computing on students’ social presence in relation to satisfaction and perceived learning.

The degree of student satisfaction with courses has played a prominent role in evaluating the effectiveness of blended learning (So & Brush, 2008). Social presence is a central concept in blended learning, and researchers have shown a relationship between social presence and students’ satisfaction (Richardson & Swan, 2003; Lim & Richardson, 2016) and social presence and perceived learning (Richardson and Swan, 2003; Zhan & Mei, 2013; Lim & Richardson, 2016). Tu (2002) mentioned that social presence is a complicated construct and involves the nature of the task, social relationships, privacy, communication styles, feedback, and immediacy. Meanwhile, instructor actions such as assigning responsibility to lead or participate in discussion support students’ learning (Akyol & Garrison, 2011). Increase in level of communication as an important part of social presence leads to increase in individuals’ satisfaction...