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Relationship Between Computer-Mediated Communication Competence and Attitude Toward Using Frog VLE Among Secondary School Teachers

Siew Pei Oh, UCSI University, Malaysia
Yan Piaw Chua, University of Malaya, Malaysia

ABSTRACT

This study aims at examining the relationship between teacher computer-mediated communication (CMC) competence and teacher attitude toward using Frog VLE, a virtual learning platform. This is a non-experimental research using a cross-sectional survey technique through the administration of a set of questionnaires that comprised teacher demographic variables, teacher CMC competence, and teacher attitude toward using Frog VLE. The participants in this study are 351 secondary school teachers from Klang District, Selangor. The results indicated that teachers showed a medium level of attitude and a medium level of CMC competence toward using Frog VLE. Results showed that there is statistically significant direct causal relationship between teacher CMC competence and teacher attitude toward using Frog VLE. CMC motivation and CMC knowledge are the two direct factors of teachers' affective and behavioural attitude toward using Frog VLE, and CMC motivation predict teachers' cognitive attitudes toward using Frog VLE.

KEYWORDS

Attitude, Frog VLE, Secondary School, Teacher CMC Competence, Virtual Learning Platform

INTRODUCTION

The Interim Strategic Plan 2011-2020 have highlighted the importance of leveraging of ICT to upgrade the quality of learning of Malaysia learners (Ministry of Education, 2012b). In accordance with the proliferation of technology and Malaysia government's vision of providing quality internet-enabled education for all, Ministry of Education Malaysia (MOE) had initiated a project known as 1BestariNet and it is one of the many initiatives identified under the first wave of the Malaysian Education Blueprint (2013-2015).

Under the project, schools will be equipped with an integrated solution allowing teaching, learning, collaboration and administrative functions to take place through the Internet-based Virtual Learning Environment better known as Frog VLE and a high-speed connectivity to all its 10,000 schools (New Straits Times, 2014). According to Mohamad Mohsin, Hassan, & Ariff (2014), the introduction of Frog VLE helps 21st century learners to learn best in this new era, to become successful in their education and life as well as improve the quality of schools in Malaysia as a whole. 1BestariNet project not simply serve as a noteworthy impetus for internet proliferation in Malaysia, it might increase national

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income of the country (Hiong & Umbit, 2015). Implementation of 1BestariNet is estimated to keep running over for 13 years and is hoped to transform Malaysian education by seeing more technology usage in the classroom (Cheok & Wong, 2014).

The growing interest in using the internet for education and the introduction of Frog VLE into schools have presented teachers with new opportunities for computer-mediated communication (CMC). Wu, Gao, & Zhang (2014) states that CMC not only facilitate both individual-to-group and individual-to-individual communication through networks, but it also creates new opportunities for teachers to interact personally, socially and professionally with other fellow teachers as well. However, Bakic-Tomic, Dvorski, & Kirinic (2015) indicates that teachers are not aware of their lack of communication knowledge and adequate communication skills. Additionally, the authors conclude that communication competences of teachers are equally necessary as pedagogical skills. Thus, it is critical to investigate teachers' computer-mediated communication competencies in this era of technology advancement where education emphasized more on blended learning with the increasing proliferation and prioritization of virtual learning environment.

In addition, educational technology has altered many aspects of teacher instructional practices and expanded education for us (Mohamad Mohsin et al., 2014). It has been argued that the key factor in ensuring successful implementation of ICT programmes in school is to upgrade the level of knowledge and skills among teachers (Kandasamy & Shah 2013; Samuel & Zaitun, 2007). Undeniable, knowledge and skills in using technology tools are becoming increasingly important in our educational system in this era of globlalization (Adeyemi & Olaleye, 2010). However, without teachers' genuine efforts, it does not seem possible to effectively integrate technology in school (Celep & Tülübaº, 2014). Additionally, individuals' decision to adopt a new ICT tools is closely related to their skills and knowledge or competencies in order to form attitudes toward it and followed by its adoption or rejection (Rogers, 2003). Hence, it is important to investigate the level of teachers' CMC competencies to understand better the potential role of CMC competence in the development of positive attitude toward using the technology. This study aimed to examine the relationship between teachers' CMC competencies and teachers' attitudes toward using Frog VLE in Klang district secondary school.

LITERATURE REVIEW

As noted by Kandasamy & Shah (2013), knowledge in ICT is a must among teachers and is an essential element in imparting knowledge to pupils. However, the authors state that many teachers do not acquire the necessary level of ICT related knowledge. This is further supported by Mahmud & Ismail (2010), in which their study indicates that only a minority group of teachers were knowledgeable in basic ICT and there were even a group of teachers who demonstrate having very minimal knowledge of ICT. The majority of them only had average knowledge in ICT. This scenario clearly shows that the key factor in ensuring successful implementation of ICT programmes in school is to upgrade the level of ICT knowledge and skills among teachers (Kandasamy & Shah, 2013). Besides, another key factor in ensuring successful implementation of ICT programmes in school is teachers' positive attitude toward ICT (Liaw, 2002; Williams, 2015). According to Sa'ari, Luan, & Roslan (2005), being competent and having the right attitude in using computers are favourable assets for professional teachers in motivating their preparedness toward using educational technology innovations.

Further supported by Ertmer, Ottenbreit-Leftwich, Sadik, Sendurur, & Sendurur (2012) which states that teachers' attitudes, beliefs and their current level of knowledge and skills (CMC competence dimensions) toward ICT are the strongest barrier preventing them from using ICT. Besides, scholars have the same opinion that teacher negative attitude and poor ICT skills and knowledge are the main barriers that influence the usage of instructional ICT tools in schools (Bingimals, 2009; Samuel & Zaitun, 2007). Furthermore, literature search found that there are limited current empirical studies that study explicitly the direct relationship between teachers' CMC competencies and teachers' attitudes

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