Development and Validation of Teachers Mobile Learning Acceptance Scale for Higher Education Teachers

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ABSTRACT

Technological advancements in mobile devices coupled with their increased use in informal and formal learning at an individual level have forced academicians to implement full-scale mobile learning in higher education. However, its full-scale implementation can be achieved if the perception and attitude towards its acceptance are studied from the viewpoint of higher education teachers. This exploratory study begins with the identification of potential determinants of mobile learning acceptance. Thereafter, Teachers Mobile Learning Acceptance Scale was developed based on the explored factors. There is no available instrument so far that encompasses important factors for determining acceptance of mobile learning by higher education teachers in ‘one go’. This instrument serves to be a comprehensive measure of teacher’s acceptance of mobile learning. Two new factors ‘teacher authority and privacy’ and ‘motivational factors for students’ have been added. Although these factors have not been addressed in the past research, yet they play a significant role when considered from teachers’ perspective. This instrument depicts a high level of content validity and reliability.

KEYWORDS

Focus Group Discussion, Mobile Learning, Mobile Learning Acceptance, Pre-Testing, Scale Development, Teachers Mobile Learning Acceptance Scale

INTRODUCTION

The corpus of knowledge in the field of mobile learning is rapidly growing. It is seen as a promising educational tool. However, the area related to mobile learning is under-researched as compared to e-learning. Mobile learning has the potential to bridge the digital divide between today’s students and the university teachers. As a tool, it will enhance students’ learning and educational success. Mobile learning has to offer a wide range of benefits to offer to academia, which includes flexible learning, collaboration, classroom management, notes sharing, research work and much more. With ever increasing technological capabilities of mobile devices the educational possibilities with mobile learning are also proliferating. Al-Emran, Elsherif, & Shaalan (2016) stated that acceptance of mobile learning by students and educator is critical for its implementation. Determining the faculty’s and students’ attitude towards mobile learning system will help in identifying its strengths and weaknesses and help in the development of the technology infrastructure. This view is also supported by Mahat, Ayub, & Luan (2012) who asserted that before designing and implementing mobile learning system, it is important to assess the perception of future users towards mobile learning because their perception...
will significantly influence their willingness and readiness to use mobile learning. Al-Emran, Elsherif, & Shaalan (2016) identified the mobility of the technology, the mobility of the learner, the mobility of the educator and the mobility of learning as the important dimensions of mobile learning. This study focuses on the mobility of the educator with which the mobility of the learner and mobility of learning is closely related. Mobile learning in developing nations is in a nascent stage, its full-scale implementation can be achieved if the perception and attitude towards its acceptance are studied from the viewpoint of higher education teachers. The goal of this paper is to explore the factors affecting mobile learning acceptance by higher education teachers and to develop a scale based on the explored factors.

RATIONALE OF THE STUDY

Effective decisions regarding the role and application of mobile learning in the educational system must incorporate stakeholders’ perceptions and requirements. The important stakeholders of education are students, teachers, and university administration. Each group holds different perspective towards mobile learning and its feasibility. Their perceptions of the usefulness and applications of mobile learning will likely vary. Their willingness to accept mobile devices in support of learning will also likely vary. It is thus crucial to investigate user requirements before a system is implemented. University administrators need to incorporate student and faculty perceptions. The scope of this research will focus on the teachers’ perceptions and preferences in connection with the acceptance of mobile learning. In higher education, the success of mobile learning depends upon teachers’ acceptance of the technology, therefore; teacher’s acceptance should be a key concern for administrators in the implementation of mobile learning. The previous research on teachers’ acceptance towards technology largely focuses on the acceptance of ICT tools in general. There is a dearth of studies which specifically focus on technology acceptance with respect to mobile learning. So it becomes imperative to study the factors that determine mobile learning acceptance by higher education teachers. And to measure the acceptance level, a standardized instrument is required. This study aims at achieving both the objectives systematically.

LITERATURE REVIEW

Mobile Learning

Mobile learning is a revolutionary stage in the field of education technology (Peng, Su, Chou, & Tsai, 2009). Researchers have defined mobile learning in different ways. For example, Orr (2010) asserts that mobile learning is dependent upon mobile devices as compared to e-learning which depends on desktop computers. Keegan (2005) focuses on the mobility of the devices and defined mobile learning as “the provision of education and training on PDAs/palmtops/handhelds, smartphones, and mobile phones.”

The main characteristic of mobile learning that differentiates it from other technology-based learning is its “mobility”. Technological advancements and enhanced computational capabilities of mobile devices have forced educators to use them for knowledge delivery. Mobile learning can never fully replace traditional teaching but if leveraged properly they can add value to the existing learning styles (Liaw, Hatala, & Huang, 2010). The full potential of mobile devices such as smartphones, iPads, and tablets can be realized in developing countries by the full-scale implementation of mobile learning in formal education. Mobile learning will have great influence on experience and performance of learners. However, the successful implementation of mobile learning will be greatly determined by the
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