Is M-Learning a Challenge?
Students Attitudes Toward the Sustainable Learning and Performance

Syed Far Abid Hossain, Xi'an Jiaotong University, Xi'an, China

Xu Shan, Xi'an Jiaotong University, Xi'an, China

Mohammad Nurunnabi, Prince Sultan University, Riyadh, Saudi Arabia

ABSTRACT

Over the last few years, students' learning methods have changed considerably from traditional techniques to e-learning and m-learning. Indeed, mobile learning (m-learning) is a technology that has advanced quickly without creating any limitations on time and place, to deliver electronic learning (e-learning) with the use of personal electronics. Studies that emphasize the use of m-learning in educational institutions are surfacing. This study looks at the advanced techniques of m-learning and examines students' attitudes toward the use and implementation of m-learning techniques for the sustainability of learning. The results are based on a survey conducted with 253 students at various universities in terms of their attitudes toward and perceptions of m-learning techniques as a supplement to traditional learning methods. This study followed and checked the academic details of each student to ascertain the impact of m-learning techniques. The findings suggest that it is essential to design m-learning so that the material to be taught inside and outside the classroom is known.

KEYWORDS

E-Learning, M-Learning, Student Engagement, Sustainability, Traditional Techniques of Teaching

INTRODUCTION

The Global Education First Initiative (GEFI) launched by the United Nations (UN) is a distinct step in sustainable development of good-quality learning (Whiting, Konstantakos, Misiaszek, Simpson, & Carmona, 2018). Learning with technology is a supplement to traditional face-to-face classroom learning methods (Clayton, Blumberg, & Anthony, 2018), as students may choose different educational paths over time, from traditional learning paths to more technical (Ashford, 2004). The increasing growth of user preferences for mobile technology and mobile learning (m-learning) apps (Uther & Ylinen, 2018) in society is well accepted by scholars. Despite the lack of scholarly contributions in learning specific sociocultural facts, heritage, or language (Koole & Lewis, 2018) with the help of mobile apps, the use of current educational technology is an effort to enhance the progress of learning in a more adaptable, easy, and comfortable way (Briz-Ponce, Pereira, Carvalho, Juanes-Méndez, & García-Peñalvo, 2017). The way people interact and communicate with each other and learn has evolved completely, incorporating mobile phones and laptops (Şad & Göktaş, 2013; Hossain, 2019) or other mobile technologies. M-learning has great potential to enhance the quality of learning and students' academic performance (Zheng, Chu, Wu, & Gou, 2018).

Learning techniques has changed with a more detailed version of the paradigm (Shepard, 2000) in the 20th century. Previously, African American culture and heritage were considered in higher educational research and practice (Freeman & Kassie, 2000). Recent scholarly articles emphasize sustainable learning and problem-based learning (Luo, 2017), impact of digital game in learning (Chen, Yang, Huang, & Fu, 2017), and so on. M-learning is a technique of learning something using a mobile device (Sarrab & Al-Shihi, 2018). Previously, similar learning tools like distance learning (d-learning), electronic learning (e-learning), and virtual reality learning (VR-learning) attracted researchers in sustainable educational development (Calvo & Villarreal, 2018; Huang, Rauch, & Liaw, 2010; Webster & Hackley, 1997). However, m-learning as a supplement to traditional learning methods, is still missing and needs to be discovered as a part of sustainable development goals.

This study is an attempt to discover students' attitudes toward the sustainability of learning and to examine any positive or negative effects on academic performance with m-learning as a supplement to traditional learning. Considerable research has been conducted on m-learning in general (Koole & Lewis, 2018). However, few studies have focused on e-learning from a sustainable development perspective. To the best of the authors' knowledge, there is no logical research on m-learning as a challenge.

This study analyzed m-learning and technologies in sustainable educational development. We also attempted to discover students' attitudes and behaviors toward m-learning along with the probable challenges they face. With a structured questionnaire, personal information and monthly mobile phone expenses were collected from the respondents. Overall, we found that there is a very strong correlation between

15 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/article/is-m-learning-a-challenge/234415

Related Content

The Influence of Information Technology on Organizational Behavior: Study of Identity Challenges in Virtual Teams
Babak Sohrabi, Aryan Gholipourand Behnam Amiri (2013). *Interdisciplinary Applications of Electronic Collaboration Approaches and Technologies (pp. 79-95).*
www.irma-international.org/chapter/influence-information-technology-organizational-behavior/68605

Engaging and Supporting Students in Exploratory and Collaborative Activities: The Use of e-ECLip and ACT Environments in Learning Programming
Agoritsa Gogoulou, Evangelia Gouliand Maria Grigoriadou (2012). *International Journal of e-Collaboration (pp. 35-53).*
www.irma-international.org/article/engaging-supporting-students-exploratory-collaborative/73659

Governance Mechanisms for E-Collaboration
Anupam Ghoshand Jane Fedorowicz (2009). *E-Collaboration: Concepts, Methodologies, Tools, and Applications (pp. 919-925).*
www.irma-international.org/chapter/governance-mechanisms-collaboration/8839

Effects of Social Network Information on Online Language Learning Performance: A Cross-Continental Experiment
Abrar Al-Hasan (2021). *International Journal of e-Collaboration (pp. 72-87).*
www.irma-international.org/article/effects-of-social-network-information-on-online-language-learning-performance/255123

3D Reconstruction Methods Purporting 3D Visualization and Volume Estimation of Brain Tumors
Sushitha Susan Josephand Aju D. (2022). *International Journal of e-Collaboration (pp. 1-18).*
www.irma-international.org/article/reconstruction-methods-purporting-visualization-estimation/290296