Chapter 11 The Potential Adoption of Second Life as a Platform for Learning

Sonny Anyetei Ako-Nai

https://orcid.org/0000-0002-5261-4907 University of KwaZulu-Natal, South Africa

Nurudeen Ajayi

https://orcid.org/0000-0002-8106-0210 University of Johannesburg, South Africa

ABSTRACT

Second Life (SL), an advanced virtual world technology used in education, creates an environment that facilitates engagement, collaboration, and conceptualization of knowledge to improve teaching and learning. The chapter investigates the potential of SL as a learning platform and students' perceptions on the ease of use of SL and usefulness as a learning platform, and challenges with SL implementation. The chapter adopts the qualitative research method, the Technology Acceptance Model, and a purposive sample drawn from fourth year Information Systems and Technology (IS&T) students at the University of KwaZulu-Natal in South Africa. The chapter reports that SL is perceived to be a useful learning platform by students and improves students' instinctive and creative learning ability. However, inadequate training and insufficient information technology (IT) infrastructure are the challenges that hamper SL implementation efforts. Thus, the chapter suggests adequate training, provision of infrastructure and creation of a support pathway for SL as a learning platform as the possible solutions.

DOI: 10.4018/978-1-7998-2983-6.ch011

INTRODUCTION

Over the years, there has been rapid growth and change in technology. Such growth and changes can be found in the emergence of concepts such as Virtual Reality (VR), Cloud Computing, Artificial Intelligence (AI), Big Data and Internet of Things. According to Burbules, Fan, and Repp (2020), the digital evolution of the global society and economy is changing the speed of today's business activities and increasing the number and rate of getting individuals worldwide better educated. Similarly, according to Solomon, Ajayi, Raghavjee, and Ndayizigamiye (2018), the transformation created by technology has created interactive environments for education. These environments now include three dimensional (3D) and immersive learning platforms that are increasingly being adopted by organizations and educational institutions alike.

However, these growth and changes have presented institutions with several learning platforms that can be used to facilitate teaching and learning. Among these platforms, there is the Virtual Reality (VR). It is one of the technologies believed to have the potential to transform educational processes (Chang, Hsu, & Jong, 2020; Olasoji & Henderson-Begg, 2010). Over the years there has been a rapid growth in the development and advancement of VR technology (Bashabsheh, Alzoubi, & Ali, 2019). This growth has also been influenced by the increasing convergence of wireless and broadband technologies, and also, by the increasing maturity of video and audio technologies (Warburton, 2009). Today, VR technology has become more practical and useable, as seen in the case of modern video games and television shows (Upadhyay, Rao, Kornder, & Crawford, 2017). It is also increasingly becoming a vital tool in the facilitation of student-centered learning and the promotion of flexible and distance learning.

One of the prominent VR technology that is increasingly used to facilitate learning and student collaboration is Second Life (SL) (Olteanu, Bîzoi, Gorghiu, & Suduc, 2014). This is because SL extends the functionalities of other technologies by creating a dynamic virtual environment that provides students with real-time learning experience (Saeed, Yang, & Sinnappan, 2009). It also makes it possible to simulate real-life complex problems, by providing a platform/environment in which such problems can be simulated virtually (Solomon *et al.*, 2018). The capability of SL to provide a virtual platform/environment for simulation helps to provide a platform/environment for students to be able to improve their analytical and problem-solving skills about a problem, without being physically present at the place where the problem happened or is happening. The adoption of SL to facilitate learning is, however, faced with challenges such as its ease of use and its perceived usefulness as a learning platform. The first objective of this study, is therefore to understand, from the perspective of students, the usefulness of SL as a learning platform. The

23 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/chapter/the-potential-adoption-of-second-life-asa-platform-for-learning/264347

Related Content

Mining Electoral Data for Effective Campaigns and E-Participation: A Case Study in Venezuela

Marlene Goncalves, Francisco Castro, Luis Alberto Vidal, Maribel Acostaand Maria-Esther Vidal (2013). *E-Government Implementation and Practice in Developing Countries (pp. 59-82).*

www.irma-international.org/chapter/mining-electoral-data-effective-campaigns/76240

Enablers for Patients to Adopt Web-Based Personal Health Records (PHR)

Changsoo Sohnand Younsook Yeo (2016). *International Journal of E-Adoption (pp. 1-12)*.

 $\underline{\text{www.irma-}international.org/article/enablers-for-patients-to-adopt-web-based-personal-health-records-phr/160138}$

A Framework for Analyzing the Role of ICT on Agricultural Commercialization and Household Food Security

Julius J. Okello, Ramatu Al-Hassanand Ruth M. Okello (2010). *International Journal of ICT Research and Development in Africa (pp. 38-50).*

www.irma-international.org/article/framework-analyzing-role-ict-agricultural/41935

Analyzing the Level of Inclusion of Digital Educational Objects in Eskola 2.0

Ma Luz Guenaga, Iratxe Mentxaka, Susana Romeroand Andoni Eguíluz (2013). *Technologies for Inclusive Education: Beyond Traditional Integration Approaches (pp. 199-219).*

www.irma-international.org/chapter/analyzing-level-inclusion-digital-educational/71875

Direct Taxation and E-Commerce: Possibility and Desirability

Subhajit Basu (2010). *International Journal of Innovation in the Digital Economy (pp.* 37-63).

www.irma-international.org/article/direct-taxation-commerce/39081