

E-LEARNING ADOPTION FOR ENHANCED LEARNING BEHAVIOR IN HIGHER EDUCATION IN SIERRA LEONE

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LETTERS

In recent decades, the rapid growth of Information and Communication Technology (ICT) has led to many changes and developments in all aspects of life, in particular the education sector. For example, the growth of ICT has allowed higher education institutions to reach a wide range of students and improved student access to higher education. Scholkmann, (2017) stated that as a result of the developments in ICT and network technologies, further innovative distribution and learning methods have appeared in order to produce meaningful learning experiences for students in academic settings. E-learning has become popular in higher education institutions in many countries (Anggrainingsih et al., 2018; Basak et al., 2016; Thai et al., 2017; Muianga et al., 2018). Despite the proliferation of e-learning in higher education institutions, the adoption of e-learning still faces a number of obstacles and challenges in some countries (Scholkmann, 2017). These obstacles and challenges can be summarized as a lack of ICT infrastructure, leadership, training of instructors and learners, as well as e-learning strategy (Khashkhash, 2011). Successful e-learning implementation in a country offers learners and institutions with new opportunities of learning that may overcome those obstacles and challenges which limit participation in a traditional classroom. Typical challenges include the cost of learning, travel and classroom facilities. According to Basak et al., (2016), successful implementation of e-learning requires an investigation into the pedagogical, technological and individual factors that enhance the effective utilization of the technology. Many researchers have highlighted that investigating the factors that impact users' acceptance and usage of e-learning, is significant for better implementation and use of e-learning (Al-Emran, & Shaalan, 2015; Al-rahmi et al., 2015; Dečman, 2015; El-Masri, & Tarhini 2017).

The idea of using and adopting e-learning has become widely accepted across higher education in many developed countries, including the USA, UK, most European countries and Australia (Oliver, 2001; Paredes & Correa, 2010; Saowapakpongchai, 2010; Tucker & Gentry, 2009). Some developing countries also appear to adopt e-learning in their higher education to improve and enhance the education experience (Abdel-Gawad, & Woollard, 2015; Al-Adwan & Smedley, 2012; Chuntao, 2010; Mahmud & Gope, 2009). Nevertheless, the adoption of this technology as a tool for teaching and learning in higher education in Sierra Leone is still in its infancy stage, where some of the difficulties and challenges are still being addressed. In fact, researchers found that the Critical Success Factors to adopt e-learning differ from one country to another due to reasons such as culture, policy, government regulation and economic environment. Lonner et al. (1980) defined culture "as the collective programming of the mind that distinguishes the members of one group or category of people from another". Therefore, student's and teachers' perceptions of e-learning differ, depending on their backgrounds. Cultural and cultural-pedagogical challenges in some cases have resulted in failure of educational institutions to accomplish their intended goals (Ess, 2009). Most Sierra Leoneans are still quite tradition in their

attitudes, customs, behaviours, communication patterns and protocols (Brima & Sesay, 2019). On the other hand, students as well as teachers are still generally unaware of the potential of e-learning in Sierra Leone. The introduction of the 2018-2020 Education Sector Plan (ESP) (Ministry of Education Science and Technology) in Sierra Leone has addressed the importance of sustainable learning with the aim of achieving knowledge-based economy. Many educational funds and subsidies were allocated by the government and private sectors to promote sustainable learning. Among the allocations were the recently approved \$50 million grant by the World Bank Board of Executive Directors to support the Government of Sierra Leone's flagship program for Free Quality School Education launched in 2018. The Free Education Project will support some initial COVID-19 response activities, including provision of distance learning and communication campaigns on prevention and various financial supports from the private sectors. These financial supports was to encourage most of the higher education institutions in Sierra Leonean to continue their educational and to further equip themselves with professional skills. However, this has not been actualized given the present state of the country's economy.

Jackson (2015) mentioned that the long civil war in Sierra Leone that ended in 2002 crippled the country's economy and has badly influenced its infrastructure. They further mentioned that Sierra Leone is facing significant challenges aftermath the 11 year armed conflict, which left the country in a dismal state and forced it to "start from scratch" in building up its infrastructure and services. One of the most important challenges facing Sierra Leone is to rebuild its educational system. By the time the 11-year civil war ended in 2002, Sierra Leone's education sector had severely deteriorated—more than 60 percent of the country's educational infrastructure had been destroyed—and many teachers and academics had fled during the hostilities. Rehabilitation of the sector was therefore a huge challenge for the government, as well as persuading professionals to return to the country (Redwood-Sawyerr, 2011). Many of the higher educational institutions in the country are still in that dilapidated state. These must be taken care of in order to revive the education system in Sierra Leone (Guerrero, 2014).

All these factors may cause obstacles and challenges for e-learning implementation. As Sierra Leone has a different culture, policy, government regulation and economic environment from the rest of the world, e-learning implementation in the Sierra Leone higher education scene could face unique challenges and obstacles. Therefore, the broader objective of this research is to identify the challenges and obstacles present in the Sierra Leone higher education system for the adoption of e-learning.

Sierra Leone is one of the few developing countries where the usage of ICT and the use of e-learning is still in its embryonic stages (Gbamanja, 2018). The process of implementing the National ICT policy, specifically the development of projects in different domains in general is still on-going (Gbamanja, 2018). Although some universities in Sierra Leonean such as COMAHS, FBC, UNIMTECH and NJALA (The ICT department) have some basic ICT infrastructure and facilities such as computers, projectors, network and Internet access, they still rely heavily on the traditional education method of using face-to-face interaction in and out of the classrooms between students and teachers. Besides, most learning activities are only available on campus (Gbamanja, 2018). Recently, due to the covid-19 outbreak, the government of Sierra Leone has provided some initiatives to move towards the implementation of e-learning in higher education, but there are many challenges and obstacles that need to be resolved for the

implementation of e-learning. There is an absence of skilled and experienced teachers who can bring ICT into classrooms for their teaching (Isaac, 2020). The higher education landscape of Sierra Leone still faces many challenges to implement ICT and e-learning technology in teaching and learning. The challenges are related to financial factors, awareness and attitudes of students and teachers towards e-learning, a lack of efficient technological infrastructure, as well as a shortage of curriculum development for e-learning (Isaac, 2020). However, the factors to successfully implement e-learning technology in Sierra Leone higher education have not been defined and studied. Therefore, this research will focus on examining the experience, perception and intention of teachers and students in Sierra Leone towards using e-learning. This research will also investigate and provide an understanding of the factors that have an impact on the implementation of e-learning for higher education in Sierra Leone.

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