



Implementation of Online Learning in Nigeria: Significance of Teachers' Preparedness

Mise En Œuvre De L'apprentissage En Ligne Au Nigéria : Importance De La Préparation Des Enseignants

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Abstract

Online learning provides an individual with flexibility learning based on his own time, pace and availability. Research have made emphasis on importance and limitations of e-learning but there is dearth of literature on teachers' preparedness in the use of e-learning. However, it is hoped that the COVID-19 pandemic will encourage more teachers in the use of online learning. This paper therefore focused on significance of teachers' preparedness in the implementation of e-learning in Nigeria. It also discussed the use and importance of e-learning in Nigerian education. Finally, this paper identifies gaps in e-learning literature and recommend that Federal Government of Nigeria should make effort to provide enabling environment for online learning through establishment of online learning facilities in all schools.

KEY WORDS: e-Learning, Implementations, Teachers' Preparedness.

Résumé

L'apprentissage en ligne offre à l'individu un apprentissage flexible basé sur son temps, son rythme et sa disponibilité. Les recherches ont mis l'accent sur l'importance et les limites de l'apprentissage en ligne, mais il existe une pénurie de documentation sur la préparation des enseignants à l'utilisation de l'apprentissage en ligne. Cependant, il faut espérer que la pandémie du COVID-19 encouragera davantage d'enseignants à utiliser l'apprentissage en ligne. Cet article s'est donc concentré sur l'importance de la préparation des enseignants dans la mise en œuvre de l'apprentissage en ligne au Nigéria. Il a

également discuté de l'utilisation et de l'importance de l'apprentissage en ligne dans l'éducation nigériane. Enfin, ce document identifie les lacunes de la littérature sur l'apprentissage en ligne et recommande au gouvernement fédéral du Nigéria de faire des efforts pour créer un environnement propice à l'apprentissage en ligne par la mise en place de structures d'apprentissage qui lui sont dédié dans toutes les écoles.

Mots-clés : apprentissage virtuel, mise en œuvre, préparation des enseignants

Introduction

Education is the foundation of development in all nations of the world. It is the solution to poverty, ignorance and for unlocking potentials in individual and natural resources. World Bank (2012) corroborates this when it stated that education is the main instrument for economic development. Based on this, Okebukola (2013) asserts that no nation striving for accelerated development does so without enormous investment in education. Hence, UNESCO recommends that the developing countries should devote a minimum of 26% of their annual national budget to fund education. As germane as education is, it is still far from being accessible, flexible and cost effective by those yearning for it in most nations, including Nigeria. It is on the basis of this that attention is now focussed on online learning.

Online learning is also referred to as “e-learning” among other terms used to denote the mode of learning. Manoj (2019) states that e-learning is an education that takes place using the Internet. It is also an educational strategy that uses technology to provide access to education and training courses to participants who are in different locations as against the practice of traditional classroom learning. Online learning has suffered in the perspective of definitions as each researcher defines the term based on his knowledge and interest. It is therefore, difficult to find a common and universally accepted definition for the term. Offering opinion on this challenge of definition were Oblinger and Hawkins (2005) and Dublin (2003) who stated that no definition of online learning are the same. Holmes and Gardner (2006) supported this when they affirmed that different researchers have their definitions of e-learning. In order to save the situation, Dublin (2003) tries to find a collective meaning of e-learning by asking the following questions: Is e-learning an on-line coursework for students at a distance? Does it mean using a virtual learning environment to support the provision of campus based education? Does it refer to an on-line tool to enrich, extend and enhance collaboration? Or is it a totally on-line learning or part of blended learning? (Dublin, 2005). Therefore, few definitions of e-learning are thus suffices:

Rodrigues, Almeida, Figueiredo, and Lopes (2019) define e-learning as an innovative web-based system that is cetered on digital technologies and other

forms of educational materials whose primary goal is to provide students with a personalized, learner-centered, that is open and enjoyable learning processes. Garrison (2017) describes e-learning as a disruptive technology that is currently transforming how learning is approached in an educational context. Sarabadani, Jafarzadeh, and ShamiZanjani, (2017) describe e-learning as the application of ICT to continue to provide a variety of teaching and learning options for students. Dron and Anderson (2016) identified four generations of e-learning pedagogies: The behaviorist/cognitivist, the social constructivist, the connectivist, and the holistic generation. The relevance of each pedagogical approach depends on the technological capabilities that it uses. Fazlollahtabar and Muhammadzadeh, (2012) submitted that e-learning is an innovative approach for delivering educational services using electronic medium to enhance knowledge, skills, and other outcomes of learners.

From the foregoing, this paper defines online learning as a learning approach that is a flexible, accessible, and affordable process that allow learners to increasingly determine what, where, how and when they learn, as well as the pace at which they will learn through the use of technology.

Benefits of online learning

Benefits of online learning are all encompassing to the students, society and nation. The benefits range from reduced costs, networking opportunities, reduction of illiteracy and poverty levels, to the development of the nation. Compare to traditional classroom settings which is characterized by class attendance, reading, listening, writing, and doing other activities designed by the teacher/instructor in the face-to-face situation, learning online does not require students to be in the same location (Bri, 2020). The context of online learning is so open to the extent that the learner is at freedom to choose what to learn. This is so because students is at liberty to learn at their own pace. Students of online learning may not have physical contact with other students or the teacher till graduation. But they attend classes by visiting the class web pages, complete assignments according to the class schedule; communicate with the instructors and classmates through the use of e-mail and online discussion forums. Also, online learning class design is very flexible for people with busy programmes; students can hook on to their courses at any time of the day and night. In addition, interaction on online enables students to receive more personal feedback from fellow students and teachers than they would have likely received in a traditional classroom environment.

Lower total costs of programme is another benefit. Online programme prove to be a more affordable option than traditional schools. In online learning, there are no commuting costs as students can hook online from anywhere they are; sometimes, students may not require to purchase course materials as materials are uploaded online for free use. All these make online learning cheaper to run than conventional learning.

Another benefit is that students enjoy more comfortability learning environment as there is no physical class sessions; students listen to lectures and complete assignments electronically without need to visit the campus. Some commercials on media confirm this when they feature online students studying in their homes, in order to show the level of comfortability of e-learning. In addition, online students enjoy conveniency and flexibility than traditional learning settings. Students on online programme have greater opportunity to plan their study at their convenience and this assist them to balance work and family commitments with their education.

Furthermore, online learning acts as another alternative where there is inadequate academic staff/facilitators, laboratory technicians etc. In addition, the use of online learning allows for self-pacing; unlike the traditional settings that strickly put all students to do the same number of courses and work at a time in each semester, online learning permit each student to study at his or her own pace and speed. This manner of self-pacing is what Amer (2007) and Algahtani (2011) found to increase satisfaction and decreases stress among the students.

Other benefits include:

1. Any employee working on full time can enroll for online learning.
2. Online learning promotes active and independent learning for learners.
3. Online learning offers learners the opportunity to train themselves on a daily basis and weekends or whenever they are free to do so.
4. Learners are able to interact with everyone online and also get their areas of challenged resolved through discussion boards and chats.
5. The video instructions that are provided for audio and video learning give opportunity to learner to rewind the lesson and hear the same repeatedly.

Disadvantages of online Learning

1. Likelihood of being distracted are very high: Students may likely take longer period of time to complete their programme in an online learning since there are no interface with lectures and classmates who may likely spur their concentration or to remind each other about assignments.
2. Courses that require practical, laboratory or workshop (such as engineering, medical sciences) cannot be done in an online programme.
3. Most of the online assessments are limited to objective questions such as Multiple Choice Questions (MCQs) and Fill in the Blank (FBQs).

4. There is also the problem of insecure websites that offer online courses without accreditation by educational authority or fake authorities.
5. The authenticity of a particular student's work as students can be impersonated especially in writing project or seminar is another challenge.
6. Not all fields or discipline can employ the online learning technique in education. For instance the purely scientific fields such as medicine, pharmacology, and pharmacy, that need practical skills to perform can not be properly be studied through online learning.

Implementation of Online Learning in Nigeria

According to Nigeria Demographics Profile (2018), Nigeria population estimate is 190,632,261 while 42.54% of the population falls on 0-14years age structure and 19.61% falls on 15-24years. Also, the National Bureau of Statistics (NBS) (2017) stated that total number of registered birth in 2016 was 7,742,488; also, from 1st quarter to third quarter 2017, the country's unemployment rate rose from 8.08 million in fourth quarter 2015 to 11.19 million in third quarter 2016; and from 14.2% to 18.8% in 2017. The National Bureau of Statistics (NBS) (2017) further report that estimated eight million Nigerians became unemployed between January 2016 and September 30, 2017. Eweniyi (2018) reported that by February 2018, Nigeria will overtake India as the country with highest number of people in extreme poverty. For Nigeria to wriggle out of the unemployment and poverty, education plays a key role. In the recent time, there appear an upsurge in the establishment of schools from primary to university level by the private sector, yet only few of these schools run online learning. Till date, Nigeria has 170 universities; only National Open University of Nigeria (NOUN) was accredited by National University Commission (NUC) to run full online programmes. However, some universities (University of Lagos, University of Abuja, University Ibadan, Obafemi Awolowo University, Ile-Ife, University of Maiduguri) were recently granted accreditation to run dual mode (face-to-face combined with online education). This shows the extent to which Nigeria is holding on traditional mode of chalk and board (face-to-face) education.

Nigerian Government intensified efforts towards online learning through investment in ICT infrastructure, management information systems, e-mail access and library information services for the last three decades through National Universities Commission and the assistance of the Commonwealth of Learning since the National Open University of Nigeria was established (Ogunlela & Ogunleye, 2014). Indeed, computers and the internet services in schools and classrooms has become increasingly available in Nigeria.

Further, the ongoing Coronavirus pandemic otherwise known as COVID-19 has changed the face of education globally; Nigeria is not an exception to this. The outbreak of coronavirus disease (COVID-19) has been declared a Public Health Emergency of International Concern (PHEIC), the virus has spread nearly to all the countries in the world. While a lot is still unknown about the treatment of the virus, it is a known fact that the virus is transmitted through direct contact with respiratory droplets of an infected person (generated through coughing and sneezing). Individuals can also be infected from touching surfaces contaminated with the virus and touching their face (e.g., eyes, nose, mouth). In order to prevent the spreading of the virus, most of the countries were shutdown. This global shutdown due to this COVID-19 has necessitates working online by all sectors of economy. Meetings and lectures are now conducted online via Skype, Zoom and the likes with all implementing partners and other stakeholders.

The COVID-19 pandemic is revolutionizing digital and online education globally. This has affected the operations educational system in Nigeria as well. Many private and public institutions of learning are forced to conduct online lectures and teaching. For the first time in the history of education in Nigeria, teachers and educationists are now put on their toes for work delivery through online platforms. The Federal Government through the Federal ministry of Education imposed online teaching and conducting virtual online examination on the universities but was vehemently buffed by the Academic Staff Union of Universities (ASUU).

However, despite these challenges, there are many schools and communities that have no computers and other technological devices that can power online learning (Ogunleye & Afolabi, 2007) thereby depriving learners in those localities of the benefits of online learning experience. The causative factors are in part, lack of conditions to be fulfilled before any institution can implement on line learning. These conditions include but not limited to lack of functional electricity, insufficient internet connectivity, insufficient computers and computer accessories, inadequate ICT personnel, inadequate pedagogy, lack of teachers preparedness and poor attitudes (Ogunleye, 2009). Hew and Brush (2007) listed the following as challenges to proper implementation to online learning; lack of functional electricity, infrastructural deficit such as building, computers, ICT personnel and support services, fiscal indiscipline, inadequate teachers' knowledge and skills in technology that powers ICT, bad leadership, corruption and inadequate pedagogy. All these challenges are still the bane of Nigeria's development in ICT. Few of these factors are briefly discussed below:

Lack of functional electricity: electricity is the main driver of online learning in Nigeria. However, Nigeria as a nation has not been able to find her feet in providing uninterrupted power supply for her population. According to Olowosejeje (2019), power supply is not present in many parts of the country,

where it is present; the supply barely lasts eight hours per day. Olowoseje (2019) stated that Nigeria has spent her fortune in providing electricity for her economy but there is little to show for it. He further explained that corruption is the main challenge responsible for inadequate provision and supply of electricity in Nigeria. Supporting this fact was International Monetary Fund (IMF) (2019), which claimed that unreliable power supply is a major hindrance to Nigeria's economic growth and that lack of access to reliable electricity costs Nigeria an estimated \$29 billion a year.

Infrastructural deficit such as building, computers, ICT personnel and support services: many schools at basic and secondary schools lack basic infrastructure. Classrooms are inadequate so also computer laboratories.

Inadequate teachers' knowledge and skills in technology that enhances ICT: qualified teachers to facilitate online programme is another major barrier to implement online learning. The non-inclusion of ICT programmes in teachers' training curricular at the basic levels of education may be responsible for this. Despite United Nations Educational Scientific and Cultural Organization (UNESCO) (2002) report that students and their teachers need to keep pace with technological development, and the objectives of National Computer Policy (1988) to ensure that the Nigerians appreciate the impact of ICT, the use of ICT and the technologies that process, manage, and communicate the information; The modalities and strategies for achieving these stated objectives which include, training teachers and associated personnel were not properly implemented.

Unstructured Teachers' in-service programme: Teachers' readiness, training and re-training to use educational technology gadgets is a critical factor in the implementation of online learning. Most training of teachers are inadequate and in most cases off track of online learning, and where it is online relevant, it sometimes grossly not up-to-date. Some opine that such training are done as an avenue to syphon government money.

Inadequate pedagogy: In the current dispensation, online learning initiatives are implemented with little regard for the pedagogy and classroom practices employed by teachers. Pedagogy is germane to teaching and learning, it more than collection of methods and practices of teaching. Cihad and Gülçin (2019) and Ogunleye (2019) affirm that pedagogy incorporates the complex relations between the learning context, teachers and learners, selection of learning and assessment activities, and learner characteristics such as age, knowledge and learning stage. To this end, pedagogy should be considered if educators are to realise the full potential of online learning in improving student/learning outcomes.

The Significance of Teachers' Preparedness

The significance of teachers in the implementation of online learning in Nigeria cannot be underestimated. Oba-Adenuga and Oba-Adenuga (2018) reported that school teachers as career men and women saddled with the responsibilities of effective teaching and supervising instruction in schools in order to bring about good performance of their students. In the online learning process, teachers make use of computers and internet services to generate meaningful learning experience and other number of preparatory and administrative tasks during and outside classroom hours. One of the basic challenge on the implementation of online teaching is that teachers of analogue age are compel to teach in a way in which they have never been taught during their pre-service training. Oluwalola (2015) cited Rutherford and Grana (1995) on the fear of academic staff in the face of technology, identified some areas that could prevent staff from making changes that would enable them integrate technology into their teaching: these are fear of change, fear of time commitment, fear of appearing incompetent, fear of techno failure, fear of not knowing where to start, fear of having to move backward to go forward and fear of rejection or reprisals. In other to achieve the above, teachers are to keep abreast curriculum developments, art and science of teaching practice powered by ICT, keeping abreast with new educational policies as well as keeping an up-to-date with the current technological tools. For instance NOUN partnered with many establishments such as Commonwealth of Learning (COL), African Council for Distance Education (ACDE), Open University, UK (OUUK), World Bank etc to train her academic staff. Cuban (2003) corroborates this when he argued that it is meaningless to make technology available in schools without teachers that should make use of the technology, if not, that the technology will not be used effectively. Therefore, government and other stakeholders should prepare teachers adequately for online learning by providing enough computers, internet services, good instructional software, adequate training opportunities, and enough funding.

Apart from the above, teachers' work environment must be enabling for work delivery. Work environment is the summation of the interrelationship that exists within the employees and the environment in where they work. Sarode, and Shirsath (2014) define work environment as comprising the lighting, noise, colour and air quality at workplace. Agbozo, Owusu, Hoedoafia, and Atakorah (2017) grouped work environment into three distinct but intertwined systems. These are Physical work environment, psychological work environment and social work environment.

Physical Work Environment: work environment deals with office layout, temperature, ventilation, machinery, lighting, noise level and space at workplace. Some aspects of work like lighting and noise have great number of influence directly and indirectly on psychological processes. Jafari,

Khosrowabadi, Khodakarim, and Mohammadian, (2019) believed that noise may impair the cognitive performance of certain tasks. Physical environment also include Psychological Work Environment (PWE) which is the set of characteristics of work environment that affect how a worker feels in the course of discharging his/her duty. Examples of PWE include working requirements, nature of work, wages to be earned, bullying, opportunity for growth and the likes. These factors affect the level of contentment of an employee and his or her work performance (Adenuga, 2015).

Social work environment is also part of physical work environment and this comprises style of communication, team work, relationship between superiors and subordinates, relationship among co-workers, issues of discrimination and segregation based on age, gender or race, and the role of personal politics in forming workplace relationships. Agbozo, Owusu, Hoedoafia, and Atakorah (2017) explain further that supportive work environment helps workers to perform their duties efficiently and effectively, workers also make the best use of their knowledge and skills to provide high-quality services.

Motivation of teachers is very important as teachers relate students directly. Oba-Adenuga and Oba-Adenuga (2018) established positive correlation between teachers' motivation and students' academic performance. However, Gitonga (2012) noted that most Nigerian teachers are unhappy, frustrated and unmotivated. The school environment is full of dilapidated buildings and outdated laboratory facilities and equipments; and teachers in most cases work under unsafe and unhealthy conditions. This has no doubt, have great impact on students' poor performance in external examinations, their involvement in examination malpractice, cultism and other negative dispositions (Gitonga, 2012). For online learning to be implemented for optimum performance, aspect of motivation of teacher must be taken cognisance on.

All the above factors determine teachers' preparedness in taking charge of online learning. These factors must be put in place to enhance teachers' work effectiveness.

Conclusion

This paper concludes that online learning in Nigeria has the capacity to innovate, motivate and enrich skills to engage students and strengthening the teaching and learning processes; and that teachers generate meaningful and learning experiences for their students. However, there many challenges affecting full implementation of online learning in Nigeria such as epileptic electric power supply, inadequate teachers' knowledge and skills in technology that powers online learning and inadequate pedagogy. It is therefore also established that adequate teachers' preparedness is the greatest impetus to grow and enlarge online learning so as to accommodate all and sundry education until illiteracy and poverty is driven out of Nigeria.

Recommendations

From the foregoing, the paper made the following recommendations:

1. The Federal Government of Nigeria should make effort to provide the enabling environment for online learning through establishment of online learning facilities in all schools in Nigeria.
2. Pre-service teachers' training should including software applications, how to surf websites, the use of computers etc to facilitate online learning.
3. The Nigerian Government should mandate all teachers and students to have computer by providing loans and subsidize the cost of computer and other online equipment.
4. Government at all levels; non-governmental organizations and private sectors should assist to equip all educational institution with modern equipment for effective delivery of lectures to students with online learning technologies.
5. Obtainment of certificate of computer literacy should be made compulsory for employment of teachers.

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