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# Abstract

The study investigated the perception of learners and lecturers on Elearning mode of Education and the availability as well as utilization of facilities for teaching and learning at the Distance Learning Institute (DLI), University of Lagos. Guiding the study are three research questions. The study population consist of all DLI Science education learners and Lecturers. A sample of two hundred and sixteen learners and sixty lecturers (Core and Adjunct) of the Science Education Department, Distance Learning Institute were involved in the study. Detailed researcher-designed questionnaire was the instrument used for data collection. Analysis of data collected was done using frequency counts and mean. Results showed that E-learning facilities such as laptops are inadequate especially on the part of the core lecturers of the institute. Other findings also showed that E-learning facilities that are adequate and available are computers for computer-based test (Examinations), Elibrary, Internet access while in the institute's premises and Interactive boards in classrooms. Based on these findings, there were recommendations to encourage the use of E-learning facilities for learners as well as lecturers to foster teaching and learning. Hence, there should be regular in-house training for lecturers. Government should provide the required 21st Century E-learning technologies in universities.

*Keywords:* e-learning, learning facility, distance learning, open distance education

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### Introduction

Education in Nigeria is regarded as an instrument per excellence for effective national development (FRN, 2013). It is seen as a prerequisite for economic and social development (Igwe, Uzoka & Ekwerike, 2015). Education, among others factors, is identified as an instrument of development of societies and the individuals (Fashiku, Adinlewa & Yusuf, 2017). Formal higher education in Nigeria before independence was obtainable through correspondence education of the University of London (Omolewa 1982 in Rashid & Ojekheta, 2004). Later in 1948, the University of Ibadan was established as a college of the University of London to offer education to Nigerians at a distance (Omolewa, 1982). However, after independence in 1960, the nation witnessed the establishment of a number of Universities which include the University of Lagos. University of Lagos, apart from the regular conventional education programme, started offering education at a distance through the Correspondence Studies Unit since 1974 to produce university graduates in disciplines necessary to meet national labour needs for example teachers, nurses, and so on (Rashid & Ojokheta (2004). The Correspondence Studies Unit metamorphosed into the Distance Learning Institute (DLI) of the University in 1993. These days, students have the option of enrolling either through the conventional mode of learning or through the distance learning mode to attain higher education degree from the University of Lagos. An open distance education provides opportunity for learners to acquire skills, knowledge, training and indeed education without necessarily being present in a classroom.

In Nigeria and indeed the world over, open distance education has become a component of higher education institutions (Anietor, 2019). Open distance education is now seen as a reliable mode and a good alternative to regular classroom-based university education. Recently, much focus has been on the use of Open Distance Education (ODE) for providing education for all especially those who might have been denied education through face-to-face mode of learning. Open distance education provides access to higher education, in Nigeria, to teaming population of interested candidates who are not admitted into the regular formal mode of university education (Ememe & Modebelu, 2019). Open and Distance Education gives room for an individual to work and also learn, such an individual can earn his degree (First degree, Masters and Ph.D. degrees) without having regular physical contact with the facilitator. Learners embark on their own learning process themselves using available e-learning platforms and facilities. Akande (2011) says that distance learning means having minimal contact between facilitators

17

and learners, hence it relies more on electronic communication. This means that there has to be available facilities and resources for learners to use and be able to achieve success in their learning programme on their own.

A system of learning facilitated by using electronic resources can be referred to as E-learning. It is also known as the means of transferring skills and knowledge to a large number of learners at the same/different times via an enabled network. E-learning can be seen as the use of the computer and internet facilities to provide various solutions that will enhance learning and academic performance (FAO, 2011). Henderson *et al.*, (2017) in their study, observed that digital technology is fundamental to students' learning experiences.

E-learning approaches can be classified as: self-paced and facilitated/instructor led. In self-paced, the learner is alone and learns independently while for facilitated/instructor-led, the learner receives instruction and is guided through learning by the E-Tutor and could collaborate among learners (FAO, 2011).

Facilitated/instructor-led approach has therefore been employed by Distance Learning Institute, University of Lagos. For this to be achieved effectively, the learners should therefore not lack all the required materials/technologies that enhance distance education. Hence, the need to determine the lecturers and learners' view of e-learning and the level of availability and utilization of e-learning facilities in Distance Learning Institute, University of Lagos.

### **Literature Review**

The concept of open and distance learning has received different definitions from different authorities over the years. A lot has been done to delineate the concept as an evolving an important concept in the field of education. Sherry (2006) is of the opinion that Open and Distance Education is a learning process involving learner and facilitator though separated in the form of space and time. They still communicate via print media or Information communication and technology (ICT); where the learners take absolute control of learning rather than the facilitator. From what has been defined, emphasis is on the fact that for distance learning to be operative, great support is required and learners need not depend on the use of pencil and paper but ICT, they also need group work among themselves and ability to develop their study skills (UNESCO, 2002). When we take a look at developing countries, ICT is rarely used due to erratic power supplies, inadequate ICT tools as well as incompetence in its use.

Information and Communication Technologies (ICTs) are known as the essential tools to improve both learning and teaching in Open and Distance Learning Institutions. E-learning, is seen as being synchronous (a situation in which learning and teaching takes place at the same time) or asynchronous (whereby learning takes place at a different time from the teaching time). As a result, Ololube (2006) revealed that Information and Communication Technology is essential in teaching learners so as to meet modernizations world-wide. E-learning is meant to be centered on the learners and to maintain New Learning Environments (NLE). This is seen to be a form of moving away from normal conventional outdated learning culture that is teacher-oriented. When a student learns with ICT, learning content and pedagogy are enriched, enhancing broader access to information resources.

According to Keegan (2006) 'Open and Distance Learning' is referred to as an educational method which involves a quasi-complete separation of the facilitator and the learner both in time and space. In Open and Distance Learning, the teacher and the methods of instructions are integrated within the study materials intended as a self-imposed learning guide for the learner. 'Open Learning,' however, refers to the theoretical concept that remove obstacles and restraints which can prevent learners from gaining access to and subsequently having a quality lifelong education. Open and Distance Learning (ODL) as a theoretical concept and as an educational method, has been recognized as an active means of contending with the educational challenges affecting Nigeria as a nation. Moore & Tait (2002) emphasized this statement "... that in developing countries, human knowledge resource improvement through initial and continuing education occur as essential for growth and competitiveness as well as for social impact for prompting natality rate, increase in women independence and in improving quality of wellbeing and rural environment"p.7. This confirms the vital role that education is playing in developing countries such as Nigeria. Education gives vital support to social and economic development. However, in meeting up with the new demands for training as well as education, ODL is viewed as a method that is a suitable replacement for the direct method of teaching dominating most systems of education.

Different people have observed the benefits of Open and Distance Learning in so many ways; their insights have therefore influenced attitudes towards the acceptance and use of ODL in the education system in other countries, as well as in Nigeria. Schmidt and Faulkner (2009) reported that there are concerns about how effective ODL has been for learners who are less independent with the need for direct communication during the course of the instructional procedure. Another great concern is also the cost of ODL programming for each learner (Ojo, Ogidan, & Olakulehin, 2005).

Mclean (2001) opines that Open and Distance Learning centres on equity issues, the quality as well as supporting ODE with information. For education to be accessible by all, planning is very essential. Gboku & Lekoko (2007) worked on planning programmes in adult education in Africa, and they are of the opinion that planning should focus on an African philosophy as well as the everyday realities of life in Africa. There is a need to understand that though globalization is presumed to be good; coping with this globalization has been a bit difficult. As a result, it is assumed that most of the knowledge delivered are copied from the developed countries and therefore could not offer solutions to the challenges faced by developing countries. It seems that media which include; the correspondence, electronic communications, telephone and face-to-face differ broadly in their effectiveness and are only partially understood (Tait, 2005). However, Lewis (2005), reported that an instructor is "the main source of support for the student beyond the course materials". As a result, both the course material and the tutor are significantly important in ODE.

Benefits of ODL for the learners include choice of institution, flexibility, increased access to learning, access to distant professionals, performance, reward, marketing made easier and lifetime learning opportunities (Belanger and Jordan, 2000). Access to distant professionals might be one of the things encouraging learners to enrol for distance learning programmes. Despite all these expected benefits, distance education institutions still encounter many challenges. Garrison (2000), reported that, "most Open and Distance Learning institutions deal with fulfilling the educational demands of adults", while Holmberg (2006), opined that "distance teaching helps to motivate learners and also enhances the pleasure of learning particularly when delivered in such a way that is relevant and are able to meet learner's individual needs. Open and Distance Education therefore comes with the opportunity to "study and learn" in a peer-free environment, whenever the learners prefer it (Verduin & Clark, 2001). Tait (2005), was able to categorize learner support as feedback on assessment and progress, learning of study skills, tutoring, advice/counselling, peer group support, administrative problemsolving and language support in order to support learners whether alone or in groups.

All ODL institutions need to address the question of who are their learners and what are their needs? whenever learner support services are to be delivered. These institutions then have to determine how these needs will be met based on cost constraints, technologies and geography. Learner support is very important in the provision of Open and Distance Learning. The three key areas are timely student feedback, access to library materials and on-site support. On-site facilitators' support has been reliably known to be vital to the efficiency of ODL programme (McCleary and Egan, 2009). An assessment of learner support conducted showed that right to use of library materials and E-library is a vital element of ODL (Dillon, Gunawardena & Parker, 2002). Threlkeld & Brzoska, (2004) also stated that "Resources in the Library are very important to distance learners as most learners acknowledged that access to library materials have led to their success in required courses."

Pirani (2004), reported that for an institute to implement e-learning, such institute should be able to deliver sufficient and constant technical facilities to support e-learning. Also, according to FAO (2011), a lot of institutions use e-learning because it is cost-effective. Though developing it might be more expensive than preparing classroom materials for traditional classroom teaching.

Facilitators/E-tutors, as well as learners, must also have the technical skills to use these technologies. As a result, there is a need to determine the lecturers and learners' view of e-learning and the level of availability and utilization of e-learning facilities in Distance Learning Institute, University of Lagos.

### **Theoretical Framework**

This study has been guided by the e-learning theory which is based on Dabbagh's framework (2005). This framework deals with flexible and open methods on how people learn, comprising of pedagogical models, instructional strategies and learning technologies. This framework, gives room for lecturers (facilitators) and learners to interact within the available e-learning system facilities/ technologies. All stakeholders' including technology providers can however, interact effectively with this system. However, Redondo-Duarte *et al.*, (2017) have developed a pedagogical model promoting knowledge generation in virtual communities which is as an improvement over this e-learning theory.

### **Statement of the Problem**

The need for utilization of e-learning in the various sectors/units of education on instructional delivery is to impact efficiency and productivity in the implementation of the curriculum. In developed countries e-learning has developed considerably. However, in a developing country like Nigeria, e-learning faces inevitable problems arising from lack of access to reliable internet facilities, with the associated problems relating to electronic communications, teleconferencing and suitable software. This study aimed to explore how these problems were being experienced by learners and lecturers at the Distance Learning Institute, University of Lagos.

More specifically the study focuses on:

- 1. The adequacy of e-learning facilities for effective teaching and learning.
- 2. Learners' capability in the use of e-learning facilities to improve learning.
- 3. The learners' view of lecturers' expertise in employing e-learning facilities in teaching.

# **Research Questions**

- 1. How adequate are e-learning facilities for effective teaching and learning in DLI?
- 2. How do learners perceive their capability in the use of e-learning facilities to enhance learning?
- 3. How do learners perceive the expertise of lecturers in employing elearning facilities in teaching?

### Methodology

The study used a descriptive survey design. The study population consists of all DLI Science Education learners and Lecturers. A sample of two hundred and sixteen learners and sixty lecturers (Core and Adjunct) of the Science Education Department, Distance Learning Institute were involved in the study. A 48-item researcher-designed questionnaire was used to elicit responses from respondents via emails. The instrument used for the study was validated by two experts in Test and Measurements, Faculty of Education and Mathematics Unit, Distance Learning Institute, University of Lagos. Their suggestions were incorporated into the final copy of the instrument. In measuring the internal consistency of the instrument, a test re-test was employed and the reliability coefficient of 0.87 was obtained for the questionnaire and this was high enough to justify its use for data collection for this study. The questionnaire had four sections and four-point rating scale was used. Mean was used to analyse the data. The cut-off point for accepting or rejecting an item was fixed at 2.50 being the criterion mean.

# **Results and Findings**

Research Question 1: How adequate are e-learning facilities for effective teaching and learning in DLI?

# Table 1

Adequacy of e-learning facilities for effective teaching and learning.

S#	Statement	X1	Remark	X <sub>2</sub>	Remark
1	The institute provided adequate internet services	1.20	Disagreed	1.17	Disagreed
2	Availability of standby generators for constant power supply	3.75	Agreed	2.92	Agreed
3	There is adequate security for safeguarding e-learning materials	2.40	Disagreed	2.06	Disagreed
4	There is a massive computer literacy program for the learners	1.10	Disagreed	1.14	Disagreed
5	The software is adequately provided	1.03	Disagreed	1.08	Disagreed
6	Availability of Regular Digital Video Disk players	1.20	Disagreed	1.14	Disagreed
7	Lectures are produced on Digital Video Disk players and are available	1.28	Disagreed	1.17	Disagreed
8	The institute's website provides links to educational resources websites and e-journals	1.24	Disagreed	1.15	Disagreed
9	Internet services provided are effective and fast	1.71	Disagreed	2.04	Disagreed
10	Accessibility and utilization of Internet services outside the university	1.82	Disagreed	2.10	Disagreed
11	Computers and Printers are adequately provided for the learners/lecturers	1.15	Disagreed	1.13	Disagreed
12	There is easy access to the computer/ICT room	1.20	Disagreed	1.16	Disagreed
13	Availability of Television sets	1.10	Disagreed	1.11	Disagreed
14	E-books are sufficient	1.33	Disagreed	1.13	Disagreed
15	Interactive whiteboards are adequately provided	1.50	Disagreed	1.10	Disagreed

16	Multimedia projectors are adequate	1.46	Disagreed	1.16	Disagreed
17	Adequate assessment of Educational Materials	2.14	Disagreed	2.0	Disagreed
18	There is an efficient digital library	3.30	Agreed	2.88	Agreed
19	There is adequate Flash drives/	1.20	Disagreed	1.14	Disagreed
	External Drives		-		-
20	The learning management system	1.58	Disagreed	1.38	Disagreed
	is robust for E-tutor's efficient				
	interaction with learners for				
	synchronous teaching and				
	learning				

Note:  $X_1$ = mean value for lecturers;  $X_2$ = mean value for learners.

In Table 1, the result shows that eighteen of the statements are disagreed because their mean scores were less than 2.50 while only two statements appeared as agreed.

Research Question 2

How do learners perceive their capability in the use of e-learning facilities to enhance learning?

### Table 2

Learners' capability in the use of e-learning facilities to improve learning

S#	Statement	Mean	Remark
		Score (X)	
1	Learners always browse the internet to solve assignment	3.04	Agreed
2	Learners are able to learn new concepts effectively through the internet	3.18	Agreed
3	The use of internet is preferred to book reading	1.44	Disagreed
4	The use of the internet helps a lot with academic information	2.70	Disagreed
5	The use of the internet help with school fees payment and registration	3.17	Agreed
6	Learners have mobile phones and this help with academic information	1.80	Disagreed
7	Learners have computers to enhance learning	3.32	Agreed
8	Video capture of lectures are done for revisiting later	1.08	Disagreed
9	Audio capture of lectures are done for easy access to vital information	1.10	Disagreed

10	Learners chat online regularly for the academic	1.16	Disagreed
	purpose		
11	Mobile phones serve a lot in passing information	1.24	Disagreed
	to learners to facilitate teaching and learning		
12	Lecturers use social media e.g Facebook, Twitter,	1.39	Disagreed
	Google hang out e.t.c. to communicate with		C
	learners and to pass educational information to		
	enhance teaching and learning		
13	The learning management is regularly used by E-	1.13	Disagreed
	tutors for efficient interaction with learners for		
	synchronous teaching and learning		
14	Learners learn a lot from the virtual classroom	1.11	Disagreed

Table 2 shows only four statements were agreed, the remaining statements disagreed because their mean values were below 2.50.

Research Question 3

How do learners perceive the expertise of lecturers in employing elearning facilities in teaching?

Table 3

Learners' view of lecturers' expertise in employing e-learning facilities in teaching.

S#	Statement	Mean Score (X)	Remark
1	Learners are referred to the internet to solve assignment	3.10	Agreed
2	Learners are referred to specific websites to learn new concepts	3.33	Agreed
3	Teleconferencing is employed by lecturers	1.43	Disagreed
4	Lectures have e-mails to communicate with learners	3.0	Agreed
5	An Individual lecturer has a web blog	1.30	Disagreed
6	Computer-based testing is done to assess learners	3.75	Agreed
7	Online Tutor Marked Assignments are done by learners to assess the learners	3.53	Agreed

8	Computer simulations are used to aid teaching and learning	1.54	Disagreed
9	Updated Educational materials are sourced to aid teaching and learning	2.73	Agreed
10	Lecturers are provided with electronic devices that can access, read and manipulate information	1.33	Disagreed
11	Mobile phones are used to pass information to learners to facilitate teaching and learning	1.46	Disagreed
12	Use of Social media by lecturers e.g Twitter, Facebook, Google hang out e.t.c. to facilitate learning and to pass educational information.	2.86	Agreed
13	The learning management system (LMS) is regularly used by E-tutors for efficient interaction with learners for synchronous teaching and learning	2.40	Disagreed
14	Use of virtual classroom aids teaching and learning a lot	1.46	Disagreed

From Table 3, it is indicated that half of the statements were agreed (mean values above 2.50) while the remaining seven statements disagreed because their mean values were below 2.50.

# Discussion

From Table 1, it is clear from the lecturers and learners' view that internet service is provided but the bandwidth is not adequate. The two groups (lecturers and learners) agreed that there is an efficient digital library; which is commendable for an Open Distance Learning Institute. However, the two groups are of the opinion that Interactive whiteboards, Multimedia projectors, Flash drives/ External Drives are not adequately provided, there is no easy access to the computer/ICT room and that the learning management system is not robust for E-tutor's efficient interaction with learners for synchronous teaching and learning Learners see e-learning as a means to help knowledge retention and to learn anytime, anywhere. This is in agreement with the observations by (Wu & Tsai, 2006) that internet improves learner's self-study and performance. Also, it is said that when learners take charge of their learning, they are responsible for their learning (Chang, 2005). This statement agrees with the findings by Popovici and Mironov (2015), in a study carried out to

investigate students' perspectives on using e-learning technologies, that the students are adequately equipped and use e-learning technologies to support their learning. Also, Holmes and Prieto-Rodriguez (2018) in their study observed that students' accessibility of online materials is a great contributing factor to their study. In this same study, both students and staff professed that effectiveness of LMS will enhance learners 'interest in learning.

Lecturers and Learners' view in table 1, indicated that the institute has a functioning website but it is not mainly for enhancing teaching and learning but just to disseminate information. This table also revealed lecturers' and learners' opinion that TV sets, projectors, printers, computers, regular internet services (especially for the lecturers) are not adequate for efficient and effective e-learning program. The table also revealed that lecturers and learners agreed that there is no massive computer literacy program for the learners to aid them learn more online. Learners make use of their phones only for chats and not for academic purposes as seen from their views in Table 2. This is not in agreement with the opinion of Yang & Lin (2010) that learners who show positive attitudes to the internet seem to contribute more in online forum. As a result, learners of Distance learning Institute should be encouraged to be more positive towards online learning. It has been discovered that these learners have electronic devices that can access, manipulate, read and store audio-visual information; yet they hardly use them to record and share lectures. Table 3 reveals that learners perceive that lecturers interact very well with the Learning Management System in terms of disseminating useful academic information and deploying Continuous Assessment both the CMA (Computer Marked Assignment) and TMA (Tutor-Marked Assignment). However, academic interaction with the learners through social media, teleconferencing, virtual classroom and the use of e-learning facilities like an interactive whiteboard at study center meetings by the lecturers is not rampant as seen in Table 3 as learners' opinion. In the same vein, Alhosban and Ismaile (2018) in their study found out that students do not have experiences in the use of the eLearning technology deployed in terms of communication, interaction and feedback. This, therefore, calls for more investment in training lecturers as well as the learners, in order to meet up with the trends of using the 21<sup>st</sup> Century e-learning technologies. These observations will, therefore, lead to the consideration of the report gathered by Wodi (2009) & Ololube (2006) that information communication technology industry being very dynamic, needs continuous and unrelenting training sessions to meet up with leading edge of innovation, creativity and knowledge.

# Conclusion

The importance of e-learning cannot be over-emphasized in Distance Education; e-learning enhances self-evaluation, makes assessment easier and enhances the easy use of multimedia. This study reveals from the respondents' views that there is a need for more supply of e-learning facilities. Also learners need to improve in the effective use of the available facilities and very importantly, the lecturers who will teach in this learning mode. The results from this study, will be useful to the management of the Distance Learning Institute, University of Lagos, in providing the required 21<sup>st</sup> century facilities and resources, for lecturers and distance learners, in order to achieve success via the e-learning mode.

Based on the findings from this study, it is recommended that; DLI website should be upgraded to contain useful links to different websites on various aspects of learning. Proper mass-orientation should be giving to learners on the use of electronic devices provided to aid their learning. Also, the University would have to interact with private organizations to provide inexpensive but effective and trending electronic devices for learners and lecturers.

### References

- Aderinoye, R. & Ojekheta, K. (2004). Open-Distance Education as a Mechanism for Sustainable
- Development: Reflection on the Nigerian Experience. *The International Review of Research in Open and Distributed Learning*, 5(1), 1-13. https://doi.org/10.19173/irrodl.v5i1.174.

Agyeman, O. T. (2007). ICT for Education in Nigeria. Retrieved from http://www.infodev.org.

- Akande, S. (2011). Computer and Internet Facilities Use in Distance Education: A Survey of Sandwich Students of University of Ado-Ekiti, Nigeria. *Library Philosophy & Practice (e-journal) 452* Retrieved from https://digitalcommons.unl.edu/libphilprac/
- Alhosban, F. & Ismaile, S. (2018). Perceived Promoters of and Barriers to Use of a Learning Management System in an Undergraduate Nursing Program, *International Journal of Emerging Technologies in Learning (iJET)*, 13 (2), 226-233. eISSN: 1863-0383
- Anietor, G. O. (2019). Approaches to promoting the Quality of Open and Distance Learning in Resource Poor Nations. *International Journal* of Educational Research. 6(1) 127-133.
- Beare, P. L. (2009). "The comparative effectiveness of videotape, audiotape, and telelecture in delivering continuing teacher education". *The American Journal of Open and Distance Learning*, 3(2), 57-66.
- Belanger, F., & Jordan, H. (2000). Evaluation and Implementation of Distance Learning: technologies, tools and techniques. London: Ideal Group Publishing.
- Chang, M. M. (2005). Applying self-regulated learning strategies in a web-based instruction-An investigation of motivation perception. *Computer Assisted Language learning, 18* (3), 217-230.
- Dabbagh, N. (2005). Pedagogical models for E-learning: Theory based design framework. Retrieved from

29

- http://www.sicet.org/journals/ijttl/issue0501/DabbaghVol1.Iss1.pp25-44.pdf
- Dillon, C., Gunawardena, C., and Parker, R. (1992). "Learner Support": The critical link in Distance Education. *Distance Education*, *13* (1), 29-45.
- Ememe, P.I & Modebelu, O.J. (2019). Challenges of Accessibility and Utilization of Open Educational Resources (OERs) in Single and Dual Mode Open Distance Education Institutions in Lagos. *International Journal of Educational Research*. 6(1) 114-126.
- Food and Agriculture of the United Nations (FAO). (2011): E-learning methodologies. A guide for designing and developing e-learning courses. Retrieved from http://www.fao.org/3/i2516e/i2516e.pdf
- Fashiku,C.O., Adinlewa, M.D. & Yusuf, A.A. (2017). Quality of Universities Education: An Agent of National Integration and Development in Nigeria. *Journal of Curriculum and Instruction*. 10(2), 100-106.
- Federal Republic of Nigeria (FRN, 2013). *National Policy on Education*. Yaba, Nigeria: NERDC.
- Fuller, S. A. (2002). A study of differential perceptions of students and faculty in distance learning [Dissertation]. Austin: The University of Texas.
- Garrison, G. R. (2000). Understanding Open and Distance Learning: A framework for the future. London: Routledge.
- Gboku, M., & Lekoko, R. N. (2007). African perspectives on Adult Learning": Developing programmes for Adult Learners in Africa. South Africa: Rolene Liebenberg.
- Henderson, M., Selwyn, N. & Aton, R. (2017). What works and why? Student perceptions of 'useful' 'digital technology in university teaching and learning, *Studies in Higher Education*, 42 (8), 1567-1579.
- Holmberg, B. (2009). Theory and practice of Open and Distance learning. New York: Routledge.

- Holmes, K. A. & Prieto-Rodriguez, E. (2018). Student and Staff Perceptions of a Learning Management System for Blended Learning in Teacher Education. *Australian Journal of Teacher Education*, 43 (3) 2. 21-34.
- Igwe, R.O., Uzoka, N.E. & Ekwerike, C.I. (2015). Higher Education: A Panacea for Sustainable
- Development, the Nigerian Experience. Lagos Education Review Journal. 15 (2) 178-192.
- Jegede, O., & Owolabi, I. (2008). "Technology use among college students": Implications for Student Affairs Professionals. NASPA Journal, 43920, 280-300.
- Keegan, D. (2016). *Foundations of Distance Education* (3rd ed). London: Routledge.
- Maier, P & Warren, A. (2000). *Integrating Technology in Learning and Teaching*. London: Kogan Page.ISBN 0 7474 3180 6.
- McCleary, I. D., & Egan, M.W. (2009). "Program design and Evaluation": Two-way interactive television. The *American Journal* of Open and Distance learning, 3 (1), 50-60.
- McLean. S. (2001). 'Open and Distance Learning: "A framework for the Food and Agriculture Organization of the United Nations". Rome: FAO. Retrieved from http://www.fao.org/sd/2001/KN0901a en.htm
- Moore, M., & Tait, A. (2002). Open and Distance Learning: Trends, Policy and Strategy considerations. Paris. UNESCO (p.7).
- Ojo, O.D. (2000). Knowledge, Attitudes, Practices of Parents and Teachers in relations to Adolescents' Reproductive Health Training in Osun State, Nigeria [Unpublished Ph.D. Dissertation]. Faculty of Education, Obafemi Awolowo University: Ile-Ife, Nigeria.
- Ojo, O. D., Ogidan, R., & Olakulehin, F. K. (2005). Cost-effectiveness of Open and Distance Learning in Nigeria: Responses from focus group discussion. *Online Journal of Distance Learning Administration*, 9 (2), 2 – 11

- Ololube, P. N. (2006). "Appraising the relationship between ICT usage and integration and the standard of teacher education programs in a developing economy". International Journal of Education and Development using Information and Communication Technology (IJEDICT), 2(3),7-85.
- Omolewa, M. (1982). Historical Antecedents of Distance Education in Nigeria, 1887-1960. *Adult Education in Nigeria*, 2(7),7 26.
- Pirani, A. J. (2004). "Supporting e-learning in higher education: roadmap, tools for navigating complex decisions". EDUCAUSE centre for Applied Research. Retrieved from www.educause.edu/edcarl.

Popovici, A., & Mironov, C. (2015). Students' Perspectives on using eLearning technologies. *Procedia - Social and Behavioural Sciences*, 180,1514 – 1519. Retrieved from https://www.researchgate.net/publication/277935119\_Students%27\_ Perception\_on\_Using eLearning Technologies (accessed Nov 30 2020).

- Redondo-Duarte, S., Sánchez-Mena, A., Navarro-Asencio, E., Gutiérrez-Vega, S. (2017).
- Design of a pedagogical model to promote knowledge generation in virtual communities. *International Journal of Learning Technology (IJLT), 12* (1), 3-25.
- Sherry, L. (2006). Issues in distance learning. *International Journal of Educational Telecommunications*, 1(4), 337-365.
- Tait, A. (2000). Planning student support in Distance and Open Learning. *Open Learning*, 15(3), 287-299.
- Threlkeld, R., & Brzoska, K. (2004). Research in Open and Distance Learning. In B.Willis (Ed.), Open and Distance Learning: Strategies and tools (pp 41-66). Englewood Cliffs, NJ: Educational Technology Publications.
- UNESCO (2002). Open and Distance Learning: Trends, Policy and Strategy considerations. Paris. UNESCO.

- Verduin, A., & Clark, A. (2001). Media in Distance Learning: The Nigerian National Teachers Institute Distance Education Programme. *Turkish Online Journal of Distance Education* 6(4). Retrieved from http://www.tojde.anadolu.edu.tr/tojde20/pdf
- Wodi, S.W. (2009). The concept of educational Technology; Problems and Prospects of
- Information and Communication Technology (ICT) in Nigeria. International Journal of African Studies. 1(1) 4-10.
- Wu, J. P., & Tsai, R. J. (2006). An integrative model to predict the continuance use of electronic learning systems: Hints for teaching. *International Journal on E-learning*, 5(2), 287-302.
- Yang, Y., & Lin, N. C. (2010). Internet perceptions, On-line participation, and Language Learning in Moodle forums: A case study on nursing students in Taiwan. *Procedia Social and Behavioural Sciences*, 2(1) 21-23.

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