

Open and Distance Learning (ODL) for Lifelong Learning: Student's Perception

Nworgu, Raymond Buchi., & Chukwuemeka Nkechi

Abstract

Open and Distance Learning gives the students more access to higher education with its flexible style, broader choice of courses, qualitative instructional procedures and cost efficiency. The advent of ICT has made e-learning an essential part of ODL. The advent of open and distance learning has grown to a point where it is crucial to express it inwards as to recognise the system generally for its growth and development. This self-examination of the system can be achieved precisely by the students who are making use of the system. In this regard, efforts were made to study the students' perception on (i) the role of open and distance learning (ODL) in our higher education system; (ii) the role of Information and Communication Technology (ICT) in ODL, and (iii) e-learning platform/online learning. The researcher developed the questionnaire for the study and its was validated by an expert in field of ODL. The questionnaire used for the study was given to 600 online students. In addition, only 264 students answered the questionnaire. The answers obtained were subjected to analyses and the result equally discussed.

Keywords: ODL, lifelong learning, Role of ICT, Online learning, e-learning, Student's perception

IJSER

Introduction

The field of open and distance learning is at the heart of active growth and transformation globally. Formal and non-formal education occurs mainly in structured environments in the form of institutions (schools, community centres, multimedia centres, learning villages/cities, etc.). Informal education on the other hand takes place in both structured and unstructured environments. Prayoonwong & Nimnuan (2010) asserted that understanding how students learn as well as their performances is by focusing on the learning environment. Lifelong learning offers a holistic perspective on the role of education in someone's life cycle. It affirms that learning, as a continuous process in life, plays an essential role in enabling individuals to adapt to, and deal with, new challenges and changes in their life's and surrounding environment.

Lifelong learning, embracing all forms of educational and learning experiences, helps students to engage in purposeful interactions with their environment through the development of their knowledge, skills and critical thinking abilities. Lifelong learning is intended to enable students to become active social agents that is, people who are able to act, reflect and respond appropriately to the cultural, social and development challenges they face both as individuals and as members of society. Students' perceptions of school events, the nature of teachers' expectations, and the patterns of interaction between students and instructors have an impact on their academic attitudes and behaviours. The way one look at situations, places, and things reflect the way one view the world and influences the conclusions and decisions one make.

Our perception of an event is a personal interpretation of information from our own perspective. The impact of schools on students' academic performance is derived from a student's individual perception rather than the objective reality of the

activities and interactive relations in the educational setting. A teacher's behaviour towards a student is a major determinant of the student's perceived control. Students who perceive that their teachers are satisfied with their jobs have been found to be more likely to achieve. The field of education plays an essential role in the growth of an individual as well as the society at large (Nworgu, Nwachukwu &, Okop, 2019). According to Farrell, (2014) open and distance learning encompasses open learning, distance learning, flexible learning, online learning, e-learning, and virtual learning. Farrell emphasised that open learning practices tolerate access to learning with no or least barriers in respect of gender, age, etc. and also provides education openings which can be accessed at any time and place with much importance on preparation of events than to any precise mode of delivery.

Open and Distance Learning (ODL) programmes are facilitator and student-centred in nature. The ODL system differs from those of the conventional university system where both instructional activities and courseware materials are instructor-centred. Open and Distance Learning (ODL) is a ray of hope for learners who have missed the chance to avail the opportunity to educate themselves at the right time and place and feel the pinch of being left behind. ODL attempts to provide prospect for those marginalized persons and sections to join the main stream of the society (Mishra & Panda, 2007).

It is understood that ODL system are on the increase, as time is not far when the entire education and training system will be fully controlled by the ODL system. The coming of Information and Communication Technology (ICT) has supplemented the e-learning part to ODL as well. In spite of its fast growth and acknowledgement, the system has some challenges, which need to be addressed. There is a big gap left, as since the advent of

ODL in Nigeria, there is no policy framework to determine its operation and practice in the country. The open and distance education has gotten a stage where it is imperative to express it inwards, to fully recognise the system broadly for its growth and development (Barth & Rieckmann, 2016). This self-examination of the system can be achieved more correctly by the users who are ODL students. Therefore, an effort was made to look at ODL from the students' perception. What do they think of the ODL system and how do they attempt to reach out others students that are not ODL compliant? To understand the importance of Open and Distance Education, the Government of Nigeria started the National Open University of Nigeria (NOUN) an online university initiative to reach all that are qualified for university education.

According to (Ojo & Olakulehin, 2006) some other dual-mode Universities like the University of Ibadan (UI), University of Lagos (UNILAG), University of Abuja, Obafemi Awolowo University (OAU), University of Nigeria, Nsukka (UNN), University of Maiduguri and Federal University of Technology (FUT-Yola) just to mention a few has taken up the initiative of the NOUN as well. The restraints of e-learning, measures to bring ODL at par with face to face learning were deliberated in this research work.

Review of Literature

The review of relevant literature was carried out keeping in mind the objectives of the study.

Open and Distance Learning (ODL) as mode of Education: The word Open and Distance Learning is an approach of instruction delivery where learners and instructors need not be in physical contact and holds a high variety of flexible education atmosphere, improves access to tertiary education; has what it

takes to distribute variety of services and uses a variety of media and technologies to deliver quality education for huge number of learners (Nworgu, et al, 2019). ODL provides extra opportunity to higher education to learners with its flexible style, preferred choice of courses, qualitative instructional approach and cost efficiency (Sharma, 2005). Students generally have a positive perception and attitude towards ODL, compared to traditional forms of higher education (Ojo et al, 2006). According to Nwachukwu, Okop, Kolodeye & Imo (2016) the quest to attract national development and to close the gaps in educational disparities amongst its citizens, the Nigerian government realised that the only way to actualise this huge dream of development is through provision of quality and sound education to all its citizens. According to Nwachukwu et al (2016) opined that it's a difficult task, as the formal education system could not reach all Nigerians that needed education and that called for an alternative which is an open and distance education.

Open and Distance Learning (ODL) is one of the best alternatives to satisfy the growing demand of education, especially higher education, of a variety of learners. How to implement ODL is also very important and thrust he needs to assess the perception of students in ODL.

Information and Communication Technology (ICT) Role in Open and Distance Learning (ODL): According to UNESCO (2004), ODL is one of the most rapidly growing fields of education, and its potential impact on all education delivery systems has been greatly accentuated through the development of Internet-based information technologies, and in particular the World Wide Web presenting approaches that focus on opening access to education and training provision, freeing learners from

the constraints of time and place and offering flexible learning opportunities to individuals and groups of learners.

ICT has become all pervasive and has also influenced ODL especially the mode of delivery. Like most African countries, Nigeria not left out has inadequate ICT facilities/infrastructures. A study conducted by Nigerian Information Technology Professionals in America in 2002 showed that given the present ICT infiltration it may take Nigeria 50 years to equal with America on the aspect of PC count per households (Iromanto, 2004). According to Smidt, Li, Bank, Kochem & McAndrew (2017) stated that adult learners respond differently to different types of technology, and therefore, different topology of Internet-based instruction that relates levels of technology should be used in Open and Distance Learning.

The role of facilitator in the process of arranging learning strategies in the classrooms is getting changed with the modernised inputs as supported by the ICT (Nworgu, et al, 2019). Open and distance learning is a widely adopted technology in many developed parts of the world where educational institutions are constantly considering new technologies that can serve as a medium for instructional delivery, learner support services and interaction among learners. One of the most recent technologies to gain much consideration and usage is the mobile technology.

According to Bandalaria (2007), emphasized how quality of learning is guaranteed in a technology-driven (ICT) system of education, which comprises, among others, the employment of the 'quality circle approach' in the progress of courses and learning packages, and the delivery of suitable technologies to accomplish academic processes and achieve institutional goals.

Open and Distance Learning (ODL) and e-Learning/Online Learning: According to Mishra & Panda (2007) opined that

extensive use of computers and email has a high relationship with positive attitudes towards e-learning and online learning. The most significant barricades perceived by the facility included poor internet access by students and lack of training on e-learning/online learning, followed by institutional policy and instructional design for e-learning/online learning (Nisha S, k., Gowthaman, A. k., Awadhiya, A. M., and Gayatri, k. (2018). The important motivators involved personal awareness to use technology, intellectual challenge, and adequate provision for technology infrastructure. E-Learning is fundamental to online learning. E-learning is thus defined more scarcely than distance learning, which comprises of print-based education resources and correspondence communication. Consequently, E-learning can be defined as a subset of open and distance learning, but not vice versa (Rosenberg, 2011).

The published materials which are widespread in open and distance learning should be known here as a type of technology as well. E-learning is macro concept that includes online and mobile learning environments. Online learning facilitates communication and collaboration via networked computers. According to Crescente, Mary, Lee, and Doris (2011) offer enough bases to differentiate between online learning and e-learning: "The word e-learning covers a wide set of applications and procedures, including computer-based learning, Web-based learning, virtual classrooms and digital collaboration. E-learning as the delivery of content [and interaction] through all electronic media, including the Internet, intranets, extranets, satellite broadcast, audio/video tape, interactive TV, and CDROM respectively. Hitherto, e-learning is defined more scarcely than open and distance learning, which would include text-based learning and courses conducted via written correspondence". A new understanding of knowledge production and learning, challenges the core of learning design, demanding innovative

and appropriate approaches to teaching and learning. They presented a set of learning design principles drawn from the user's perception.

Objectives of the Study

The objectives of this research study are to:

- 1) To study the students' perception on the role of ODL in Higher Education;
- 2) To examine measures for enhancing ODL acceptability;
- 3) To analyse the views of the students on the role of ICT for qualitative improvement in ODL; and
- 4) To study student's perception on online courses;

Research Methodology

The purpose is to take a glimpse into students' perception of the ODL use in our universities. In addition, descriptive statistics method was used for the study. It is important to note that ODL is seen as means of lifelong learning and if it is not perceived in the right direction by the students, the whole essence of the study will be misplaced.

1) Sample: There are nine (9) indigenous universities that have the accreditation to run open and distance learning programme across the country, were considered for the purpose of the study. An online survey was carried out; the sample was randomly selected through the websites of the universities. The questionnaire was sent to six hundred (600) ODL students that are running the open and Distance learning programme across the selected universities.

2) Tool: The study is aimed at understanding students' perception towards ODL system; a questionnaire was developed to collect students' perception on ODL use in the various universities. The questions focused on ODL as a mode of Education; role of Information and Communication Technology

(ICT) in Open and Distance Learning (ODL); ODL and e-learning/Online learning. Originally fourteen items with number of sub-items in each were designed. Then the questionnaire was discussed with ODL experts for ensuring the content validity of the questionnaire. Two questions were dropped and five questions were reframed as per the suggestions from ODL experts. The final questionnaire consisted of twelve items with a number of sub-items in each.

3) Data Collection: Online survey instrument was used to collect the data. The questionnaire was sent to 600 randomly selected samples. Two hundred sixty-four students responded to the questionnaire.

4) Statistical Analysis: Percentage mean was used to analyse the data obtained and to understand the user's perception towards ODL use.

Results and Discussion

The data obtained was analysed and discussed in different five sections:

(1) Demographic Profile

The Students perceptions to ODL use have an important role to play in their aspiration and quest for effective use of ODL system in the university system across the country.

Table 1 of the research work revealed the demographic distribution of students' perception in the study. This is divided into entry level, universities and discipline/specialization

Entry level: The Maximum percentage of respondents shows the intake level 45.28% of the respondents were first year student of various universities and 28.20% were second year student respectively. The percentage of third year student was slightly low 12.43% in the entry level in both single and dual mode Universities. While the fourth-year students recorded 14.09% of the student perceptions of ODL use in the country.

Universities: The result obtained shows 28.20% of the participants were from the National Open University of Nigeria (NOUN) who are regular students. The students from the University of Ibadan seconded with 15.10% respondents. In the same vein, University of Maiduguri formed 12.43% of the respondents while the least respondents were recorded with the University of Nigeria, Nsukka with 3.03% of the student's response.

	Responses in (%)	No. of Students Participation in ODL
Entry level		
First year	45.27	140
Second year	28.20	62
Third year	12.43	30
Fourth year	14.09	32
Universities		
National Open University of Nigeria (NOUN)	28.20	62
University of Ibadan (UI)	15.10	33
University of Lagos (UNILAG)	8.33	24
University of Abuja, Obafemi Awolowo University (OAU), Ile-Ife	7.05	23
University of Nigeria, Nsukka (UNN)	9.25	25
University of Maiduguri	3.03	16
Federal University of Technology (FUT-Yola)	12.43	30
Ahmadu Bello University (ABU), Zaria	4.03	20
	3.41	31
Discipline/Specialization		
Agriculture	1.42	10
Arts & Humanities	30.20	64
Business Administration	19.09	40
Education	21.20	50
Engineering	6.45	22
Law	4.03	17
Health Sciences	2.43	14
Social Sciences	9.88	26
Physical Sciences	2.20	12
Vocational Technical Education	1.34	9

Discipline/Specialization: The analysis of the sample shows that maximum respondents were from Arts and Humanities with (30.20%). Respondents from Education Discipline contributed 22.20% followed by Business Administration recorded (19.03%). The Social Sciences had 9.88% of the respondents. 6.45% of engineering students responded to the questionnaire. Respondents from Law were 4.03%; Health Sciences were 2.43%; Physical Sciences were 2.0%. Respondents from field of Agriculture were 1.43%, followed by Vocational Technical

Table 1: Demographic profile of the student's participation in ODL with Responses

Education with (1.34%). Students from a good number of disciplines expressed their opinion on the role of ODL in lifelong learning.

(2) Role of Open and Distance Learning (ODL) in Higher Education

Table 2: The responses of the students on the role of ODL

S.N.	Responses	Agree No. of Responses (%)	Disagree No. of Responses (%)	Not Aware No. of Responses (%)
1.	Improved access to higher education	99.60 (260)	0.20 (2)	0.20 (2)
2.	Acquiring several skills	97.97 (250)	0.69 (5)	1.34 (9)
3.	Capacity Building/ Training of Students	70.39 (194)	9.25 (25)	20.36 (45)
4.	Chances of employment	57.90 (171)	18.03 (38)	24.07 (55)
5.	Lifelong learning/ education	65.00 (182)	9.88 (26)	25.12 (56)

Table 2 reveals that 99.60% students expressed that the ODL improves access to higher education. One thing that is obvious is that ODL is a ray of hope for learners who have missed the chance to avail the opportunity to educate themselves as the students do firmly believe in it. Around 97.97% believed that through ODL several skills can be acquired. More than 70.39% of students agreed that ODL has significant role in capacity building/training of the student; while there are high chances of employing the student as it supports lifelong learning. The role of ODL in improving access, employability, acquiring skills, capacity building and lifelong learning and continuing education was also supported by other researchers (Ojo et al, 2006).

Table 3: The responses of the students on the role of ODL in different fields of education

S.N.	Fields of Learning	Agree No. of Responses (%)	Disagree No. of Responses (%)	Not Aware No. of Responses (%)
1.	Vocational Technical Education (VTE)	45.28 (140)	26.26 (58)	33.93 (66)
2.	Professional Education (Law, Medical Sciences, Paramedical Sciences, Business Management, Agriculture, Health, etc.)	48.75 (148)	24.92 (56)	26.33 (60)
3.	Teachers Education	85.13 (220)	4.99 (18)	9.88 (26)

When the students were asked to respond whether ODL has the skills to impart Vocational technical education and other areas of education, 45.28% of them agreed that ODL can impart vocational technical education and 48.75% agreed for professional education. Around 33% were not aware whether ODL can impart vocational technical education effectively and around 26% did not agree with the statement. The responses obtained with regard to professional education shows that 48.75% of the student agreed can be imparted through professional education, while 26.33% of the students were not aware and 42.92% did not agree. Majority of students agreed that teacher education can be imparted efficiently through ODL.

(3) Measures for enhancing Open and Distance Learning (ODL) Acceptability

Table 4: The responses of the participants on the measures for enhancing ODL acceptability

S.N.	Responses	(No. of respondent) %
1.	Improved use of ICT	34.48 (68)
2.	Quality Assurance Measures	19.85 (43)
3.	Recognition & Accreditation	9.25 (25)
4.	Examination reforms	9.25 (25)
5.	Use of local faculty & lecture rooms	5.10 (21)
6.	Promoting e-learning & online learning	4.99 (18)
7.	Government involvement	3.03 (16)
8.	Policy Awareness measures	2.43 (14)
9.	Effective learner support system	2.32 (13)
10.	Awareness & publicity	1.42 (10)
11.	Behavioural change	1.20 (8)
12.	Capacity building of students	0.90 (6)
13.	Research activities	0.90 (6)
14.	Others	21.20 (47)

The respondents gave more than one response

Table 4 above reveals the perception of the students on the way and mechanism through which more acceptability of ODL can be made. 34.48% of the students voiced their faith in the use of ICT to raise the acceptability of the ODL in the university system. This was followed by quality assurance measures (19.85%). Recognition & accreditation; Examination reforms were the measures suggested by 9.25% of the students followed by the use of local faculty and lecture rooms by 5.10% students. They expressed measures like Government involvement (3.03%); promoting e-learning and online learning (4.99%); ensuring policy awareness measures (2.43%); Effective Learner support system (2.23%); awareness and publicity (1.42%); behavioural change (1.20%); both capacity building of students and research activities stand at 0.90%; and other measures to raise the acceptability of ODL is (21.30%). Earlier research conducted by (Barth & Rieckmann, 2016) also suggested measures for improving the acceptability of ODL.

(4) Role of Information and Communication Technology (ICT) for Qualitative improvement in Open and Distance Learning (ODL)

Table 5: Use of ICT for Qualitative Improvement in ODL

S.N.	Responses	Agree	Disagree	Not Aware
		No. of Responses (%)	No. of Responses (%)	No. of Responses (%)
1.	Development of Learning Resources	99.01 (257)	0.35 (3)	0.59 (5)
2.	Curriculum implementation	94.61 (242)	0.40 (4)	4.99 (18)
3.	Providing Student Support Services (Media & Publicity, Admission, Counselling, Training, practical, etc.)	98.70 (254)	0.40 (4)	0.90 (7)
4.	Student Assessment	94.55 (234)	1.42 (10)	4.03 (20)
5.	Governance & Management	97.25 (245)	0.69 (6)	2.43 (14)

Table 5 reveals that around 99% of the student felt that ICT provides support in developing learning resources, more than 94% of the students agreed that ICT plays a significant role in the implementation of the curriculum for the student, while 97% of the student were of the opinion that governance and management plays a vital role in the use of ICT for ODL improvement. About 98% of the students believed that ICT effectively contributes in providing support services to the students. ICT also plays a significant role in students' assessment as experienced by the respondent.

The findings are in line with the findings obtained by (Nworgu et al, 2019) The role of facilitator in the process of arranging learning strategies in the classrooms is getting changed with the modernised inputs as supported by the ICT. Thus, taking the views of the students into consideration, it can be stated that ICT has a crucial and essential role in enhancing the quality and reach of ODL learners. The internet is an important component of ICT, as with lower bandwidth, high level internet-based connectivity, development could be achieved. Some of these

issues were reported almost twenty years back (Smidt et al, 2017). Therefore, there is an urgent need to address these issues and update the system to encompass the technological advancement.

In response to a question, a significant percent of students of ODL expressed their opinion of using mixed mode i.e. use of online learning, OER, e-learning, face-to-face interaction to enhance accessibility to learner for online courses (52.55%) whereas, around 20% of the students stated that full-fledged online courses are helpful for distance learners typically the working class people.

As one can see that more than 50% of the students preferred mixed mode, which indicates the increasing popularity of OER, e-learning and online education.

(5) Students Perception on Online Courses

Table 6: Responses of the Students on the difficulties for implementing online courses

S.N.	Responses	No. of Students (%)
1.	Non-acknowledgement of online Course	48.25 (145)
2.	Lack of Policy Framework for online courses	58.93 (173)
3.	Lack of larger bandwidth	39.30 (137)
4.	Lack of steady internet connection	28.10 (126)
5.	Non-availability of Computers/ other connection devices	23.81(123)
6.	Lack of trained personnel for online delivery	49.25 (149)
7.	Lack of competent e-content	30.42 (128)
8.	Non-availability of learning resources/tools	24.50 (124)

The respondent gave more than one response.

Table 6 reveals perception of students on difficulties encountered in implementing the online courses. Most of the students (58.93%) felt that lack of policy framework for online courses is the major problem in launching them, followed by lack of trained personnel for online delivery (49.25%), non-

acknowledgment of online courses (48.25%); lack of larger bandwidth for ODL delivery (39.30%); lack of competent of e-content (30.42%), lack of steady internet connection (28.10%); non-availability of computers/other connection devices for learners (23.81%); non-availability of learning resources/tools (24.50%).

The difficulty in implementing online courses make the policy makers, administrators, teachers and others cautious while selecting the modes for launching a course for the distance learners. This has already been highlighted in previous paragraphs, as most of the students prefer mixed mode for delivery of courses. There are many accredited Institutions/Universities that are offering online courses to learners around the country. Around 72% of the students in the study were of the opinion that online learning can complement learning in all universities and not merely in Open Universities. Further, 64.25% of students expressed their desire to promote online learning. Though the students were asked to express their opinions with regard to issues and advantages in relation to use of online learning for learning opportunities, the student highlighted several issues.

Table 7: Issues related to use of online education for learning opportunities

S.N.	Responses	No. of Students (%)
------	-----------	---------------------

1. Exceptional Issues	30.20 (64)
2. Add to existing knowledge	21.20 (50)
3. Additional learning Resources	12.43 (30)
4. Updating knowledge	4.03 (20)
5. Online Counselling	2.93 (15)
6. See to different needs	1.42 (10)
7. Online evaluation	1.20 (8)
8. Real Cost	0.90 (6)
9. Others e.g (Capacity Building/Training/ Resources)	18.03 (38)
The respondents gave more than one response.	

2. Facilities/Resources	46.30 (141)
3. Awareness/enlightenment	34.86 (103)
4. Guidance/Trained Personnel	34.86 (103)
5. Language barrier	14.09 (32)
6. Financial constraint	12.43 (30)
7. Acknowledgement of Courses	1.34 (9)
8. Lack of eagerness and inspiration	1.20 (8)
9. Quality	0.90 (6)
10. Others e.g. (Sex)	1.42 (10)
The respondents gave more than one response.	

Table 7 shows that around 30% stressed upon exception issues about online education. Around 21% stated that it will add to already existing knowledge. A small percent of about (18.03%) of students felt that online education can help in capacity building. However, additional learning resources have 12.43% of the response. In contrast, only real cost recorded the least percentage of 0.90% as against online evaluation (1.20%); seeing to different needs of the student clock 1.42% of the response, while updating knowledge (4.03%); and online counselling 2.93% respectively.

According to Nworgu, et al (2019) ODL has the capacity to distribute variety of services and uses a variety of media and technologies to deliver quality education for huge number of learners. However, the students have not presented any solid opinion about the use of online education for learning opportunities, as they have pointed out some limitations in response to another question as can be seen in Table 8.

Table 8: Limitations to access Online Learning courses in rural and remote areas

S.N.	Responses	No. of Students (%)
1.	Internet Connectivity	55.20 (154)

Table 8 reveals that online learning has fewer spread in rural and remote areas of Nigeria. The most important limitation being internet connectivity, i.e. poor internet connection (55.20%), followed by facilities (46.30%) whereas both awareness and lack of trained personnel (34.86%) were perceived equally by the students as limitations in rural area for use of Online learning. Language barrier and finance constraints, quality, lack of inspiration, acknowledgment of courses has also been perceived as limitations.

Conclusion

ODL is the answer to the Nigerian quest for global education, equal access and opportunity to all. This mode of teaching and learning has the essential ability to reach the last learner according to his/her convenience. Therefore, it is important that ODL is perceived by all in the true sense. The study establishes the perception of the students that all of them have great faith in ODL as a system to make education accessible to all. Almost all students approved the view that ODL can meet the demands of higher education thus increasing the Gross Enrolment Ratio (GER), as suited for lifelong learning. Most of them feel that skill development, capacity building and employability can be done through ODL. It is commonly perceived by the common

man that ODL is suitable only for Arts and Humanities courses. But most of the students feel that ODL is also suited for both technical and professional education. ICT is being looked upon as a measure that can help in the qualitative improvement of ODL. Besides that, Government involvement, policy measure, recognition and accreditation, quality improvement are looked upon as measures to increase the perceived validity of the ODL system. Many hindrances to online education have been highlighted, the foremost being lack of policy framework, which leads to no clear-cut rules and procedures. Also, non-acknowledgment, larger bandwidth issues, implementation issues, lack of trained personnel, competent e-content and learning resources were the hurdles pointed by the students. Online learning is favoured by a good number if exceptional issues are taken into consideration. Limitations to access online education in rural areas were many, the foremost being the issue of internet connectivity.

Recommendations

The implication, for this study, is that universities may use the information obtained as a basis for further studies. The results may also assist ODL institutions to identify the features they should be looking for when conducting further research on the ODL as a lifelong learning.

Open and Distance Learning (ODL) is one of the best alternatives to satisfy the growing demand of education, especially higher education, with variety of learners. There is need to implement ODL as an important tool to assess the perception of students.

The progress and appropriate delivery of online courseware resources to the learners are encouraged and considered vital in the quest for lifelong learning to be maintained by all a sundry in ODL programme. It is necessary to put into consideration, the availability of network, an enhanced method of communication amongst the university and learners to dodge delay in dissemination of information.

Implementation of online education in rural areas is inevitable to assist learners bridge the gap on the distance to study areas, the foremost being the study availability of internet connectivity. The use of Information and Communication Technology (ICT) should be seen as a measure that can assist learners in the qualitative improvement of ODL in all area of one's endeavour.

References

- Bandalaria, M.P. (2007). Impact of ICTs on open and distance learning in a developing country setting: The Philippine experience. *The International Review of Research in Open and Distributed Learning*, 8(1), Retrieved from: <http://www.irrodl.org/index.php/irrodl/article/view/334>
- Barth, M., & Rieckmann, M. (2016). State of the art in research on higher education for sustainable development. In Matthias Barth, Gerd Michelsen, Marco Rieckmann and Ian Thomas (Eds.), *Routledge handbook of higher education for sustainable development*, 100-113. London: Routledge.
- Crescente, Mary L., Lee Y., & Doris. (2011). "Critical issues of M-Learning: design models, adoption processes, and future trends". *Journal of the Chinese Institute of Industrial Engineers*, 28(2), 111-123.
- Farrell, G (Ed.). (2014). *A Virtual University for small states of the Commonwealth*. Vancouver: The Commonwealth of Learning.
- Iromantu, O.C. (2004). Integration of ICT in education. The status, issues, challenges and infrastructure. *Paper presented at the Association for the Development of Education in Africa (ADEA) sub-regional conference on integration of ICT in education for West Africa: Issues and challenges*, held in Abuja, Nigeria between July 26-30, 2004.
- Mishra, S., & Panda, S. (2007). E-Learning in a mega open university: Faculty attitude, barriers and motivators. *Educational Media International*, 44(4), 323-338.
- Nisha, S., Gowthaman, K., Ashish K. A., Anshu M., & Gayatri, K. (2018). ODL for Life Long Learning: Insiders' Perspective: *Indian Journal of Open Learning*, 27(2), 67-80.
- Nwachukwu, R. U., Okop, E. O., Kolodeye, U. L. & Imo, C.O. (2016). The Role of Distance Education in Teachers Upgrade for sustainable Development in Nigeria. *Institute of Education Journal*, 28(2), 207-224.
- Nworgu, R. B., Nwachukwu, R., & Okop, E. O. (2019). Current trend in Open and Distance Learning: The Nigerian Perspective. *International Journal of Studies in Education*, 16(1), 140-153.
- Ojo, D.O., & Olakulehin, F.K. (2006). Attitudes and perceptions of students to open and distance learning in Nigeria. *The*

International Review of Research in Open and Distributed Learning, 7(1). Retrieved from:

<http://dx.doi.org/10.19173/irrodl.v7i1.313>

Prayoonwong, T., and Nimnuan, C. (2010). Dental Students' Perception of Learning Environment. *South-East Asian Journal of Medical Education*, 4(1), 49-54.

Rosenberg Self-Esteem Scale, (2011). Retrieved from:

<http://www.bsos.umd.edu/socy/research/rosenberg.htm>

Sharma, R.C. (2005). Open learning in India: Evolution, diversification and reaching out. *Open learning: The Journal of Open, Distance and e-Learning*, 20(3), 227-241.

Smidt, E., Li, R., Bunk, J., Kochem, T., & McAndrew, A. (2017). The meaning of quality in an online course to administrators, faculty, and students. *Journal of International Learning Research*, 28(1), 65-86.

United Nations Educational, Scientific and Cultural Organization UNESCO. (2004). Final report of the meeting of higher education partners (World Conference on Higher Education). Paris: UNESCO.

Authors' Information

1. Nworgu Raymond Buchi is currently pursuing his PhD Programme in the Department of Computer Science in university of Nigeria, Nsukka where he works as a Lecturer. He also work as a staff at the Centre for Distance & e-Learning (CDeL) , University of Nigeria, Nsukka
[\[raymond.nworgu@unn.edu.ng\]](mailto:raymond.nworgu@unn.edu.ng)
[+2348065609655]

Co-Author' Information

2. Chukwuemeka Nkechi is currently pursuing her PhD programme in the Department of Psychology, Nnamdi Azikiwe University, Awka. She works as a Lecturer in Department of Psychology at University of Nigeria, Nsukka
[nkechinyere.chukwuemeka@unn.edu.ng]
[+2348134748882]