

CHALLENGES TOWARDS DISTANCE EDUCATION AND OPEN LEARNING FOR CHANGING COMMUNITIES: A CASE OF NATIONAL OPEN UNIVERSITY OF NIGERIA

Chris N. Mbah, Ph.D; Kelvin Onyewuchi Ugorji and Emmanuel Duru

Abstract

As access to education has become a global issue, provision of education and training to the society for economic survival and to meet the ever-changing requirements of the society and individual needs become difficult through the conventional system of education. Conventional system of education became hard-pressed to meet the demands of today's socio-educational needs as tertiary institutions fail to cope with candidates seeking admissions yearly. ODL became necessary but without challenges. This study therefore, aimed at determining the challenges towards distance education and open learning using National Open University of Nigeria (NOUN) as a case study. Two research questions and hypotheses each were administered and formulated to guide the study which adopted a descriptive and inferential survey design. A 15-item instrument named SCODE of both 5-point and 4-point Likert forms was designed and completed by a sample of 494 respondents. The responses were analyzed using mean rating and Z-test statistic. The findings showed that technological and infrastructural facilities challenge ODL to a great extent and public perception of ODL and relevance of the curriculum significantly challenge the system. Following the findings and their implications some recommendations were made to improve the implementation of the system.

Keywords: Distance Education, Open Learning, Changing Communities, Challenges, Conventional.

Education has become an important agent of globalization as access to education is a global issue (Olusola and Alaba, 2011). Hence to eradicate inequalities, poverty and higher

education level deprivation, government all over the world have made commitments to make education accessible to its citizenry to achieve the MDGS.

To this end providing education and training to the learners for economic survival and to meet the ever-changing requirements of the society and to meet the individual's requirements and tasks is not possible through the conventional system of education based on colleges and universities. The electronic system is now being used in communication, sharing of resources and delivery of education in distance learning method. Therefore distance and open learning help a great lot in providing the solution because electronic computing and communication have played a great role in changing the perspectives of the world in an imaginable way.

Distance education and Open learning

While distance learning (education) is used to describe learning organized, dispensed and acquired from a distance, "Open" was attached to distance learning as a result of criticisms against the formal or conventional school system and globalization (Biao, 2012) hence open learning is the construct that sees to remove barriers and constraints that may prevent learners from accessing and succeeding in quality education (Oyo and Olakulehin, 2006). Therefore in this study, distance education and open learning will be used

interchangeably with open and distance learning ODL.

Such criticisms are the inability of the conventional system to accommodate as many as would need education, its high cost to erect and maintain, its wastage through a high percentage of failure of its students at private and public examinations and finally the idea of globalization that suddenly turned the world into a global village (Bio, 2012). As a result of these social developments learning opportunities are opened up to many people in the society irrespective of their geographical locations.

Because education is a global issue as it has become an important agent of globalization (Olusola and Alaba, 2011), governments all over the world in collaboration with international community have made commitments to make education accessible to its citizenry. The essence is to eradicate inequalities and higher level deprivation in educational endeavours so as to achieve the MDG.2 as it related to education for all by the year 2015. To meet these goals open and distance learning programmes were established, hence the increase in the establishment of open universities, correspondence colleges and other institutions other than the conventional tertiary institutions. It is an approach considered appropriate substitute for the face-to-face method that still dominate the educational system.

To the learner, distance and open learning mean more freedom of access and thereby a wider range of opportunities for learning and qualifications (UNESCO, 2002). It is often a cheaper alternative for them to pursue a course through conventional methods. As many people cannot afford to leave their work to study, it becomes important that distance education and training be combined with work. Distance and open learning also mean a more learner – centered approach, allowing some flexibility and personal organization of the learning programme.

For employers, open and distance learning offers the possibility of organizing learning and professional development in a workplace which often saves costs of travel and subsistence. E-learning is the use of internet technologies to deliver a broad array of solutions that enhance knowledge and performance (Rosenberg, 2001). It is based on networking which involves storage, retrieval and sharing of information; content delivery through computer using World Wide Web (internet).

Therefore, in order to facilitate learning, web is used as the backbone and its value is delivery and producing effective learning to people cannot be underestimated. Distance education gives the flexibility to study a university degree without needing to visit a campus. A distance education student studies a programme content through a number of means including the use of online discussion for a, electronic library resources, by receiving all necessary and required materials online. The student has the ability to study in the comfort of his/her own home, at his/her own pace, combining the study with fairly and work commitments. By distance education, students have access to material resources including e-books, e-journals etc.

Finally, according to Evans and Fan (2002) as mentioned by Olusola and Alaba (2011), open and distance learning are characterized by the separation of teacher and learner in time and place with the use of a variety of media using a two-way communication that allows learners and instructors to interact with occasional face-to-face meetings.

Brief History of National Open University of Nigeria (NOUN)

Because education has become the core of globalization and a key to development as well as an emancipation tool from deprivation,

Challenges towards Distance Education and Open Learning for Changing Communities: A Case of National Open University of Nigeria

majority of Nigerians began to seek for higher education at the expense of their comfort. Before the establishment of open and distance learning in Nigeria, many Nigerians went outside the country in quest for higher education (Adesina, 1988).

The major concern to Nigerians even today has been access to quality education which is reflected in the number of candidates that apply for admissions yearly into tertiary institutions through JAMB. By the emergence or introduction of National Open University of Nigeria (NOUN), training through correspondence courses from London has been in existence and through it many Nigerians were trained into secretarial and administrative positions (Adesina, 1988). It was the only mode of distance education available.

When the conventional education became hard pressed to meet the demands of today's socio-educational needs and between the educational system at the tertiary level and the number offered admissions yearly, the NOUN became a necessity. Records showed that NOUN is the first fully fledged university "and solely fundamental of open and distance learning at university level" in the whole of west Africa which operates in an extremely open and distance learning mode of education (Ojo and Olakulehin, 2016) established in April 2001. It focuses mainly on open and distance teaching and learning system and delivers its materials by ICT. It is a good and novel development in the provision of higher education in Nigeria.

It is known that as the demand for university education as well as the job training remains unabated in Nigeria, NOUN becomes operative based on its ability to provide dual mode of learning processes to take care of the educational needs of those that are qualified for university education but were not offered admissions for want of space in tertiary institutions (Aderinoye, 2002). The desire of this category of students that were denied admissions, despite their possession of minimum entry requirements is realized through NOUN. The

issue of carrying capacity does not necessary apply to open and distance education.

Table:
Number of applicants and number of students admitted in Nigeria universities 1999/2000 – 2008/2009

	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
No. of applicants	41,773	46,749	5,039	99,389	1,038,009	84,957	916,371	8,307	911,653	1,054,060
No. admitted	78,550	50,277	6,071	51,845	10,515	12,249	76,984	8,502	107,370	200,000
% admitted	18.8	10.7	1.2	5.2	10.0	14.5	8.4	1.1	11.8	18.9

Source: JAMB, cited from Awe, 2015

Changing Communities:

As communities have futures, they also have a history (Pollard n.d). History, in the sense that they grow and change overtime.

As new people move into communities, other people move out and changes unfold. Certain factors make or help communities to change. They include education, transportation, health care, and accessibility to ICT etc.

The present changing communities or learning environments and the advancement of modern technologies call for change in demand for education and the approach to teaching and learning and the delivery of education. A changing community is therefore one that is advancing or developing as a result of new ICT through education.

Challenges towards Distance Education and Open Learning.

In Nigeria, distance education does not go without some challenges. The challenges could be more daunting than those of the conventional system of education. Most of the challenges towards open and distance learning are relevant curriculum, technological, attitudinal and financial etc. they are addressed as follows:

(i) **Technological challenges:** Advanced technologies have aided and transformed distance education greatly. Distance education is technology – driven and according to Aina (2001) absence of necessary infrastructure for technologies will pose a challenge to distance education. And according to him, inadequate facility and support staff are barriers to distance learning.

On the other hand, Biao (2012) emphasized that poor internet connectivity constitute a threat to the smooth operations of an online work. Inaccessibility to internet services is a major threat to many of the open and distance learning students. Closely related to this is the instructor's incompetence in using online platforms. This is as a result that some instructors are not familiar with the web facilities and fewer are efficient users.

(ii) **Attitudinal challenges:** It is a known fact that majority of distance learners in Nigeria are either employed or involved in business including farming. They enroll in distance education to obtain qualification and or promotion or update their knowledge and skills yet others enroll with the attitude that distance education is easy. Some lecturers believe that students of DE do not need extra support (Garrison, 2000).

Despite the rapid growth in the popularity of DE, the quality of higher learning through it has been called to question (Dede, 1996; Harrison, 2001) as quoted in Helland (2003). The widespread perception among the general public is that ODL is ineffective and that

the quality of instruction is not comparable with the conventional studies.

The perception has influenced attitude towards acceptance of ODL in education system in Nigeria. Awe (2015) said that major challenge is complaints from the labour market on the poor quality of its graduates who when employed are sometimes subjected to in-service or on-the-job training by their employers to make up the deficiencies in the expected skills.

(iii) **Financial Challenges:** ODL is a capital intensive programme. Funds are needed for purchasing technology and internet facilities, remunerations to instructors and supportive staff, acquisition of building and resource centers. Therefore, open and distance education are faced with very precarious funding challenges which also confront conventional universities (Awe, 2015).

High cost of ODL is a barrier to those who want to enroll for it (Basaza et al, 2010) and not many DE students have paid employment.

(iv) **Relevance of the Curriculum:** Education system in Nigeria is challenged to produce job creators rather than job seekers (Garrison, 2000). Some curricula are not adapted to suit contemporary needs. This implies that ODL promotes rote learning rather than application, problem solving and entrepreneurial skills. On the other hand very few DL lectures have experience with the instruction and learning strategies (Basaza et al, 2010). Their inadequacy is reflected in lack of quality distance learning materials, and lack of quality instructions.

(v) **Instructional delivering challenges:** In distance learning the instructional materials are packaged to felicitate self-study and easy comprehension by the learners without much assistance from the facilitators/instructors (Awe, 2015).

This is as a result that the learners have limited access to lecturers unlike in conventional tertiary institutions. In this case self-instructional materials carry out all the functions the teacher would carry out in the conventional system. This therefore calls for specialists in instructional design and materials developments to develop interactive instructional materials that would gear to the success of DE. As the learners have limited access to lecturers, they also lack the face-to-face interactions with fellow students.

Problem

As the conventional education became hard pressed to meet the demands of today's socio – educational needs and between the educational system at the tertiary level, distance and open learning help a great lot in providing the solution because electronic computing and communications play a role in changing the perspectives of the society in an unimaginable way. Despite the rapid growth in the popularity of ODL, the quality of higher learning through the system has been called to question.

One, therefore, is poised to ask the questions: Do technological and infrastructural factors challenge the effectiveness of ODL? Do the widespread perception of the general public and quality of the curriculum affect the mindsets of the open and distance education students? Does inability to fund the system challenge effective implementations of ODL? The answers to these questions and more constitute the problem to the study.

Purpose

The purpose of the study was to examine the challenges towards distance and open learning in changing communities using NOUN as a case study. The study therefore aimed at ascertaining:

(1) If technological and infrastructural factors challenge the effectiveness of open and distance learning.

(2) Whether the widespread perception of the public and quality of infrastructural curriculum affect the ODL.

(3) If government's inability to fund the system challenge the effective implementation of ODL.

Significance

The study is considered significant in encouraging people who couldn't get opportunities to study through conventional institutions and those who cannot afford to leave their work or business at the expense of higher education study to undertake ODL.

It would also serve the need for the network and internet providers to be effective in their services especially in the extension of network inside the communities. The study would encourage the government in the provision of regular electricity for rural dwellers.

Research Questions

To guide the study two questions were addressed.

1. To what extent do technological and infrastructural factors challenge the effectiveness of open and distance learning?
2. Do public perception of ODL and quality of the curriculum affect the mindsets of the students?

Research Hypotheses

The following research hypotheses were formulated to guide the study.

1. Technological and infrastructural factors do not significantly challenge the effective implementation of open and distance learning ($P < 0.05$).
2. Public perception and quality of the curriculum do not challenge the ODL significantly ($P < 0.05$).

Methods

Design

A descriptive and inferential survey were adopted for the study aimed at determining the challenges towards distance education and open learning for changing communities with National Open University of Nigeria as a case study. An instrument named Scale of Challenges towards Open and Distance Education (SCODE) was used for the study.

Population

The target populations for the study were the students of National Open University of Nigeria students of Owerri study center and the academic staff from tertiary institutions in Imo State.

Sample and Sampling Techniques

A sample of 394 Open and distance learning graduating students in Owerri study center of NOUN and 100 academic staff for the study. The graduating students were from different faculties and departments of the institution and were considered to be suitable for the study having spent years at the course of their studies and must have experience some challenges if any.

Instrument

The instrument for the study was designed and generated by the researchers and validated by two instructors with the National Open University of Nigeria and an expert in measurement and evaluation. The instrument which was named a Scale of Challenges towards Open and Distance Education (SCODE) adopted a 5-point and 4-point likert form of Very Great Extent, Great Extent, Moderate Extent, Poor Extent, Very Poor Extent and Strongly Agreed, Agreed, Disagreed and Strongly Disagreed respectively.

The scale is a 15-item instrument of two sections. Section A contained 9 items, aimed at

determining the technological and infrastructural challenges to ODL was completed by the students and section B with 6 items aimed at determining the challenges of public perception of ODL and its quality of curriculum was completed by the academic staff of IMSU, FUTO and AIFCE. The reliability coefficient of the instrument was determined using a test and re-test method and calculated to be 0.69.

Data Collection

A total of 400 copies of the instrument for the study of section A was distributed to the 2015 graduating students of NOUN on the day of their debriefing for convocation and a 394 was able to be returned. The three institutions of IMSU, FUTO and AIFCE were visited to administer the 100 copies of section B of the instrument to the academic staff.

Method of Data Analysis

The research questions were answered using mean ratings of the data collected and hypothesis tested with z-test statistic.

Results

Research Question One: To what extent do technological and infrastructural factors challenge the effectiveness of ODL?

Challenges towards Distance Education and Open Learning for Changing Communities: A Case of National Open University of Nigeria

Table 1: Frequency distributions of responses on technological and infrastructural factors.

S/No	Items	VGE	GE	ME	PE	VPE	Σf	Σfx	\bar{x}	
1	Geographical location of center	205	121	56	10	2	394	1699	4.31	
2	Poor network services	213	128	53	-	-	394	1356	3.44	
3	Poor online instructional delivery	266	128	-	-	-	394	1842	4.68	
4	Lack of face-to-face interaction	209	178	6	-	-	394	1775	4.51	
5	Adequate electricity supply	7	23	67	114	183	394	967	2.45	
6	Poor internet accessibility	211	92	73	18	-	394	1678	4.26	
7	Difficulty in computer/internet use	169	109	48	33	35	394	1526	3.87	
8	Familiarity with concept of online learning	27	6	12	163	186	394	707	1.79	
9	Incompetence of instructors with web facilities	102	153	68	41	30	394	1438	3.65	
							Σ	3546	12988	32.96
							\bar{x}			3.66

Table 1 shows that the ground mean of the responses (3.66) is greater than the expected mean (3.00), hence the factors together, challenge the effective implementation of ODL to a great extent. Separately, the grand mean of the responses on technological factors, items 2,3,4,6,7,8,8 (3.72) and that of infrastructural factors; items 1 and 5 (3.38) are each greater than the expected.

Research Question Two: Do public perception of ODL and quality of the curriculum affect the mindsets of the DE students?

Table 2 Distribution of the responses on public perception of ODL and quality of curriculum.

S / N o	Items	SA	A	D	SD	Σf	Σfx	x	—
1	Inability of curriculum to capture societal needs	31	43	26	-	100	305	3.05	
2	Poor attitude of public to ODL affects students	29	57	12	2	100	313	3.13	
3	Inability of labor market to place better recognition to the certificate	46	28	23	3	100	317	3.17	
4	Low quality of learning affects students	41	33	19	7	100	308	3.08	
5	Poor assessment of lectures	32	39	22	7	100	296	2.96	
6	No extra learning support for students	23	28	31	18	100	256	2.56	
							600	1795	17.95
						\bar{x}			2.99

In Table 2, because the grand mean (2.99) of the public perception and quality of curriculum of ODL is greater than the expected mean of 2.50, it implies the factors contribute to the challenges of the system.

Hypothesis one: Technological and infrastructural factors do not significantly challenge the effective implementation of open and distance learning ($P < 0.05$).

Table 3:
Z-test analysis of responses on technological and infrastructural factors

n	x	$\bar{\mu}$	SD	Standard error	Z_{cal}	Z_{tab}	Decision
39	3.6	3.0	0.7	0.04	16.5	1.96	H_0
4	6	0	8		5	6	rejected

Since $Z_{cal} (16.5) > Z_{tab} (1.96)$ the null hypothesis is rejected, hence technological and infrastructural factors significantly challenge the effective implementations of open and distance learning ($P < 0.05$)

Research Hypothesis Two: Public perception and quality of the curriculum do not challenge the ODL significantly ($P < 0.05$)

Table 4:
Z-test analysis of the responses on public perception and quality of curriculum:

n	x	$\bar{\mu}$	SD	Standard error	Z_{cal}	Z_{tab}	Decision
10	2.9	2.5	0.9	0.09	5.44	1.96	H_0
0	9	0	0		4	6	rejected

Table shows that $Z_{cal} (5.44) > Z_{tab} (1.96)$, hence, H_0 is rejected showing that public perception to ODL and quality of curriculum changed the system significantly.

Discussion

The finding of the analysis showed that certain factors challenge, to a great extent and

significantly, the open and distant learning system. Result of table one shows that mean rating on technological and infrastructural factors (3.66) is greater than the expected mean of 3.00. On the other hand, result of table 3 shows that the calculated Z-test value (16.5) is greater than the critical value 1.96 indicating also that technological and infrastructural factors significantly changed the implementation of ODL.

The result supported the assertions of Aina (2001) and Biao (2012) that absence of necessary infrastructure will pose a challenge to distance education and poor internet connectivity constitute a threat to the smooth operations of an online work respectively. The results went on to support Biao (2012) again that inaccessibility to internet services and instructors incompetence in the use of online platforms are major threats to ODL students.

On the other hand results of table 2 shows that the mean rating on public perceptions of ODL and relevance of its curriculum (2.99) by academicians is greater than the expected mean of 2.50, an indication that the factors affect the mindsets of the students. Again, table 4 shows that the calculated Z value (5.44) is greater than the critical (table) value (1.96), hence supporting results of table 2.

The results agreed with the findings of Dede (1996) and Harrison (2001) in Helland (2003) that due to rapid growth in the popularity of DE, the quality of higher learning through ODL is queried. This, according to them is because the public views the system to be ineffective as the quality of instruction is not comparable with the conventional studies. The results supported the findings of Awe (2015) that the major compliant from the labour market is the poor quality of ODL students who, after being employed are subjected to in-service or on the job-training. The perception of the public has therefore generally influenced

the public attitudes towards the acceptance of ODL in education system in Nigeria.

Conclusion

While distance education and open learning provides flexibility for students, reduces the need for educational buildings, transportation costs by students and allows students to remain with their families and communities, the success of ODL is inhibited by poor infrastructure, relatively high cost of education, an irrelevant curriculum to the societal aspirations and needs, inadequate expertise in ODL, poor attitude towards ODL and technological services. ODL therefore is unlikely to succeed without collaboration between government and educational institutions.

Recommendations

Based on the findings and subsequent implications, the following recommendations were made.

1. Training and retraining programmes of the adhoc staff should be a regular feature of ODL institutions for their technological demands.
2. The ODL curriculum should be designed and drawn to consider the aspirations and needs for changing communities.
3. The government should ensure that the supply of electricity as much as possible regular and sustained in communities so as to enable people to access the internet.
4. Prospective ODL students should ensure they undergo a course in the use of computers and internet.

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Chris N. Mbah, Ph.D
School of General Studies,
Imo State polytechnic,
Umuagwo.

Kelvin Onyewuchi Ugorji
School of General Studies,
Imo State polytechnic,
Umuagwo.

And

Emmanuel Duru
Department of Maths/Statistics,
Imo State Polytechnic,
Umuagwo