

A Review of Open & Distance Education and Human Development in Nigeria

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Abstract—Distance Education have a lot of potential gains – such as meeting the education needs of the teeming population of qualified students who could not gain admission to tertiary institution; some of these are indigent students who could hardly afford formal tertiary education and so need to work and learn simultaneously. More so, the higher institutions in Nigeria are hardly able to absorb 30% of applicants on a yearly basis. With population increase, the situation is becoming aggravated with each passing year. The current state of the study centres needs urgent attention. This study, therefore, focused on empirically ascertaining the state of Open and Distance Education (ODE) in Nigeria and strives to evolve a pragmatic solution to the challenge of ODE in Africa. The research designs adopted for the first phase of this study is the case study design. The second phase of the study is devoted to test-running the proposed Information and Computer Technology (ICT) based solution. From findings in this study, the speculation that there are pertinent challenges in the current ODE practices in Nigeria has been confirmed. Thus, providing information required for improved platform for ODE implementation in Covenant University and hence the proposed recommendations.

Index Terms—Distance Education, Human Development, Open Education,

I. INTRODUCTION

Nigeria is the most populous black nation in the world with almost 168 million people, 30 million of which are students. Achieving Universal Basic Education (UBE) is a Millennium Development Goal (MDG) that Nigeria aims to achieve by 2015. There is paucity of quality academic staff in virtually all areas, particularly in the critical areas of science and technology (USA, 2012). Nigeria has the challenge of both access and quality of education occasioned by poor funding and inadequate manpower/infrastructure. The continuous technological advancement powered by the internet and the huge impact on learning has brought about a paradigm shift in education. The application of ICT-based learning has great potential for increasing access to university education in Nigeria.

The advent of the internet has modernized educational delivery in Nigeria. Several schools and colleges today have started offering online courses. Several academic institutions have been established in Nigeria in the last few years that offer accredited career enhancement programs to students (Sharon, 2012). Despite the proliferation and benefits of Open and Distance Education (ODE) in Nigeria, the quality of delivery and infrastructure has been major concern to stakeholders.

The basic characteristic of ODE is the separation of teacher and learner in space and time. The National Universities Commission (NUC), the Supervisory Agency of University Education in Nigeria, in an attempt to ensure that standards are maintained in the operations of distance education enacted some regulations. One of such is the stipulation that the ODE study centres should offer both academic and social support. Students should have easy access to ICT facilities for learning purposes. For specific programs, functional internet access is required at all study centres (NUC, 2013).

Operationally, ODE is a formal education system that deploys ICT facilities to communicate, teach, coach and facilitate productive learning amongst students who are domiciled in distant locations. Such education system is said to open because students are not limited by such conditions/factors like age, sex, pregnancy, work, race, religion and so on. It is an education that is open to all. *Human Development* is the process of nurturing human being to experience optimal cognitive, affective and psychomotor development, such that the individual is able to achieve self-actualization within the shortest period of time.

The social and economic developments of a country ultimately depend on the quality of human development. It is universally recognized that investment in human development is an essential component of a nation's development plan (Col-adb, 1999). The issue of human development and its impact on the society is partly a product of effective delivery of ODE in Nigeria. This has necessitated a yawning need for standard ODE programme. Covenant University (CU) is warming up to meet this need.

II. LITERATURE REVIEW

The history of Distance Education in Nigeria dates back to 1887 with the practice of correspondence education as a means of preparing candidates for the General Certificate in Education, a pre-requisite for the London Matriculation Examination. Thus, University of London was tagged the first "Open University". In spite of the establishment of a University College in Ibadan in 1948, many of its academic staff passed through the higher degree programs of the University of London as *distance learners*, which gave them the opportunity to combine work with studies. Consequently, a significant number of Nigeria's early educated elites were products of the British correspondence distance education system. This is the beauty of a well-run Distance Education programme.

In Nigeria, the first Distance Education programme was the University of Lagos Correspondence and Open Studies Unit (COSU) programme. Initiated in 1974, it has since

metamorphosed to Distance Learning Institute (DLI). Today there is an array of Distance Education programs in Nigeria. The most prominent of them all is the National Open University (Obioha & Udidi, 2011).

Previous studies relating to ODE in Nigeria and in other countries have been done. For instance, Obioha and Ndidi (2011) identified the administrative problems of open and distance education in Nigeria. In their quest to ascertain if there is a significant difference in the administrative challenges of National Open University in the two broad geopolitical zones (Northern and Southern zone) of Nigeria, they found that the most serious problem was the administration of study centres by staff who lack sufficient experience in the field of educational administration.

A study by Aluede and Idogho (2012) conceptualized access to education and presented documentary evidence regarding the demand and supply of university education in Nigeria. It reported that out of the number of candidates applying for admission every year in Nigeria, only about 5.2% to 15.3% get admitted every year; meaning that about 84.7% to 94.8% of the candidates seeking admissions every year never got admitted into Nigerian universities. The study recognized the fact that this low access to university education in Nigeria could be the result of low infrastructural facilities; inadequate public financing; economic constraints; labour market failure and inadequate curriculum.

The need for distance learning in Nigeria was examined by Nakpodia (2010). The structure of distance learning gives adults the greatest possible control over time, place and pace of learning. The usual tradition of face-to-face teaching could hardly meet the educational needs of all Nigerians. Duffy, Gilbert, Kennedy and Kwong (2002) did a comparative study of the academic achievement of distance learning students and classroom-based students undertaking the same module in a degree course. The finding showed that though all the sampled students were successful in their studies, the distance learning students' performance was significantly higher than the performance of their classroom-based colleagues. This finding, which appeared mysterious, suggests the potential of ODE.

Despite the impressive rise of enrolment levels in formal schools, a significant number of hard to reach children in South Asian countries continue to have limited access to basic education (Cdec, 2009). Cdec's report recommended that more effort need to be made to reap the full potential of ODE; this can be done by supporting teachers' development, improving on ICT applications, among others.

Ayo, *et. al.* (2011) presented the attractions of social networking combined with e-Learning. The system offers collaborative e-Learning which helps to improve the quality of education beyond the capabilities of the individual institutions. It depicts vividly, quality education without borders, as there is enhanced interaction and collaboration between students, faculty within and outside the country based on the areas of competences of individual faculty and institutions. The proposed model offers a viable model for delivery of quality education based on ICT facilities (Internet, PCs, PDAs, iPods, mobile phones etc). Where the Internet is a challenge, the mobile devices, which are highly available, will offer a cheaper alternative to all and sundry.

It was reported by Perraton (2010) that post-conflict countries have used open and distance learning to overcome teacher shortages. Rwanda, for example, trained secondary teachers via distance learning through the Kigali Institute of Education (Mukamusoni, 2006). As Uganda was coming out of war, it began to experiment with distance education as a way of upgrading serving but untrained teachers.

On the foreign scene, Indira Gandhi National Open University (IGNOU) currently offers 338 programs of study through 3,500 courses leading towards doctorate, masters, bachelors, postgraduate, and under-graduate diplomas and certificate programs (Hanover Research, 2011). The University has established a network of 43 Regional Centers (RCs), six Sub-Regional Centers and 1,400 Study Centers (SCs) throughout India to provide easy access and effective support services to its learners. In India today, there are 10 open universities and 62 correspondence learning institutions affiliated with conventional universities that are catering for the educational needs of about one million students annually.. From the survey conducted by Zhang and Venkaiah (2000), ICT usage for distance education has not been fully harnessed. With the current distance learning trends in the United Kingdom, the vast majority of online distance learning offered by higher education institutions is at the postgraduate level (Hanover Research, 2011)

Kappel, Lehmann, and Loeper (2002) gave a history of distance education at University of Koblenz-Landau, Germany. Students have made use of computer that allows them to download and read guidebook, submit questions to course lecturers prior to videoconference, and work on assignments that are sent and submitted via email. The University of Koblenz-Landau ODE programme is reaching thousands of students that could not ordinarily be reached with the traditional classroom delivery approach.

Hanover (2011) presented a global overview of current and future trends in distance education. The report identified seven key players in global higher education distance learning. They are: Open University UK; University of Derby; University of Maryland USA; Drexel University; Indonesia Open University; Indira Gandhi National Open University (IGNOU) and University of South Africa (UNISA). In the findings, these key players in global distance education enroll between 100,000 to over 500,000 students. The analysis showed that Africa and India are two of the growing markets for distance education globally.

A. Statement of the Problem

Despite the number of Open and Distance Education (ODE) centres operating in Nigeria today, the need for standard ODE is apparent. Observations of activities in some of ODE centres tend to indicate deficiency in the deployment/usage of Information and Communication Technology (ICT) facilities. It is therefore not uncommon to find a typical ODE institution in Nigeria today lacking e-learning platforms, still using the correspondence approach, and habitually requesting students to travel long distances to converge in the host institutions during long holidays or weekends for the delivery of traditional face-to-face lectures. The vicious circle culminates in poor human and national development. It is a situation that calls for urgent intervention, hence this project. There is, therefore, need to empirically ascertain the state of ODE in

Nigeria, and if the speculations are confirmed, subsequently work to upgrade the system to meet world class standard.

Therefore, the *objectives* of this study include to:

1. ascertain the current state of Open and Distance Education (ODE) in Nigeria
2. find out how a typical semester or session runs in the sampled ODE institutions
3. propose a standard structure for ODE take-off in Covenant University

III. METHODOLOGY

A. Research Design

The Case Study research design was adopted for this study. This was because the focus of study was on the school structure, facilities and lecture delivery modes than on the human entities within the system.

B. Population, Sample & Sampling Technique

The nature of this study and choice of research design [case study] did not demand for sampling. The case studies were focused on three key players of ODE in Nigeria. In order to fulfil the promise anonymity, they are simply tagged Case A, Case B and Case C. The Cases A and B institutions are based in Lagos state while Case C is based Oyo state. Both Lagos and Oyo are states in the South-west of Nigeria. Even though the focus of the study was more on learning infrastructure, a sizeable number of students and Lecturers still supplied relevant data for this study.

C. Instruments

The core instruments used for data collection are:

Questionnaire - The *Open and Distance Education Questionnaire* [for Administrators, Lecturers and Students]. Some of the prompts in the instrument include: Year Institution Commenced; List of Academic Programs; Number of Students; Modes of Lecture Delivery; Modes of Tests and Evaluation; Students Records; Internet connectivity for staff and students; Provisions for students from remote areas; Overview of how a typical semester or session runs; and Common challenges.

Interview Guideline - The Interview guideline was adapted from the core items in the ODE Questionnaire

Observation Guideline - Observation video recording and snapping of photographs were made.

D. Procedure for Data Collection

After developing and ascertaining the content validity of the ODE Questionnaire and related instruments via expert judgment, Research Assistants [RA] were trained. Formal permissions to conduct the study were obtained from the selected institutions. In company of the Principal Researcher, the RAs proceeded on field work to administer the instruments. Thus relevant data required for deducing valid answers to the research questions were obtained.

E. Data Analysis and Results

This is basically a qualitative study, hence qualitative analysis technique was adopted. The data collected were thus collated and analyzed in line with the research ques-

tions to bring out the current trend in the ODE system in Nigeria. The results of these analyses are presented below:

1) What is the current state of Open and Distance Education (ODE) in Nigeria?

TABLE I.
STATE OF ODE IN NIGERIA

	CASE A	CASE B	CASE C
Year of Inauguration	22 July 1983	1974	1972
Registration	Online	Manual	Manual
No of students as at 2014	272,733	12,000+	5000+
Farthest Distance to Learning Center	Approx 30 kilometers	Approx 35 kilometers	Data not available
Mode of Teaching	Face-to-face lecture	Face-to-face lecture	Face-to-face lecture
	Occasional use of Power point/Projectors	Occasional use of Powerpoint/Projectors	Occasional use of Powerpoint/projectors
Mode of practical teaching (Science, Engineering & Tech)	Little or no practical teaching	Little or no practical teaching.	Little or no practical teaching.
Mode of examination (Online/Manual)	Continuous Assessment (CA) - online	CA - manual	CA - manual
	100 & 200 level - online	100 and 200L - online	Pre Degree - manual
	300L, 400L, Postgraduate Diploma (PGD) & Masters - manual	300 & 400L - manual	Degree - manual
			PGD - online
Nature of Lecture Materials	Printed courseware. -Online courseware available.	Printed courseware.. No online courseware	Printed courseware. Online courseware available.
Mode of record keeping	Manual and electronic method.	Manual method.	Manual and electronic method.
Current challenges (Students)	-Course materials often not fully supplied -Exam time table often not strictly followed	-Financial challenges -Irregular power supply. -Orientation and training on the use of online examination before its introduction hardly given	-Transportation -Incessant ASUU strike. -Missing scripts during exam.

Deductions from this table tend to confirm the problems speculated at the onset of this study. In all the three ODE centres sampled, there were little or no practical works done to allow for application of knowledge, which is the bedrock of development. The mode of teaching was still predominantly face-to-face, with little or no use of ICT facilities. Consequently, students living in remote locations and those undergoing peculiar conditions, like the

pregnant women, nursing mothers, workers, husbandry farmers [etc] could hardly participate. One of the sampled institutions (Case A) that tend to reach some remote students was further limited by the fact that most of its lectures were in printed formats. Students have to read, study and learn independently. This was simply correspondence education. It has great limitations. Such modes of learning could hardly produce 'fully baked' graduates that could meaningfully contribute to national development.

2) *Next, how does a typical semester or session run in the sampled ODE institutions*

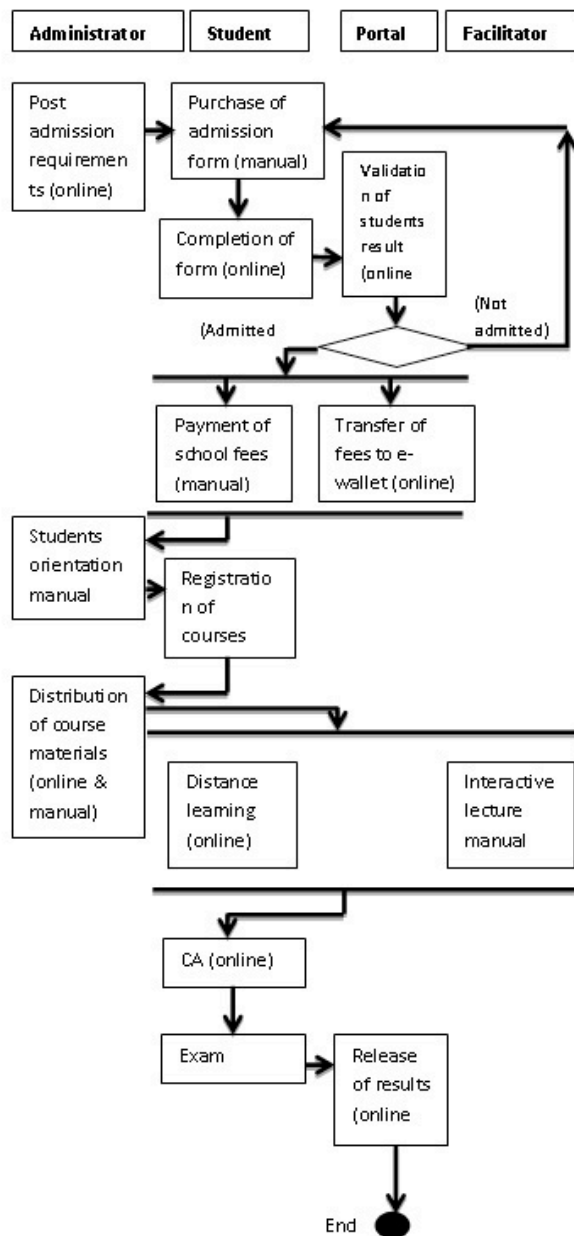


Figure 1. Activity Diagram of how a typical semester runs in Case Study A (Distance Learning Institute Predominantly Using ICT Platform)

Keys: Diamond shape represents decisions; bars represent the start or end of concurrent activities; a black circle represents the start (initial state) of the workflow; an encircled black circle represents the end (final state). Arrows run from the start towards the end and represent the order in which events happen.

Figure 1 shows an activity diagram of how a typical semester runs in Case A. Case A ODE institution was unique for better application and deployment of ICT facilities in payment, registration, record keeping, testing and result dissemination. These activities are succinctly summarised by the Unified Modelling Language (UML) as proposed by Bennett, Skelton and Lunn (2005)

Figure 2 shows an activity diagram of how a typical semester runs in Case Study A and B. The most visible and recurrent feature in these ODE institutions is the use of manual, analog and traditional methods in the delivery of their services. This trend tends to affect the overall delivery quality and also cuts off the teeming population of prospective students who find it difficult to gain access to the traditional schooling system.

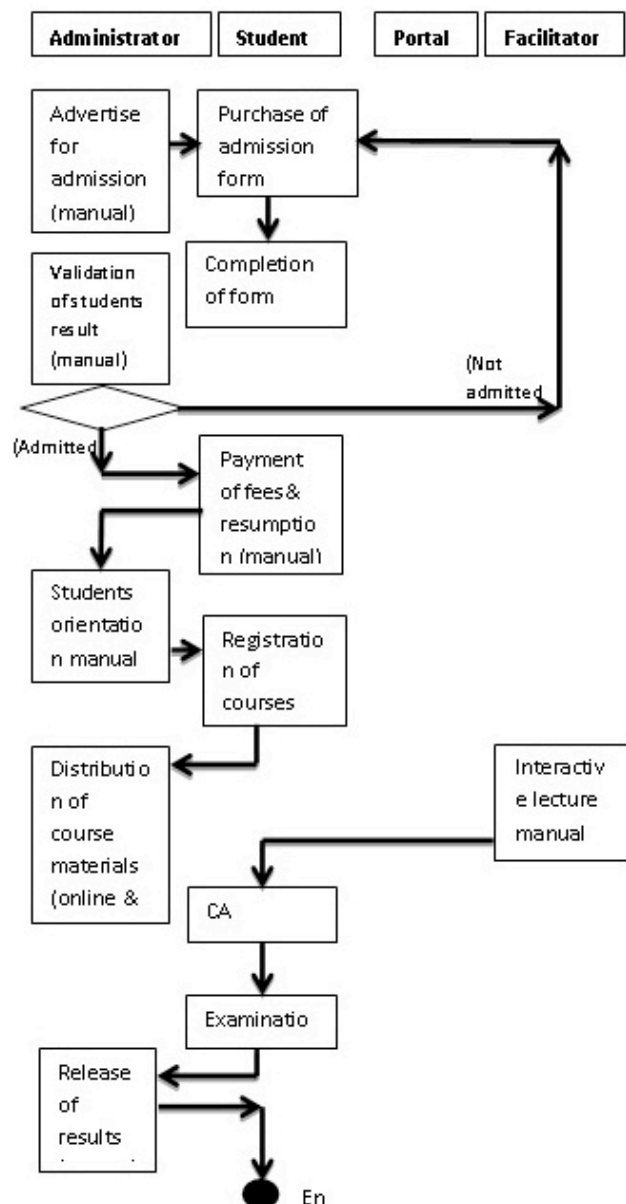


Figure 2. Activity Diagram of how a typical semester runs in Cases B and C (Distance Learning Centres Using Predominantly Using Traditional Face-to-face Lecture Method)

IV. RECOMMENDATIONS

In the light of these findings, the following are recommended:

- Establish of an ODE Centre in the University
- Establish of more Tele-conferencing centres for the operation of the ODE operations
- Develop online courseware and lecture delivery modes for ODE operations
- Provide energy efficient Tablets for students as part of the required operational tools
- Collaborate with Pearson for the development of Courseware

V. DISCUSSION AND CONCLUSION

From findings in this study, the speculation that there are pertinent challenges in the current ODE practices in Nigeria has been confirmed. The challenges range from poor electricity; poor ODE learning infrastructure, especially, those relating to ICT; poor teaching and learning method; few qualified lecturers and poverty, among others. These challenges have strong limitation on proper implementation of ODE. Consequently, many of the ODE institutions in Nigeria were merely operating correspondence learning practice. Many have reverted to traditional face-to-face teaching. These practices have serious limitation in the realization of the ODE core objective of meeting the learning needs of all categories of people irrespective of their location per time. These findings further justify the need to proceed to the Phase 2 of this study as proposed. There is clearly a need to evolve a true Open and Distance Education that could cater for all categories of people at all times, in all places without travelling long distances for lectures and examinations. There is need to create an ODE centre that operates *virtual lectures with animations of abstract concepts* and engages students in *real practical works*. Such ODE programme has the potential of significantly contributing to national development. ODE, due to its openness to all categories and caliber of students, irrespective of age, marital status, pregnancy, employment, age [etc], is a powerful instrument for the speedy achievement of the millennium goal of Education for All [EFA].

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