

# USE OF INTERNET FOR THE TRANSFORMATION OF OPEN AND DISTANCE LEARNING IN HIGHER INSTITUTIONS IN SOUTH-SOUTH NIGERIA

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## **Abstract**

*This study investigated the use of internet for the transformation of open and distance learning in higher institutions in south-south Nigeria. Four research questions and three hypotheses were postulated to guide the study. The population comprised all 300 level students of open and distance learning in tertiary institutions in south-south Nigeria. This study adopted correlational survey design, while stratified random sampling technique was used in selecting the respondents. One researcher made instrument was administered to the respondents tagged, "internet use for the transformation of open and distance learning questionnaire (IUTODLQ)" and Cronbach Alpha Statistic was used to establish the reliability coefficient of .83. Data were analyzed using percentage analysis, Pearson Product Moment Correlation analysis and hypotheses tested at .05 significant levels. The results of the data analysis, revealed that there is significant relationship between use of internet and provision of reliable learning materials, quick dissemination and submission of assignment and finally, promotion of interaction among students and lecturers of higher institutions in*

*South-South Nigeria. Amongst the recommendations made was that government and school authorities should provide adequate internet services to enhance teaching and learning.*

**Keywords:** Internet, Transformation of Open and Distance Learning.

In this age of Information and Communication Technology (ICT), there is growing concern for the use of ICT resources such as the computer, scanner, printer, Internet, e-mail, videophone systems, teleconferencing devices, wireless application protocols (WAP), radio and microwaves, television and satellites, multimedia computer and multimedia projector in curriculum implementation. In internet learning, curriculum content in the form of texts, visuals, e.g. pictures, posters, videos, audio/sound, multicolor images, maps, and graphics, can be simultaneously presented online to students in both immediate locations (classroom model of internet learning) and various geographical distances (Distance Education model of Internet learning).

Presently, some institutions in Nigeria are using it to promote distance education (DE) and lifelong learning. Internet learning according to Sale (2002) is the use of electronic technology to deliver education and training applications, monitor learner's performance and report learner's progress. Distance Learning is the interactive, educational process between students and teachers separated by physical distance, it adapts to individual differences and the way students react to media, (Harry, I., Keith, J., John, M., Keegan, H., and Desmond, G. (1993).

The use of ICT through internet technology in education and reaching out to students at distances has become a way of resolving some of this financial stress on the people and the society. Students using this system of education can afford to draw a schedule for themselves that allows them time to work at their own pace. These students can even get employed and earn substantial amount of money needed to support their education without dependency. Jimoh (2013) asserts that Open and Distance Learning (ODL) has enabled many people to get education; especially those who probably had no previous access to educational opportunities based on their location from home and work, poor-economic circumstances, social status etc.

Open and Distance Learning could therefore be used as option for attaining higher qualification without attending the regular higher institutions within the immediate environment. Open and Distance Learning remains the primary mechanism for the information-driven age especially as it pertains to the use of internet technology which this study is investigating, Anderson (2012). Students can interact with the teacher, the learning and teaching materials through other teaching methods such as correspondence and technologies that enhance the delivery of information for individualized study. Students can still have access to these learning materials when

the source of information is separated by time and distance or both. However the expansion of the Internet in recent years has made it the most essential tool for delivering distance education (Obi, 2016)

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### **Statement of the Problem**

It is quite true that Internet resources have a lot of prospects with respect to distance and open learning. Internet resources over the years have been under utilized by many over the years including institution of higher learning. The underutilization of these resources especially in the South- South of Nigeria may be attributed to many factors including negative attitudes of school administrators and lecturers towards information and communication technology (ICT). For instance, some lecturers only open their e-mail addresses once in a blue moon and probably had created the addresses on the account of not using it frequently, which would result in getting locked out of their e-mail addresses. This leads to discouragement and lack of seeing the need of ensuring the availability and accessibility of ICT in teaching and learning. The result is that the student gets deprived of the opportunity of getting exposed to ICT resources. Be this as it may, it is baffling that researchers are yet to explore the prospects of internet resources with respect to open and distance learning in South-South Nigeria a way that will help minimize or solve prevalent challenges in that direction. That is why there are still gaps to be filled. This study is therefore conducted to fill up this gap by assessing use of internet for the transformation of open and distance learning in higher institutions in South-South Nigeria.

### **Objectives**

The main objective of the study is to assess the use of internet for the transformation of open and distance learning in higher institutions in South-South Nigeria using the following guidelines:

1. To find out the relationship between internet use and collection of reliable learning materials by open and distance learning students of higher institutions in South-South Nigeria.
2. To determine the extent to which use of internet relates with quick dissemination and submission of assignment by open and distance learning students of higher institutions in South-South Nigeria.
3. To examine the relationship between use of internet and interaction among open and distance learning students and lecturers of higher institutions in South-South Nigeria.

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### **Hypotheses**

The following hypotheses were postulated and tested at .05 level of confidence.

1. There is no significant relationship between the use of internet and collection of reliable learning materials by open and distance learning students of higher institutions in South-South Nigeria.

2. There is no significant relationship between the use of internet and quick dissemination and submission of assignment by open and distance learning students of higher institutions in South-South Nigeria.
3. There is no significant relationship between the use of internet and interaction among open and distance learning students and lecturers in higher institutions in South-South Nigeria.

## **Literature Review**

### **Distance Learning**

Distance education or distance learning is a field of education that focuses on teaching methods and technology with the aim of delivering teaching, often on an individual basis, to students who are not physically present in a traditional educational setting such as a classroom. It has been described as a process to create and provide access to learning when the source of information and the learners are separated by time and distance, or both, (Jimoh, 2013). However, Distance Education (DE) is a system of education characterized by physical separation between the teacher and the learner in which instruction is delivered through a variety of media including print and other ICTs to learner who may either have missed the opportunity earlier in life or have been denied the face-to-face formal education due to socio-economic, career, family and other circumstances.

Distance Learning is a new, global technology-based education to facilitate easy, immediate learning and interaction for communicators, teachers, and students in education programs. Distance Education can provide mass-education for everyone, (Chen-Hsuan, 2016). It facilitates student selection of courses and content to reflect their needs and motivations. It provides creative and qualified ideas and information to motivate students from diverse backgrounds.

In distance learning system, learners are remote to the institution and are in large scale. It is difficult for a learner to visit the institution every day to get a service/support as available in a conventional system and at same time, it is even difficult for the institution itself to provide various services to the learners at different phases of a student learning life cycle, due to limited human resource available. Information and Communication Technology (ICT) is a prime resource to overcome such limitations, (Anderson, 2012).

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### **Role of Distance Learning**

Distance learning requires alternative learning processes, roles of teacher and students (Clark, 2001). People roles in distance learning can be categorized in four subtitles;

1. **Students:** In distance education, students have the role to learn. In that process, student has difficult and different roles according to traditional learning process.

2. **Teachers:** The main role of the teacher is the design of the course and setting the needs of the students. Teacher has roles to guide the students.
3. **Designer Groups:** This person determines the goals, content, delivery systems, interaction, and evaluation. Usually it is a team of subject matter experts, educators, instructional designers, and production personnel. They design the cyber and digital environment for the effective teaching and learning.
4. **Directors:** In all institutes, there are people who direct planning, implementation, and evaluation of the education process.

### **Applications of Computers in the Open and Distance Learning**

Distance educators refer to three distinct applications of computers in the off-campus study environment: Computer Managed Instruction, Computer Aided Learning, and Computer Conferencing, (Clark, 2001).

**Computer Managed Instruction:** This facilitates management and administration of the learning process. It provides opportunities for electronic counseling of students, on-line registration, instructional record keeping, evaluation, and tracking student progress.

**Computer Aided Learning:** this includes software applications to teach students subjects and concepts through pre-structured and programmed materials. Courseware either replaces or supplements materials that students are expected to learn from through other media (print, video, audio cassette). Lesson formats ranges from tutorials to simulations. Students can also use Internet resources for exploration and research.

**Computer Conferencing:** This uses the electronic network to enable individuals to communicate via computers through the internet at the same time (synchronous) or delayed time (asynchronous), either as a group or between two individuals. Typical formats include email, bulletin board, threaded discussion, net meeting (with the possibility of audio, video, and shared “blackboard” displays), and databases.

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### **New Communication Technologies and New Modes of Distance Learning**

This analysis points clearly to the necessity of rethinking the structures and processes of teacher education. The forms of teacher education that emerged in the twentieth century, campus based colleges and university departments of education, will be unable to meet the demands of the present century. In many parts of the world acute teacher shortages require untrained adults to go directly into the classroom. Even in the richer economies great difficulties exist. A reference has already been made to the large numbers of untrained teachers in the Californian state elementary school system. More broadly across the USA it is estimated that one third of all lessons in grades 7-12

is taught by non-specialists. In some subject areas this percentage increases (Ingersoll, 1999 and 2004). Half of all history and science classes are taught by non-specialists.

The status and image of distance learning is, however, slowly changing. New communication technologies have provided creative and motivating ways of presenting information and providing opportunities for interaction (Leach and Moon, 2002). The increased mobility of these technologies is opening up possibilities for learners in remote, often rural, locations that previously were impossible. One of the most fascinating developments in the last few years has been the open content or open educational resource (OER) movement. Based on the same philosophy as the open source software initiatives (viz. Linux) OERs are freely available to anyone to use and adapt as they wish.

## **Methodology**

### **Research Design**

A correlation survey design was used for this study. Correlation is a statistical technique that can show whether and how strongly pairs of variables are related. The research area for this study was South-South Nigeria. The population for this study comprised 3000 all of 300 level students of distance learning in South-South Nigeria. A stratified random sampling technique was used to draw the 300 respondents derived from 3 institutions in the zone, namely; University of Uyo, Akwa Ibom State, River State Polytechnic Bori and Federal College of Education Akamkpa, Cross River State. The researcher made instrument used in this study was questionnaire titled "internet use for the transformation of open and distance learning questionnaire (IUTODLQ). The questionnaire was made up of two sections, section A and section B. Section A was used to collect information on personal data of the respondents while section B of the questionnaire was made up of the independent and dependent variables. The obtained data was coded statistically before the statistical analysis of the data. The instrument passed through face and content validation by two experts in test and measurement. Cronbach Alpha Statistics was used to determine the level of reliability of the instrument. In the trial test, a total of 30 respondents who did not form part of the main study were randomly selected from Akwa Ibom State College of Education in South-South Nigeria and the instrument administered on them. The reliability coefficient obtained was .83. and this was high enough to justify the use of the instrument. A letter of introduction was written by the researcher. This letter was to introduce the researcher to the heads of the institutions for understanding and approval for the exercise. The questionnaire were issued and retrieved 2 days later from each respondent. The exercise took two weeks. The researcher subjected the data generated for this study to appropriate statistical techniques such as descriptive analysis and Pearson Product Moment Correlation Analysis. The test for significance was done at .05 alpha level.

**Results and Discussions**

**Hypothesis One**

There is no significant relationship between use of internet and collection of reliable learning materials by students of higher institutions in South-South Nigeria.

**Table 1**

**Analysis of the relationship between use of internet and collection of reliable learning materials by students of higher institutions in South-South Nigeria.**

Variable	$\sum x$	$\sum x^2$	$\sum xy$	$\sum y^2$	r
Use of internet (x)	4631	72939			
Collection of reliable learning materials (y)	18670	615210	84232		0.93

Table 1 presents the obtained r-value as (0.93). This value was tested for significance by comparing it with the critical r-value (0.113) at .05 levels with 298 degree of freedom. The obtained r-value (0.93) was greater than the critical r-value (0.113). Hence, the result was significant. The result therefore means that there is significant relationship between use of internet and collection of reliable learning materials by students of higher institutions in South-South Nigeria. The result therefore was in agreement with the research findings of Obi, (2016) who stated that students can still have access to these learning materials when the source of information is separated by time and distance or both. The significance of the result caused the null hypotheses to be rejected while the alternative one was not rejected.

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**Hypothesis Two**

There is no significant relationship between use of internet and quick dissemination/submission of assignment to students of higher institutions in South-South Nigeria.

**Table 2**  
**Analysis of the relationship between use of internet and quick dissemination/submission of assignment to students of higher institutions in South-South Nigeria.**

Variable	$\sum x$	$\frac{\sum x^2}{\sum y}$	$\frac{\sum xy}{\sum y^2}$	r
Use of internet (x)	4631	72939		
Quick dissemination/submission of assignment (y)	4200		66004	0.70

Table 2 presents the obtained r-value as (0.70). This value was tested for significance by comparing it with the critical r-value (0.113) at .05 levels with 298 degree of freedom. The obtained r-value (0.70) was greater than the critical r-value (0.113). Hence, the result was significant. The result therefore means that there is significant relationship between use of internet and quick dissemination/submission of assignment to students of higher institutions in South-South Nigeria. The result therefore was in agreement with the research findings of Clark (2001) who stated that computer conferencing uses the electronic network to enable individuals to communicate via computers at the same time. The significance of the result caused the null hypotheses to be rejected while the alternative one was not rejected.

### Hypothesis Three

There is no significant relationship between use of internet and interaction among students and lecturers in higher institutions in South-South Nigeria.

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**Table 3**  
**Analysis of the relationship between use of internet and interaction among students and lecturers in higher institutions in South-South Nigeria.**

Variable	$\sum x$	$\frac{\sum x^2}{\sum y}$	$\frac{\sum xy}{\sum y^2}$	r
Use of internet (x)	4631	72939		
Interaction among students and lecturers in higher institutions (y)	5218	91844	81590	0.83

Table 3 presents the obtained r-value as (0.83). This value was tested for significance by comparing it with the critical r-value (0.113) at .05 levels with 298 degree of freedom. The obtained r-value (0.83) was greater than the critical r-value (0.113). Hence, the result was significant. The result therefore means that there is significant relationship between use of internet and interaction among students and lecturers in higher institutions in South-South Nigeria. The result therefore was in agreement with the research findings of Chen-Hsuan, (2016) who stated that distance Learning is a new, global technology-based education to facilitate easy, immediate learning and interaction for communicators, teachers, and students in education programs. The significance of the result caused the null hypotheses to be rejected while the alternative one was not rejected.

### **Findings and Conclusions**

Based on the findings of the research work, the following conclusions are deemed necessary: Internet resources have been under utilized by our institutions in South-South Nigeria. There is significant relationship between use of internet and collection of reliable learning materials by students of higher institutions in South-South Nigeria. There is significant relationship between use of internet and quick dissemination / submission of assignment to students of higher institutions in South-South Nigeria. There is significant relationship between use of internet and interaction among students and lecturers in higher institutions in South-South Nigeria.

### **Recommendations**

Based on the findings made the following recommendations were deemed necessary:

1. Government and school authorities should ensure that adequate internet services are provided for use by students and lecturers in order to promote teaching and learning.
2. Government should make adequate funding to ensure availability, accessibility and utilization of information and communication technology in our educational system.
3. The use of internet resources promotes students' quick response to dissemination and submission of assignments as well as enables presentation and discussion with the lecturers on those academic issues that bother them.
4. Lecturers and school administrators should develop positive attitude towards the use of ICT as well as ensuring that there is promotion of utilization of internet resources for accessing research materials and encouragement of interaction between lecturers and students.

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