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## The role of library in e-learning in selected higher institutions in rivers state

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### Abstract

The aim of this study is to investigate the role of library in selected higher institution in Rivers State. For the purpose of this study, descriptive research design was used. Simple random sampling technique was respectively used to select the respondents for the study. Respondents for this study were fifty (50) made up of twenty-five (25) M.Sc. student and twenty-five (25) B.Sc. student. Structured questionnaires were used for data collection. The study findings indicated that, library plays major role in e-learning in higher institution as an equipped and conducive library environment promotes learning and students assimilation. The study also revealed that students will improve their performance if the problems identified during the research are tackled by the institutions. In conclusion based on the findings the study recommended that Tertiary institutions should try as much as possible to build a conducive library environment that attracts, retain and motivate its students to read and make researches. This is to enable the student comprehend and concentrate while studying. Secondly, higher institutions should make available e-resources and technologies in library that aides learning. This is to boost the students reading ability and increase their assimilation level.

**Keywords:** Library, e-learning, student, performance

### 1. Introduction

The environment of higher education is evolving. There has been need for increasing academic performance and thus, this has led institutions to increase the need for distance education which has caused educational institutions to re-examine the way that education is delivered. In response to this changing environment, the concept of e-learning is being introduced and implemented in higher education, which has created new and exciting opportunities for both educational institutions and students.

E-learning, or electronic learning, has been seen in a number of different ways in the literatures. In general, e-learning is the phrase generally used to explain "instructional content or learning experience delivered or enabled by electronic technologies" (Ong, Lai and Wang, 2004, page 1) [18]. While some definitions of e-learning are more restrictive than this one, for example limiting e-learning to content delivery via the Internet (Jones, 2003) [9]. The comprehensive definition, which will be used for the purposes of this article, can include the use of the Internet, intranets/extranets, audio- and videotape, satellite broadcast, interactive TV, and CD-ROM, not only for content delivery, but also for interaction among participants (Industry Canada, 2001). More recently, this definition can be further extended to include mobile and wireless learning applications (Suhonen, Sutinen, and Goh, 2003; Lehner, Nösekabel and Lehmann, 2003) [23, 15].

E-learning entails all forms of electronic supported learning and teaching, which are practical in character and aim to effect the construction of knowledge with reference to individual experience, practice and knowledge of the learner. Information and communication systems, whether networked or not, serve as specific media to implement the learning process. It has also extended to Web-based training or web-based learning, and online learning which are only but a few synonymous to the terms which have over the last few decade been labelled as e-learning. Each of this implies a "just-in-time" instructional and learning approach.

### 1.1 Statement of problem

The e-learning models of higher education today find their roots in conventional distance education. Initially introduced to allow individuals in isolated and rural areas to gain access to higher education, e-learning has evolved to encourage distance learning significantly over time.

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Technological advancement has been the major inspiration for the innovation, starting with the amalgamation of radio broadcasting in the 1920's (Huynh, Umesh and Valachich, 2003) <sup>[8]</sup>.

However, Walji (2014) <sup>[25]</sup> noted that both students and librarians are facing the following problem in cause of utilizing this educational system, such challenges as limited connectivity, low levels of digital literacy and geographical remoteness. Also confirmed by Smith & Lee (2017) <sup>[22]</sup> who noticed that, academic librarians and students also face the challenge of fast changing technology that requires students to consistently upgrade their skill to effectively manage change in order to manage with the changing needs of users and at the same time manage multiple and simultaneous responsibilities. Thus to keep pace with the changing innovations in the information environment and age, academicians, librarians students etc need relevant upgraded skills and competencies. This constitute a challenge in this research work. This study therefore seeks to examine the relationship between library and e-learning and students performance in selected higher institution in rivers state.

## 1.2 Objectives of the study

1. To examine the effect of non-access to information resources to students in the selected institutions
2. To find out the relationship between inter-library loan and E-journals usage in students performance in the selected institutions.
3. To examine the effect of electronic reference service in students researches in the selected institution.
4. To examine the influence of Library blog in students performances in the selected institutions.

## 2. Literature review

### 2.1 Concept e-learning

E-learning can be said to be the use of information and communication technologies to access to online learning/teaching resources. According to Abbad *et al.* (2009) <sup>[1]</sup>, E-learning to can be any training that is enabled electronically. This suggest that for it to be termed e-learning, the learning must be empowered by the use of digital technologies. According to LaRose *et al.*, (1998) <sup>[13]</sup>, this learning must be internet-enabled or web-based.

According to Maltz *et al.* (2005) <sup>[12]</sup>, the term 'e-learning' is viewed in different perspectives, including distributed learning, online-distance learning, as well as hybrid learning. While OECD (2005) <sup>[19]</sup> defined it as the use of information and communication technologies in diverse processes of education to support and enhance learning in institutions of higher education, and includes the usage of information and communication technology as a complement to traditional classrooms, online learning or mixing the two modes. These encompasses all technological enabled material use for learning as oppose to traditional method of learning. Also according to Wentling *et al.* (2000) <sup>[26]</sup> the term e-learning refers to the attainment and use of knowledge that predominantly make possible and distribute by electronic means. To them, the e-learning depends on computer platform and networks. In e-learning literature reviewed on definitions for e-learning, it has been found that the features of e-learning process are mainly focused on the internet such as global sharing and learning resources; flexibility of learning as computer-generated

environment for learning is created to surmount issues of distance and time as noted by (Liu and Wang, 2009) <sup>[14]</sup>.

### 2.2 Library services in supporting learning

Libraries play an important role in teaching and learning through acting as access points for contents needed for teaching and learning processes. Many libraries are hybrids, providing virtual access to electronic resources and services, while maintaining and supporting use of a physical collection housed in a library building (Anderson, 2008) <sup>[3]</sup>. This is due to the fact that learners come in contact with the different learning opportunities that can be supported by the different types of libraries (Gunn, 2002) <sup>[6]</sup>. Moreover, physical libraries are sometimes closed making it impossible for users to have access to materials. The use of Virtual libraries makes it possible for readers to have acces to e-resources 24/7 a week, both student and researchers can have access to online libraries and information resources such as library catalogues and full-text electronic journals and books. Moreover, online libraries can be accessed from a distance.

### 2.3 E-learning and library services in higher learning institutions in Nigeria

Higher learning institutions in Nigeria have managed to install the basic ICT infrastructure for delivery of information resources for supporting teaching and learning. According to Swarts and Wachira (2010) <sup>[23]</sup>, most universities have dedicated computer centres, education and research networking and e-learning as a strategy to increase access. These has further strengthen the accessing of materials in higher institution. Information communication technology plays a vital role in enhancing the achievement of the hub functions of universities in Nigeria which include but not limited to the following: teaching, learning, research and consultancy. Students from tertiary or high citadel of learning in Nigeria are motivated to purchase their own laptop, palm top, Ipad and computers which they will make use of while in or out of university campuses. This is true as was confirmed in a study conducted by Mtega *et al.* (2013) <sup>[17]</sup> which reviewed that the level of ownership of laptop computers is on the high side in the country most especially among postgraduate students. With the fast growing internet infrastructure in most urban areas where higher learning

### 2.4 The use of e-learning in education

The development of multimedia and information technologies, as well as the use internet as a new technique of teaching, has made radical changes in the traditional process of teaching (Wang *et al.* 2007). These innovations has tripled the advantages of studying, especially in distance learning. Development in information technology, According to Yang and Arjomand (1999) <sup>[27]</sup>, has generated more choices for today's education. E-learning has the capability to transform the educational process in such a way that will improve students, knowledge, skills and performance (Henry, 2001). The importance of e-learning has propel colleges, universities, and other institutions of higher learning to ensure the advancement of online course capability in a fast developing cyber education market. As was noted by Dublin (2003) <sup>[5]</sup>, the introduction, use and expansion of a range of e-Learning tools has caused a drastic change in schools, especially in terms of educational delivery.

### 2.5 Some of the advantages that the adoption of e-Learning in schools can be to higher education from the reviewed literature includes the following

1. It allows for flexibility when issues of time and place are taken into consideration.
2. E-learning enhances the efficiency and effectiveness of knowledge and qualifications via ease of access to a considerable amount of information.
3. It is able to provide opportunities for relations between learners by the use of discussion forums. Through this, e-learning helps eliminate barriers that have the potential of hindering participation including the fear of talking to other learners.
4. E-learning is cost effective in the sense that there is no need for the students or learners to travel. It is also cost effective in the sense that it offers opportunities for learning for maximum number of learners with no need for many buildings.
5. E-learning always take cognizance of the individual learners differences. While some learners, for instance may prefer to concentrate on certain parts of the course, the others are prepared to review the entire course.

### 2.6 Disadvantages of e-learning

E-learning, in spite of the advantages that it has when adopted in education, also has some Disadvantages. The disadvantages of e-learning that have been given by studies include the following:

1. E-learning makes the learners undergo contemplation, remoteness, as well as lack of interaction or relation. It therefore requires a very strong inspiration as well as skills with to the management of time in order to reduce such effects.
2. With respect to clarifications, offer of explanations, as well as interpretations, the e-learning method might be less effective that the traditional method of learning. The learning process is much easier with the use of the face to face encounter with the instructors or teachers.
3. When it comes to improvement in communication skills of learners, e-learning as a method might have a negative effect. The learners. Though might have an excellent knowledge in academics, they may not possess the needed skills to deliver their acquired knowledge to others.
4. Given the fact that tests for assessments in e-learning are possibly done with the use of proxy, it makes it difficult, if not impossible to control or regulate bad activities like cheating.
5. It encourages piracy, plagiarism, predisposed by inadequate selection skills, as well as the ease of copy and paste.

## 3. Research Methodology

### 3.1 Research design

The study employed descriptive survey research designs approached because it provided overview of the data elicited from the respondents concerning the way and manner which students were exposed in learning environments of the institutions in Rivers State.

### 3.2 Area of the study

This research will be carried out in Port Harcourt of Rivers State

### 3.3 Population of the Study

The population of the study includes 70 university students in Port Harcourt in Rivers State. The population will be comprised of student in several departments in the selected Institutions.

**Table 1:** Categories of the target population

Category	RSU	Uniport	I.A.O.E	Total
Management	10	5	10	25
Engineering	5	5	5	15
Law	12	10	8	30
Total	27	20	23	70

### 3.4 Sample and sampling size

This research work will sample students in selected tertiary institutions in Port Harcourt of Rivers State. The sample size will be randomly selected student in several tertiary institution in Rivers State. The sample size of 60 students was used for the study. This was determined by using the Yaro Yamen's formula. A total of 70 student will be used to determine the sample size of the given population, the formula is shown below.

This is Mathematically Derived using the Taro Yamen's Formula as

$$n = \frac{N}{1 + N(e)^2}$$

Where: n=the sample size

N=total population size

e=error margin limit

1=constant

$$n = \frac{N}{1 + N(e)^2}$$

$$\frac{70}{1 + 70(0.05)^2}$$

$$n = \frac{70}{1 + 70 \times 0.0025}$$

$$n = \frac{70}{1.175}$$

$$n = 60$$

### 3.5 Research instrument

The research instrument for this study will be the questionnaire. According to Ojo (2005) questionnaire is a instrument containing some questions and statements (some with suggested alternative answers) for which the questions or confirm the statements. The questionnaire that will be used in the study will be divided in two sections. Section-A contained information about the respondents that is their gender, marital status, age, educational qualification, years of working experience etc. Section B contained items on the library e-learning.

### 3.6 Validity of the research instrument

A number of concepts are involved in a discussion of validity. Different types of validity have been identified. These include, the predictive validity which is the validity of an instrument to predict some future events, the concurrent validity which is usually measured by the calculation of a correlation coefficient between the distribution of test scores and some concurrently existing criterion measure, the content validity which is essentially determined by the process through which the items were selected.

### 3.7 Method of data analysis

Descriptive statistics which includes frequencies, mean, standard deviation, and percentages. Data collected was reported using frequency tables.

## 4. Results

This chapter deals with the presentation of data gathering from the field, while at the same time analyse and interpreted the results.

### 4.1 Data presentation

**Table 2:** Questionnaire distributed returned percentage

Total No. of Questionnaire Distributed	No. of Questionnaire Returned	Percentage (%) Returned	No. of Questionnaire not Returned	Percentage (%) not Returned
60	50	83.35%	10	16.5%

*Source:* survey data 2019

### 4.2 Findings and data analysis

The data analyses were presented in tables according to research objectives and using the appropriate statistical tools for the analyses.

#### 4.2.1 Gender respondent

The study involved gender distribution of respondents in order to answer the questionnaires provided as shown on the table

**Table 3:** Gender of respondents

Respondents	Frequency	Percent	Valid percent	Cumulative Percent
Female	24	48.0	48.0	48.0
Male	26	52.0	52.0	100.0
Total	50	100.0		

*Source:* Researcher, 2019

Table 3 above depicts that 52% and 48% of respondents of male and female respectively answered the questionnaires distributed

#### 4.2.2 Level of Respondents

The level of respondents in this study was used in order to answer the distributed questionnaires.

**Table 4:** Level of respondents

Respondents	Frequency	Percent	Valid Percent	Cumulative percent
MSc	25	50.0	50.0	50.0
BSc	25	50.0	50.0	100.0
Total	50	100.0	100.0	

*Source:* Researcher, 2019

From the table 4, the MSc student makes up 50% of the students who responded the distributed questionnaires. The remaining 50% make up the B.Sc. students.

#### 4.2.3 Age of respondents

In this study, age of the respondents was considered to be important in determining the influence of library in e-learning and Students performance in the selected institutions in Port Harcourt of rivers state.

**Table 5:** Age of respondents

Respondents	Frequency	Percent	Valid percent	Cumulative percent
20-30 years	14	28.0	28.0	28.0
31-40years	20	40.0	40.0	68.0
41-50 years	13	26.0	26.0	94.0
50 and above	3	6.0	6.0	100.0
Total	50	100.0	100.0	

*Source:* Researcher, 2019

The 31-40 year group constituted 40% of respondents and was highest number of respondents followed by 20-30 with 28% and then the 40-50 which made up 26% of the respondents. The lowest number of respondents was within the 50 and above which made 6% of MSc students.

#### 4.2.4 Non access to information resources to student

Non-access to information resources to student in this study have been considered as one of the factors towards students' performance in e-learning as responded by students through distributed questionnaires.

**Table 6:** Non access to information resources

Responses	Frequency	Percent	Valid percent	Cumulative percent
Very bad	11	22.0	22.0	22.0
Bad	10	20.0	20.0	46.0
Moderate	13	26.0	26.0	68.0
Good	8	16.0	16.0	52.0
Very good	8	16.0	16.0	100.0
Total	50	100.0	100.0	

*Source:* Researcher, 2019

Majority of the students from the table 6 which constitute 26% described their experience in non-access to information resources and their academic performance as moderate to influence them to stay in the library and study comfortable. 22% of the students said non-access to information resources is very bad for them, making it uncomfortable for them to stay in the library and read 20% of the students described non-access to information resources as bad for them stay in the library and read comfortably while 16% of students said they have access to information resources in the library and feels comfortable by ticking good and the remaining 16% of students said information resource in the library is very good for them and they are comfortable with the library environment. Majority of the students agree that there exists a strong relation between non- access to information resources and their academic performance. This shows that it is the responsibilities of the institutions (universities) to provide friendly E-resources e.g. internet, intranet etc which will influence students to utilize the library efficiently and effectively in reading to boost their academic performance.



#### 4.2.5 Inter-library loan and e-journals usage

The table 7 explained the presence of inter-library loan and e-journals resources sharing influenced students performance in the institutions.

**Table 7:** Inter-library loan and e-journals usage

Responses	Frequency	Percent	Valid Percent	Cumulative percent
Strongly disagree	5	10.0	10.0	20.0
Disagree	15	30.0	30.0	30.0
Agree	11	22.0	22.0	52.0
Strongly agree	19	38.0	38.0	100.0
Total	50	100.0	100.0	

*Source:* Researcher, 2019

From the table 7, 38% of students strongly agreed that inter-library loan and e-journal resources has influenced their performance while 30% of the student disagree that has influenced their performance negatively. 22% of the students agree that the inter-library loan and e-journal resources has influenced their performance. The remaining 10% of the students strongly disagree that the inter-library loan and e-journal resources has influenced their performance. Universities inter-library loan and e-journal resources has impact on students performance as resulted to student not having adequate and updated information that will aide their learning process.

#### 4.2.6 Electronic reference services

Student usage of electronic referencing services was considered to be important factor towards students' performance. The following were the response.

**Table 8:** Electronic reference services usage

Response	Frequency	Percent	Valid percent	Cumulative percent
Always	8	16.0	16.0	16.0
Usually	10	20.0	20.0	36.0
Sometimes	16	32.0	32.0	68.0
Rarely	8	16.0	16.0	84.0
Never	7	14.0	14.0	98.0
Not sure	1	2.0	2.0	100.0
Total	50	100.0	100.0	

*Source:* Researcher, 2019

As shown from table 8 that, 32% of the student said they sometimes use the electronic referencing services, followed by 20% who said they normally use the services. 16% of the students said they rarely use the library electronic referencing services and another 16% said they always use the library electronic reference services whereas 14% said they never make use of the library electronic referencing service in the library. 2% said they are not sure if they have use the library electronic referencing in the library or not. Not using the library electronic referencing especially in learning and researching as a student has negative impact on students' academic performance because of plagiarism sanction and penalty for utilizing other people research work without properly referencing them in the researchers work which reduces the originality of the students work.

#### 4.2.7 Library blog

The table 4.5 explained the usage of library blog in the institutions. Usage of library blog was considered to be important factor towards students' performance. The following were the response.

**Table 9:** Visit to library blog

Responses	Frequency	Percent	Valid Percent	Cumulative percent
Strongly disagree	5	10.0	10.0	20.0
Disagree	15	30.0	30.0	30.0
Agree	11	22.0	22.0	52.0
Strongly agree	19	38.0	38.0	100.0
Total	50	100.0	100.0	

*Source:* Researcher, 2019

From the table 7, 38% of students strongly agreed that they have visited and use the school library blog and it has influenced their performance while 30% of the student disagree that although they visited but it has not influenced their performance positively. 22% of the students agree that the school library blog has influenced their performance positively. The remaining 10% of the students strongly disagree that the school library blog has influenced their performance. Universities library blog has impact on students' performance as it is used in current awareness service to highlight news or resources of interest; and to post book reviews from students, academic researchers which has resulted to student having adequate and updated information that aided their learning process.

#### 5. Conclusion

Library plays a vital role in e-learning in facilitating students learning and their academic performance, especially while making use of the e-learning platform. Since the conventional learning method is not a sufficient motivator in encouraging the student performance required in today's competitive educational environment. The ability to attract, keep and motivate high-performance from students in higher institution is becoming imperative and this can only be achieved by examining the role library plays in ensuring that all students are being entertained both on line and offline. At the end of the research, it was realized that the library role is increasingly important in today's competitive academic environment and students academic performance, especially online. Therefore it is the responsibilities of the academic institutions to provide friendly and useable library environment which will influence students to study or read comfortable and promote learning exercise.

#### 6. Recommendations

Based the findings, the following was recommended

1. Tertiary institutions should try as much as possible to build a conducive library environment that attracts, retain and motivate its students to read and make researches. This is to enable the student comprehend and concentrate while studying.
2. Higher institutions should make available e- resources and technologies in library that aides learning. This is to boost the students reading ability and increase their assimilation level.
3. Liberians should find ways and means of communicating the advantages of utilizing e-resources to students especially those in first and second year in school. This not only give them the advantages of the e-learning method but also expose them to avalanche of sites and platform to access materials online.

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