# ASSESSING THE ATTITUDE OF ACADEMIC STAFF TOWARDS E-LEARNING IN TERTIARY INSTITUTIONS IN SOUTH-SOUTH GEOPOLITICAL REGION OF NIGERIA

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**ABSTRACT**

**Purpose:** The study assessed the attitude of academic staff towards utilization of e -learning in teaching and learning in the universities in Bayelsa State, which is in the South-South Geopolitical Region of Nigeria.

**Methodology:** The study employed descriptive survey research design. The population was made up of 1,958 academic staff out of which 587 were sampled and used for the study. Sampling technique used was random sampling in which 30% of the total population was selected for the study. A self- made instrument, 'attitude of academic staff to e-learning questionnaire (AASEQ)' was developed for the study. It was validated by two experts in Educational Measurement and Evaluation, and has reliability coefficient of 0.87. Mean and standard deviation were used in answering the research questions, while independent sampled t-test was used test the hypothesis at 0.05 significant level.

**Findings:** The result indicated that academic staff have positive attitude towards utilization of e -learning in teaching and learning. The study also found that there is a significant difference between the mean score of male and female academic staff on their attitude towards the use of e-learning in teaching and learning in the universities.

**Application of the Study:** Insights from the study can guide policymakers and educational leaders in creating conducive environments for e-learning.

**Novelty/Originality of this study:** This study focuses on the South-South geopolitical region of Nigeria, which may not have been extensively covered in previous research on e-learning attitudes. This regional focus could provide new insights specific to this area, which may differ from findings in other regions of Nigeria or other countries. The study targets academic staff in tertiary institutions. Much of the existing literature might focus on students' attitudes towards e-learning, making this focus on academic staff relatively unique. Understanding the perspective of educators is crucial as their attitudes can significantly influence the success of e-learning initiatives. The study adds to the body of knowledge in the field of educational technology and e-learning.

## INTRODUCTION

The emergent of Information and Communication Technology (ICT) gave rise to the use of World Wide Web (www) which has brought the world into a global village. The use of the web led to surge of interest in electronic learning (e-learning). Nigerian is in dire need of e-learning at all levels of its educational system so as to meet with international standards. It is worthy of note that in 1988, the Nigerian government enacted a policy on e-learning by introducing computer education in schools. Over years, the government has recognized the relevance of e-learning as an aspect of ICT in the educational system. This is informed by the National Policy on Education (Federal Republic of Nigeria, FRN 2014), which stated that the government shall provide facilities and necessary infrastructures for the promotion of ICT and e-learning.

Today, every university is facing severe and competitive challenges emanating from knowledge creation and management. Universities that are able to hook up with the contemporary challenges of knowledge creation or production through e-learning application are at comparative advantages. This is obvious as knowledge is undergoing internationalization processes. According to Dike (2013), use of information and technology in teaching and learning is a paradigm shift from conventional method to globalised application of teaching process. By the use of electronic learning, the quality of teaching and

learning becomes more globalised. This has equally intensifies competition among various institutions of higher learning.

E-learning means electronic learning. It is the use of electronic applications, the web and digital devices in teaching-learning process. The American society for training and Development (ASTD 2008) defined e-learning as a broad set of web-based applications and digital technologies for curriculum delivery. The European Union (EU) as cited in Olatubosun, Olusoga and Samuel, (2015) defines e-Learning as the use of new multimedia technologies and the Internet to improve the quality of learning by facilitating access to resources and services as well as remote exchanges and collaboration. Nwana, Ugwoegbu and Oraegbunam (2011) stated that e-learning is the delivery of curriculum or education programme by electronic means especially the computer. E-learning is used both in formal and non-formal education systems for curriculum delivery. It is a form of ICT that facilitates online delivery. It is a technology based instructional system which uses the computer, videophone system, teleconferencing devices, internet and intranet, audio and audio-visual systems, fiber optic cables, microwaves, satellite systems, packet-switching and multimedia system for curriculum implementation.

In e-learning, the curriculum can be presented online in form of texts, visuals, sound, multi-colour images, maps and graphics simultaneously. Software packages e.g Ready–made instructional Packages (RMIP), Teacher-Developed Instructional Packaged (TDIP), Learning Activity Packages (LAP) are used in e-learning. Other software are CD-Rom, slides, flash drive, diskettes, audio discs and videodisc. In e-learning, the students can have all their textbooks and reading materials in a CD-Rom which can be opened and displayed on computer built-in screens. These are technically called High-teach reading materials or E-books.

There are two major types of e-learning: the synchronous and asynchronous e-learning. The asynchronous e-learning requires both the teacher and the learners to be physically present in one classroom, one lecture hall or one lecture location using media technologies during lectures (Nwana, 2009). This type of learning emphasizes that both the teacher and the learners should be seeing themselves face-to-face and eyeball-to-eyeball during lectures. The synchronous e-learning is the type in which the teacher teaches online and the learners learn online. Lectures are online in real-time. This is to say that both the teacher and the learners are separated by geographical distances. In this type of teaching – learning, the teacher uses the internet-connected computer, videophone systems, teleconferencing devices and direct broadcast satellite television (DBST) among others (Nwana, 2009).

Attitude is a predisposition to respond favorably or unfavorably to an object, person, or event. Successful initiation and implementation of e-learning technology in the university depends strongly on the attitudes of academic staff whose task responsibility entails both administrative and quality academic delivery service. Positive attitudes can lead to effective implementation, while resistance can hinder its success. Factors like perceived benefits, challenges, and level of comfort with technology can all influence academic staff attitudes.

The use of e-learning in the classroom teaching-learning has provoked and challenged teachers and students' capacity to operate, store, manipulate, and retrieve information useful for their learning environment. Adequate utilization of e-learning thus provides for the credence of independent, expertise, active learning possibility, self-responsibility for learning and facilitates sharing of academic resources. Cavusa and Kanbulb (2010) opined that the benefit of using e-learning is that it provides immediate feedback in tests and assignments. Access to learning materials using e-learning process has made teaching and learning flexible as it ensures broad viability and availability of educational opportunities. It is a cost effective system as learning materials can be accessed irrespective of time, space and its environment. This is to say that it creates an interdisciplinary and revolutionizing approach to teaching and learning process. Mastery capacities of academic staff to search, select, analyze and evaluate information rather than just technical operation of technological equipment is a major challenge. This means that they must be creative and efficient at using digital tools, communicate and collaborate with other people to actually produce, publish and commercialized their researches, materials and information. Presently, the challenges are enormous as the space students engage themselves in the internet usage cannot be compared to the space in which the lecturers embrace it.

The call for utilization of e-learning in various educational sectors / unit on instructional delivery is to infuse and inject efficiency and effectiveness in Curriculum implementation. However, in developing countries like Nigeria, e-learning is challenged with the problem of material devices such as computer, computer laboratories, internet and email facilities, videophone systems and teleconferencing devices, fax and wireless

applications, digital library, digital classrooms, multimedia systems and the problem of multimedia courseware development among others. Other studies indicates that there is dearth of professional trained and skills teachers for e- learning, lack of facilities, infrastructures and equipment (Jegede & Owolabi, 2008). It is against this background that the present study is to be carried out to determine the attitude of academic staff towards the use of e-learning, and the various challenges facing e-learning as well as to examine its prospects and benefits to the education industry if well utilized. According to Mac-Ikemenjima (2005), some of the challenges that influence attitude of academic staff for effective utilization of e-learning are: inadequate ICT infrastructure including computer hardware and software high, and bandwidth/access; lack of skilled manpower to manage available systems and inadequate training facilities for ICT education at the tertiary level; resistance to change from traditional pedagogical methods to more innovative, technology based teaching and learning methods, by both students and academics; and the overall educational system is underfunded, therefore, available funds are used to solve more urgent and important survival needs by the institutions.

Nwana, Ofoegbu and Ikechukwu (2017) examined the use of e-learning resources by lecturers in colleges of education, Anambra State. The population was made up of 340 lecturers out of which 200 were sampled and used for the study. The instrument for data collection was a 20 –item self-constructed questionnaire. It was validated by experts and has reliability coefficient of 0.83. Data were analysed using the mean. The findings indicated that the lecturers are using e-learning facilities e.g. digital library to a high extent. Again they are using e-learning hardware e.g. computer to a high extent. Also, they are using e-learning courseware e.g. CD-ROM and slides to a high extent. On the other hand, it was found that they are using e-learning packages to a low extent. Ali, Abubakar and Abubakar (2018) assessed of the utilization of e-learning facilities among lecturers in Kaduna Polytechnic for effective teaching-learning and sustainable National Development in Nigeria. The population of the study consisted of all the lecturers in Kaduna polytechnic totaling 1252, Nigeria. Simple random sampling technique was used in selecting a sample of 150 lecturers. The findings of the study revealed that, Mobile phone/smart phone, Multimedia tools like radio, CD-ROM, Computer room, Multimedia projectors/PowerPoint, digital camera and lots of others, Digital Library, Off-line ordinary computer and E-mail facilities were the most available types of e-learning facilities in Kaduna polytechnic. The study found that incessant interruption in power supply, high cost of hardware in Nigeria, slow connectivity, inadequate funding, high transmission cost, and lack of Government commitment to the development of the educational sector were the major challenges encountered by the respondents in utilizing e-learning facilities in teaching-learning process. The study also revealed that the most available types of e-learning facilities in Kaduna polytechnic were utilised at medium and low level respectively.

Ahmar and Rahman (2017) asserts that e-learning facilities are not available in most schools and colleges due to poor infrastructure amenities and attitude of students and lecturers, this has affected the availability of e-learning facilities in our tertiary institutions. Consequently, effective teaching-learning and sustainable National development in Nigeria may not be achieved. Ezenwafor, Okeke, and Okoye, (2014) conducted a research on the utilizationof e-learning resources for instruction by technology and vocational educators in tertiary institutions in South –East Nigeria, and the findings revealed that the respondents utilize e-learning resources to a low extent and that lack of skills for utilizing the resources and their inadequate supply in institutions, among others, are their major constraints. Manir (2009) examined and discussed the problems, challenges and benefits of implementing E- Learning in Nigeria by reviewing the consciousness and willingness of the selected Universities. This study also identifies the enabling factors, the traffic-jam and, forecasts the future growth of E-learning in Nigeria. Survey research method was adopted for the study, and questionnaire was the only instrument used for the data collection. The findings of the study showed that awareness of e-learning among the Universities is very high but investment and commitment to develop an e-learning application is very poor and below expectation according to the study. Most of the staff and students in the universities only use Internet related e- learning site just for the sake of finding related information for their researches, since their libraries cannot afford to provide them with adequate and current materials but not for the sake of real online learning. The study also found out that some of the universities have web page and others are in the trend of creating a web page, which is usually for advertisement of the universities but not for the e-leaning activities. The Statistical analysis result shows that there are significant differences across both forms of e-learning activities and type of universities in Nigeria.

**Objective of the Study**

The purpose of the study is to assess the attitude of academic staff towards e-learning in tertiary institutions in Nigeria. Specifically, the objectives of the study are as follows:

- To examine the attitude of academic staff towards e-learning
- To assess benefits of e-learning to teaching and learning.
- To identify challenges that affect the attitude of the academic staff

**Research Questions**

1. What are the attitudes of academic staff towards e-learning in the universities?
2. What are the benefits of e-learning in teaching and learning?
3. What are the challenges that influence attitude of academic staff towards utilization of e-learning in teaching and learning?

**Hypothesis**

1. There is no significant relationship between the mean score of male and female academic staff on their attitude towards the use of e-learning in teaching and learning in the universities.

**METHOD**

The study is a survey design intended to investigate how the academic staff react to the application of e-learning for the teaching and learning in the university system. The population of the study consists of all academic in five tertiary institutions; Federal University, Otuoke (650), Niger Delta University Yenagoa (855), University of Africa, Toru Orua (180), Bayelsa Medical University (215), and Hensard University, Toru-Orua (58) given the total population as 1,958 in Bayelsa State. The sample size was 587. Sampling technique was based on random sampling technique in which 30% of the total population was selected for the study. A self–made instrument, 'attitude of academic staff to e-learning questionnaire (AASEQ)' was developed for the study. Thus, one single questionnaire was developed for male and female academic staff. Responses were based on the Likert typed scale (4-point rating) in which the responded were requested to answer: strongly agree, agree, disagree, strongly disagree. The researcher in collaboration with other academic staff administered the questionnaires to the academic staff. Mean and standard deviation were used to answer research questions while independent sampled t-test was used to test the hypothesis at 0.05 significance level. A mean score of 2.50 served as the criterion mean for judgement.

**RESULTS AND DISCUSSION**

*Result*

**Research Question One:** What are the attitudes of academic staff towards e-learning in the universities?

**Table 1 - Mean scores of male and female academic staff attitude towards e-learning**

| S/N | Items | Mean | | Standard Deviation | | Decision |
|---|---|---|---|---|---|---|
| | | Male | Female | Male | Female | |
| 1 | I like using internet to teach my students | 3.56 | 3.62 | 0.73 | 0.68 | Accepted |
| 2 | I prefer using projector in teaching and learning | 3.98 | 3.84 | 0.15 | 0.37 | Accepted |
| 3 | I don't like using internet because it is waste of time | 1.27 | 1.16 | 0.41 | 0.37 | Rejected |
| 4 | I always read seminars and projects on line. | 3.74 | 3.62 | 0.44 | 0.65 | Accepted |
| 5 | I prefer using e-learning techniques to conventional methods in teaching and learning | 3.66 | 3.18 | 0.52 | 0.84 | Accepted |
| 6 | Grand Mean | 3.24 | 3.08 | 0.45 | 0.58 | Accepted |

Table 1 shows the mean scores of attitude of academic staff towards e-learning in the universities in Bayelsa State. Academic staff subscribes to items 1, 2, 4 and 5 with the high mean set of 3.56, 3.98 3.74, and 3.66 respectively while item 3 with low mean of 1.27 was rejected following the criterion mean of 2.5.

The grand mean scores of 3.24 for male academic staff and 3.08 for female academic staff show that the academic staff accepted the items in the table to be the attitude of academic staff to e-learning. Therefore, the attitudes of academic staff towards e-learning in the universities in South-South geopolitical region of Nigeria is positive.

**Research question Two: What are the benefits of e-learning in teaching and learning?**

**Table 2 - Mean scores of academic staff on the benefits of e-learning in teaching and learning.**

| S/N | Item | Mean | Standard Deviation | Decision |
|---|---|---|---|---|
| 1 | E-learning provides for independent and group learning activities. | 2.75 | 0.86 | Accepted |
| 2 | Providing immediate feedback in tests and assignments | 3.52 | 0.73 | Accepted |
| 3 | Academic staff prefer conventional method to the use of e-learning facilities. | 1.71 | 0.45 | Accepted |
| 4 | E-learning facilitates critical academic curiosity, initiatives and peer discussions | 3.44 | 0.73 | Accepted |
| 5 | Grand Mean | 2.86 | 0.69 | Accepted |

Table 2 indicates the mean scores of the benefits of e-learning in teaching and learning in the universities. The academic staff agreed to items 1, 2 and 4 with the high mean scores of 2.75, 3.52, and 3.44 respectively, which are all greater than the criterion mean of 2.5. Item 3 has mean of 1.71, which shows that the academic staff reject the item as one of the benefits.

**Research Question Three: What are the challenges that influence attitude of academic staff towards utilization of e-learning in teaching and learning?**

**Table 3 - Mean rating of academic staff on challenges that influence academic staff attitude towards to e-learning.**

| S/N | Item | Mean | Standard Deviation | Decision |
|---|---|---|---|---|
| 1 | Inadequate ICT infrastructure | 3.68 | 0.65 | Accepted |
| 2 | Resistance to change from traditional pedagogical methods to more innovative, technology based | 3.23 | 0.87 | Accepted |
| 3 | Most academic staff do not possess the ICT competences required to use the facilities. | 3.54 | 0.75 | Accepted |
| 4 | Ineffective coordination of all the various ICT for education initiatives. | 3.85 | 0.48 | Accepted |
| 5 | Inadequate training facilities for ICT education at the tertiary level | 3.75 | 0.51 | Accepted |
| 6 | Grand Mean | 3.61 | 0.652 | Accepted |

Table 3 confirms that the mean rating of the challenges that influence academic staff attitude towards to e-learning in the universities. From the mean sets, all the items were accepted with mean of 3.68, 3.23, 3.54, 3.85 and 3.75 respectively, which are greater than the criterion mean of 2.5.

**Hypothesis** One: There is no significant difference between the mean ratings of male and female academic staff on attitude towards the use of e-learning in teaching and learning in the universities.

**Table 4 - Test of Hypothesis using Independent Sampled t-test**

| Group | N | Mean | Standard Deviation | df | t | p-value |
|--------|-----|-------|--------------------|-----|-------|---------|
| **Male** | 186 | 18.89 | 1.16 | 348 | | |
| | | | | | 6.920 | 0.00 |
| **Female** | 164 | 17.92 | 1.46 | | | |

α =0.05

Table 4 shows the independent sampled t-test analysis of the difference between the mean ratings of male and female academic staff on attitude towards the use of e-learning in teaching and learning in the universities. The table shows the p-value as 0.00, which is greater than the alpha value of 0.05. In this case, hypothesis 1 which states that 'there is no significant difference between the mean ratings of male and female academic staff on attitude towards the use of e-learning in teaching and learning in the universities' is rejected as p-value is less than alpha value. Therefore, there is a significant difference between the mean ratings of male and female academic staff on attitude towards the use of e-learning in teaching and learning in the universities.

**Discussion**

The result from research question one revealed that the attitudes of academic staff towards e-learning in the universities in South-South geopolitical region of Nigeria is positive. The finding of this study is in agreement with the findings of Nwana, Ofoegbu and Ikechukwu (2017), who examined the use of e-learning resources by lecturers in Colleges of Education, Anambra State, and found that the lecturers are using e-learning facilities and e-learning hardware e.g. digital library and computer respectively to a high extent.

The result from research question two revealed that the benefits of e-learning in teaching and learning in South-South geopolitical region of Nigeria are: providing immediate feedback in tests and assignments; facilitates critical academic curiosity, initiatives and peer discussions; and e-learning provides for independent and group learning activities. The findings of this study is in line with the findings of Abed (2019), who stated that the benefit of e-learning are: provide tools that analyze grades, results and tests as well as the development of statistics about them; instant evaluation tools provided teachers with a variety of ways to quickly and easily build, distribute and classify information; and online forums, such as discussion boards and dialogue rooms, provide opportunities for exchanging views on topics that increase the chances of benefiting from the ideas and suggestions presented and integrating them with the views of the student, which helps to form a solid foundation for the learner.

The study found that the challenges that influence attitude of academic staff towards utilization of e-learning in teaching and learning are: inadequate ICT infrastructure; resistance to change from traditional pedagogical methods to more innovative; technology based, most academic staff do not possess the ICT competences required to use the facilities; ineffective coordination of all the various ICT for education initiatives; and inadequate training facilities for ICT education at the tertiary level. The findings of this study is in agreement with the findings of Ali, Abubakar and Abubakar (2018), who assessed of the utilization of e-learning facilities among lecturers in Kaduna Polytechnic for effective teaching-learning and sustainable National Development in Nigeria, and found that incessant interruption in power supply, high cost of hardware in Nigeria, slow connectivity, inadequate funding, high transmission cost, and lack of Government commitment to the development of the educational sector were the major challenges encountered by the respondents in utilizing e-learning facilities in teaching-learning process.

The result from hypothesis one revealed that there is a significant difference between the mean ratings of male and female academic staff on attitude towards the use of e-learning in teaching and learning in the universities. The finding of this study is in agreement with the findings of Edo (2016), who used Z-test statistics to analyze the significant difference between the mean ratings of male and female academic staff on attitude towards the use of e-learning in teaching and learning in the universities in Rivers State, Nigeria. The study found the there is no significant difference between the mean ratings of male and female academic staff on attitude towards the use of e-learning in teaching and learning in the universities in Rivers State, Nigeria. This indicated that male and female academic staff is of the same opinion on their attitude to the use of e-learning.

## CONCLUSION

Based on the findings, it is therefore concluded that academic staff utilization of e-learning to teaching and learning is positive.

## RECOMMENDATIONS

Based on the conclusion, the study recommends that:
1. Lecturers should be trained and motivated towards using e-learning techniques to compete with other colleagues.
2. E-learning facilities should be provided in each department to enhance the attitude of academic staff toward its utilization.

## ACKNOWLEDGEMENT

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