

Attitude of Academic Staff towards E-Learning in Tertiary Institutions in Rivers State

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Abstract

The study centered on attitude of academic staff towards utilization of e -learning in teaching and learning in the universities in Rivers State. E-learning has become a globalised issue that every organization and individuals keeps on clamoring for it. Thus, in this study three research questions and three hypotheses were drawn. The population of the study consisted of 2352 academic staff in three universities in Rivers State. The sample size was 706 .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. The respondents were requested to answer: very high extent (VHE), high extent (HE),, low extent(LE), and very low extent(VLE),. Thus, 706 copies of the questionnaires were distributed and retrieved 524(74%) for the analysis of the research questions and hypotheses. The result indicated that academic staff attitude to e-learning is poor. This is because most of the academic preferred conservative mode of using chalkboard. Thus, it is recommended that the lecturers should be mandated to use projectors-mails and other technological apparatus as a source of teaching and learning, assignments, seminars, tests and projects.

Introduction

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.

For Dike (2013) using 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 has the potentials for ensuring effectiveness and efficiency in teaching-learning process. In other words, it targets reform and innovative tendency of every institution to initiate or stimulate academic responsibilities as well as enhancing students' capacity to learn aggressively and proactively.

Concept of e-Learning

E-learning is an umbrella term that describes any type of learning that depends on electronic communication. It is a generic term covering a wide set of ICT technology-based applications and processes which includes: computer-based learning, web-based learning, virtual classrooms, digital collaboration and networking” (Hambrecht, 2000; Kaplan-Leiserso’s online glossary). In other words, it is referred to teaching and learning that is web-enabled. In conjunction, other commonly used terms include: online learning, computer assisted learning or ICT in education. E-learning incorporates both content (curriculum) and instruction (pedagogy).It has become a term representing a new model of education that incorporates academic networks which particularly impact on the learning communities using varieties of learning resources.

E-learning as a technological tool is used in number of ways within the university to impact and enhance teaching and learning outcome. Use of e-learning has provided the opportunities to reflect on the intersection among the three domains (knowledge content, pedagogy and technology). With the use of e-learning these domains can no longer be perceived as independent in knowledge rather it will be access as interdependence with the attribute of transformative potentiality (Ezekwe, Onwe & Udu 2014).

In a nutshell, utilization of e-learning is relatively new in Nigeria’s educational system. It is a departure from the conventional approach in curriculum implementation. It targets transformation, reformations and innovations in teaching and learning in every aspect of the educational level apart from its application in the university.

Attitude of Academic Staff to E-Learning in the University

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.

In Rivers State tertiary institutions, e-learning have not deeply been rooted into the process of teaching and learning.Utilization is still very minimal in the sense that very few lecturers may decide to have their assignment on line only. In other words;most academic staff has not really utilized the advantages of delivering their learning processes on line. They are adamant to the usage as it is conceived as waste of time. They prefer the conservative aspects of writing on the chalk board rather. Thus, with the increased agitation for dynamic change in the use of instructional materials to meet the demands of individual and society in the contemporary society, some of them are being forced to revisit, if not altogether redefine their teaching methodology that reflects on e-learning technologies.

It is pertinent that management has to ensure that all the academic staff actually utilize the processes of e-learning .This is done by encouraging and sponsoring programme that reflect on the knowledge of modern information and technology. However, the problem remains as most of academic staff feels very reluctant to embrace these processes. Some of the academic staff who has attained the level of senior staff and professorship felt that it is not necessary for them as they assumed that it is meant for younger generation of lecturers. This is certain as most of the

professors never attended workshops, seminars and conferences. Even some of the younger generation of lecturers doesn't really see the values of delivering their lecture using the electronic system as they considered not vital and essential. Those that are competence to use and determine to apply e-learning technique face the problems of non availability of the infrastructure. These are some of the problems which this study determines to address.

Researches indicated that academic staff attitude towards e-learning is generated by factors like :organizational climate, lecturers' educational beliefs and attitudinal factors,, school policies in relation to the use of ICT, lecturers' background, teaching experiences, professional development, tendency towards innovativeness and creativeness, technology self-efficacy (technology competence),socio-organizational factor, administrative support, pressure to use technology (Dike,2013). These factors play different roles in the behavior of the academic staff in their applications of e-learning to teaching and learning in the university system.

Evidence from research shows that there is a strong relationship between academic staff related attitudes and utilization of technology for e-learning as emphasized in many studies. Attitudes toward computers influence lecturers' acceptance of the usefulness of technology. By this, several attempts are being made to institute this technological mindset into the academic staff through the processes of organizing workshop, conference and seminar by various tertiary institutions in Rivers State.

Benefits of E-Learning to Tertiary Institutions

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.

In most part of the world, e-learning has generated much interest in learning responsibilities both in the classroom situation and external environment. The fact remains that lecturers who have not really being trained to the use of computer cannot have the zeal of utilizing it. This is the more reasons why universities sponsored their staff for workshops and conferences in order to expose them to global challenges in their respective fields.

For Cavusa and Kanbulb (2010), 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.

Common experiences revealed that traditional educational environments do not seem to be suitable for preparing learners to function or be productive in the workplaces of today's society. Universities that do not incorporate the use of new technologies cannot seriously claim to prepare their students for life in the twenty-first century.

E-learning is recognized as a catalysts for change in working conditions, handling and exchanging information, teaching methods, learning approaches, scientific research and in accessing information. As expressed by Sabina (2012), e-learning facilitates learning, critical thinking and peer discussions. It is identified that e-learning is not only essential but most facilitative as it increases flexibility of delivery; increasing access; and satisfying public demands for efficiency.

Further, e-learning has provided for more individualized knowledge in different ways. based on its vital roles, it has become necessity for every higher institution to be recognized and to compete favorably with the global institutions at the dawn of the 21st Century, E-learning allows for the creation of learning communities that defy the constraints of time and distance as. This is predication on the fact that it provides access to knowledge that was once difficult to obtain

The education landscape is changing at the dawn of the 21st century thus pose challenges to the responsibilities of the academic staff. Currently, many academic staff sees the rise in the availability of e-learning not only as a revolutionary opportunity to increase their ability to update their potentialsbut also to hasten the overall pace of reform in their academic and administrative responsibilities.

Challenges of using E-learning in teaching and learning

Mastery capacities of lecturers 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.

E-learning is a potential, powerful and effective tool but if lecturers' use it only as a delivery vehicle, the outcomes will be less than its potential. The challenge is to make full use of technology so that it doesn't simply a substitute teacher (Olson, Codde, Kurt, Tarkleson, Sinclair, Yook, and Egidio, 2011).

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 rate students out spaced the lecturers have sometimes affect the utilization in the classroom set up as no lecturers will be willing to expose their incompetence in the use of the modern technology. Common experiences revealed that this is one of the reasons why the conservative mode of teaching and learning is still vital for the lecturers.

The study of Goode (2010) highlights the high costs of technologies and states that lecturers who do not have enough resources and experiences would probably lose out on training opportunities. This finding correlate the situation university academic staff found themselves, since they do not possess the ICT competences required to use the facilities. Probably based on this study, university management persistently organized various developmental programmes focusing on modern information technology, manpower development training and adequate provision of ICT facilities to close the digital divide in the system.

The increased agitation for the utilization of e-learning reveals a new but complex challenge to the skills of academic staff. Lecturers are faced with many types of decisions and are required to fulfill many different tasks related to quality lecture delivery.

For Mac-Ikemenjima (2005) some of the challenges that influence attitude of academic staff for effective utilization of e-learning are:

1. Inadequate ICT infrastructure including :computer hardware and software high, and bandwidth/access;
2. Lack of skilled manpower to manage available systems and inadequate training facilities for ICT education at the tertiary level;
3. Resistance to change from traditional pedagogical methods to more innovative, technology based teaching and learning methods, by both students and academics;
4. The overall educational system is underfunded, therefore, available funds are used to solve more urgent and important survival needs by the institutions;
5. The over-dependence of educational institutions on government for everything has limited institutions ability to collaborate with the private sector or seek alternative funding sources for ICT educational initiatives.
6. Ineffective coordination of all the various ICT for education initiatives.

Statement of the problems

Universities all over the world is struggling to dominate knowledge through the utilization of information communication and technology. Thus, most universities have resulted to communicate their clients through the internet. This implies that learning and discussion activities as regards academic issues are done on line. For instance, the National University of Nigeria (NOUN) often engages their students through on-line-learning and interactive processes. This same measure has equally been initiated by other universities. The aim is to be at competitive edge of global information as regards studying and learning procedures.

However, learning process has been clouded with several challenges as most of the academic staff still expressed lack luster attitude to usage of the electronic learning system. The system too has also made even the academic staff that is competent in computer application to relent as the system fail to support and reinforce the staff. In another development, some of the staff does not see the relevant of applying modern technology in the classroom activities as they consider it as waste of time. These are some of the problems that inform the researcher to examine attitude of academic staff towards e-learning in Rivers State Universities.

Purpose of the Study

The purpose of the study is to investigate attitude of academic staff towards e-learning in tertiary institutions in Rivers State. 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

- What are the attitudes of academic staff towards e-learning in the universities?

- What are the benefits of e-learning in teaching and learning?
- What are the challenges that influence attitude of academic staff towards utilization of e-learning in teaching and learning?

Hypotheses

- 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.
- There is no significant relationship between the mean score of male and female academic staff on the benefits of e-learning in teaching and learning in the universities.
- There is no significant relationship between the mean score of male and female academic staff on the challenges that influence the attitude of academic staff towards utilization in teaching and learning.

Methodology

The study is a survey design intended to investigate how the academic staff react presently 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 three tertiary institutions; University of Science and Technology (553) University of Port Harcourt (1321) and Ignatius Ajuru University of Education (478) given the total population as 2352 in Rivers State. The sample size was 706. 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 (4point rating) in which the responded were requested to answer: very high extent (VHE), high extent (H) low extent (LE) and very low extent (VLE)

The researchers in collaboration with other lecturers administered the questionnaires to the academic staff. Thus, 706 copies of the questionnaires were distributed and retrieved 524(74%) for the analysis of the research questions and hypotheses. Frequency counts, mean scores and descriptive tables were used for the data analysis while t-test was used for the hypotheses.

Research question 1: 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/no	Items	Male lecturers		Female lecturers		Mean set	Order rank
		\bar{X}	STD	\bar{X}	STD		
1	I like using internet to teach my students	1.9	1.0	2.1	0.9	2.0	5 th
2	I prefer using projector in teaching and learning	2.9	0.9	2.7	0.9	3.1	1 st
3	I don't like using internet because it	3.0	1.0	2.9	1.2	3.0	2 nd

	is waste of time						
4	I always read seminars and projects on line.	2.8	0.9	2.9	1.1	2.9	3 rd
5	I prefer using e-learning techniques to conventional methods in teaching and learning	2.1	1.1	2.2	1.1	2.2	4 th
	Aggregate mean score	2.54		2.56		2.72	

Table 1 shows the mean scores of attitude of academic staff towards e-learning in the universities in Rivers State. Academic staff subscribes to items 2-4 with the high mean set of 3.1, 3.0 and 2.9 respectively while 2.2 and 2.0 items were rejected following the criterion mean of 2.5.

The aggregate mean scores of 2.54 for male lecturers and 2.56 for female lecturers show that the lecturers accepted the items in the table to be the attitude of academic staff to e-learning.

Research question 2: What are the benefits of e-learning in teaching and learning?

Table 2: mean scores of male and female academic staff on the benefits of e-learning in teaching and learning.

	items	Male lecturers		Female lecturers		Mean set	Ranking Order
		\bar{X}	std	\bar{X}	std		
1	E-learning provides for independent and group learning activities.	3.1	0.9	3.0	1.1	3.1	1 st
2	Providing immediate feedback in tests and assignments	3.1	0.8	2.9	1.0	3.0	2 nd
3	Lecturers prefer conventional method to the use of e-learning facilities.	3.0	0.9	2.7	1.0	2.9	3 rd
4	Lack of adequate supply of	3.1	0.9	3.1	1.1	3.1	1 st
5	E-learning facilitates critical academic curiosity, initiatives and peer discussions	3.0	0.9	3.1	1.1	3.1	1 st
	Aggregate mean score	3.06		2.96		3.04	

Table 2 indicates that the mean scores of the relevance of the e-learning to teaching and learning in the universities. academic staff agree to items 1-5 with the high mean scores of 3.1,3.1,3.1,3.0 and 2.9 respectively following the ranking order ranging from 1-5 which are greater than the criterion mean of 2.5.

The aggregate mean scores of 3.0 for male lecturers and 2.96 for female lecturers show that the lecturers accepted the items in the table to be the relevance of e-learning to teaching and learning.

Research question 3: What are the challenges that influence attitude of academic staff towards utilization of e-learning in teaching and learning?

Table 3: mean rating of male and female lecturers on challenges that influence academic staff attitude towards to e-learning.

S/no	Items	Male academic staff		Female academic staff		Mean set	Order rank
		\bar{X}	STD	\bar{X}	STD		
1	Inadequate ICT infrastructure	3.1	0.8	3.1	0.9	3.1	2 nd
2	Resistance to change from traditional pedagogical methods to more innovative, technology based	3.1	1.0	2.9	1.1	3.0	3 rd
3	Most lecturers don't possess the ICT competences required to use the facilities.	3.2	0.9	2.6	1.0	2.9	4 th
4	Ineffective coordination of all the various ICT for education initiatives.	3.1	1.0	2.7	1.1	2.9	4 th
5	inadequate training facilities for ICT education at the tertiary level	3.3	0.9	3.0	1.0	3.2	1 st
		3.16		2.86		3.02	

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 3.2,3.1,3.0 and 2.9 respectively following the ranking order ranging from 1-5 which are greater than the criterion mean of 2.5.

The aggregate mean scores of 3.16 for male lecturers and 2.86 for female lecturers concede to all the items as the challenges confronting effective utilization of e-learning in the universities.

Hypotheses

Ho₁: 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 Z-test

RESPONDENTS	\bar{X}	STD	DF	Z-CAL	Z-CRIT	DECISION
Male lecturers	2.54	0.98	522	0.36	1.96	accepted
Female lecturers	2.56	1.04				

$p > 0.05$ (not significant)

The result of table 4 indicated that z-calculation (0.36) is less than the z-critical (1.96) at the degree of freedom (522).and significant level of 0.05. Hence, the null hypothesis of no

significant difference between the mean ratings of male and female academic staff on their attitude towards the use of e-learning in teaching and learning in the universities is accepted.

Ho₂: There is no significant relationship between the mean score of male and female academic staff on the benefits of e-learning in teaching and learning in the universities.

Table 5: test of hypothesis using Z-test

RESPONDENTS	\bar{X}	STD	DF	Z-CAL	Z-CRIT	DECISION
Male lecturers	3.06	0.88	522	2.5	1.96	rejected
Female lecturers	2.96	1.06				

$p > 0.05$ (significant)

The result of table 5 indicated that z-calculation (2.5) is greater than the z-critical (1.96) at the degree of freedom (522).and significant level of 0.05. Hence, the null hypothesis of not significant difference between the mean ratings of male and female academic staff on the benefits of e-learning to teaching and learning was not accepted.

Ho₃: There is no significant relationship between the mean score of male and female academic staff on the challenges that influence the attitude of academic staff towards utilization in teaching and learning.

Table 6: test of hypothesis using Z-test

RESPONDENTS	\bar{X}	STD	DF	Z-CAL	Z-CRIT	DECISION
Male lecturers	3.16	0.94	522	0.70	1.96	accepted
Female lecturers	2.86	1.02				

$p > 0.05$ (not significant)

The result of table 6 indicated that z-calculation (0.70) is less than the z-critical (1.96) at the degree of freedom (522).and significant level of 0.05. The null hypothesis shows significant difference between the mean ratings of male and female academic staff on the challenges that affect the attitude of academic staff to effective utilization in teaching and learning is accepted.

Results:

The finding of this study indicated that academic staff in the universities has not utilize modern facilities in teaching and learning. In other words, the conservative mode of teaching is preferable by them. The aggregate mean score indicated that lecturers' attitude to the used of e-learning in teaching and learning is not encouraging in the tertiary institutions in Rivers State. Statistically, hypothesis indicated that male and female academic staff is of the same opinion on their attitude to the use of e-learning.

Further investigation indicated that e-learning provides for independent and group learning activities as well as creating an interdisciplinary approach to teaching and learning .The aggregate mean scores of 3.0 for male lecturers and 2.96 for female lecturers show that the

lecturers accepted the items in the table to be the benefits of e-learning to teaching and learning. Hypothetically, it is indicated that there is a significant difference between the mean ratings of male and female academic staff on the benefits of e-learning in teaching and learning. This may be that the values of using e-learning in teaching and learning among the academic staff have not been fully initiated.

Finally, the study revealed that utilization of e-learning in teaching and learning are negatively affected by inadequate training facilities for ICT education at the tertiary level, inadequate ICT infrastructure and resistance to change from traditional pedagogical methods to more innovative, technology based. The hypothesis indicated no significant difference between the mean score of male and female academic staff on the challenges that affect the attitude of academic staff to effective utilization in teaching and learning. This implies that the lecturers are aware of the situation that impels effective utilization of the modern technology on teaching and learning processes in tertiary institutions in Rivers State.

Conclusion

Based on the findings, it is therefore concluded that academic staff utilization of e-learning to teaching and learning is poor. This is because most of the lecturers preferred conservative mode of chalkboard. In short, there is disillusionment among the academic staff towards utilization of modern facilities as the infrastructures are very costly and even not available to use by those who are competent in the use of modern learning facilities.

Recommendations

- Lecturers should be trained and motivated towards using e-learning techniques to compete with other colleagues.
- E-learning facilities should be provided in each department to enhance the attitude of academic staff toward its utilization.
- E-learning should be made compulsory in teaching and learning so that lecturers will see it as very mandatory and paramount.
- Lecturers should be mandated to use e-mail as a source of their assignments, seminars, tests and projects.

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