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UTILIZATION OF E-LEARNING IN THE STUDY OF GENERAL STUDIES COURSES ATTHE UNIVERSITY OF NIGERIA.

[1]Ifeanyi Benedict Ohanu (PhD) & [2]Chukwudike Micah Ngozi

[1&2]Department of Industrial Technical Education, University of Nigeria Nsukka.

E-mail: ifeanyi.ohanu@unn.edu.ng

Abstract

This study adopted a descriptive survey research design to determine the utilization of e-learning in the study of General Studies courses at the University of Nigeria. Three research questions and two null hypotheses guided the study. The hypotheses were tested at .05 level of significance. The researcher developed 74 item structured questionnaire based on the reviewed literature. The questionnaire was face validated by three experts. The reliability of the instrument was determined using Cronbach Alpha, which yielded a reliability coefficient value of 0.84. Copies of the questionnaires were administered to 220respondents to obtain data and 183copies of the questionnaire were returned. Data collected were analysed using SPSS version 20. Collected data were analyzed using mean to answer the research questions. The findings of the study showed that in the study of General Studies courses in the University of Nigeria, supposedly needed e-learning gadgets and facilities are averagely available but their functionality is below average. Among other findings, it was recommended that e-learning gadgets should be provided to the students.

Introduction

E-Learning is championed using electronic gadgets to make learning available to the target audience. This present age of Information and Communication Technology (ICT) according to Nwana (2012), is marked by a globalized high diffusion rate of information ever seen in history through the wide use of both electronic and informational technologies (Omeruo, 2013). Almost every facet of human existence bears the prefix e- such as e-mail, ebusiness, e-commerce, e-health, e-government and so on. Partnership for 21st Century skills (2014), highlights skillfulness in information, media and technology as literary skills required of a successful learner in this age. These three pillars are crucial to e-learning with respect to the effective transmission of knowledge and information from the resource persons to the recipients in a very short time irrespective of the geographical barriers and of course with little or no contact between them. The driving force behind this possibility is the presence of internet. The internet is the global network of computers interconnected in operation using a set of standardized communication protocols known as Transmission Control Protocol/ Internet Protocol or the Internet protocol suite (TCP/IP) (Linfo, 2015). This interconnection is visible in the spheres of academics, government, health and so on.

In October 1999, at a Computer Based Test (CBT) systems seminar in Los Angeles, a new word ‗elearning' for the first time was used

in a professional arena (Gogos, 2013). According to Gogos, it was used to demonstrate a learning platform based on the use of recent technologies that have online access, are interactive and can be personalized to upgrade competencies while the procedure of learning differs from time and location. Shavinina (2001) in Abdoderin and Kumuyi (2013) stated that all digital facilities such as computers, scanners, printers, telephones, internets, digital satellite systems (DSS), direct broadcast satellites (DBS), pocket switching, fiber optic cables, laser disc, microwaves and multimedia systems for the collection, processing, storage and dissemination of information all over the world. Adeola, Adewale and Adele (2013), stated that it can be communicated synchronously (e-learning classes occurring in real time) exemplified in webcam conferences and chat rooms or asynchronously (access to prearranged elearning material in real time) such as e-mail and web-boards.

E-learning is not an abstract philosophy; hence it passes through specific gadgets which can be hardware, software in combination of other needed facilities. The availability and functionality of these gadgets and facilities is instrumental for a successful e-learning experience. Hardware devices such as recent computers/laptops, monitor, mobile devices (smartphone, iTouch, iPad, mp3), microphones, speakers, headsets, printers and scanner are utilized in e-learning. Software such as an operating system (windows xp, linux sand so on), PDF readers, PDF creators, plug-ins and Microsoft Office and other specialized ones like movie, graphics and engineering editors are all used for e-learning existent. Some of the other accessories include wireless or wired network and e-mail addresses.

(e-Learners, 2016).

The availability of this gadgets and the perceived advantage of e-learning as being the best method of teaching and learning has led to its acceptance for education in tertiary institutions (Adeola et.al, 2013). These advantages are heightened if the supposed utilizers are ready (ability to use the available resources to perform effective e-learning). Thus, this readiness as noted by Partnership for 21st Century skills (2014), entails skillfulness in information, media and technology which are all literary skills required of a successful learner, instructor or teacher in the 21st Century's Information Age. It is the availability, functionality of theses gadgets and the e-readiness of its users that are accountable for the many benefits of e-learning.

Among the many benefits of e-learning include flexibility and feasibility of learning with respect to time and place for learning, learning at one's pace, access to a large expanse of information, elimination of social barriers through online discussion forums, cost effectiveness both to students and facilities, covers up for scarcity of academic staff and choice of learning content. It also solves the problem of overcrowding in lecture halls and hostels, insufficiency of laboratory materials, cultism and the ratio of

applicants to available schools (Curran, 2004). Elearnframe (2000) noted e-learning for improved retention due to individualized studies, enhanced socialization among students, immediate access to learning materials and its less intimidation compared to the traditional teacher led instruction. Added to these, Akingbade (2015) stated that it gives room for collaboration, efficiency, better adaptation and adoption by visually and auditory impaired students positing that finishing an online course gives self-confidence as well as better results. In conclusion of these facts, the learner most at times determines the direction of the learning and not the instructor or teacher. According to Akingbade, elearning is also better than traditional learning if properly applied.

E-learning has many other disadvantages such as the absence of important personal interactions, not only between instructors and students but also among student colleagues. According to Epignosis (2014), students may find it difficult to get clarification and explanations from the instructor. Furthermore, cheating, plagiarism, piracy may not be properly checked resulting to improper assessment of students' abilities. Also, it makes little impact due to the nature of some fields and disciplines that require practical skills. Taking cognizance of high student to teacher ratios and traffic on the e-learning platform becomes a pertinent cause of worry (Aboderin & Kumuyi, 2013). These factors even apply only when there is adequate literacy of both the e-learning concept and attached facilities and the absence of inadequacy of the needed facilities is a great disadvantage to e-learning (Epignosis, 2014). Kuriakose and Luwes (2016) assert that assessment is and has been the basic problem in e-learning due to technological incompetence of various educational stakeholders in formulating qualitative test items other than the conventional multiple-choice questions.

E-learning has advanced to mobile e-learning and blended e-learning in other to handle the problems facing it. Mobile learning is purely online with no form of physical contact between the teacher and the student, it is just the student using electronic gadgets to learn for himself once the learning content has been provided. Alison (2014) views blended learning as a preferred e-learning method which combines mobile learning and the traditional styles. Agreeing to that fact, DreamBox (2013) noted the following models of blended e-learning: rotation, flex, a la carte, online lab, online driver, self-blend and enriched virtual models.

E-learning is not strange as earlier said to developing Nigeria; in fact, it is getting well known in many citadels of learning and in various forms. Despite the proliferation of e-learning in different higher institutions of the world, Nigerian Universities are yet to fully fit in (Ajadi, Salawu, & Adeoye , 2008). The National Open University of Nigeria (NOUN) was the first among the few to adopt e-learning with operations on distance education as noted by Adu, Eze, Salako and Nyangechi (2013).The University of Nigeria, has adopted e-learning in the teaching and learning of General Studies courses.

General Studies (G.S.) courses are courses designed to help students have a better and holistic view of the world which the specialty of their different courses of study will not offer them to be functional members in the society. The focus of G.S. courses is to enlighten students with liberal education courses through which the consciousness of their social, cultural and natural heritages is got and widened (University of Nigeria, 2017). The University of Nigeria School of General Studies is broadly divided into four units: Humanities, Social Sciences, Use of English and Natural science units.

The Humanities General Studies Programme (GSP) courses include GSP 207 (African Humanities, Philosophy and Logic) and GSP 208 (History of Nigerian Peoples and Culture) which are focused on the resident and evolving developmental crisis in the world with Nigeria as the case study. They are offered by all but the Faculty of Arts students (University of Nigeria, 2017). The Social Sciences courses GSP 201 (Social Sciences I) and GSP 202 (Peace and Conflict resolutions) are aimed at arousing student's inquiry of man and his chins of relationships, educates students on the theoretical principles governing the world of social sciences with the right empowerment to exploit such to improve man's living. They are offered by all except the Faculty Social Science students (University of Nigeria, 2017).

The Natural Science courses (offered by all whose specialty is humanities or social sciences). It is geared towards inspiring students to be scientifically interested and consciously involved in science and its societal effects. They are GSP 105 (Natural Science I) and GSP 106 (Natural Science II) (University of Nigeria, 2017). The Use of English GSP courses is aimed at equipping students with study skills necessary for the academic world. One of them is GSP 101 (Use of English I) which emphasizes speech and oral trainings. Another is GSP 111 (Use of Library skills) which basically deals on library and research skills acquisition. The other is GSP 102 (Use of English II) that majors on writing, grammar and book reviewing skills acquisition (University of Nigeria, 2017). It is clear so far that these G.S courses are departmentalized to offer the world view experience limited by one's specialization.

The University of Nigeria has created an e-learning platform for the study of General Studies (G.S) courses. It was formally announced and orientations for the students offering such courses held from the 22nd to the 23rd of November, 2016 for Nsukka campus and held for Enugu campus on the 1st of December, 2016 as released on the University' website. This, the university said was a mandate to be pursued creating such platform for student activities (University of Nigeria, 2017).

These G.S courses is being offered by almost the whole population of 100 and 200 level students of the University. The population for the 2016/2017 Academic session was over 27000 students (Okeke, 2017). The University of Nigeria school of General Studies is the first of its kind in Nigeria, setting the pace also as the first to be involved in conducting Computer Based Tests (CBT) in the school and recently to use e-learning for its students. Other departments have started following gradually. The University of Nigeria looking at its wealth of experience is not estranged of the requirements of quality and vital education. An

e-learning enabled General Studies Programme should be well evaluated, consequence(s) predicted, pitfalls avoided and discovered necessary changes effected. This highlights the essence of this study as to make sure that all resource needed for the e-learning concept is actualized and utilized while maintaining the demand for continuous, high quality and less expensive education.

Statement of Problem

The study of General Studies (G.S.) courses using the e-learning is a new approach for teaching and learning at the University of Nigeria. It is expected that other departments in and outside the school, including departments with practically oriented courses like Industrial Technical Education,
Engineering and so on will follow suit.

As current literature posits, technology and information in the 21st century has undergone various mechanisms in teaching and learning such that little or no contact is made between the source of information and the recipient(s) on transmission. Reasons are clear based on the vast advantages enumerated in the background of the study which are economically based such as traffic, stress and cost effectiveness. But the economic state of the country puts these advantages to test coupled with the inability of the educational stakeholders to uphold the tenets of quality education where the teacher is irreplaceable and learning is learner driven. Furthermore, a major concern is the effectiveness of e-learning's models of assessment and evaluation in determining learning outcomes with precision devoid of malpractice.
The adoption and the utilization of this learning mode has been reportedly applicable to learning in some Nigerian educational institutions but no documentation at the start of this research is available as concerned with the University of Nigeria. As such, the feasibility of e-learningmight not have been tested in the University as the School of General Studies Centre sets the pace. The main concern as heard from reviewed authors seems to be the consistency of e-learning with the tenets and beliefs of education. Hence, a good model must be found or developed in this respect.

Facts bring these pertinent issues to heart as excellent outcomes are expected to emanate from University of Nigeria's e-learning approach to studying G.S. courses: the availability and functionality of electronic gadgets needed for teaching and learning G.S. courses; readiness of both lecturers and students for e-learning and the establishment of an of an e-learning model to be used as it is or developed for use without eliminating the teacher which is an aberration to educational tenets and proper assessment. This study will seek to provide answers to these issues because if these factors are not settled, the e-learning platform in the University of Nigeria may not be sustained.

Purpose of the Study

The major purpose of this study is to determine the use of e-learning in the study of General Studies courses in the University of Nigeria. Specifically, the study determined the:

1. available electronic gadgets and facilities needed for teaching and learning G.S courses.
2. functionality of the available gadgets for teaching and learning G.S courses.
3. e-learning readiness of both the lecturers and the students for G.S courses effective teaching and learning.
4. effect of e-learning on students' academic performance.

Research Questions

1. What are the e-learning gadgets and facilities available for the study of G.S. courses in the University of Nigeria?

2. What is the functionality of the available elearning gadgets and facilities in studying G.S. courses in the University of Nigeria?
3. What is the e-learning readiness of G.S. lecturers and students in the University of Nigeria?

Hypotheses

The following null hypothesis will be tested at 0.05 level of significance:

$H0_1$: There is no significant difference between the mean responses of the students and lecturers on the functionality of the available e-learning gadgets and facilities.

$H0_2$: There is no significant difference between the mean responses of G.S. students and lecturers on their readiness for e-learning.

Methodology

A descriptive survey research design was employed for this study. According to Ezeh (2011), a descriptive survey design is a method of data collection using questionnaires or interviews to collect data from samples that have been selected as a representative of a population from which findings are generalizable. The descriptive survey design is most appropriate for the study since the findings deduced from the analysis of the sampled population will be generalized on the whole population of General studies students and lecturers.

The study was conducted at the Nsukka campus of the University of Nigeria, Nsukka, Enugu State. The University of Nigeria, Nsukka campus has 113 departments distributed among 13 faculties. The population for the study is 27,044 General Studies lecturers and students. This consists of 61 lecturers and 26,783 students.

The sample for the study is 220 selected by stratified random sampling technique. This consists of 190 students and 30 lecturers of the School of General Studies for the 2016/2017 session.

The research instruments were developed by the researcher based on reviewed literatures on the study. Two questionnaires titled ‗E-learning Utilization Questionnaire for School of General Studies Students (EUQFSOGSS)' and ‗E-learning Utilization Questionnaire for School of General Studies Lecturers (EUQFSOGSL)' were used to gather information for the study: one for the students and the other for the lecturers. Both measure the same thing only that words peculiar to each side were used to reflect the same demanded response. Section A deals with the information about the respondents. Section B has 24 items on the availability of elearning facilities in the School of General Studies, University of Nigeria. It is structured to receive either of two options - Not available (NA) and Available (A). Section C has 28 items on the functionality of these facilities in the study of General Studies courses in the University of Nigeria. It is structured on a five point Likert scale: Very Low Extent (VLE), Very Low Extent (LE), Undecided (U), Moderate Extent (ME) and Great Extent (GE). Section D has 27 items on the e-readiness of both students and lecturers. The section D items were structured on a five point Likert scale: Strongly Disagree (SA), Disagree (D), Undecided (U), Agree (A) and Strongly Agree (SA).

The questionnaire was face validated by three experts: a lecturer from the Department of Industrial Technical Education, the Deputy

Director, Centre for Distance and e-learning (CDeL), and a lecturer from the School of General Studies all at the University of Nigeria, Nsukka. The experts were required to check the appropriateness of the questionnaire items in eliciting the required responses in fulfilment of the research purposes. Based on their various inputs, the final questionnaire was developed.

The instrument was administered to 21 General Studies students from different departments in the University of Nigeria, Enugu Campus, to determine the reliability of the instrument. Cronbach Alpha was used to determine the internal consistency of the instrument. An overall index of 0.846 was obtained, while 0.866, 0.886, and 0.767 were got separately for sections B, C and D respectively.

The researchers administered 30 copies of the questionnaire to the lecturers and only 10 copies were retrieved. The researchers as well as four research assistants also administered 190 copies of the questionnaires to the students. The researchers explained to the research assistants the peculiarity of the items for easy explanation to confused respondents. This was also to enhance compliance and return of completed questionnaires. It took one week to administer and collect the instrument. 173 copies of the questionnaires administered to the students were completed and returned.

Data collected were analyzed using percentages and mean. Percentage was used to analyze data collected for research question one. For each response category based on Not Available (NA) or Available (A), a value equal to or above 50 for the available option will be taken as available for the stated item or not available if less than 50. Mean was used to analyze data collected for research question two and three and the obtained results were interpreted based on the real limit of numbers as follows: 1.00 – 1.49 (Very Low Extent/Strongly Disagree), 1.50 – 2.49 (Low Extent/ Disagree), 2.50 – 3.49(Moderate Extent/Undecided), 3.5 – 4.49(High Extent/Agree), and 4.5 – 5.0(Very High

Extent/Strongly Agree). Data analyses was carried out using Statistical Package for Social Sciences (SPSS) version 22.

Hypotheses one and two were tested using t-test for independent sample at .05 level of significance. Any item whose probability value is less 0.05 was regarded as significant and the null hypothesis rejected for the item while, any item whose probability value is greater than 0.05 was regarded as not significant and the null hypotheses not rejected for the item.

Results

Research Question 1

What are the e-learning gadgets and facilities available for the study of G.S courses at the University of Nigeria?

The data answerable to this research question are tabulated below:

Table 1: Mean Responses of Students and Lecturers on the Availability of E-Learning Gadgets and Facilities for Studying G.S. Courses in the University of Nigeria.

N = 183

S/N	Availability of E-learning					NA	A	%NA	%A	Remarks
1	Personal laptop/smart phone				35	148	19.1	80.9	Available	
2	Projectors	95	88	51.9	48.1	Not Available				
3	Printer	126	57	68.9	31.1	Not Available				
4	Public Address System			40	143	21.9	78.1	Available		
5	Computer Laboratory			113	70	61.7	38.3	Not Available		
6	Smart/electronic boards			99	84	54.1	45.9	Not Available		
7	Digital Library Linkages			82	101	44.8	55.2	Available		
8	Scanner	133	50	72.7	27.3	Not Available				
9	Flash drive/external hard drive				81	102	44.3	55.7	Available	
10	Plugins e.g google, flash players, antivirus,					99	84	54.1	45.9	Not Available antispywares
11	Microsoft Office	65	118	35.5	64.5	Available				
12	Radio Communication			114	69	62.3	37.7	Not Available		
13	Video Tapes	109	74	59.6	40.4	Not Available				
14	CD ROMs	119	64	65.0	35.0	Not Available				
15	PDF Reader	52	131	28.4	71.6	Available				
16	Photocopiers	69	114	37.7	62.3	Available				
17	Courseware	87	96	47.5	52.5	Available				
18	Virtual Classroom	116	67	63.4	36.6	Not Available				
19	Audio/Conferencing Hall			88	95	48.1	51.9	Available		
20	E-books	73	110	39.9	60.1	Available				
21	Email	35	148	19.1	80.9	Available				
22	Blogs					45	138	24.6	75.4	Available
23	Regular Electricity					91	92	49.7	50.3	Available
24	Internet Access					24	159	13.0	86.9	Available

The data presented in Table 1 reveal that 14 items: 1, 4, 7, 9, 11, 15, 18, 17, 19, 20, 21, 22, 23 and 24 have scores of 50% and above. This implies that the respondents agreed that the items are available ELearning gadgets and facilities for studying G.S. courses at the University of Nigeria, Nsukka. Also, items 2, 3, 5, 6, 10, 12, 13, 14 and 19 were indicated as unavailable since their percentage scores are below 50%.

Research Question 2

What is the functionality of the available e-learning gadgets and facilities in studying G.S. courses in the University of Nigeria?

The data answerable to this research question are tabulated below:

Table 2: Mean Responses of Respondents on the Functionality of E-learning gadgets and facilities in studying G.S. courses in the University of Nigeria

N = 183

S/N	Functionality of E-learning Gadgets and Facilities	X	SD	Remarks
25	Personal laptop/smartphone	3.52	1.41	High Extent
26	Projectors	2.40	1.37	Low Extent
27	Printer	2.50	1.39	Moderate Extent
28	Public Address System	3.56	1.38	High Extent

29	Computer Laboratory	2.40	1.45	Low Extent
30	Smart/electronic boards	2.20	1.41	Low Extent
31	Digital Library Linkages	2.55	1.43	Moderate Extent
32	Scanner	2.20	1.32	Low Extent
33	Flash drive/external hard drive	2.49	1.36	Low Extent
34	Plugins e.g, google, flash players, etc.	2.50	1.43	Moderate Extent
35	Microsoft Office	2.99	1.47	Moderate Extent
36	Radio Communication	2.42	1.37	Low Extent
37	Video Tapes	2.27	1.36	Low Extent
38	CD ROMs	2.37	1.39	Low Extent
39	PDF Reader	3.11	1.51	Moderate Extent
40	Photocopiers	3.14	1.52	Moderate Extent
41	Courseware	2.77	1.52	Moderate Extent
42	Virtual Classroom	2.23	1.38	Low Extent
43	Audio/Conferencing Hall	2.64	1.48	Moderate Extent
44	E-books	2.90	1.47	Moderate Extent
45	Email	3.46	1.41	Moderate Extent
46	Blogs	3.25	1.47	Moderate Extent
47	Regular Electricity	3.20	1.43	Moderate Extent
48	Internet Access	3.56	1.40	High Extent

Data in Table 2 reveal that items 25, 28 and 48 are that respondents' views were not very far from their functional to a high extent with mean range of 3.52 – means. 3.56. Items 27, 31, 34, 35, 39, 40, 41, 43, 44, 45, 46 and 47 are functional to a moderate extent with mean range of 2.50 – 3.46. Items 26, 29, 30, 32, 33, 36, 37, and 38, and 42 are functional to a low extent with mean range of 2.20 – 2.49. All standard deviations are positive and within the range 1.32 – 1.52 indicating

Research Question 3

What is the e-learning readiness of G.S lecturers and students in the University of Nigeria?

The data answerable to this research question are tabulated below:

Table 3: Mean Responses of Respondents on the readiness of G. S. Lecturers and students on Courses and students in the University of Nigeria.

SN	E-readiness for Learning	⌐	SD	Remarks
49	G.S. e-learning Computer Based test properly assesses students' better than paper tests	3.21	1.48	Undecided
50	E-learning is better compared to the traditional face to face learning approach	3.13	1.44	Undecided
51	E-learning can make teaching and learning better	3.72	1.26	Agree
52	Lecturers are satisfied with the e-learning processes	3.35	1.08	Undecided
53	There is personal satisfaction with the current e-learning process	3.10	1.22	Undecided
54	E-learning will produce better employable and society responsible students than the traditional learning approach	3.15	1.31	Undecided
55	E-learning will reduce plagiarism than other learning approaches	3.17	1.28	Undecided

56	The present G.S. curriculum is suitable for e-learning	3.67	1.10	Agree
57	As a lecturer/student, creating time to interact with lecturers and other students online is easy to do	3.23	1.32	Undecided
58	As a lecturer, creating, opening, saving, retrieving and deleting files with any computer application is easy to do	3.96	0.99	Agree
59	As a lecturer/student, installing and uninstalling software and doing any kind of setting wanted on the Computer is easy to do	3.71	1.21	Agree
60	As a lecturer/student, sending , reading, saving and downloading file attachments with emails is easy to do	3.96	1.05	Agree
61	As a lecturer/student, searching, reading, saving and downloading files from the internet using web browsers s easy to do	4.07	1.04	Agree
62	As a lecturer/student, uploading files and assignments using the Moodle is easy to do	3.16	1.27	Undecided
63	IAs a lecturer/student, studying courseware (learning materials) personally using the Moodle is easy to do	3.08	1.30	Undecided
64	As a lecturer/student, personally navigating the digital library and other resource databases is easy to do	3.25	1.21	Undecided
65	As a lecturer/student, a deal of experience in e-learning has been acquired	3.52	1.19	Agree
66	As a lecturer/student, more training on e-learning is required	4.16	1.03	Agree
67	G.S. lecturers/students have enough skills for e-learning	2.92	1.20	Undecided
68	G.S. lecturers/students need more training on e-learning	4.02	1.15	Agree
69	The school Administration is e-learning friendly	3.26	1.26	Undecided
70	The government supports e-learning in all ways especially by funding.	2.96	1.27	Undecided
71	Students have parent's support for e-learning	3.44	1.17	Undecided
72	Employers will prefer e-learning graduates to the traditional learning	3.53	1.29	Agree graduates
73	The ICT providers of the school are competent providing all that is needed for e-learning of G.S. courses	3.07	1.27	Undecided
74	E-learning approach should be adopted for other departments in the university for teaching and learning	3.92	1.18	Agree

The data in Table 3 indicates that the respondents 0.99 – 1.48 indicating that respondents' views were agreed to the items 51, 56, 58, 59, 60, 61, 65, 66, 68, not very far from their mean.
72 and 74 with their mean ranging from 3.50 – 4.16. **HO_1:** There is no significant difference between
Also, the respondents were undecided on items 49, the mean responses of G.S. students and lecturers
50, 52, 53, 54, 55, 57, 62, 63, 64, 67, 69, 70, 71 and on the functionality of e-learning gadgets and 73
with their mean ranging from 2.92 – 3.35, the facilities.
respondents were undecided. The standard deviation Data got by testing this hypothesis is presented in
for all the items are positive and within the range of Table 4.

Table 4: t-test Analysis of the Responses of G.S. Students and Lecturers on the Functionality of ELearning Gadgets and Facilities.

S/N	Functionality of E-learning Gadgets	Students $\bar{X}_S$	SD_S	Lecturers $\bar{X}_L$	SD_L	Grand Mean	Grand SD	df	t-cal	sig.(2-tailed)	Remarks
25	Personal laptop/smartphone	1.41	4.50	3.50	0.41	4.00	1.41	181	-1.10	0.27	Not Significant
26	Projectors	2.38	1.36	4.00	1.41	3.20	1.39	181	-0.90	0.34	Not Significant
27	Printer	2.47	1.38	3.10	1.66	2.80	1.52	181	-1.40	0.16	Not Significant
28	Public Address System	3.55	1.37	3.60	1.64	3.60	1.51	181	-1.00	0.92	Not Significant
29	Computer Laboratory	2.35	1.42	3.40	1.71	2.90	1.57	181	-2.30	0.25	Not Significant
30	Smart/electronic boards	2.16	1.39	2.90	1.52	2.50	1.46	181	-1.60	0.10	Not Significant
31	Digital Library Linkages	2.58	1.44	1.90	1.19	2.20	1.32	181	1.48	0.14	Not Significant
32	Scanner	2.18	1.3	2.50	1.65	2.30	1.48	181	-0.70	0.45	Not Significant
33	Flash drive/external hard drive	2.45	1.35	3.10	1.52	2.80	1.44	181	-1.50	0.14	Not Significant
34	Plugins e.g, google, flash players, etc.	2.48	1.42	2.90	1.66	1.40	1.54	181	-0.90	0.36	Not Significant
35	Microsoft Office	3.01	1.46	2.80	1.75	1.50	1.6	181	0.43	0.66	Not Significant
36	Radio Communication	2.42	1.38	2.40	1.35	1.40	1.36	181	0.05	0.96	Not Significant
37	Video Tapes	2.28	1.38	2.10	1.10	1.40	1.24	181	0.41	0.68	Not Significant
38	CD ROMs	2.36	1.38	2.50	1.65	1.40	1.52	181	-0.30	0.75	Not Significant
39	PDF Reader	3.12	1.51	2.90	1.66	1.50	1.59	181	0.45	0.65	Not Significant
40	Photocopiers	3.13	1.52	3.30	1.70	1.70	1.61	181	-0.30	0.73	Not Significant
41	Courseware	2.73	1.51	3.40	1.78	1.50	1.64	181	-1.30	0.18	Not Significant
42	Virtual Classroom	2.20	1.36	2.80	1.69	1.40	1.53	181	-1.30	0.18	Not Significant
43	Audio/Conferencing Hall	2.65	1.49	2.40	1.27	1.50	1.38	181	0.53	0.59	Not Significant
44	E-books	2.92	1.48	2.40	1.08	1.50	1.28	181	1.10	0.27	Not Significant
45	Email	3.45	1.41	3.70	1.49	1.40	1.45	181	-0.50	0.58	Not Significant
46	Blogs	3.27	1.5	2.90	0.99	1.50	1.24	181	0.78	0.43	Not Significant
47	Regular Electricity	3.20	1.44	3.00	1.25	1.40	1.34	181	0.44	0.66	Not Significant

48	Internet Access	3.58	1.42	3.70	0.95	1.40	1.19	181	-0.30	0.79	Not Significant

Key: $\bar{X}_S$ = mean for students, $\bar{X}_L$ mean for Lecturers $S.D_S$ = Standard Deviation for Students, $S.D_L$ = Standard Deviation for Lecturers

Considering the data presented in Table 4, all the items have their probability values above 0.05, which entails that there is no significant difference between the mean responses of the G.S. students and Lecturers on their readiness for e-learning on the listed items. To this effect, the null hypothesis is upheld.

Hypothesis 2

HO_2: There is no significant difference between the mean responses of the G.S. students and Lecturers on their readiness for e-learning.

Data got but by testing these hypotheses is presented in Table 5

Table 5: t-test analysis between the mean responses of the G.S. students and Lecturers on their readiness for e-learning.

SN	E-readiness of G.S. Students	Resp. Stds		t-cal	Sig.(2-tailed)	Remarks	Lecturers				
				2.10	1.197	2.685	1.30				
49	E-learning Computer Based test properly assesses students' better than paper tests	3.27	1.48					181	2.46	0.01	Significant
50	E-learning is better compared to the traditional face to face	3.16	1.44	2.50	1.434	2.83	1.44	181	1.41	0.15	Not Significant
51	learning approach E-learning can make teaching and learning better	3.72	1.28	3.8	0.919	3.76	1.10	181	-0.20	0.84	Not Significant
52	Lecturers are satisfied with the e-learning processes	3.39	1.08	2.6	0.843	2.995	0.96	181	2.28	0.02	Significant
53	There is personal satisfaction with the current e-learning	3.09	1.23	3.2	1.135	3.145	1.18	181	-0.27	0.78	Not Significant
54	process E-learning will produce better employable and society	3.16	1.32	3	1.504	3.08	1.41	181	0.36	0.71	Not Significant
55	responsible students than the traditional learning approach E-learning will reduce plagiarism than other learning	3.17	1.29	3.3	1.059	3.235	1.18	181	-0.31	0.75	Not Significant
56	approaches The present G.S. curriculum is suitable for e-learning	3.67	1.12	3.7	0.675	3.685	0.89	181	-0.08	0.93	Not Significant
57	As a lecturer/student, creating time to interact with lecturers	3.26	1.33	2.7	1.16	2.98	1.24	181	1.30	0.19	Not Significant
58	and other students online is easy to do As a lecturer, creating,	3.99	0.97	3.3	1.252	3.645	1.11	181	2.15	0.03	Significant

	opening, saving, retrieving and deleting files with any computer application is easy to do											
59	As a lecturer/student, installing and uninstalling	3.73	1.19	3.3	1.494	3.515	1.34	181	1.10	0.27	Not Significant	software and doing any kind of setting wanted on the Computer is easy to do
60	As a lecturer/student, sending , reading, saving and	3.98	1.04	3.7	1.252	3.84	1.15	181	0.81	0.41	Not Significant	downloading file attachments with emails is easy to do
61	As a lecturer/student, searching, reading, saving and	4.1	1.02	3.6	1.265	3.85	1.14	181	1.48	1.40	Not Significant	downloading files from the internet using web browsers s easy to do
62	As a lecturer/student, uploading files and	3.12	1.29	3.8	0.789	3.46	1.04	181	-1.64	0.10	Not Significant	assignments using the Moodle is easy to do
63	IAs a lecturer/student, studying courseware (learning	3.08	1.30	3	1.414	3.04	1.36	181	0.19	0.84	Not Significant	materials) personally using the Moodle is easy to do
64	As a lecturer/student, personally navigating the digital library and other resource databases is easy to do	3.27	1.22	2.9	0.994	3.085	1.10	181	0.93	0.35	Not Significant	
65	As a lecturer/student, a deal of 1.135 experience in e-learning has been acquired	3.51	1.19	3.8								
						3.655	1.16	181	-0.75	0.45	Not Significant	
66	As a lecturer/student, more training on e-learning is	4.16	1.02	4.1	1.197	4.13	1.10	181	0.18	0.85	Not Significant	required
67	G.S. lecturers/students have enough skills for e-learning	2.99	1.17	1.6	0.699	2.295	0.93	181	3.71		Not Significant	
68	G.S. lecturers/students need more training on e-learning	4.02	1.14	4	1.414	4.01	1.28	181	0.06	0.02	Significant	
69	The school Administration is e-learning friendly	3.24	1.26	3.6	1.265	3.42	1.26	181	-0.87	0.38	Not Significant	
70	The government supports e-learning in all ways especially	2.98	1.27	2.6	1.35	2.79	1.31	181	0.92	0.35	Not Significant	by funding.
71	Students have parent's support for e-learning	3.46	1.19	3	0.667	3.23	0.93	181	1.21	0.22	Not Significant	
72	Employers will prefer e-learning graduates to the	3.55	1.29	3.1	1.287	3.325	1.29	181	1.08	0.27	Not Significant	traditional learning graduates
73	The ICT providers of the school are competent	3.06	1.27	3.2	1.317	3.13	1.29	181	-0.32	0.74	Not Significant	providing all that is needed for e-learning of G.S. courses
74	E-learning approach should be adopted for other departments and learning	3.94	1.20	3.5	0.85	3.72	1.02	181	1.15	0.24	Not Significant	in the university for teaching

Key: $\bar{X}_S$ = mean for students, $\bar{X}_L$ mean for Lecturers $S.D_S$ = Standard Deviation for Students, $S.D_L$ = Standard Deviation for Lecturers

The data presented in Table 5 reveals that items 49, 52, and 58have probabilities values of 0.01, 0.02, and 0.03 respectively, which are less than

0.05 level of significance, which indicates that there is a significant difference between the mean responses of lecturers and students on their readiness for e-learning concerning those items. Also, items 50, 51, 53 to 57, as well as 59 to 74 have their probability values above 0.05 level of significance. This indicates that there is no significant difference between the mean responses of lecturers and students on their readiness for e-learning on those items. Therefore, the null hypothesis of no significant difference was not rejected for those items.

Discussion of Findings

The findings revealed the needed e-learning gadgets and facilities which include: personal laptops/smartphones, public address systems, digital library linkages, flash drives/external hard disks, Microsoft Office Suites, PDF readers, photocopiers, courseware, audio conferencing halls, e-books, emails, blogs, regular electricity and internet access are available for the study of General Studies courses at the University of Nigeria. The findings also indicated that projectors, printers, computer laboratories, smart/electronic boards, scanners, plugins, radio communication, CD ROMs and virtual classrooms are not available for the study of General Studies courses in the University of Nigeria. The findings are in line with Anyaneme, Nwokolo, and Anyachebelu (2012), which stated that Information and Communication Technology facilities are limitd in the Nigerian South East universities. In addition, Mostert and Olorunfemi (2013) found that ICT facilities were available in Nigerian universities but lacked infrastructural sufficiency.

The findings of the study revealed the functional e-learning gadgets and facilities which include: personal laptops/ smartphones, public address systems, PDF readers, photocopiers, emails, blogs, regular electricity and internet access. In line with the finding which indicates underutilization of available e-learning gadgets and facilities, Aremu (2015) found out that electronic and automated gadgets are not sufficient and underutilized in Nigerian large classrooms. Bupo and Ndinechi (2015) in addition found out that some facilities are more utilized than the others which is in line with this research finding. Also, Anyaneme, Nwokolo, and Anyachebelu (2012) confirmed that the use of Information and Communication Technology for learning is very low in the Nigerian South East universities.

From the findings, the General Studies lecturers and students are ready for use of e-learning in the study of G.S. courses. This is in line with the findings Anyaneme, Nwokolo, and Anyachebelu (2012), which stated that students are e-ready only that the resources are not fully accessible. This is evident in terms of positive attiitude or perception of e-learning to be

able to improve teaching and leraning. According to the respective mean responses of students and lecturers on e-readiness for learning as displayed in appendix 3 the teachers object the students' perceptions that e-learning accesses students better which is probably based on a qualitative assessment stand point. Adding to the ereadiness of students against the lecturers', the findings agree that the current e-learning approach is better compared to the traditonal approach. Affirming the basis of this disparities, Nawaz and Kundi (2011) affirm that research has revealed that users of e-learning systems in Higher Education Institutions (HEIs) have different perceptions, theories and methods due to demographic differences.Another noted disparity in terms of e-learning perception is the ability to create time for online discussions and classes which most of the the students believe they can easily do as compared to the time conservative lecturers.

Still on attitudinal e-readines based on the findings of the study, most of the students and lecturers agree that e-learning products will stand a better chance to be employable and responsible society wise: a great stimulant for students' pursuit for achievements in the elearning way. Most of the students and lecturers accept that e-learning can reduce plagiarism which is a huge concern in the academic world. Conclusively on this positive indicators of atitude related e-readiness both lectures and students recommend the use of e-learning in the study of other courses in different departments of the school. The findings are strongly against the recommendations of Chiaha, Eze, and Ezeudu (2013) supporting the stepping down of the take off of e-learning in the universities because they are not yet e-ready.

Another indicator of e-learning readiness has to do with the skills possessed by the stakeholders. Majority of the lecturers and students concur that they have enough skills to perform e-learning. This is in line with the findings of Anyaneme, Nwokolo, and Anyachebelu (2012) on South East universities that indicated that availability of elearning and not e-learning skills is the problem. Such skills include the creation, opening, sending, saving, retrieval, downloading, uploading, and deletion of files, assignments, courseware, emails as the case may be using any computer application especially on the

Moodle. Also inclusive is their proficient abilities to install and uninstall software and doing needed settings on the computer in the affirmative. Majority of the lecturers however indicated that they cannot easily navigate the digital library and other resource databases which is not a problem to the students which in line with the findings of Mostert and Olorunfemi (2013), some lecturers are not proficient in the kills needed to operate some e-learning facilities and gadgets making them not functional.This study also revealed that both lecturers and students opine need more training on e-learning though majority of the students and lecturers judge themselves to have acquired a deal of experience on e-learning. Nevertheless, as seen from the findings, both party against themselves disagree that they have enough skills for elearning

affirming greatly that each side needs more training on e-learning. In line with that, Nawaz and Kundi (2011) and many other authors affirm that training and retraining of educational stakeholders especially the sudents, lecturers and other staff is not negiotiable for a sustained e-learning progress.

References

Aboderin, O. S., & Kumuyi, G. J. (2013). The Problems and Prospects of E-Learning in Curriculum implementation in Secondary Schoos in Ondo State, Nigeria. *International Journal of Educational Research and Technology*, *4*(1), 90-96.

Adeola, O. S., Adewale, O., & Alese, B. (2013). Integrated E-Learning System (IES) for the Nigeria Universities: An architectural Overview. *American Journal of Database Theory and Application*, *2*(1), 1-8.

doi:10.5923/j.database.20130201.01.

Adu, E. D., Eze, I. R., Salako, E. T., Nyangechi, J. M., & Adu, E. D. (2013). E-Learning and Distance Education in Nigeria. *International Journal of Science and Technology*, *2*(2), 203-2010. Retrieved from http://www.journalofsciencestechnology.org/archive/2013/feb_vol_2_ no_2/919888135221482.pdf.

Ajadi, T. O., Salawu, I. O., & Adeoye, F. A. (2008). E-learning and Distance

Education in Nigeria. *The Turkish Online Journal of Educational Technology*, *7*(4,7), 1-10. Retrieved from http://files.eric.ed.gov/fulltext/ED503472. pdf.

Akingbade, D. (2015). *E-Learning and Nigerian Education System*. Retrieved from

Linkedin: https://www.linkedin.com/pulse/elearning-nigerian-education-system-dejiibironke-akingbade?trk=pulse-detnav_art.

Alison, D. (2014). *Different faces of blended learning*. Trumbull.

Anyaneme, A. N., Nwokolo, C. N., &

Anyachebelu, E. F. (2012). Availability and Use of Information and

Communications Technology Resources for Counselling University Students in South East States, Nigeria. *International Journal of Humanities and Social Science*, *2*(7), 220-225.

Aremu, M. A. (2015). Students'perception of the use of electronic media in ELT large classes in Southwestern Nigeria Colleges of Education. *International Journal of English Language and Linguistics Research*, *3*(8), 1-16.

Bupo, G. O., & Ndinechi, G. I. (2015). Business Education Student's Utilisation of Elearning in Anamra State Tertiary Institutions. *International Journal of Scientific Research and Innovative Technology*, *2*(4), 16-25.

Chiaha, G. T. U., Eze, J. U., & Ezeudu, F. O. (2013). Education students' Access to Elearning facilities in Universities South East of Nigeria. *Information and Knowledge Management*, *3*(10), 32-41.

Curran, C. (2004, Semptember 15). Strategies for elearning in universities. *Centre for studies in Higher Education 7.04*, pp. 1-27. Retrieved from http://ishi.lib.berkeley.edu/cshe/

DreamBox. (2013). *6 models of blended learning*. Retrieved from http://www.dreambox.com/: http://www.dreambox.com/6modelsofble ndedlearning/

eLearners (2016). *Hardware & Software You'll Need for E-Learning*. Retrieved from www.elearners.com: http://www.elearners.com/Hardware&Sof twareYou'llNeedforE-Learning.

Elearnframe. (2000). *Facts, Figures & Forces Behind e-Learning*. Retrieved from moodle.uws.ac.uk: http://moodle.uws.ac.uk/pluginfile.php/18 1238/mod_resource/content/1/elearningf acts.pdf

Epignosis. (2014). *E-learning: Concepts, Trends, Application*. San Francisco: Epignosis LLC.

Ezeh, D. N. (2011). *Writing Research Proposals and Report without Tears.* Enugu: TIMEX Entreprises.

Gogos, R. (2013). *A brief history of elearning (infographic).* Retrieved from efrontlearning.com: https://www.efrontlearning.com/blog/abri ef%20historyofelearning(infographic)

Kuriakose, R., & Luwes, N. (2016). Student Perceptions to the Use of Paperless Technology in Assessments- A Case Study using Clickers. *2nd International Conference on Higher Education Advances, HEAd´16* (pp. 78-85). Valencia: Procedia - Social and

Behavioral Sciences.

Linfo (2015). *Internet Definition*. Retrieved from www.linfo.org: http://www.linfo.org/index.html

Mostert, B. J., & Olorunfemi, D. Y. (2013). Serving Nigerian Law Students: Ereadiness and Utilization of University EInformation Facilities. *International Journal of Technology and Inclusive Education (IJTIE)*, *2*(2), 200-207.

Nawaz, A., & Kundi, G. M. (2011). Users of elearning in higher educationinstitutions (HEIs): Perceptions, styles and attitudes. *International Journal of Teaching and Case Studies*, *3*(2-4), 161-174. Retrieved January 20, 2017, from

https://www.researchgate.net/profile/Alla h_Nawaz/publication/264836845_Users

_of_elearning_in_higher_education_institution s_HEIs_Perceptions_styles_and_attitud es/links/5603e67d08ae08d4f1718f78/Us ers-of-e-learning-in-higher-educationinstitutions-HEIs-Perc

Nwana, S. (2012). Challenges in the Application of Elearning by Secondary School Teachers in Anambra State, Nigeria. *African Journal of Teacher Education*, *2*(1). Retrieved from

https://journal.lib.uoguelph.ca/index.php/ ajote/article/view/1913/2425

Okeke, O. (2017). *First ever General Studies Computer Based Examination*. Retrieved from unn.edu.ng:

http://www.unn.edu.ng/first-ever-generalstudies-computer-based-examination/

Omeruo, K. (2013). *E-learning Nigeria: Exploring the Opportunities in e-learning to enhance Education in Nigeria*. Retrieved from TechTrendsng.com: http://www.TechTrendsng.com.

Partnership for 21st Century Skills (2014). *21st Century Skills, Education and Competitiveness: A Resource and Policy Guide.* Tucson: Partnership for 21st Century Skills.

University of Nigeria (2017). *Centre for Distance & e-Learning (CDeLWorkshop).* Retrieved July 12, 2017, from http://www.unn.edu.ng: http://www.unn.edu.ng/cdel-workshop/

University of Nigeria (2017). *Natural Science Unit. Nsukka, Enugu, Nigeria*. Retrieved June 7, 2017, from http://www.unn.edu.ng/academics/faculti es/school-of-general-studies/naturalscience-unit/

University of Nigeria (2017). *School of General Studies. Nsukka, Enugu, Nigeria*. Retrieved June 7, 2017, from http://www.unn.edu.ng/academics/faculti es/school-of-general-studies/

University of Nigeria. (2017). *Social Science Unit. Nsukka, Enugu, Nigeria*. Retrieved June 7, 2017, from http://www.unn.edu.ng/academics/faculti es/school-of-general-studies/socialscience-unit/#

University of Nigeria (2017). *Use of English Unit. Nsukka, Enugu, Nigeria*. Retrieved June 7, 2017, from http://www.unn.edu.ng/academics/faculti es/school-of-general-studies/the-use-ofenglish-unit/