STUDENTS' AND LECTURERS' ATTITUDES TOWARD THE USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES (ICTs) FOR SUSTAINABLE EDUCATIONAL DEVELOPMENT IN THE UNIVERSITIES IN SOUTHWEST, NIGERIA

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Abstract
This study examined the attitudes of students and lecturers toward the use of ICT for sustainable educational development in the universities in SouthWest, Nigeria. A descriptive survey design was employed and adapted questionnaires were used to collect data from the respondents. The population of the study consists of all students and lecturers in the selected universities and an incidental random sampling technique was used to select five hundred (500) students and three hundred (300) lecturers from the population of the study and two research questions and four hypotheses were formulated for the study. Out of the 500 and 300 questionnaires administered on both the sample of the students and lecturers respectively, only 470 and 230 were returned for both students and lecturers respectively. Data collected were analysed using both simple percentage, correlation coefficient and multiple regression analysis at 0.05 level of significance. The results of the study indicated that both the students (75.5%) and lecturers (87.5%) had positive attitudes toward the use of ICT for sustainable educational development. In addition the results showed that there was no significant difference between the attitudes of students and lecturers toward the use of ICT for sustainable educational development. The results of the study also revealed that there was significant relationship between the use of ICT and sustainable educational development. Finally, the results indicated that the following demographic data of both students and lecturers (i.e. age , gender, course of study, year of teaching experience and highest educational qualification) significantly predicted the attitudes of both the students and lecturers toward the use of ICT for sustainable educational development while both the level and faculties did not significantly predicted the attitudes of the students and lecturers toward the use of ICT for sustainable educational development. Conclusively, this study showed that both the students and lecturers were favourably disposed to the use of ICT in bringing positive changes to the educational development. Therefore, the study recommends that university management should organise ICT capacity building training programme for the lecturers, students and other supporting staff and they should also provide enabling environment as well as incentives which encourage both students and lecturers to develop more positive attitudes toward the use of ICT for sustainable educational development.

Introduction

One of the problems facing Nigeria today is sustainable development. Sustainable development leads to fulfilment of societal ideas considered relevant to the needs and aspiration of the society. Information and Communication Technologies (ICTs) is capable to promote educational change and sustainable development when appropriately used. The potentials and role of ICT as tool that promote sustainable educational development cannot be over emphasized. For instance, the use of different forms of online learning such as e-

learning, mobile learning and ubiquitous learning has change the idea of learning which are confined in a classroom to be taking place anytime and anywhere. This new forms of learning enable learners to be at different location and communicate with both their lecturers/tutors and other students effectively and received feedback promptly without any delay.

Nowadays, most of the universities in Nigeria had adopted the use of ICT in different form to bring about changes to the way learning are delivered to the students. For instance, some lecturers made use of social network sites/tools such as email, whats app, messenger, Facebook to bring about sustainable development on the part of the learner. Through the use of whats app group, email group and Facebook group, learners can collaborate with one another, lecturers and experts to share the ideas and knowledge in regardless of their location. Some lecturers embedded their lectures with the use of You Tube to show video clips of some contents to the students in order to enhance their assimilation. Some institutions have replaced the use of paper based test (PBT) with computer based test (CBT) to curb the examination malpractices which have becomes rampant among the students. Computer Based Test (CBT) not only eradicate some of the forms of examination malpractices but also enable the institution to release the results of the students on time without any delay which have been experienced in Paper Based Test (PBT). All this new innovation facilitates the new ways of learning that called for sustainable educational development.

To achieve sustainable educational development in the universities in SouthWest, Nigeria through the use of ICT, both the lecturers and the students must cultivated right attitudes toward the use of ICT in teaching and learning. Lecturers must be acquainted with necessary ICT skills and competences needed to adequately use ICT tools in their teaching in order to motivate their students to reciprocate. Though, some of the universities in southwest, Nigeria were equipped with necessary ICT tools either through TETFund or some other non governmental bodies, therefore both lecturers and students must demonstrate positive attitudes toward the use of ICT to achieved sustainable educational development.

Information and Communication Technologies (ICTs), which include radio and television, as well as newer digital technologies such as computers and the internet, have been touted as potentially powerful enabling tools for educational change and sustainable development (Saidu, Tukur & Adamu, 2014). ICTs stand for information and communication technologies which can be defined as a "device set of technological tools and resources used to communicate, and to create, disseminate, store, and manage information" These technologies include computers, the internet, broadcasting technologies (radio and television), and telephony (Blurton, 2011).

The term "ICT" describes the use of computer-based technology and the internet to make information and communication services available to a wide range of users. The term is used broadly to address a range of technologies, including telephones. Central to these is the internet, which provides the mechanism for transporting data in a number of formats including text,

images, sound, and video (Saidu et al., 2014). The term ICT also refers to *information channels* such as the *World Wide Web,* online database, electronic documents, management and accounting systems, intranet, etc; communication channels such as e-mail, electronic discussion groups, electronic conferences, the use of cell phones, etc. hardware and software used to generate, prepare, transmit, and store data, such as computers, radio, TV, computer programmes/tools, etc. (International Institute for Sustainable Development, 2007).

Education is regarded as the most important sector that needs adequate attention in the society and the introduction of ICT as an educational tool in the promotion of both men and women educational advancement has immense potentials. The application of ICT as a tool for effective enhancement of learning, teaching and education management covers the entire spectrum of education from early childhood development, primary, secondary, tertiary, basic education, etc. (Sukanta, 2012).

In the field of formal education, ICTs are increasingly deployed as tools to extend the learner's capacity to perceive, understand and communicate, as seen in the increase in online learning programs and the use of the computer as a learning support tool in the classroom (Leslie, 2008). Therefore, in order to best use these technologies in education, new pedagogies and learning assessment methods will be required. Educators are continuing to develop new applications and online resources to support learning objectives in all disciplines. The introduction of ICT has helped to promote fundamental changes in teaching and learning methods thereby helping to overcome the barriers of time and place as technology introduces new choices and opportunities for students and teachers through endless research and learning on the internet (Osakwe, 2012).

According to Ayodele (2007), sustainable development can be broadly defined as the ability of the economy to support the needs of the people of a country over a time, taking into consideration the economic, social and ecological constraints of the country. ICT for sustainable development on the other hand represents a catalytic process for social change that seeks to foster through education training and public awareness-the values, behaviours and lifestyles required for sustainable future (Saidu et al., 2014). It is about learning needed to maintain and improve our quality of life of generations to come. It is about individuals, communities, groups, business and government to live and act sustainably; as well as giving them an understanding of the environmental factor, good moral behaviours and economic issues involved (Ayodele, 2007).

Several studies have been carried out either on the role of information and communication technology on sustainable educational development or impact of information and communication technology on sustainable development in Nigeria. For instance, Anyasi, Onianwa, Akpadia, Idiakheua and Ebegba (2012) examined the significance of information and communication technology for sustainable development and their findings revealed that information and communication technology is a necessary tool to achieve sustainable development in Nigeria.

In another study, Major (2013) examined the roles of ICT in enhancing the quality

assurance procedures in Nigerian universities. The study concluded that ICT facilities if properly put into use have the tendency to enhance university quality assurance procedures. The study also found that ICT devices such as computer and electronic and internet technologies ensure the basic quality assurance procedure in line with the prescribed Minimum Academic Standard (MAS). In addition, Ogunwale, Olaleye,and Oyedemi (2010) conducted a study to find out the degree of perception, acquisition and utilization of ICT and finding from the study revealed that ICT were grossly inadequate in all the secondary schools selected.

Kadir, Kidir, Yusuf and Rasheed (2014) findings revealed that Information and Communication Technology (ICT) had helped in the development of education and that the respondents had developed a positive attitude towards the use of ICT for the acquisition of new skill in the study area. Mattew, Joro and Manasseh (2015) investigated the role of ICT in educational system in Nigeria. The authors observed that Nigeria still experienced a lag in its implementation and this had continued to widen the digital and knowledge divides and the access to ICT facilities. The study concludes that despite the roles ICT can play in education, schools in Nigeria have yet to extensively adopt them for teaching and learning. Efforts geared towards integration of ICT into the school system have not had much impact. Problems such as poor policy, project implementation strategies and poor information infrastructure militate against these efforts. The study recommends that efforts should be made by government to post and provide teachers skilled in ICT to each school to impart ICT skills to the student and also should stabilize electricity supply in Nigeria. Adu, Emunemu and Oshati (2014) findings revealed that effective ICT integration will promote sustainable development in Nigeria.

Statement of the Problem

ICTs have been increasingly deployed as tools to broaden the learners' ability to perceived, comprehend and communicate. ICT enhanced teachers' professional knowledge and skill thereby making teaching to be more efficient. For both the lecturers and students to be able to cope with the use of ICT tools in teaching and learning to achieve sustainable educational development, there is need for them to demonstrate strong positive attitude toward the use of ICT. However, despite the fact that ICT promote sustainable educational development in the universities in Nigeria, there seem to be some degree of lazier -fair attitudes on the part of the lecturers and students toward the use of ICT to achieve sustainable educational development and also there are limited study on the attitudes of both the lecturers and students toward the use of ICT for sustainable educational development. Therefore, this study aims to investigate the students and lecturers attitudes toward the use of ICT for sustainable educational development in the universities in southwest, Nigeria.

Objectives of the Study

This study examined students' and lecturers' attitudes toward the use of information and communication technologies for sustainable educational development in the universities in south west, Nigeria. Specifically, the study was carried out to achieve the following objectives:

(i) Examine the attitudes of the students toward the use of ICT for sustainable educational development in the universities in southwest, Nigeria.

(Ii) Examine the attitudes of the lecturers toward the use of ICT for sustainable educational development in the universities in southwest, Nigeria.

(iii) Examine the relationship between ICT usage and sustainable educational development in the universities in southwest, Nigeria.

(iv) Examine whether students' demographic data (i.e. age, gender, level and course of study) will predict their attitudes toward the use of ICT for sustainable educational development in the universities in southwest, Nigeria.

(v) Examine whether lecturers' demographic data (i.e. age, gender, years of teaching experience, highest educational qualification and faculty study) will predict their attitudes toward the use of ICT for sustainable educational development in the universities in southwest, Nigeria.

Research Questions

(i) What is the attitude of the students toward the use of ICT for sustainable educational development in the universities in southwest, Nigeria?

(ii) What is the attitude of the lecturers toward the use of ICT for sustainable educational development in the universities in southwest, Nigeria?

Hypotheses

(i) There is no significant relationship between the use of ICT and sustainable educational development in the universities in southwest, Nigeria.

(ii) There is no significant difference between the attitudes of students and lecturers toward the use of ICT for sustainable educational development in the universities in southwest, Nigeria.

(iii) The following demographic variables of the students (i.e. age, gender, level and course of study) do not predict the students' attitudes toward the use of ICT for sustainable educational development in the universities in southwest, Nigeria.

(iv) The following demographic variables of the lecturers (i.e. age, gender, years of teaching experience and faculty study) do not predict the lecturers' attitudes toward the use of ICT for sustainable educational development in the universities in southwest, Nigeria.

Methodology

The descriptive research design of the survey type was employed in the study. The population of the study consisted of all lecturers and undergraduate students in five universities selected in South West Zone of Nigeria (i.e. Ladoke Akintola University of Technology, Ogbomoso, University of Ibadan, Ibadan, Obafemi Awolowo University, Ile-Ife, Federal University of Agriculture, Abeokuta and Osun State University, Osogbo). Both incidental and proportional random sampling techniques was used to select five hundred students and two hundred and fifty lecturers. One

hundred students and fifty lecturers were selected from each university. Questionnaires were employed as an instrument for this research. The questionnaires are of two types i.e. Students perception toward the use of Information and Communication Technologies for sustainable educational development in Nigerian Universities and Lecturers perception toward the use of Information and Communication Technologies for sustainable educational development in Nigerian Universities. Both the questionnaires consisted of four major sections (Sections A, B, C and D). Section A dealt with demographic data of the lecturers' or students' which consist of age, gender, level, course of study, year of experience, highest educational qualification and faculty, section B consists of six items questions asking student/lecturer to specify the level of their agreement on perceived contribution of ICT in enhancing sustainable educational development in Nigerian Universities. Section C consists of six items questions asking student/lecturer to specify the level of their agreement on the impacts of ICT on sustainable educational development in Nigerian Universities while Section D consists of six items questions asking student/lecturer to specify the level of their agreement on the attitudes toward the use of ICT in enhancing sustainable educational development in Nigerian Universities. The response mode is 4 Likert response scale "SA","A", "D" and "SD". The face and content validity of the questionnaires was ascertained by experts in Test and Measurement. A sample of twenty respondents was selected apart from the selected sample and the questionnaire was administered on them to carryout test-retest analysis. The reliability coefficient was calculated to be 0.86 using the correlation coefficient on the data collected. The instrument was administered personally by the researcher on the sample respondents. Only 470 copies of the completed students' questionnaires and 230 copies of completed lecturers' questionnaires were retrieved from the sample respondents to give 94% and 92% respectively return rate. Therefore, four hundred and seventy (470) students' questionnaires and two hundred and thirty (230) lecturers' questionnaires were used and analyse with Statistical Package for Social Sciences (SPSS) package 20.0. In this study, the statistical techniques adopted are simple percentage, frequency count, Pearson correlation coefficient, paired t-test analysis and regression analysis at 0.05 level of significant.

Results

Table 1: Demographic data of the students

Demographic	Frequency	Percentage
Age		
19-22 years	114	24.3
23-26 years	108	23.0
27-30 years	68	14.5
31-34 years	84	17.9
Above 34 years	96	20.3
Gender		
Male	294	62.6
Female	176	37.4
Level		
100	54	11.5
200	70	14.9
300	166	35.3
400	125	26.6
500	55	11.7
Course of Study		
Agricultural Science	38	8.1
Agricultural Economics	35	7.4
Anatomy	36	7.7
Nursing	31	6.6
Civil Engineering	57	12.1
Electrical/Electronic Engineering	52	11.1
Computer Science	67	14.3
Medical Laboratory Science	45	9.6
Mathematics	62	13.1
Science Education	47	10.0

Table 1 showed the demographic information of the students. The table indicates that 24.3% of the students were their age is between 19 years and 22 years, 23.0% were their age is between 23 years and 26 years students, 14.5% were their age is between 27 years and 30 years, 17.9% were their age is between 31 years and 34 years while 20.3% were their age above 34 years. In terms of gender, 62.6% were male and 37.4% were female; this shows that male was more represented than female participants. With regards to level of the students, the table shows that students in 300 level have the highest percentage of 35.3% follow by 400 level with 26.6% and 200 level with 14.9%. Finally, in terms of course of study, students that studied computer science had the highest percentage of 14.3% followed by mathematics (13.1%) and civil engineering (12.1%).

Table 2: Demographic data of the lecturers

Demographic	Frequency	Percentage
Age		
25-34 years	37	16.1
35-44 years	58	25.2
45-54 years	70	30.4
55 and Above	65	28.3
Gender		
Male	143	62.2
Female	87	37.8
Years of Teaching Experience		
1-5 years	26	11.3
6-10 years	89	38.7
11-15 years	21	9.1
16-20 years	43	18.7
21 years and above	51	22.2
Highest Educational Qualification		
B.Sc/ B.Ed/B.A/B.Tech	19	8.3
M.Sc/M.Ed/M.A/M.Tech	119	51.7
P.hD	92	40.0
Faculty		
Medical/Clinical Sciences	40	17.4
Engineering and Technology	55	23.9
Sciences	78	33.9
Agricultural Sciences	31	13.5
Education	26	11.3

Table 2 showed the demographic information of the lecturers. The table indicates that 16.1% of the lecturers' age is between 25 years and 34 years, 25.2% is between 35 years and 44 years students, 30.4% is between 45 years and 54 years while 28.3% is between 55 years and above. In terms of gender, 62.2% were males and 37.8% were females; this shows that males were more represented than females participants. With regards to the year of experience, lecturers with years of experience between 6 and 10 years had the highest percentage of 38.7% followed by 21 years and above (22.2%) and 16-20 years (18.7%). Also, in terms of highest educational qualification of the lecturers, 8.3% had B.Sc/ B.Ed/B.A/B.Tech, 51.7% had M.Sc/M.Ed/M.A/M.Tech while 40.0 had P.hD. Finally, in terms of faculty of the lecturer, lecturers belong to sciences had the highest percentage of 33.9% followed by engineering and technology (23.9%) and medical/clinical sciences (17.4%).

Research Question 1: What is the attitudes of the students toward the use of ICT for sustainable educational development in the universities in southwest, Nigeria?

Table 3: Students' attitudes toward the use of ICT for sustainable educational development in the universities in southwest, Nigeria (n=470)

Items	Frequency & Percentage			
	SA	A	D	SD
Learning is made easier by using ICT	264(56.2%)	118(25.1%)	63(13.4%)	25(5.3%)
I use ICT because it allows me to learn wherever I need to	178(37.9%)	164(34.9%)	86(18.3%)	42(8.9%)
ICT makes me a more effective learner	247(52.6%)	120(25.5%)	44(9.4%)	59(12.5%)
ICT generally increases my learning performance	179(38.1%)	144(30.6%)	83(17.7%)	64(13.6%)
ICT is useful as a learning tool	168(35.7%)	164(34.9%)	80(17.0%)	58(12.4%)
I ?nd it easy to become skillful in using ICT to support learning	217(46.2%)	166(35.3%)	36(7.7%)	51(10.8%)

Results in Table 3 indicated that the responses of the respondents to all the question items were above 50% for the level of agreement. Therefore, it can be deduced that students showed positive attitudes toward the use of ICT for sustainable educational development in the universities in southwest, Nigeria.

Research Question2: What is the attitudes of the lecturers toward the use of ICT for sustainable educational development in the universities in southwest, Nigeria?

Table 4: Lecturers' attitudes toward the use of ICT to enhance sustainable educational development in the universities in southwest, Nigeria (n=230)

Items	Frequency & Percentage			
	SA	A	D	SD
The performance of my classes is higher due to the use of ICT	174(75.7%)	35(15.2%)	10(4.3%)	11(4.8%)
Due to the incorporation of ICT in my teaching, my students are more motivated to work at my subject	123(53.5%)	86(37.4%)	21(9.1%)	0(0.0%)
Using technology in my classes improves students' evaluation	176(76.5%)	33(14.3%)	0(0.0%)	21(9.2%)
ICT improve and facilitate teacher-student communication	136(59.1%)	28(12.2%)	43(18.7%)	23(10.0%)
ICT save teacher repeating work	170(73.9%)	38(16.5%)	0(0.0%)	22(9.6%)
The use of ICT in the classroom facilitates teaching for university teachers	174(75.7%)	35(15.2%)	21(9.1%)	0(0.0%)

Results in Table 4 showed that the responses of the lecturers to all the question items were above 70% for the level of agreement. Therefore, it can be deduced that lecturers showed positive attitudes toward the use of ICT for sustainable educational development in universities in southwest, Nigeria.

Hypothesis 1: There is no significant relationship between the use of ICT and sustainable educational development in the universities in southwest, Nigeria.

Table 5: Regression Analysis to test significant relationship between use of ICT and sustainable educational development in the universities in southwest, Nigeria (n=700)

Model		B	Std. Error	Beta	t	Sig. value
1	(Constant)	1.285	.353		3.640	.000
Use of ICT		.966	.019	.889	51.2	.000

R	R^2	Adjusted R Square	Std. Error of the Estimate	F change	Sig. F change
.889	.790	.789	1.604	2622.388	.000

The first stepwise regression analysis (Table 5) is used to test hypothesis one. The model explains approximately 79% of the variance of the relationship between use of ICT and sustainable educational development in Nigerian Universities (adjusted R^2=.789).

The results also indicated that effective usage of ICT enhance sustainable educational development in Nigerian Universities (β=.889, $p<0.05$). The F Value is equal to (2622.388) and hence is significant at ($p<0.05$) and this assures significant relationship between the use of ICT and sustainable educational development in Nigerian universities. Therefore, the hypothesis which stated that there is no significant relationship between the use of ICT and sustainable educational development in universities in southwest, Nigeria is not accepted.

Hypothesis 2: There is no significant difference between the attitudes of students and lecturers toward the use of ICT for sustainable educational development in the universities in southwest, Nigeria.

Table 6: T-test Analysis to test significant difference between the attitudes of Students and Lecturers toward the use of ICT for sustainable educational development in the universities in southwest, Nigeria (n=700)

Variable	N	Mean	SD	DF	t	Sig (2-tailed)
Student Attitude	470	20.63	1.601	698	.880	.380
Lecturer Attitude	230	20.44	3.708			
Total	**700**	**41.07**	**5.309**			

Results in Table 6 indicated that the mean score of students' attitudes is 20.63 while the mean score of lecturers' attitudes is 20.44. Also, t_{cal} is .880, p=.380 at degree of freedom 698. Since sig. (2-tailed .380) is greater than significant value (.05). This result indicated that there is no significant difference between the attitudes of students and lecturers toward the use of ICT for educational sustainable development in universities in southwest, Nigeria. Therefore, the hypothesis which stated that there is no significant difference between the attitudes of students and lecturers toward the use of ICT for educational sustainable development in universities in southwest, Nigeria is accepted.

Hypothesis 3: The following demographic variables of the students (i.e. age, gender, level and course of study) do not predict the students' attitudes toward the use of ICT for sustainable educational development in the universities in southwest, Nigeria.

Table 7: Regression Analysis to test level of prediction of the students' attitudes toward the use of ICT for sustainable educational development in the universities in southwest, Nigeria by the following demographic variables (age, gender, level and course of study) (n=470)

Model	B	Std. Error	Beta	t	Sig. value
1 (Constant)	18.391	.539		34.137	.000
Age	.215	.096	.102	2.240	.026
Gender	1.152	. 286	.179	4.034	.000
Level	.089	.121	.033	.739	.460
Course of Study	.449	.048	.398	9.312	.000

R	R^2	Adjusted R Square	Std. Error of the Estimate	F change	Sig. F change
.422	.178	.171	2.836	25.196	.000

The third stepwise regression analysis results (Table 7) indicated that level of the student (β=.033, p>0.05) did not significantly predict the attitudes of the students toward the use of ICT for sustainable educational development in Nigerian Universities. The model explains approximately 17% of the variance in the attitudes of the students toward the use of ICT for sustainable educational development in the universities in south west, Nigeria (adjusted R^2=.171).

The results also indicated that age of the student (β=.102, p<0.05), gender (β=.179, p<0.05) and course of study (β=.398, p<0.05) predict the attitudes of the students toward the use of ICT for sustainable educational development in Nigerian Universities. The F Value is equal to (25.196) and hence is significant at (p<0.05) and this assures that demographic variables of the students (i.e. age, gender and course of study) predict the attitudes of the students toward the use of ICT for sustainable educational development in the universities in south west, Nigeria.

Hypothesis 4: The following demographic variables of the lecturers (i.e. age, gender,

years of teaching experience, highest educational qualification and faculty study) do not predict the students' attitudes toward the use of ICT for sustainable educational development in the universities in southwest, Nigeria.

Table 8. Regression Analysis to test level of prediction of the lecturers' attitudes toward the use of ICT for sustainable educational development in the universities in southwest, Nigeria by the following demographic variables (age, gender, years of teaching experience, highest educational qualification and faculty) (n=230)

Model	B	Std. Error	Beta	t	Sig. value
1 (Constant)	19.394	.437		44.349	.000
Age	.322	.112	.211	2.884	.004
Gender	.571	. 282	.173	2.030	.044
Years of Teaching Experience	.353	.078	.306	4.514	.000
Highest Educational Qualification	.561	.215	.217	2.614	.010
Faculty	.060	.097	.045	.617	.538

R	R^2	Adjusted R Square	Std. Error of the Estimate	F change	Sig. F change
.466	.218	.200	1.433	12.455	.000

The fourth stepwise regression analysis results (Table 8) indicated that faculty of the lecturer (β=.045, $p>0.05$) did not significantly predict the attitudes of the lecturers toward the use of ICT for sustainable educational development in Nigerian Universities. The model explains approximately 20% of the variance in the attitudes of the lecturers toward the use of ICT for sustainable educational development in the universities in south west, Nigeria (adjusted R^2=.200).

The results also indicated that age of the lecturer (β=.211, $p<0.05$), gender (β=.173, $p<0.05$), years of experience (β=.306, $p<0.05$) and highest educational qualification (β=.217, $p<0.05$) predict the attitudes of the lecturers toward the use of ICT for sustainable educational development in Nigerian Universities. The F Value is equal to (12.455) and hence is significant at ($p<0.05$) and this assures that demographic variables of the lecturers (i.e. age, gender, years of experience and highest educational qualification) predict the attitudes of the lecturers toward the use of ICT for sustainable educational development in the universities in south west, Nigeria.

Discussion of the findings

The results from Table 3 showed that students have strong positive attitudes toward the use of ICT for sustainable educational development in the universities in southwest, Nigeria. The average percentage of their agreement on the attitudes scale is 75.5%. This finding corroborates that of Abdullah, Zideon, Chi Aman and Mustapha (2015) which found the same result.

The findings in Table 4 showed that lecturers had positive attitudes toward the use of ICT for sustainable educational development in Nigerian Universities. The average percentage of their agreement on the attitudes scale is 87.5%. This finding is supported by the findings of Bamigboye, Bankole, Ajiboye and George (2013) and Chuckwunyere and Ranjit (2016) which revealed that lecturers in Nigerian University had favourable attitude toward the use of ICT in education.

Also, the findings from Table 5 indicated that there was significant relationship between the use of ICT and sustainable educational development in Nigerian Universities. This finding is in consonant with the findings of Kadir et al. (2014) who revealed that indeed information and communication technology is a true instrument for promoting sustainable education development in the study area as it has helped to improve the level of education and assist in interpersonal relationship and enhance access to information. The finding of this study also corroborates the findings by Anyasi et al. (2012) who observed the powerful role of ICT in sustainable economic development.

The findings from Table 6 revealed that there was no significant difference between attitudes of students and lecturers toward the use of ICT for sustainable educational development in Nigerian Universities. This finding contradicted the findings of Nwokeocha (2010) which founds that there is significant difference between the attitudes of lecturers and students toward the use of ICT.

Finally, the findings from Table 7 indicated that age, gender and course of study of the students predicted the students' attitudes toward the use of ICT for sustainable educational development in Nigerian Universities. This finding was supported by the findings of Abdullah et al. (2015) which found that gender of the students determine the attitude of the student toward the use IT and also founds a statistically significant difference between Arts and Science students in their attitude toward IT in favour of Science students. In addition, the findings from Table 8 indicated that age, gender, years of experience and highest qualification of the lecturers predicted the lecturers' attitudes toward the use of ICT for sustainable educational development in Nigerian Universities. This finding contradicted the findings of Ajibade, Oloyede, Adeleke and Awopetu (2012) which found that lecturers' faculty, sex, and years of teaching experience did not have any significant difference in their attitude toward the use of ICT. Also the findings of Onasanya, Sheu, Oduwaiye and Sheu (2010) which revealed that gender had no effect on lecturers' attitudes toward the use of ICT but years of experience did affect the lecturers' attitudes toward the use of ICT in favour of younger experience.

Conclusion

From this study, it was found that both students and lecturers had positive attitudes toward the use of ICT for sustainable educational development in Nigerian Universities. Also, it was found that the use of ICT enhanced sustainable educational development in Nigerian Universities. In addition, it was found that there was no significant difference between the attitudes of students and lecturers toward the use of ICT for sustainable educational development in Nigerian Universities. This shows that both students and lecturers were favourable disposed to the use of ICT in

bringing positive changes to the educational development.

However, it was found that some demographic variables of students and lecturers such as age, gender, course of study, years of experience and educational qualification predicted their attitudes toward the use of ICT for sustainable educational development in Nigerian Universities.

Recommendations

Based on the findings of this study, the following suggestions are hereby made:

(i) University Management should organise ICT capacity building training programme; for all lecturers and other supporting staff.

(ii) Government and University management should provide an enabling environment and as well as incentives which encourage both students and lecturers to develop greater positive attitudes toward the use of ICT for sustainable educational development.

(iii) Government should provide adequate and relevant ICT facilities to the university.

(iv) Each university should evolve a sustainable and very strong ICT policy that would enable each one of them to fully optimize the use of their ICT infrastructures.

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