INFORMATION AND COMMUNICATION TECHNOLOGY CAPACITY BUILDING SKILLS OF EDUCATION LECTURERS IN UNIVERSITIES IN SOUTH-SOUTH, NIGERIA

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Abstract

This study investigated ICT capacity building skills of education lecturers in universities in South-South, Nigeria. Three research questions and three hypotheses were formulated. The design was descriptive survey. The population of this study comprised all the education lecturers in the six federal and six state university institutions in South-South, Nigeria comprising 2,410 lecturers. A sample of four universities (two state and two federal universities) was drawn from which a sample size of 320 education lecturers was drawn using stratified random sampling technique, representing 56% of the population. Questionnaire titled "Human Capacity Building Skills of Education Lecturers in Information and Communication Technologies Questionnaire (HCBSELICTQ)" was validated and the reliability tested with test-retest method, yielded an index of 0.92. In analyzing the data, mean scores and standard deviation were used to answer the research questions and z-test used in testing the hypotheses. The findings revealed among others that, the strategies for enhancing the ICT capacity building needs of education lecturers in universities include: assisting lecturers with grants to participate in international conferences, providing the lecturers with laptops to carryout research for individual capacity building, giving the lecturers access to internet facilities in the school environment, unlimited transfer of ICT skills to lecturers with the help of school management, adequate maintenance of ICT policy implementation strategy in the system, constant electricity supply in institutions for the application of ICT devices, and proper maintenance of educational software used in network programming for knowledge building among staff. Researchers recommended that education lecturers should participate frequently in capacity building programmes using ICT devices to share knowledge/ideas among themselves for knowledge creativity.

Keywords: ICT, capacity building, capacity building skills, education lecturers, universities

Introduction

Education lecturers are responsible for shaping the destinies of nations and individuals. The greatest man on earth was taught by a teacher. Without the teacher, there would be no educationists, educators, pharmacists, architects, doctors, engineers, chemists, lawyers, accountants, agriculturists, administrators and even teachers themselves. Generally, academic staff of universities are of utmost importance in developing human skills which is vital and fundamental to national development. This human skill development is carried out through teaching, learning and research. For effective teaching to take place in educational institutions, education lecturers must be regularly involved in capacity building programmes. According to Madumere-Obike, Ukala and Nwabueze (2017), staff of any organization needs to be

qualified with good grades, involve in staff training and continually updates his knowledge and skills for improved instructional competitiveness. Adiele (2006) states that, human capacity building involves the provision made to educate and improve the performance of staff from initial employment to retirement stage, which makes the staff functional and productive in his subject-area. That is, it is a long-term educational process which managerial personnel learn conceptual and intellectual knowledge for specific and general purpose.

Capacity building programmes in higher education are those educational programmes that assist lecturers to improve on their skills. These programmes help them to build new knowledge and skills for productivity. Capacity building needs are those skills and ideas required of every human for individual development and nation building. Capacity building entails a process of equipping individuals with the necessary skills required for meeting the goals of an organization through developmental programmes. This involves staff training and development for organizational development. In an educational setting, it is a process of acquiring new knowledge, teaching method, new techniques, skills, ideas and changes required for the production of students through training and development. It equally equips them with useful knowledge as well as proper skills of applying and utilizing these information and communication technology devices in education processes such as teaching, learning, research development, administration, sports and even community services.

Information and communication technologies (ICTs) are modern and electronic devices used in processing, storing, applying, documenting, and retrieving useful information that sustain the educational programes. Looking at the speed and expanding rate at which ICT devices have accumulated since the mid-20th century, Nwabueze (2011) is of the opinion that application and utilization of ICT services in education industry have developed a strong role in development of higher education institutions and globalization around the world. According to Yusuf (2005), states that the field of education has been influenced by application of ICTs devices in institutional programmes has really made teaching, learning, school management and research more serious for individual and societal growth. ICT devices have enhanced the quality of education through improved medium for teaching, learning, research and management. Training on ICT applications and utilizations are part of human capacity building needs of university lecturers for instructional competitiveness. These ICT devices and skills help them in teaching the students for effective service delivery; and equally assist them in their academic research and development.

Practitioners and academics believe that ICTs can be successfully employed to reach out to a greater number of staff to promote teaching and knowledge along-side exposing the students to the technical skills required for employment (Itaas, 2008). Ronald (2001) states that ICT technologies serve as useful tools for teaching, administration, research and learning purposes for academic staff, aiding them to teach course curriculum and subject contents to students. ICTs can actually help trigger up or tap into lecturers' interest in teaching through new media and have a potential of enhancing their preparation for further education and work (Nwabueze & Ukaigwe, 2015). This is evidenced in today's improved communication technology, which has made time and space less complex in the academic world and other business transactions. It could be observed that this modern age is the age of information exploration and exploitation in which an average individual wants to explore the information system through modern technology devices.

However, the ICT devices required for enhancement of capacity building of educational administration lecturers include: computer systems, internet facilities, projectors, CDs, flashes, uninterrupted power supply, printers, scanners, photocopiers, tapes and video cameras (Oragwu & Nwabueze, 2015). These ICT devices enable the lecturers to fully gain the knowledge and skills required of them for knowledge transfer and productivity in higher educational institutions and beyond the labour

market. They equally make it faster to communicate and transfer information from one point to another such as virtual and oral presentations, academic practices, administrative processes, and networking.

Looking at the roles of ICT in the practice of academic and administrative activities in schools, teaching and learning through ICT devices are readily needed in educational institutions. Onyegegbu (2007) states that one of the problems of educational institutions in achieving the expected outcomes is the inadequacy of academic facilities of which ICT is readily needed for individual and school productivity. Looking at Onyegegbu (2007) interpretations, unavailability of ICT devices in educational institutions leads to low understanding of subject contents among staff and students which may cause poor academic productivity.

Yusuf (2008) listed some of the findings of his study on barriers to ICT usage in universities as follows: lack of teachers' confidence and computer anxiety, poor development of ICT skills among staff and students, low access to ICT devices due to inadequate provision of the hard and soft-ware devices needed for knowledge transfer, poor time management on the areas of ICT applications and usages among staff and students, technical problems which encompass lack of technical support, infrastructure and electricity, poor leadership expectations among staff hinder effective knowledge transfer and development. Aladejana (2008) points out some of the problems militating against ICT usage in Nigerian schools to include: poor provision and maintenance of educational facilities, poor electricity generation for utilizing the ICT devices available in schools, inactive working personnel to make adequate use of available ICT devices, low fund generation for the provision and maintenance of ICT devices, no internet modem for sourcing of teaching and learning materials, and no access to internet network for research and publications. Aduwa-Ogiegbaen (2005) added that, government and stakeholders have made little or no efforts in providing and installing ICT devices in university institutions for students' and staff productivity.

Majority of academic staff of universities find it very difficult to use and apply ICT devices in teaching and research developments (Nwabueze, 2011). Ololube (2006) discovers that, due to poor and ineffective support and encouragement, academic staff do not see these devices as very important in teaching, learning and research for educational sustainability, growth and development. Conducting researches in educational institutions is becoming easier apparently because of ICT. The ICT tools necessary for conducting research by academics include: statistical package for social sciences (SPSS), anti-plagiarism software, laptop, desktop and internet (Chinien, 2003; Morgan, Leech, Gloeckner & Barrett, 2004; Onugha, 2009).

Based on the foregoing, education lecturers in Nigerian universities need to be equipped with the relevant technologies in order to withstand the adoption, application and use of ICT devices to discharge their duties effectively. Since technology changes frequently, academic staff needs constant in-service training, especially in ICT for capacity building. Capacity building according to AUSAID (2004) in Ifeanyieze and Osinem (2011) is the process of developing competencies and capabilities in individuals, groups, organisation sectors or countries which lead to sustained and self-generating performance improvement.

The fundamental goal of capacity building therefore, is to enhance the ability of individuals based on perceived needs. Nwobu in Asogwa and Ohagwu (2010) defines capacity building as that which is geared towards increasing the knowledge of staff and possession of skills for enhanced and efficient job performance and productivity. Therefore, effective and efficient use of ICT by education lecturers to improve their job performance is important through ICT applications where capacity building is required by the lecturers (Chukwuedo & Igbinedion, 2014). Obi and Akarahu (2010) reveal that, education lecturers require word processing skills, internet technology skills and telecommunication skills for effective instructional performance in the school system.

Theoretical Framework

Theory adopted in this study is Human Capital Theory. Human Capital Theory was propounded by Schultz in 1967 which states that, functional performance of academic staff is associated with their specific attributes and the ability to transfer needed knowledge and skills into the learners through specific medium (Oluwuo & Nwabueze, 2016). These attributes when embedded in academic staff, enhance positive teaching methods, education excellence and academic productivity. Human capital theory is based on the fact that, capacity building in an educational institution will promote new knowledge programmes for improved production capacity of schools. Accordingly, human capacity building would manifest itself in staff performance function, level of classroom management and the quality of graduate produced.

This theory is not only imperative but also indispensable to the achievement of educational and organizational goals. Hence, when lecturers are properly equipped with the capacity building needs through ICT programmes, their morale become so active to perform the expected duties required of them more efficiently and effectively.

Statement of the Problem

ICT devices are very important in the teaching and learning processes as well as research. The skills of using the ICT devices in teaching and research can be achieved through capacity building programmes. Inadequate and poor participation of lecturers in human capacity building programmes can adversely affect their ability of transmitting the value of education into the students and other staff. This may regularly occur as a result of inadequate knowledge of applying the ICT devices among them in school processes (teaching, administration, research development and learning). Despite that these ICT devices are rarely provided in the school system by the government, some academic staff of universities, especially those in the Faculty of Education seem not ready to learn and apply them in their academic functions, personal development and school upliftment. The little available ICT devices in schools seem not to be functioning effectively for knowledge building, skill transfer, scientific reasoning, technology programming and academic production functions. This could be as a result of inappropriate time scheduling among staff for proper ICT training and fund to participate in ICT training and development programmes. All these problems listed above are major hindrances to the development of education lecturers on the application of ICT devices in teaching and research.

Aim and Objectives of the Study

The aim of this study is to investigate ICT capacity building needs of education lecturers in universities in South-South, Nigeria. Specifically, the objectives of the study are to:

i. identify the ICT capacity building skills needed by education lecturers for instructional delivery in universities in South-South, Nigeria;
ii. Find out factors militating against the enhancement of ICT capacity building skills of education lecturers in universities in South-South, Nigeria; and
iii. Determine the strategies for enhancing the ICT capacity building skills of education lecturers in universities in South-South, Nigeria.

Research Questions

The following research questions guided the study:

i. What are the ICT capacity building skills needed by education lecturers for instructional delivery in universities in South-South, Nigeria?
ii. What are the factors militating against the enhancement of ICT capacity building skills of education lecturers in universities in South-South, Nigeria?

iii. What are the strategies for enhancing the ICT capacity building skills of education lecturers in universities in South-South, Nigeria?

Hypotheses

i. There is no significant difference between the mean scores of education lecturers in state and federal universities on the ICT capacity building skills needed by education lecturers for instructional delivery in universities in South-South, Nigeria.
ii. There is no significant difference between the mean scores of education lecturers in state and federal universities on the factors militating against the enhancement of ICT capacity building skills of education lecturers in universities in South-South, Nigeria.
iii. There is no significant difference between the mean scores of male and female education lecturers on the strategies for enhancing the ICT capacity building skills of education lecturers in universities in South-South, Nigeria.

Methodology

Based on the procedures, this work adopted a descriptive survey design. The population of this study comprised all the education lecturers in the six federal and six state university institutions in South-South, Nigeria. Precisely, the population is 2,410 lecturers with 1,090 male staff and 1,320 female staff (South-South Academic Reports of Universities, 2017). There are six State Universities and six Federal Universities in South-South, Nigeria comprising 1,305 education lecturers in Federal Universities and 1,105 education lecturers in the State Universities. A sample of four universities (two state and two federal) was selected from the population using simple random sampling technique, representing 33.3% of the total universities in the political zone. From the four sampled universities, a sample size of 320 education lecturers was randomly drawn using stratified random sampling technique, and this represented56% of the population. Specifically, 80 lecturers were drawn from each of the selected universities (160 from Federal and 160 from State Universities) comprising200 male and 120 female education lecturers. The instrument was questionnaire titled "Information and Communication Technologies Capacity Building Needs of Education Lecturers Questionnaire (ICTCBNELQ)" designed and developed by the researchers. The instrument was validated and test-retest method was used in ascertaining the reliability. Thereafter, the two sets of scores were correlated using the Pearson's Product Moment Correlation to establish the reliability co-efficient, which yielded an index of 0.99. For the purpose of data analysis, mean scores and standard deviation were used to answer the research questions. Any mean score from 2.5 and above is agreed upon and below 2.5 is disagreed upon. z-test was used in testing the hypotheses of no significant difference. The z-test was adopted since the sample size is more than 30.

Results

Research Question One: What are the ICT capacity building skills needed by education lecturers for instructional delivery in universities in South-South, Nigeria?

Table 1: Mean scores of Education Lecturers on the ICT Capacity Building Skills needed by Education Lecturers for Instructional Delivery

S/N	ICT capacity building skills needed be education lecturers include:	Federal (160)		State (160)		Mean Set	Decision
		Mean	SD	Mean	SD		
1	Video conferencing	3.48	0.52	3.41	0.52	3.45	Agreed
2	Virtual presentations in conferences	2.75	0.57	2.94	0.56	2.85	Agreed
3	Seminar presentations using projectors	3.14	0.54	3.19	0.54	3.16	Agreed
4	Knowledge facilitation using projectors in classrooms	3.36	0.53	3.33	0.53	3.35	Agreed

5	Oral/poster presentations in conferences using projectors	3.34	0.53	3.41	0.52	3.38	Agreed
6	Networking with staff in other universities for knowledge exchange	3.41	0.52	3.30	0.53	3.36	Agreed
7	Networking with students using ICT devices for knowledge transfer	3.38	0.52	3.22	0.54	3.30	Agreed
8	Conducting research using ICT devices for knowledge production	3.49	0.52	3.26	0.54	3.38	Agreed
9	Ability to use magnetic boards in classroom discussions	3.56	0.51	3.22	0.54	3.39	Agreed
10	Ability to send and receive emails through Internet connectivity	3.47	0.52	3.36	0.53	3.42	Agreed
11	Ability to use laptops effectively for knowledge creation	3.45	0.52	3.38	0.52	3.42	Agreed
12	Capacity to work on Microsoft Word without obstructions	3.34	0.53	3.34	0.53	3.34	Agreed
13	Using the Microsoft Excel excellently for academic functions	3.16	0.54	3.32	0.53	3.24	Agreed
	Aggregate Mean & St. D	**3.33**	**0.53**	**3.28**	**0.53**	**3.31**	**Agreed**

Data on Table 1 present the mean scores and standard deviation of Federal and State University lecturers on the ICT capacity building skills needed by education lecturers for instructional delivery in universities in South-South, Nigeria. Academic staff in federal and state universities agreed on all the items in the table with high mean scores above the mean criterion of 2.50. The aggregate mean scores of 3.33 and 3.28 for academic staff in federal and state universities indicate that the respondents agreed on the items as stated in the table. Therefore, the ICT capacity building skills needed by education lecturers for instructional delivery in universities in South-South, Nigeria include: Video conferencing, active involvement in virtual presentations in conferences, involving in seminar presentations using projectors, knowledge facilitation using projectors in classrooms, being involved in oral/poster presentations in conferences using projectors, networking with staff in other universities for knowledge exchange, networking with students using ICT devices for knowledge transfer, conducting research using ICT devices for knowledge production, ability to use magnetic boards in classroom discussions, ability to send and receive emails through Internet connectivity, ability to use laptops effectively for knowledge creation, capacity to work on Microsoft Word without obstructions, and using the Microsoft Excel excellently for academic functions.

Research Question Two: What are the factors militating against the enhancement of ICT capacity building skills of education lecturers in universities in South-South, Nigeria?

Table 2: Mean scores of education lecturers on the factors militating against the enhancement of ICT capacity building skills of education lecturers in universities

S/N	Factors militating against the enhancement of ICT capacity building needs of education lecturers include:	Federal (160)		State (160)		Mean Set	Decision
		Mean	SD	Mean	SD		
14	Poor finance to embark on ICT training	3.56	0.51	3.52	0.51	3.54	Agreed
15	Lack of finance to acquire ICT facilities among lecturers for knowledge building	3.55	0.51	3.48	0.52	3.52	Agreed
16	Inadequate provision of new technological devices in the school for instructional enhancement	3.59	0.51	3.46	0.52	3.53	Agreed
17	Poor management of ICT facilities on the parts of university administrators	3.36	0.53	3.30	0.53	3.33	Agreed
18	Unavailability of educational software for	3.48	0.52	3.44	0.52	3.46	Agreed

	network programming						
19	Lack of/limited ICT skills among education lecturers for knowledge transfer	3.28	0.54	3.30	0.53	3.29	Agreed
20	Poor ICT policy/project implementation strategy in university institutions	3.22	0.54	3.34	0.53	3.28	Agreed
21	Frequent electricity interruption affects proper utilization of ICT facilities available in the school	3.53	0.51	3.26	0.54	3.40	Agreed
22	Lack of maintenance culture in the school system	3.54	0.51	3.31	0.53	3.43	Agreed
	Aggregate Mean & St. D	**3.46**	**0.52**	**3.38**	**0.53**	**3.42**	**Agreed**

Data on Table 2 present the mean scores and standard deviation of Federal and State University lecturers on the factors militating against the enhancement of ICT capacity building skills of education lecturers in universities in South-South, Nigeria. Academic staff in federal and state universities agreed on all the items in the table with high mean scores above the mean criterion of 2.50. The aggregate mean scores of 3.46 and 3.38 for academic staff in federal and state universities respectively indicate that, the respondents agreed on the items as stated in the table above. Therefore, the factors militating against the enhancement of ICT capacity building skills of education lecturers in universities in South-South, Nigeria include: poor finance to embark on ICT training, lack of finance to acquire ICT facilities among lecturers for knowledge building, inadequate provision of new technological devices in the school for instructional enhancement, poor management of ICT facilities on the parts of university administrators, unavailability of educational software for network programming, lack of/limited ICT skills among education lecturers for knowledge transfer, poor ICT policy/project implementation strategy in university institutions, frequent electricity interruption affects proper utilization of ICT facilities available in the school, and lack of maintenance culture in the school system.

Research Question Three: What are the strategies for enhancing the ICT capacity building skills of education lecturers in universities in South-South, Nigeria?

Table 3: Mean scores of education lecturers on the strategies for enhancing the ICT capacity building skills of education lecturers in universities

S/N	Strategies for enhancing the ICT capacity building skills of education lecturers in universities include:	Male (200)		Female (120)		Mean Set	Decision
		Mean	SD	Mean	SD		
23	Assisting lecturers with grants to participate in international conferences	3.45	0.46	3.42	0.60	3.44	Agreed
24	Providing the lecturers with laptops to carryout research for individual capacity building	3.42	0.47	3.38	0.60	3.40	Agreed
25	Giving the lecturers access to internet facilities in the school environment	3.35	0.47	3.33	0.61	3.34	Agreed
26	Constant management of ICT facilities by school administrators	3.41	0.47	3.43	0.60	3.42	Agreed
27	Proper provision of educational software used in network programming for staff capacity building	3.20	0.48	3.38	0.60	3.29	Agreed
28	Unlimited transfer of ICT skills to lecturers with the help of school management	3.25	0.48	3.37	0.60	3.31	Agreed
29	Adequate maintenance of ICT policy/project implementation strategy in the system	3.35	0.47	3.44	0.60	3.40	Agreed
30	Constant electricity supply in institutions for the application/ utilization of ICT devices	3.41	0.47	3.40	0.60	3.41	Agreed
31	Proper maintenance of educational software used in network programming for knowledge building among staff	3.42	0.47	3.46	0.61	3.44	Agreed
	Aggregate Mean & St. D	**3.36**	**0.47**	**3.40**	**0.60**	**3.38**	**Agreed**

Data on Table 3 present the mean scores and standard deviation of male and female education lecturers on the strategies for enhancing the ICT capacity building skills of education lecturers in universities in South-South, Nigeria. Both male and female education lecturers agreed on all the items in the table with high mean scores above the mean criterion of 2.50. From the table also, it is very clear that the higher the mean scores, the lower the standard deviation and the lower the mean score, the higher the standard

deviation. The aggregate mean scores of 3.36 for male staff and 3.40 for female staff indicate that, respondents agreed on items in the table. Therefore, the strategies for enhancing the ICT capacity building skills of education lecturers in universities in South-South, Nigeria include: assisting lecturers with grants to participate in international conferences, providing the lecturers with laptops to carryout research for individual capacity building, giving the lecturers access to internet facilities in the school environment, constant management of ICT facilities by school administrators, proper provision of educational software used in network programming for staff capacity building, unlimited transfer of ICT skills to lecturers with the help of school management, adequate maintenance of ICT policy/project implementation strategy in the system, constant electricity supply in institutions for the application/ utilization of ICT devices, and proper maintenance of educational software used in network programming for knowledge building among staff.

Test of Hypotheses

Hypothesis One: There is no significant difference between the mean scores of education lecturers in state and federal universities on the ICT capacity building skills needed by education lecturers for instructional delivery in universities in South-South, Nigeria.

Table 4: Summary of z-test on the difference between the mean scores of education lecturers in state and federal universities on the ICT capacity building skills needed by education lecturers for instructional delivery

Education Lecturers	N	Mean	St. Dev.	df	z-calculated value	z-critical value	Decision
Federal	160	3.33	0.53	318	0.853	±1.962	Ho1
State	160	3.28	0.52				Accepted

Data on Table 4 present the summary of z-test on the difference between the mean scores of education lecturers in state and federal universities on ICT capacity building skills needed by education lecturers for instructional delivery. Based on the analysis, the z-calculated value of 0.853 is less than the z-critical value of ±1.962 indicating that the null hypothesis was accepted. Therefore, there is no significant difference between the mean scores of education lecturers in state and federal universities on the ICT capacity building skills needed by education lecturers for instructional delivery.

Hypothesis Two: There is no significant difference between the mean scores of education lecturers in state and federal universities on the factors militating against the enhancement of ICT capacity building skills of education lecturers in universities in South-South, Nigeria.

Table 5: Summary of z-test on the difference between the mean scores of education lecturers in state and federal universities on the factors militating against the enhancement of ICT capacity building needs of education lecturers

Education Lecturers	*N*	*Mean*	*St. Dev.*	*df*	*z-calculated value*	*z-critical value*	**Decision**
Federal	160	3.46	0.52	318	1.363	±1.962	**Ho1**
State	**160**	**3.38**	**0.53**				**Accepted**

Data on Table 5 present the summary of z-test on the difference between the mean scores of education lecturers in state and federal universities on factors militating against the enhancement of ICT capacity building skills of education lecturers in universities in South-South, Nigeria. Based on the analysis, the z-calculated value of 1.363 is less than the z-critical value of ±1.962 indicating that the null hypothesis was accepted. Therefore, there is no significant difference between the mean scores of education lecturers in state and federal universities on the factors militating against the enhancement of ICT capacity building skills of education lecturers in universities in South-South, Nigeria.

Hypothesis Three: There is no significant difference between the mean scores of male and female education lecturers on the strategies for enhancing the ICT capacity building skills of education lecturers in universities in South-South, Nigeria.

Table 6: Summary of z-test on the difference between the mean scores of male and female education lecturers on the strategies for enhancing the ICT capacity building skills of education lecturers

Gender of Staff	*N*	*Mean*	*St. Dev.*	*df*	*z-calculated value*	*z-critical value*	**Decision**
Male	200	3.36	0.47	318	- 0.624	±1.962	**Ho1**
Female	**120**	**3.40**	**0.60**				**Accepted**

Data on Table 6 present the summary of z-test on the difference between the mean scores of male and female education lecturers on the strategies for enhancing the ICT capacity building skills of education lecturers in universities in South-South, Nigeria. Based on the analysis, the z-calculated value of -0.624 is less than the z-critical value of ±1.962 indicating that the null hypothesis was accepted. Therefore, there is no significant difference between the mean scores of male and female education lecturers on the strategies for enhancing the ICT capacity building skills of education lecturers in universities in South-South, Nigeria.

Discussion

The findings of this study revealed that, the ICT capacity building skills needed by education lecturers for instructional delivery in universities in South-South, Nigeria include: Video conferencing, active involvement in virtual presentations in conferences, involving in seminar presentations using projectors, knowledge facilitation using projectors in classrooms, being involved in oral/poster presentations in conferences using projectors, networking with staff in other universities for knowledge exchange, networking with students using ICT devices for knowledge transfer, conducting research using ICT devices for knowledge production, ability to use magnetic boards in classroom discussions, ability to send and receive emails through Internet connectivity, ability to use laptops effectively for knowledge creation, capacity to work on Microsoft Word without obstructions, and using the Microsoft Excel excellently for academic functions. The test of hypothesis one showed that, there is no significant difference between the mean scores of education lecturers in state and federal universities on the ICT capacity building skills needed by education lecturers for instructional delivery. All lecturers in federal and state universities must acquire ICT capacity building skills to be relevant in the fast developing world.

The increasing digitalization of global activities has left societies with the only option of joining the Information Communication Technologies (ICT) mobility for individual growth and societal development. In line with the findings, Nwabueze (2011) is of the opinion that, the ICT capabilities of a given society to some extent determine its performance in all ramifications especially in global socio-political activities, education, health and socio-cultural playing field of the 21st century. These technologies have been incorporated in the daily activities of the Western World which include peace building efforts, technology advancements, as well as sports activities. According to UNESCO (2005), ICTs enable the rapid transmission of vast amount of information and can be used as vehicles for accessing new curricula, expanding learning opportunities, introducing innovative teaching methods, promoting cooperation and simulating work place situation. ICTs can actually help trigger up or tap into lecturers' interest in teaching through new media and have a potential of enhancing their preparation for further education and work. Nwabueze, Iloabuchi and Adieme (2014) revealed that electronic communication devices would help lecturers to exchange information and communicate with other lecturers from other universities in the world, source for learning materials and share ideas with one another.

The findings of this study went further to reveal that, the factors militating against the enhancement of ICT capacity building needs of education lecturers in universities in South-South, Nigeria include: poor finance to embark on ICT training, lack of finance to acquire ICT facilities among lecturers for knowledge building, inadequate provision of new technological devices in the school for instructional enhancement, poor management of ICT facilities on the parts of university administrators, unavailability of educational software for network programming, lack of/limited ICT skills among education lecturers for knowledge transfer, poor ICT policy/project implementation strategy in university institutions, frequent electricity interruption affects proper utilization of ICT facilities available in the school, and lack of maintenance culture in the school system. Test of hypothesis two showed that, there is no significant difference between the mean scores of education lecturers in state and federal universities on the factors militating against the enhancement of ICT capacity building needs of education lecturers in universities in South-South, Nigeria.

In universities in South-South, Nigeria, there is poor provision of ICT facilities, the available ones are hardly maintained and this affects the performance of teaching staff in propagating knowledge. According to Onyegegbu (2007), the glaring challenges in Nigerian school system could be seen in the provision and utilization of new technological devices and the unavailability of these new technological devices as well as lack of knowledge and skills among teachers and students in using these devices affect administrative and academic functions negatively. Nwabueze (2011) identified high cost of ICT facilities, weak infrastructure, lack of skilled personnel to make use of the available ones, and limited access to the internet as the factors militating against the enhancement of ICT capacity building needs of education lecturers in universities in South-South, Nigeria. Madumere-Obike, Ukala and Nwabueze (2015) revealed that the problems militating against staff capacity building for effective service delivery in universities in South East, Nigeria include: poor participation of lecturers in conferences, seminars, workshops, low income to updating their knowledge through appropriate use of new technological devices, non-commitment of some lecturers to their duties, poor monitoring/supervision of teaching and learning, poor funding of education, poor supply of training materials and infrastructural facilities, and poor maintenance of existing facilities affect effective teaching in Nigerian universities.

The findings finally revealed that, the strategies for enhancing the ICT capacity building needs of education lecturers in universities in South-South, Nigeria include: assisting lecturers with grants to participate in international conferences, providing the lecturers with laptops to carryout research for individual capacity building, giving the lecturers access to internet facilities in the school environment, constant management of ICT facilities by school administrators, proper provision of educational software used in network programming for staff capacity building, unlimited transfer of ICT skills to lecturers with the help of school management, adequate maintenance of ICT policy/project implementation strategy in the system, constant electricity supply in institutions for the application/ utilization of ICT devices, and proper maintenance of educational software used in network programming for knowledge building among staff. Test of hypothesis three showed that, there is no significant difference between the mean scores of male and female education lecturers on the strategies for enhancing the ICT capacity building needs of education lecturers in universities in South-South, Nigeria. These strategies if properly applied would assist in effective enhancement of ICT capacity building needs of education lecturers in universities in South-South, Nigeria.

In line with the findings, Obi and Akarahu (2010) revealed that, education lecturers require word processing skills, internet technology skills and telecommunication skills for effective instructional performance in the school system. According to Nwafor (2005), Information and Communication Technology is a network which offers a steadily expanding range of new services that have major economic consequences for the standardization of information in universities. Uche and Nwabueze (2011) revealed that ICT devices enhance information exchange between the lecturers and students,

submitting and retrieving assignments through the internet (via e-mails), through ICT devices, lecturers can make virtual and oral presentations, and provide learning materials for students through the internet.

Conclusion

Based on the findings, the researcher concluded that every academic staff in the Faculty of Education must be serious in acquiring knowledge and skills of manipulating and utilizing ICT devices for academic purposes. This would help them in teaching, research and administrative purposes. The involvement of education lecturers in human capacity building programmes using ICT devices exposes them to the latest reform on instructional techniques needed for knowledge exchange.

Recommendations

Based on the findings of this study, the following recommendations were made:

i. Education lecturers should participate frequently in capacity building programmes using ICT devices to share knowledge/ideas among themselves for knowledge creativity.
ii. Government should equally make provision of ICT facilities in schools and among lecturers for knowledge building and practical task performance. These technological devices when made available would create instructional enhancement in the school system.
iii. University administrators should make proper management of ICT facilities in the school system for staff and students' upgrade/ development.
iv. Government should make sound ICT policy/project implementation strategy in university institutions for the growth of students and institutional development.
v. Government should equally stabilize electricity generation in the country for proper utilization of ICT facilities available in the school. This would help in proper management of the available ICT facilities in the school system.

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