INFLUENCE OF LECTURERS' VARIABLES ON THEIR VERSATILITY TO INTEGRATE INFORMATION AND COMMUNICATION TECHNOLOGY FOR INSTRUCTIONAL DELIVERY IN OGUN STATE

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Abstract
The integration of ICT facilities for learning, particularly in institutions of higher learning in Nigeria requires skills, competency and versatility from lecturers. However, most of the teachers in Nigeria institutions at all levels do not have the needed experience and competence in the use of ICT facilities for educational purposes. The study employed descriptive research of the survey type. A total of 261 (125 males, 131 females) lecturers were purposively sampled from colleges of education in Ogun State. A researchers-designed questionnaire was used to elicit information from the respondent and the instruments was tested for reliability using Cronbach Alpha and 0.71reliability coefficient was obtained. The research questions was answered using percentage while independent t-test statistics was used to test the hypotheses at 0.05 level of significance. The findings revealed that lecturers are versatile in the integration of ICT facility for instructional delivery, there was no significant difference between male and female lecturers on their versatility to integrate and there was no significant difference between experienced and the less experienced lecturers on their versatility to integrate ICT facilities for instructional delivery. Based on the findings, it was recommended that female lecturers are to redirect their focus on the use of ICT for instructional delivery and not for entertainment alone.
Key words: ICT, Versatility, and Lecturers Variables

Introduction

The use of ICT in education and training has been a priority in some African countries during the last decade, but progress has been uneven (Pelgrum, 2014). In most developing countries such as Nigeria, schools have embedded the use of ICT in teaching and learning into the curriculum and demonstrate high level of effective and appropriate use to support teaching and learning Organization for Economic Cooperation and Development, (OECD, 2014). Research shows that many Higher education use ICTs as a communication tool between teachers and students, teachers and teachers and students and students (Stensaker, 2017). This ICT- supported communication makes it easy to have immediate feedback from students and teachers alike on an array of subjects of mutual interest. Inadvertently, social skills which play a key role in learning are acquired as members learn to live and work with each other. The extensive use of social media among students also helps in this regard.

ICT has gained credence as a means for effective study of other subjects. Olorunsola (2007) stated that ICT assists in delivering instructions directly to learners by allowing them to interact with designed lesson that has been programmed into the system. Daramola and Adegbija, (2012) enumerated the benefits of ICT in our school system to include promotion of learners' empowerment, enhancement of learning performances, improvement of human welfare and ensuring satisfaction of people basic needs. These laudable benefits cannot be realized in our tertiary schools if ICT facilities are not available and effectively utilized in teaching and learning.
An effective use of ICT facilities in Nigeria Institutions can have immediate positive impacts on the school learning environments by creating more dynamic interaction between students and lecturers, creating collaboration and teamwork in problem solving activities, stimulating creativity in both students and

lecturers, and helping students to control and monitor their own learning (Oludotun, 2005). Similarly, the use of ICT in teaching and learning is a relevant and functional way of providing education to learners that will assist imbibing in them the required capacity for the worth of work. Moreover, the need for the review of technological tools by Nigeria lecturers is very crucial because lecturers' readiness is very important to the success or failure of integrating ICT into instructions.

Integration of ICT for instructional delivery refers to making use of available ICT tools or facilities with much needed skills and pedagogical knowledge. Integration is an art of combining or adding parts to make a unified whole (Drake & Burns, 2012). In view of this, Morrison and Lowther (2002) described ICT integration as having lecturers and students use the computer as a tool rather than a delivery system for drill-and practice of basic skills. They pointed out that when the computer is integrated as a tool, students and lecturers apply the same skills used to analyze and manipulate information in the workplace. The argument is that by using the computers in this manner, students learn lesson objectives as well as develop real-life knowledge and skills. Morrison and Lowther (2002) maintained that this type of integration supports teaching practices that emphasize a student-centered, open ended leaning environment in which realistic contexts for leaning are used.

The integration of ICT in the classroom creates a more inclusive learning platform which kindles interaction there by removing passivity (Ibeh, Adamu & Owoseni, 2007). Similarly, Olorundare (2006), asserted that ICT is important in teaching and learning as it guarantees unrestricted access of teachers to relevant information and development in subject area as well as the provision of efficient and effective tools to take care of students' individual differences. ICT plays a vital role in the development of any nation. It has been an instrument for achieving social, economic, educational, scientific and technological development (Aribisala, 2006).

ICT has greatly influenced the educational sector especially on teaching, learning and research. The application of ICT is not only emphasized in corporative business and the industrial sector, but it is an essential part of education at all levels (Bandele, 2006). ICT, including computers, is generally believed to foster cooperative learning, provide more information and, through simulation, make complex learning experiences easier to understand. Therefore, the use of ICT cannot be ignored either by lecturers or by students.

Versatility is referred to as ability to perform many things competently. Collins, (2015), noted that ICT versatility means ability of lecturers to use various ICT facilities competently to access, manage, integrate and evaluate information, develop new understanding and communicate effectively in the society. Versatility allows one to adapt to many different situations. One's versatility will make one to adapt to the required 21 century skills which to be ICT compliant (Mudasiru, 2016). Versatility can be earned through achievements in the following areas; conformation, agility and competence in a skill (Mudasiru, 2016). Kirschner and Woperies (2003), summarized the competencies required by teacher/lecturer in ICT application in education to include, personal use of ICT; competent mastery of series of educational models that make use of ICT; adequately competent to make use of ICT as mind tools; competent to make use of ICT as a tool for teaching; competent in mastering an array of assessment standards which make use of ICT and competency in understanding the policy scopes of the use of ICT for instructional delivery.

Colleges of education are teacher educational institutions for the training of middle level manpower. The Colleges admit and train candidates for three years after Senor Secondary School education for the award of the Nigeria Certificate in Education (NCE). Graduates of the Colleges of Education can teach at the pre-primary, primary and junior secondary school levels of Nigerian educational system after their programme (NCCE, 2006).

Gender had been established to be a factor in all field of human endeavor. Gender refers to as socio attribute and opportunity associated with been a male or female in the mutual relationship (Kolo, 2006). Kolo (2006) supported that most of the studies showed more of the male and female favored differently across the world.

The distinction between male and female in the use of ICT for instructional delivery cannot be neglected. For ICT to be properly integrated in higher institution of learning, male and female lecturers should be given equal opportunities for proper utilization. Kolo (2006), concluded in a study carried out in Botswana that lecturers in higher institution have the same perception of factors of effective instruction. Both male and female lecturers were given equal opportunity for academic and professional training to qualify them for teaching at all levels of education in the country. Male and female lecturers contribute effectively to instruction, so they are expected to be treated equally. More so, the integration of ICT could also be traced to the teaching experience.

There is a common adage that says experience is the best teacher. This could mean that the years spent in the university teaching and carrying out research using ICTs to garner more academic experience could be correlated. Chukwuemeka (2010) reported that less experienced teachers are more knowledgeable in the use of ICT and the Internet than moderately and highly experienced teachers. Bamidele and Olayinka (2012) revealed that there was a significant difference of teachers' teaching experience on their perception of integrating mobile phones to teaching. Similarly, Wang, Ertmer and Newby (2014) reported that there was significant difference in the years of experience of teachers on the usability of computer software. Perceptions of lecturers' experience could be traced to the usefulness and ease of use of ICTs that subsume mobile technologies for research collaboration.
Akubuilo (2015) agreed with the fact that years of teaching experience play a significant role and is a factor in the lecturers' use of mobile technologies for teaching and research. Conversely, Onanuga (2016) was of the opinion that more years spent on the job renders most lecturers ill-productive in all aspects, becoming lazy and uncommitted to the teaching profession. Whether these assertions are true or not, the fact remain that the length of time spent in an environment or job will definitely influence the perceptions of usefulness, ease of use and adequacy of using the technologies.

Qualification is a quality or accomplishment that makes someone suitable for a particular job or activity or the action of the fact of becoming qualified as a practitioner of a particular profession or activity. Lecturers' qualification is a necessity to his/her productivity. Tenson (2003), found that lecturers' qualification account for far more variation in student's achievement. The author further reiterated that compared teachers with higher qualification to the teachers with lower qualification in teachers' education programmes. The results showed that the teachers with higher qualification had greater input on students' performances and it's also increased greatly than teachers with lower qualification. Higher qualifications are very important to students' achievements and environmental development, due to these, lecturers of colleges of education are expected to be qualified in order to integrate ICT for instructional delivery, realizing the roles and benefits of ICT integration colleges of education in Ogun State.

Statements of the Problem

The integration of ICT facilities for learning, particularly in Nigeria higher institutions of learning requires skills, competency and versatility from teachers/lecturers. Yusuf (2005) and Onasanya (2010) noted that most of the teachers in Nigeria institutions at all levels do not have the needed experience and competence in the use of computer for educational purposes; neither do they have the needed skills and knowledge in the use of computer software. In fact, most of the available ICT facilities for instructional purposes has not been explore by college of Education lecturers for instruction neither versatile in the use of such facilities. It is in the light of this that this study attempts to investigate the influence of lecturers' variable on their versatility to Integrate Information and Communication Technology for Instructional Delivery in Colleges of education in Ogun State, Nigeria.

Objective of the Study

The investigated colleges of education lecturers' versatility to integrate ICT for instructional delivery. The study examined the lecturers' versatility to integrate ICT facilities for instructional delivery in Colleges of education in Ogun State; the influence of gender on lecturers' versatility to integrate ICT facilities for instructional delivery in Colleges of Education in Ogun State; the influence of lecturers' years of teaching experience on the versatility to integrate ICT facilities for Instructional delivery in Colleges of Education in Ogun State and the influence of lecturers' qualification on their versatility to integrate ICT facilities for Instructional delivery in Colleges of Education in Ogun State.

Research Question

What is the lecturers' versatility to integrate ICT facilities for instructional delivery in Colleges of Education in Ogun State?

Research Hypotheses

H01: There is no significant difference between male and female lecturers on their versatility to integrate ICT facilities for instructional delivery

H02: There is no significant difference between experienced and less-experienced lecturers on their versatility to integrate ICT facilities for instructional delivery.

H03: There is no significant difference between qualified and less qualified lecturers on their versatility to integrate ICT facilities for instructional delivery.

Methodology

The study was a descriptive research using survey design. This method enabled the researcher to describe events just as they appear without the manipulation of external researchers. The target population consisted of all lecturers in the colleges of Education in Ogun-state, Nigeria. The sample size was all lecturers in the selected colleges of Education in Ogun State. Purposive sampling techniques was used to select 300 respondents across the institutions while Israel model (2013) was used to determine the sample size of the respondents used for the study.

The instrument for this study was a researcher's designed questionnaire and it was validated by the researcher's supervisor and three educational technology lecturers in the Department of Educational Technology, University of Ilorin, the experts reviewed the questionnaire for its appropriateness, content coverage in terms of acceptability, adequacy and relevance to the stated objectives. Their comments, suggestions and corrections were used to produce a final draft of the instrument. The reliability of the questionnaire used in this study was achieved by administering twenty copies of the questionnaire on twenty lecturers at Kwara State College of Education Ilorin and the result of the pilot-study were analyzed using Cronbach Alpha to ascertain the internal consistency of the instruments. The results were 0.78 on lecturer's versatility to integrate ICT facilities. The result showed high internal consistencies of the items in the research instruments. Hence the result was adjudged to be reliable for the study. The researcher personally administered 300 questionnaires to the respondents and was able to collect only 261that is, 95% from the respondents. The collected data were analyzed using descriptive and inferential statistics. Mean and t-test were used to analyze data for the research questions and hypotheses with the aid of statistical package for social science (SPSS) version 20.0 at 0.05 level of significant.

Results

Research Question One: What is the lecturers' versatility to integrate ICT facilities for instructional delivery in Colleges of Education in Ogun State?

Table 1:
Versatility to Integrate ICT for Instructional Delivery

S/N	Items	Mean
1	I have enough skills in booting Computer	3.29
2	I have adequate skills to use Computer	2.92
3	I have enough skills in using Computer to keep students record	3.22
4	I am skillful in using Microsoft word to type question for my students	3.08
5	I can use different Computer operating system for instructional delivery	3.18
6	I have enough skills in using MS PowerPoint in presenting lectures	3.06
7	I have enough skills to browse the internet to search material to teaching my students	3.13
8	I am skillful in opening e-mail address for me and my students	2.94
9	I can develop educational website	1.88
10	I can use presentational software and other media to supplement lectured	3.25
11	I can prepare ICT-based learning materials	2.30
	Grand mean	**2.93**

A grand mean of 2.93 was obtained from lecturer's versatility to integrate ICT for instructional delivery in Table 1. This is above the average mean of 2.5 which implies that lecturers are versatile in the integration of ICT facility for instructional delivery.

H_{01}: There is no significant difference between male and female lecturers on their versatility to integrate ICT facilities for instructional delivery.

Table 2:
Lecturers versatility to integrate ICT facilities for instructional delivery based on gender

Gender	Frequency	Mean	SD	Df	T	Sig (2-tailed)	Remarks
Male	125	34.74	4.44	259	0.86	0.39	Accepted
Female	136	34.23	5.01				

From table 2, it can be deduced that there was no significant difference between male and female lecturers on their versatility to integrate ICT facilities for instructional delivery. This is reflected in the results of the hypotheses tested; df (259) t= 0.86, 0.39 > 0.05. Thus, the hypotheses is accepted. This means that the hypotheses which states that ''there is no significant difference between male and female lecturers on their versatility to integrate ICT facilities for instructional delivery'' is accepted. The implication therefore is that, lecturers' versatility to integrate ICT facilities in instructional delivery does not differs based on gender.

H_{02}: There is no significant difference between experienced and the less experience lecturers on their versatility to integrate ICT facilities for instructional delivery.

Table 3:
Lecturers Versatility to Integrate ICT Facilities Based on Experience

Experience	N	Mean	SD	df	t	Sig (2-tailed)	Remarks
Experienced	119	34.32	4.71	259	-0.47	0.64	Accepted
Less experienced	142	34.60	1.78				

From table 3, it can be deduced that there was no significant difference between experienced and the less experience lecturers on their versatility to integrate ICT facilities for instructional delivery. This is reflected in the results of the hypotheses tested; df (259) t= -0.47, 0.64> 0.05. Thus, the hypotheses was accepted. This means that the hypotheses which states that there is no significant between the experienced and the less experienced lecturers on their versatility to integrate ICT facilities in instructional delivery is accepted. The implication therefore is that, the lecturers' versatility to integrate ICT facilities does not differs based on experience.

H03: There is no significant difference between qualified and less qualified lecturers on their versatility to integrate ICT facilities for instructional delivery.

Table 4:
Lecturers Versatility to Integrate ICT Facilities in Instructional Delivery Based on Qualifications

Qualification	N	Mean	SD	df	T	Sig (2-tailed)	Remark
Qualified	236	1.11	0.24	259	0.56	0.57	Accepted
Less-qualified	25	10.44	2.32				

From table 4, it can be deduced that there was no significant difference between qualified and the less qualified lecturers on their versatility to integrate ICT facilities for instructional delivery. This is reflected in the results of the hypotheses tested; df (259) t= 0.56, 0.57> 0.05. Thus, the hypotheses was accepted. This means that the hypotheses which states that there is no significant between the qualified and the less qualified lecturers on their versatility to integrate ICT facilities in instructional delivery is accepted. The implication therefore is that, the lecturers' versatility to integrate ICT facilities does not differs based on experience.

Discussion

The results of the lecturer's versatility to integrate ICT facilities for instructional delivery in Colleges of Education in Ogun State gave a strong indication that lecturers are versatile in the integration of ICT facility for instructional delivery. These findings agreed with the earlier findings of Collins, (2015), whose findings indicated that ICT versatility gives lecturers' ability to use various ICT facilities competently to access, manage, integrate and evaluate information, develop new understanding and communicate effectively in the society. The findings also concur with the previous findings of (Mudasiru, 2016) whose findings revealed that Versatility allows one to adapt to many different situations. One's versatility will make one to adapt to the required 21 century skills which to be ICT compliant.

Results of the analysis related to influence of lecturers 'gender on their versatility to integrate ICT facilities for instructional delivery revealed that there is no significant difference between male and female lecturers on their versatility to integrate ICT facilities for instructional delivery. The results of the mean scores indicated that lecturers' versatility to integrate ICT facilities in instructional delivery does not differs based

on gender. These findings agreed with the previous findings of Kolo (2006), whose study concluded that lecturers in higher institution have the same perception of factors of effective instruction. Both male and female lecturers were given equal opportunity for academic and professional training to qualify them for teaching at all levels of education.

Lecturers' versatility to use ICT facilities for teaching based on years of teaching experience revealed that there is no significant difference between experienced and the less experience lecturers on their versatility to integrate ICT facilities for instructional delivery the results of the mean score also indicated that both experience and less experience lecturers does not differ in their versatility to use ICT. The findings refute the earlier findings of Chukwuemeka (2010) whose study reported that less experienced teachers are more knowledgeable in the use of ICT and the Internet than moderately and highly experienced teachers. The study could not validate the previous findings of Bamidele and Olayinka (2012) whose study revealed that there was a significant difference of teachers' teaching experience on their perception of integrating mobile phones to teaching. Similarly, the study is inconsistent with the previous findings of Wang, Ertmer and Newby (2014) who study reported that there was significant difference in the years of experience of teachers on the usability of computer software.
Lecturers' versatility to use ICT facilities for teaching based on qualification revealed that both lecturers' versatility to integrate ICT facilities does not differs based on experience and there was no significant difference between qualified and the less qualified lecturers on their versatility to integrate ICT facilities for instructional delivery. The finding refutes the earlier findings of Tenson (2003), whose findings indicated that lecturers' qualification account for far more variation in student's achievement. The author further reiterated that compared teachers with higher qualification to the teachers with lower qualification in teachers' education programmes. The results showed that the teachers with higher qualification had greater input on students' performances and it's also increased greatly than teachers with lower qualification.

Conclusions

The study concluded that available ICT facilities can be explore for instructional purposes since the colleges of education lecturers are versatile in the usage of ICT facilities. The study also concluded that Task and assignment that will involves the use of ICT facilities should be given to lecturers without gender bias. This implied that lecturers' gender is not a barrier as to the use of ICT for leaning in Nigeria College of Education,

Recommendation

The study recommends based on the findings that female lecturers are to redirect their focus on the use of ICT for instructional delivery and not for entertainment alone.

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