INFORMATION COMMUNICATION TECHNOLOGY (ICT) FOR EFFECTIVE TEACHING AND LEARNING IN GUIDANCE COUNSELLING

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Abstract

This study examined the influence of information communication technology and effective teaching and learning of guidance and counselling in Nigeria. The study used descriptive design of the survey type. The research instrument employed was a self-designed questionnaire titled ICT and effective teaching learning in guidance and counselling. The sample consists of 350 samples both students and academic staff of the college of education. The sample was selected using multistage random sampling. The students were selected using simple random sampling while the staffs were selected using purposive sampling techniques. Three hypotheses were generated to guide the study. Percentage, mean score and inferential statistics were used for data analysis. The result indicates that information communication Technology (ICT) facilities for counselling are limited in the University. The results also indicate that the level of information communication technology is very low. Based on findings of the study, it was recommended that government should make available ICT facilities in counselling laboratory of the UNN Ikere Campus in other to help facilitate effective guidance counselling and learning.

Keywords: Information, Communication, Technology and Counselling.

Introduction

The educational system in Nigeria is a technical aspect of education which involves the process of transmitting the societal norm and values towards the development of the nation. It is believed that educational goals in term of its relevance to the need of the individual as well in terms of the kind of society desire in relation to the environment and realities of the modern world and rapid social changes should be clearly set out (FGN, 2004).

Olelewe & Nzeadibe, (2014), explained that the importance of educational resources cannot be over emphasized and that functional literacy such as computer literacy and ICT skills will continue to elude the nation if some levels of relevant ICT resources are not available. Hence, it will be extremely difficult for Nigeria to achieve the Millennium Development Goal in education by the year 2015. The MDGs explicitly recognize the interdependency between functional literacy, poverty eradication and sustainable manpower development. The millennium project aims at proposing the best strategies for meeting the MDGs and at the same time developing a concrete action plan that can be utilized by the world to reverse grinding poverty, hunger and disease affecting people around the globe.

Utilization according to Ebiwolate (2015) is the proportion of the available time a system is operating. It can also be viewed as a fraction of a specified time period that is actually used to produce quality work. It therefore becomes imperative that availability and adequate utilization of educational resources in some rural communities of Enugu State be explored to determine their applications for knowledge delivery as well as its

relationships between resources availability and performance towards achieving universal primary education goal no.2 of Millennium Development Goals

The bid to meet the nation's education goal and aspiration brought about the 6-3-3-4 system of education. It was designed to restructure and inject functionality into the nation's school system of education. The 6-3-3-4 system of education was seen as a creditable programme able to bring about effective changes in the direction of technological development in a nation.

The essence of incorporating guidance and counselling into the school system was to eliminate overwhelming ignorance of many people in their choice of career prospects and personality maladjustment among school children. The training of teachers in different subject areas as discipline involves various method of approach and operation. The discipline of guidance and counselling centres on systematic study of the principles and skill pertinent to all aspects of operations, resources and administration. As new concepts of learning have evolved, teachers and lecturers are expected to facilitate learning and make it meaningful to individual learners rather than just to provide knowledge and skills. Modern developments of innovative technologies has provide new possibilities for teaching profession, but at the same time have placed more demand on lecturers and teacher to learn how to use these new technologies in their teaching (Anyira,2011). The integration of ICTs in teaching of guidance and counselling as a course in tertiary institution came as burning need on how to improve on the physical, social, political cultural, scientific and technological environment that we live in.

It is therefore paramount that effective teaching and learning which a means of sustaining quality education should be high on the agenda of any nation's educational policy which is strongly focussing on student outcomes, the characteristics of the schools and classrooms. It is therefore worthy of note that the use of ICT in teaching and learning will assist in reducing the lecturer's workloads through its use for lecture preparation and instructional delivery, individualized and collaborative learning as well as learning evaluation. Thus, teachers become learning facilitator, collaborator, coach, mentor, knowledge navigator, and co-learner and not only a dispenser of knowledge (Ogwo, 2005). Instructional content can be delivered in textual, audio, visual, and audio-visual forms. Thus, equity can be ensured for all categories of learners (disabled and geographically disadvantaged learners that cannot attend regular school etc.). The educational reform policies have aimed at integrating the use of ICT, particularly the computer, in the Nigerian school system. With the introduction of computer at all levels of education in Nigeria since 2004, computer studies is yet to gain wide acceptance into our primary and post primary schools owing to challenges facing its effective implementation both as a tool for teaching and as a subject of study (Tella, 2014).

Teaching effectiveness recognizes that teacher effects such as teacher behaviours, classroom climate and pupils/ teachers' interaction are four to five times more important than school effects Information technology is all about the technologies that aid in the communication process of passing messages from sender to the receiver. Okenwa (2008) observe, that technologies have advanced into development of communication and multimedia equipment that are capable of accepting data, processing data into information and both the data and information for future use and reference purposes.

Internet has become the choice of information assessment and dissemination, for many people. According to Mbakwem (2008) it is a global connection of many different types of computer network linked together. It is an electronic network that makes it possible for people to interact access and exchange information. He noted that computer-based technology include; teleconferencing machine, computer electronic books (e-books) computer graphics technology, instructional satellite, video conferencing and web television. In Europe and America, a vast majority of students now study in schools and classrooms with computers and some form of internet access has increased rapidly during the past decade. Virtually all schools in Europe and America have internet access in at least one location, more so most classroom have internet access.

He observes that by 2001 an estimated 99 percent of public school and 87percent of instructional rooms had internet connections.

E learning covers a broad set of applications, and processes, including web-based learning, computer-based learning, virtual classrooms and digital collaboration (Nweke,2007). Onuoha (2008) noted that education at the beginning of the century faced important challenge, such challenge includes how to provide high quality education and training, but education systems all over the world have tried to over-come the challenges by developing new approaches.

In Nigeria, one of the greatest challenges that universities are faced with is that of introduction of ICT into Nigerian schools. It is widely spread that graduates, especially those recruited locally by private companies, could not make use of computers which are the fundamental tools of operations in these companies due to inadequate computers and insufficient trainings (Awake 2008). Studies carried out on secondary school students' usage of ICT shown students ICT compliance are below expectation (Olademi and Oladieyo 2006). Bolaji (2007) and Kelly (2004), while describing Nigeria position in global technology area noted that, there is a gap between average Nigeria student's knowledge in computer skill and the computer skill of the students from other countries around the world. It has generated high levels of enthusiasm and commitment during the counseling process as well as increased resaving ability of learners, increases attention and concentration. Anyamene, Nwokolo and Anyachebelu (2010) noted that the array of information provided through counseling would help tremendously in production of professional competent graduates, introduction of ICT in the University system is a huge boost to education at that level. The provision of ICT facilities in the counselling centers pre supposes that counselors and students use them to improve counselling awareness, adjustment and learning. Agabi (2010) opined that investment in ICT based curriculum should be utmost in government priorities especially with the COVID-19 pandemic which compelled every institution to go electronic. In order to plan, design and implement ICT in the country there is a dire need of strong and committed professionals in the field and adequate facilities are required for the implementation of ICT in schools and institutions. It is doubtless if the college has enough computer aids and sufficient training both the students and lecturers the duo would carry out academic activities at their convenience. For example, lecturers will be able to engage their students in online lectures, assignment delivery, project assessment, there will be positive and sufficient teaching learning interactions that can enhance better performance in achieving the desire academic goals in guidance and counselling.

Meanwhile it is on record that the management of the college of education Ikere has invested a lot in the ICT infrastructure in various laboratories and library, even a complete ICT center was put in place apart from the College Computer Resource Center. However, teachers and students seem not well disposed to the use of the facilities. Even those assessing the facilities seem to be using them for other motive than academic. Moreover, Smith& Collins (2016) assert that the counselor's role is to provide the leadership necessary to manage the school counseling program and ensure effective strategies to implement counseling standards and effectiveness requires that counselors should incorporate new ICT ideas to facilitate learning to meet their counseling needs (Anderson, 2001). Given the importance of ICT and counseling and its need at the Universities levels of student's education, therefore the application of ICT in counselling becomes vital in improving teaching and learning.

Statement of the Problem

Educators at the teaching profession (especially at the tertiary level) needs to be able to exploit the potential of ICT to meet his or her teaching objectives.

Educators at the College of Education level must not only equip themselves but equip trainees to evaluate examples of ICT, both during their training and in their future employment; to make sound judgments about when, when not and how to use it, and to become confident and competent users of it.(Oghenetega,

Oyenike & Ugulu, 2014).) ICT in education improves engagement and knowledge retention: When ICT is integrated into lessons, students become more engaged in their work. This is because technology provides different opportunities to make it more fun and enjoyable in terms of teaching the same things in different ways.

From the foregoing, the researchers observed that in spite of the availability and implementation of guidance and counselling and information technology in the tertiary institution like University of Nigeria, Nsukka Ikere study centre. The use of information communication technology for effective lecture delivery still appears very slow and in abeyance with the school effort to make all lecturers ICT compliant. Although, several studies have been carried out by educational scholars on the impact of guidance counselling and information technology in schools, but the researchers are specifically set to examine the influence of information communication technology on effective lecture delivery in guidance and counselling in UNN Ikere Campus.

Purpose of the Study

The purpose of the study is to determine the difference between ICT and effective teaching and learning in Guidance and Counselling, specifically to determine the availability and usage of ICT among lecturers and students of Guidance and Counselling

Research Questions

1. Will availability of ICT facilities influence the effectiveness of teaching and learning in Guidance and Counselling?
2. What is the influence of usage of ICT on students' and lecturers effectiveness in the teaching of Guidance and Counselling?
3. Challenges of ICTs will not influence effective teaching delivery in Guidance and Counselling?

Research Hypotheses

Ho$_1$: There is no significant relationship between the available ICT facilities for counselling students and effective teaching learning in guidance and counselling?

Ho$_2$: There is no significant difference between the use of ICT facilities by counselling lecturer/students and effective teaching learning in guidance and counselling.

Ho$_3$: There is no significant difference between the problem militating against the use of ICT facilities and effective teaching delivery in guidance and counselling?

Methodology

The study employed the use of descriptive design to survey, describe the phenomenon of study in a factual and accurate manner and, also make assertions and generalizations in the tested hypothesis. The research instrument employed was a self-designed questionnaire titled ICT and effective teaching learning in guidance and counselling   the population of this study consists of the students and academic staff of the school of education. , UNN, College of Education Ikere-Ekiti Campus.

Sample and Sampling Techniques: The sample consists of 250 students and 100 academic staff of the college of education. The sample was selected using simple random sampling. The students and staff were selected across the five schools of study in the college.

Instrumentation: For the purpose of this study the research instrument used for data collection was designed for both the student and the lecturers. The questionnaire consists of two section: A and B. Section A was to gather information on the teacher's personal data while section B consist of the student response and lecturers to certain question base on their teaching of guidance and counseling. The questionnaire was validated using face and content validity. Experts in the arrears of Test and Measurement and Counselling were provided with copies for their assessment and endorsement after necessary corrections. The reliability of the instrument was ensured through the use of test re-test method and a correlation coefficient of 0.71 was obtained which was adjudged high enough to make the instrument usable. Questionnaires were administered directly by the

researcher to both the lecturer and student with the cooperation of the concerned Deans and Heads of Departments. The performance of the student in their last examination was also taken through the examination officer. In the process of administration, verbal explanation was given to the respondents and they were also assured of confidentiality of all the information.

Data Analysis

The spearman rank correlation co-efficient analysis was used in this research work in analysing the data collected, this is because it was considered appropriate by the researchers for testing significant relationship between variables.

Testing of Hypotheses

Hypothesis One: There is no significant relationship between the available ICT facilities for counselling students and effective teaching learning in guidance and counselling? This hypothesis will be tested based on items 1,2,3,4,5, as contained in the questionnaire.

Table 1: Summary of the relationship between availability of ICT infrastructure and effective teaching learning.

Variable	Data 1	Data 2	Rank 1	Rank 2	D	D^2
A Computer Peripherals	150	200	4	2	2	4
B. Lighting Facilities	130	220	3	3	0	0
C. Computer Tables	100	250	2	4	-2	-4
D. Micro Films	50	300	1	5	-4	-16
E Stabilizer	250	100	5	1	4	16
						$\sum d^2 = 0$

Calculating the spearman rank correlation coefficient of the ranked data:

$$R = 1 - (6 \sum d^2)\, 1 - [6\,(0)] = 1 - \frac{(0)}{5\,(5^2-1)} \qquad 5(25 - 1) \quad 1 - \frac{(0)}{120}$$

$R = 2 - 1$

$R = 0$

Analysis of the result

Spearman correlation coefficient calculated $= 0$

Spearman rank correlation coefficient tabulated $= 0.900$

From all indications, r calculated is less than r tabulated, that is r calculated $(0) < $ r tab (0.900). Therefore, the hypothesis is hereby rejected. There exists negative relationship between availability of ICT and effective teaching learning in the university college.

Hypothesis 2: There is no significant relationship between the use of ICT facilities by counselling lecturer/students and effective teaching learning in guidance and counselling. Items on level of ICT usage were used to analyse the data.

Table 2: Summary of the relationship between the use of ICT and effective teaching learning.

Variable	Data 1	Data 2	Rank 1	Rank 2	D	D²
A. Availability of internet facilities	5	345	2	4	-2	-4
B. Online interactions	10	340	4	2	2	4
C. Accessibility to Computers	5	345	3	3	0	0
D. Doing assignment on internet	0	350	1	3	-2	-4
E. Checking result in the mail.	40	310	5	1	4	16
					$\sum d^2 =$	20

Calculating the spearman rank correlation coefficient

$$R = 1 - \frac{(6\sum d2)}{n(n^2-1)} = 1 - \frac{[6(20)]}{5(5^2-1)} = 1 - \frac{[20]}{5[25-1]}, \qquad 1 - \frac{(20)}{[5(24)]} = \frac{1-20}{120}$$

R = 1 – 0.16

R = 0.44

Here, spearman rank correlation coefficient calculated = 0.44

Spearman rank correlation coefficient tabulated = 0.900

Therefore, r calculated [0.44] is lesser than r tab (0.900) we reject the alternate hypothesis and accept the null hypothesis. Since the alternate hypothesis is lesser than the null hypothesis, there is significant relationship between the uses of ICT by the counsellors in effective teaching learning in the college.

Hypothesis Three: There is no significant relationship between the problem militating against the use of ICT facilities and effective teaching learning in guidance and counselling?

Table 3: Summary of the relationship between the problem of ICT and effective teaching learning.

Variable	Data 1	Data 2	Rank 1	Rank 2	D	D²
A. Inadequate telecommunication infrastructure	20	330	1	5	-4	-16
B. limited number of computers.	330	20	4	2	2	4
C. Constant power supply	340	10	5	1	4	16
D. Lack of internet provider	300	50	2	4	-2	-4
E lack of standby generators.	320	30	3	3	0	0
					$\sum d^2 =$	0

$$R = 1 - \frac{(6 \sum d2)}{n(n^2-1)} = 1 - \frac{[6(o)]}{5(5^2-1)} = 1 - \frac{0}{5(25-1)} = \frac{1-0}{5(25-1)} = \frac{1-0}{5(24)} = 120$$

R = 1 – 0

R = 0

Therefore, spearman rank correlation coefficient calculated = 0

Spearman rank correlation coefficient tabulated = 0.900.

From all indications, r tabulated is greater than r calculated i.e. r tab (0.9) > r calculated (0.8). We accept the null hypothesis and reject the alternate hypothesis. This is to show that there are a lot of factors militating against the use of ICT in effective teaching learning in the area.

Discussion

The result of the findings showed that the respondents accepted that information technology facilities which are provided to an extent in the universities include computer with peripherals, stabilizer, scanner, it means that provision of other ICT facilities is grossly inadequate. On this, Okenwa (2008) stated that the option available for information technology include computer, electronic books, computer graphics technology, instructional television programs, motion films, live broadcast satellite, video conferencing and web television. It is one of the means of bringing reform in the field of counselling. On the level of use of ICT resources in counselling students, the findings showed that information and communication technology is not often used in counselling students to improve their learning. This does not augur well, the result is not in line with the findings of Chin-Chun (2006) who repeated ICT usage in counselling. Also, Olademi and Oladieyo 2006, Bolaji 2007 and Kelly 2004 observed high levels of enthusiasm and commitment by teachers in using ICT in counselling students. The finding demands that counsellors should incorporate the use of ICT to facilitate learning to meet their counselling needs (Anderson 2001). On the problems that affect the use of information technology facilitates in these universities, the respondents accepted that the major problems include inadequate telecommunication, lack of standby generators, constant power failure, limited number of computers, and lack incorporation of ICT in schools. This is in line with the views of Grant (2004) who noted that adequate facilities are required for implementation of ICT in schools. From the study, the use of ICT has not started impacting on the students learning. The findings also revealed ways of enhancing ICT counselling in schools. The result showed that every item was rated positive with mean above the criterion mean. In their highest ordering, ways of enhancing counselling in schools, having alternate power supply, providing internet outlet, having computer peripherals, having enough personnel, adequate furniture and computerized rooms. The importance of these facilities cannot be overemphasized. Therefore, the provision of ICT facilities in the resource centres would go a long way in enhancing ICT counselling in schools. Counsellors and students can use ICT to improve counselling learning.

Conclusion

Information technology facilities are relatively provided in the college, On the level of use of ICT resources in counselling students information and communication technology is not often used in counselling students to improve their learning. It was largely accepted that the major challenges include lack of standby generators, constant power failure, limited number of computers, and inadequate incorporation of ICT in schools. This concludes that ICT will give a good footing and show case the essence of incorporating guidance and counselling into the school system was to eliminate overwhelming ignorance of many young people on their choice of career prospects and personality maladjustment among school children.

Recommendation

In view of the above it was recommended that lecturers should give their students assignments that require e-learning, improve their use of the internet for counselling and emphasize use of the internet as a tool for e-learning to gain more professional knowledge and help students in their learning.

- Government should provide ICT facilities for students, counsellors and lecturer in higher institution.
- Electricity is very essential and should be provided in universities so that counsellors, teachers and students will participate in the information and communication technology age.

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