Availability and Use of Information and Communications Technology Resources for Counselling University Students in South East States, Nigeria.

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Abstract

The study investigated the extent of availability and use of information communication technology resources for counselling university students in south east universities, in Nigeria. The respondents comprise 10,800 students drawn from the nine universities in the south east, Nigeria. The instrument was validated by two experts in guidance and counselling. One from Nnamdi Azikiwe University, Awka and another from Ebonyi State University, Abakaliki. A test re-test method of reliability was used and a reliability co-efficient of 0.81 was obtained. Percentage and mean scores were used for data analysis. The results indicate that information communication technology (ICT) facilities for counselling are limited in the universities in the south east states, Nigeria. The results also indicate that the level of Information Communication Technology is very low. Based on the findings of the study, it was recommended that government should make available ICT facilities in counselling laboratories in all universities in other to help facilitate counselling and learning.

Keywords: Availability, usage, ICT resources, students

1. Introduction

The Internet has become the medium choice, for many people in information assessment and dissemination. According to Mbakwem (2008) it is a global connection of many different types of computer networks linked together. It is an electronic network that makes it possible for people to interact, access and exchange information. Information technology is all about the technologies that aid in the communication process of passing messages from the sender toe the receiver. Okenwa (2008) observes that technologies have advanced into the development of communication and multimedia equipment that are capable of accepting data, processing data into information and storing both the data and information for future use and reference purposes. 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 (Yasamin, 2007). Biggs (2008) also observes that access to computers and the Internet has increased rapidly during the past decade. Virtually all schools in Europe and America have Internet access in at least one location, moreso most classrooms have Internet access. He observes that by 2001, an estimated 99 percent of public schools and 87 percent of instructional rooms had Internet connections. On the part of Spencer (2000), E-learning covers a broad set of applications and processes; including web-based learning, computer based learning, virtual classrooms and digital collaboration. Onuoha (2008) noted that education at the beginning of this century faced important challenges. Such challenges include 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 universities have faced was the introduction of ICT into the Nigeria economy.

It is widely spread that graduates, especially those `recruited by local and multi-national private companies, could not make use of the computers which are the fundamental tools of operations in these companies (Awoke 2008). Studies carried out on secondary school students ICT adoption, show students ICT compliance to be below expectation (Olademi &Oladikpo 2006, Bolaji, 2007 and Kelly, 2004). While describing Nigeria's position in global technology arena they noted that there is a gap between average Nigerian student's knowledge in computer skills and the computer skill of other students from other countries around the world. Tookiji(2007) emphasized that these students need counselling to improve ICT skills before graduation.

Counselling is a form of education, which the students receive from their counsellors. Palmer (2007) states that counselling is an educational process used in solving problems of the learner. Research findings from Chin-Chun (2001) and Phrema (2006) have reported significant positive impact of ICT on counselling. It has generated high levels of enthusiasm and commitment during the counselling process as well as increased reasoning ability of learners, increased attention and concentration (Green and Yello 2002, and Chin-Chun 2001). Anyamene, Nwokolo and Anyachebelu (2010) noted that the array of information provided through counselling would help tremendously in production of professionally competent graduates. ICT introduction at the university system is a big boost to education at that level.

The provision of ICT facilities in the resource centers presupposes that counsellors and students can use them to improve awareness, adjustment and learning. Shiran (2001) has opined that investment in ICT facility will help in counselling and other support services necessary for effective delivery of an ICT-based curriculum should be utmost in government priorities. In order to plan, design and implement ICT in the country there is a dire need of strong and committed professionals in this field and adequate facilities are required for the implementation of ICT in schools. Literature review on successful ICT implementation in countries like Japan, Malaysia, Spain and Israel has shown great emphasis on ICT implementation at primary school level with adequate facilities. The incorporation of ICT into the school has shown great impact on the students of these countries. They have incorporated ICT into curriculum at different levels in schools. The teachers and counsellors were trained in this area so that they can integrate technology in the class (Vogt & Odental, 1996, Venezky & Davisah ,2004). The different studies on ICT implementation at school level has shown that the thinking process of these students has been improved considerably with the help of different tools used in the classroom.

Smith & Collins (2006) note that the counsellor's role is to provide the leadership necessary to manage the school counselling program and ensure effective strategies to implement counselling standards. Effectiveness requires that counsellors should incorporate new ICT ideas to facilitate learning to meet their counselling needs (Anderson, 2001). Given the importance of ICT and counselling and its need at the university levels of student's education, therefore the application of ICT in counselling becomes vital in improving students learning.

The basic questions are:

Are there ICT facilities for counselling students available?
To what level do counsellors use ICT facilities in counselling students?
What are the problems militating against the use of ICT facilities?
What are the ways of enhancing counsellor and students usage of ICT?

2. Method

The design of the study was survey. The study was carried out in the south east universities of Nigeria. A total of nine (9) universities namely, Nnamdi Azikiwe University, Awka, Anambra State. Anambra State University, Uli, University of Nigeria Nsukka. Enugu State University of Science and Technology,Enugu,Ebonyi State University, Abakiliki. Imo State University, Owerri, Federal University of Science and Technology, Owerri. Abia State University Uturu and Umudike Federal University of Agriculture, Umuahia. All the students in all the universities constituted the population. Proportionate stratified sampling technique was used to select 10,800 students from the nine universities. The instrument was a structured questionnaire developed by the researchers. The instrument was validated by two experts in Guidance and Counselling and measurement and evaluation. The reliability analysis yielded co-efficient of 0.81 . the instrument was therefore deemed reliable for the study. The researchers adopted a direct approach in the administration of the instrument to the respondents. By this method, copies of the questionnaire were taken to respondents' universities and administered personally with the help of 18 research assistants who were duly oriented.

The direct approach facilitated instant collection. The data was analyzed using percentage and mean. Responses that attracted mean ratings of 2.50 and above were accepted while those with mean ratings below 2.50 were rejected.

3. Results

3.1 Table I shows the availability and non-availability of ICT facilities in the Universities used in counselling and learning.

3.2 Table 2 reveals that 82.01 % of students do not have enough computers. 82.01% of them indicated that their schools do not have internet facilities. 17.05% have access to computers in their school. 59.44% indicated that their counsellors do give them assignments in the internet. and 10% indicated that they do on-line counselling with their counsellors. 11.49% indicated that they check their results in the mail.

3.3 Table 3: shows that the level of adoption or usage of Information Communication Technology in the universities in south-east states. The results indicated that information and communication technology is rarely used in counselling students.

3.4 Table 4 reveals that students strongly agree that the five(5) items are constraints to the use of ICT facilities in counselling.

3.5 Table 5, reveals that all the items are ways of enhancing counselling in the schools.

4. Discussion

The result of the findings showed that the respondents accepted that information technology facilities which are provided to an extent in the nine universities include computer with peripherals, stabilizer, scanner. It means that the provision of other ITC facilities is grossly inadequate. On this, Okenwa (2008) stated that the options available for information technology include computer, electronic books, computer graphics technology, instructional television programmes, 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 ague well, the result is not in line with the findings of Chin-Chun and Phrema (2006) who reported ICT usage in counselling. Also, Green and Yello (2002) and Chun-Chun (2001) observed high levels of enthusiasm and commitment by teachers in using ICT in counselling students. The findings demand 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 stand by generators, constant power failure, limited number of computers, and lack of internet provider in school. The result showed that lack of these facilities affect the implementation of ICT in counseling. Lack of incorporation of ICT into the school would have negative impact in students learning. There should be adequate facilities for the implementation 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 have 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 item 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 resourse centres would go a long way in enhancing ICT counselling in schools. Counsellors and students can use ICT to improve counselling and learning.

4.1 Conclusion

Globalization and information revolution is increasingly changing the learning process in higher education in Europe and America. Globalization has challenged higher institutions in Nigeria and in particular South East Universities to face new type of learning involving the use of ICT facilities to improve counselling.

It has been observed that there is a lack of ICT infrastructure in schools. It is recommended that attention must be given to the availability of ICT facilities in schools. The availability of Internet services at school will help the counsellors and students. Therefore,

- Government should provide ICT facilities for students, counsellors and lecturers in higher institutions.
- 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.
- The Universities should have counselling labs provided with air conditioners as well as standing generating sets to preserve the facilities and counter the effect of persistent power outage.
- Counsellors should give their students assignment that requires e- learning.
- University counsellors should improve their use of the Internet for counselling. They need to use the Internet as a tool for e-learning to gain more professional knowledge and help students in their learning.

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6. Tables

Table I: ICT Facilities in the Universities for Counselling

S/N	ITEMS	AVAILABLE	NOT AVAILABLE
1	Computer with peripherals	√	
2	Lighting Facilities	√	
3	Computer Tables	√	
4	Micro Films		√
5	Scanner	√	
6	Stabilizer	√	
7	Generating sets		√
8	Digital Microphone		√
9	Adequate Furniture	√	
10	Electronic Tables		√
11	Counseling Data Base Management Systems		√
12	Computerized Classrooms		√
13	Electronic Books (E-books)		√
14	Audio Recorder		√
15	Various types of Soft wares		√
16	CD Rom		√
17	Screen For Projection		√
18	Instructional Video		√
19	Printers in Labs		√
20	Television Programmes		√

Table 2: Students' Response on Availability and use in ICT.

S/N	ITEMS	YES	%	NO	%
1	Do you have enough computers in your university?	1842	17.05	8858	82.01
2	Do you have internet facility in your school?	(1842)	17.05	8858	82.01
3	Do you go to browse in your counseling lab?	(2596)	24.04	(8204)	75.96
4	Do you do on-line counseling with your counselors?	(1080)	10	(9720)	90
5	Do you have access to computer in your university?	(6520)	59.44	(4380)	40.56
6	Do your counselors ask you to do your assignments in the internet?	(6420)	59.44	(4380)	40.56
7	Do you check your results in the mail?	(1240)	11.49	(9560)	85.51

Table 3: Mean of Students Responses on level of use of ICT Resources

S/N	ITEMS	MEAN	INTERPRETATION	DECISION
1	Information search	1.2	Very low	
2	Exchange of mails	1.6	Very low	
3	Use of power point	1.1	Very low	
4	Internet	1.1	Very low	
5	Micro computer based lab	1.2	Very low	
6	Enhancing computer skills	1.8	Very low	

Table 4: The Mean Scores of Students on the Problems Militating Against the Use of Information Communication Technology Facilities in Counseling.

S/N	PROBLEM	$\bar{X}$	DECISION
1	Inadequate telecommunication infrastructure	2.82	Accepted
2	Limited number of computers	3.41	Accepted
3	Constant power failure	3.56	Accepted
4	Lack of internet provider in school	3.43	Accepted
5	Lack of stand-by generators	3.72	Accepted

Table 5: Mean Responses of the Student on Ways of Enhancing Counseling in Schools

S/N	WAYS OF ENHANCING COUNSELING	$\bar{X}$	DECISION
1	Providing more computers to schools	3.89	Accepted
2	Providing alternative power to supply	3.87	Accepted
3	Providing internet outlet	3.81	Accepted
4	Exposing students to on-line counseling	3.66	Accepted
5	Having adequate furniture	3.63	Accepted
6	Having computerized classrooms	3.61	Accepted
7	Having computer peripherals	3.72	Accepted