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Impact of the Knowledge and Utilization of Information and Communication Technologieson Students' Academic Performance in School of Midwifery, Makurdi, Nigeria

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ABSTRACT: This study investigatedthe level of knowledge and the extent of use of Information and Communication Technologies (ICTs)among students of School of Midwifery (SOM), Makurdi in Benue State,Nigeria.Specifically, the work was carried out to ascertain whether students' level of knowledge has significant influence on the use of ICTs in SOM, Makurdi.Three research questions and one hypothesis guided the study. Census survey design was adopted for the study,as the population of the study consists of all the students of SOM, Makurdi.A researcher-based questionnaire titled "Knowledge and Use of ICTs Questionnaire" (KUICTQ) containing 11 items was developed and used for data collection. Mean and standard deviation were used to answer the research questions. A cut-off point of 2.50 was used for decision-making arising from the analyses. Mean scores from 2.50 and above was accepted as having influence, while mean scores below 2.50 was accepted as otherwise. Chi-square (χ^2) statistics was used in testing the hypothesis at 0.05 alpha level of significance.Findings revealed that, students of SOM Makurdi mostly made use of ICTs for purposes other than for academic purpose.Findingsof the studyfurther revealed that students' level of knowledge has significant influence on use of ICTs in School of Midwifery, Makurdi. It was therefore recommendedamong others that; government, individuals and organizations should join hands to facilitate the provision of the required ICT materials in SOM, Makurdi, the management and staff of SOM, Makurdi should provide, for use, relevant educational software packages that will meet the needs of teachers and students so as to evoke positive use and competence from the teachers and students as they use technologies. It also recommended that, SOMstudents should keep pace with developmental trends in e-learning.

Keywords: Information and Communication Technologies (ICTs), ICT Knowledge, ICT Utilization, Academic Performance.

I. INTRODUCTION

Modern development in Information and Communications Technology (ICT) has resulted in tremendous progress in the area of communication and information dissemination, which contributed in making the world more interactive. This made transactions to emerge between people who may never meet. Also, ICT seem inexpensive and accessible easily throughout the globe. Certainly, these permit instantaneous personal dialogue and communication between people around the world.

In the words of Kofi Annan, speaking at the World Summit on the Information Society, "A technological revolution is transforming society in a profound way. If harnessed and directed properly, information and communication technologies (ICTs) have the potential to improve all aspects of our social, economic and cultural life." One of the key developments in health care in the last 25 years is the incursion of information and communications technologies. Computers are everywhere; doctors use computers to record progress notes, nurses use computers to transmit orders to other departments and in patient care, pharmacists use computers to

order medication and view a patient profile. For the most part, all healthcare workers use computers.

Recently, the development of ICT gradually replaces the traditional teaching pedagogy. Face-to-face classroom interaction is getting replaced by on-line communication, traditional white or blackboard is getting replaced by interactive whiteboard, and books or printed resources are getting replaced by on-line resources. It is believed that technology can bring our education sector from the Dark Age to the Light Age. This is because the implementation of ICT in schools can bring about some potential benefits (Huffaker, 2003).

Education is central in the survival and growth of human being as individual and as society.However, across the ages, people have devised various techniques for communicating their thoughts, needs and desires to others. In early civilized times, people achieved adequate communication through speech and written messages. Little wonder, Adeyinka, Adedeji, Majekodunmi, Adika and Adeyinka (2011) observe that, communication in teaching and learning situation were mainly teacher-centered education system in the past. Adeyinka,et al (2011) reveals further that, the conventional way of teaching was the practice at this point in time. In this kind of situation, the teacher was looked upon as the sole source of knowledge while the students were "mere recipients" of the teacher's information while the "chalk and talk" method were the principal methods in delivering lectures to students and pupils in schools.

Information and Communication Technologies (ICTs) refer totechnologies that provide access to information through telecommunications. It is similar to Information Technology (IT), but focuses primarily on communication technologies. This includes the Internet, wireless networks, cell phones, and other communication mediums (Ofodu, 2007). In his attempt to define ICT, Ochogwu (2017) explains that it is an umbrella term that studies any communication device, encompassing radio, television, cellular phones, computer, network hardware and software, satellite systems and so on, as well as various services and applications. ICT may be seen as a broad subject whose concepts are evolving. It covers any product that will store, retrieve, manipulate, transmit, or receive information electronically in a digital form (e.g., personal computers, digital television, email, or robots). Consequently, the National Information Technology Policy (2010) makes it clear that ICT includes any equipment or interconnect system of equipment that is used in theautomatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission or reception of data or information resources. The Policy equally sees ICT as computers, ancillary equipment, software and hardware, as well as similar procedures, services (including support services) and related resources.

Additionally, considering its wide area of application, we have become conversant with the use of such terms as e-nursing, e-commerce, e-banking, e-medicine, e-government, e-learning and e-education just to mention but few. To show how such aspects of life revolve round technology. This is means that Information and Communication Technology (ICT) has affected all aspects of life and has become an indispensable part of our contemporary world (Okolije, 2015). Globally, the emergence of ICT has stimulated rapid development in all sectors of the economy, especially in the socio-cultural and political spheres of life (Akanbi in Olatokun&Adeboyejo, 2009). ICT is redefining the way almost everything is done and is a ready tool for all strata of the society (Ajayi, 2003). It has transformed the world into a large global connected community and plays an increasingly important role in people's lives (Danner, 2013).

Previous studies like those of Idowu, Cornford and Bastin (2008) and Kambi (2005) also highlighted advantages and disadvantages that nations, institutions and industrial sectors would face if they did not position themselves to harness and implement ICTs as tools for leveraging their activities in the emerging global economy.However, in the educational sector, ICT has been continuously linked to quality of cognitive, creative and innovative outcomes (Adeosun, 2010). ICT is often perceived as a catalyst for change in learning approaches and in access to information and can help by providing alternative possibilities for education (Watson, 2005; Casal in Danner, 2013). For both social and economic reasons, students will need ICT skills to live successfully in a knowledge-based society (Danner, 2013).Invariably, the knowledge, access and use of ICTs are integral part of education in many parts of the globe (Ololube, 2006). The Use of different ICTs has become inevitable for students in learning. By using modern ICTs, students retrieve required information within a short time. It has the potential to become cost-effective as it offers greater flexibility regarding time and location of teaching and learning, (UNESCO, 2010). It also provides greater flexibility to adapt teaching and learning to meet

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the learners' cognitive and learning styles. ICT offers the learners the opportunity to work at their own pace. ICT enhances the quality of learning where its use is tailored to lesson objectives and the needs of the learner (Betts, 2011). The use of ICTs in teaching is a functional way of providing education to learners that will assist in imbibing in them the required capacity for the world of work. Very few jobs today do not require the use of skills in technology, collaboration, teamwork and information. All these can be acquired through teaching and learning with technology. ICT fundamentally changes the way we live, learn and work.

In-as-much as ICTs plays a pivotal role in teaching and learning in School of Midwifery, Makurdi, it has its challenges. Information communication and technology (ICT) is a fairly new era of importance in education especially in developing countries like Nigeria. Due to the technicalities involved, there is the need for teachers to understand how it can affect the teaching and learning situation. Without the teacher being knowledgeable enough in the use of ICTs, he cannot create change and make meaningful impact in his learners. Teachers' knowledge has a great impact on the effective application of ICTs because the teacher needs to understand the sequential presentation of the instructional gadgets that will suit the interests of the learners and it appropriateness with the instructional tasks (Urenyere, 2012). Other problems are; inadequate computers, poor power supply and broken down computers among others.

Moreover, ICT tools used by both teachers and students inSchool of Midwifery, Makurdi are computers, internet, telephone, mobile phone, digital camera, overhead projector, scanners, photocopier and their accessories. Other ICT materials include; compact disc read-only memory (CD-ROM), teleconferencing, audiocassette tapes video tapes, interactive television, electronic board, optical fibers, electronic notice board, slides, radio, among others (Ajayi, Ekundayo & Haastrup, 2009).

In view of the above, students-midwives have the obligation to use various instructional aids including modern ICT tools during their course of learning. This is because ICT is redefining the way almost everything is done and is a tool for all strata of the society including nursing education. Students who are unaware of existing ICTs may lose an important opportunity to make use of the positive features of ICT (cheap, safe, effective and accessible) as well as learn accordingly. The knowledge, access and extent of use of ICTs during teaching and learning of midwifery students are unknown. Studies carried out in Nigeria on ICT use were, among others, the Reproductive Health Workers (Wole & Olufunke, 2009), ICT use in Nigerian secondary schools (Ajayi, Ekundayo & Haastrup, 2009). ICT literacy among undergraduates in Nigerian Universities (Adetimirin, 2012). The present study was conceived based on the fact that, to the researcher's best knowledge, there has not been any study done on ICT knowledge, access and use among students of school of midwifery, Makurdi, Benue State Nigeria.

The National Policy on ICT in Education and Framework launched in 2010 presents a holistic and broad vision for ICT integration in the education sector in Nigeria. This Policy moves beyond a basic technology literacy approach. The Policy focuses on leveraging technology to transform the roles of the teacher and the learner in the classroom. However, in developed countries, the use of ICT by teachers and students in education has been widely studied and documented especially the positive influence of ICT in education (Kay, 2006; Murray, Nuttall & Mitchell, 2008). Studies have also been conducted on the use of ICT by students in learning in developed countries where the use of same has advanced and where there are resources and materials to maintain them (Adeyinka, Adedeji, Majekodunmi, Adika & Adeyinka, 2011).

Students' academic performance means getting required marks according to the standards set. It also refers to the measurement of students' achievement across various academic subjects (Public Policy, 2023).

Furthermore, very few studies have been carried out in Nigeria on the use of ICTs in education (Ololube, 2015). These studies were limited to attitude and competence in the use of computers by academic and non-academic staff in Nigerian higher institutions. Unfortunately, there were limited documented studies on the degree of knowledge, accessibility and use of ICTs in education generally in Nigeria, and none was found in relation to nurse educators' and student-nurses'/student-midwives'knowledge, accessibility and use of ICT in nursing education. Hence, the researcher observe that some undergraduate midwifery students find it difficult to use ICT resources on their own to carry out basic learning activities such as sending of e-mails, presentation of seminars and online registration of their courses, among others. Equally, the researcher observes that both undergraduate and postgraduate research works are supervised mostly via use of paper and pencil materials as against how a friend of one of

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the researchers who studies in Southern Africa is being supervised on-line.

Ugwuanyi, Chiegwu, Osuagwu and Ogbu (2017) carried out a study on knowledge and utilization of ICT among radiography students in South East Nigeria.The research revealed that most of the students had good knowledge of information and communication technology (ICT) and had received training. Most of their knowledge of ICT was based on Microsoft office. Almost all the Radiography students in South East Nigeria had one ICT facility or the other and their ownership increased with their level of study and most radiography students in South East Nigeria use ICT facilities for class assignments and social networking/recreation.

The results of a study by Abubakar (2015) carried out on utilization of mobile technology among nurses in primary and secondary healthcare settings in Osun State, showed that the level of nurses' knowledge ofICTs in the State were average; there was high adoption of mobile technology among the nurses, particularly mobile phone and laptop PC. The workalso revealed that the nurses' main driving force for the use of mobile technology was general knowledge update.

Edudu-Eyo, Ante and Emah (2011) carried out a study titled "Use of ICT and communication effectiveness among secondary school administrators in Akwa-Ibom State, Nigeria".The result showed that the extent of school administrators in the use of ICT was high, which meant that most secondary school administrators use ICT which confirms that secondary schools' administrators in the study area were literate in the use of ICT for their routine administration of schools.

Adeyanju and Olakeye (2010) carried out a study on utilization of ICT in the effective management of schools in Ekiti State public secondary schools. The result revealed that computers are used for typing, processing and storage of data which enhanced the effective administration of the various schools. However, the study revealed that ICT equipment like the internet services, printers, photocopying machines, Xerox and handsets were only occasionally utilized due to non-availability of this equipment. The study indicated a low-level utilization of ICT equipment in the schools.

Another research carried out by Challo, Marshall and Marshall (2005) on level of availability, effectiveness and utilization of computer technology among high school Mathematicsteachers in the instructional process in Cross River State, Nigeria".The findings revealed that computer technology is useful in instructional procedures and in the student learning process. The findings also showed that the teachers had problems accessing computers. Thus, recommended there was strong need for more curriculum-based software.

Fansanmi (2003) carried out a study titled 'relationship between ICT utilization and administrative effectiveness in eight tertiary institutions in Ekiti State'.Findings of the research revealed that ICT facilities were readily available and that the administrators of the tertiary institutions had access to selectICT facilities, but the level of ICT utilization was very low.

Purpose of the Study

This study investigated students' knowledge, accessibility and use of ICTs in School of Midwifery (SOM), Makurdi.The specific objectives of the study were to:

i. ascertainthe level of knowledge and use of ICTs among students of SOM, Makurdi;
ii. investigate the extent of use of ICTs by students of SOM, Makurdi; and
iii. determine whether theknowledge and use of ICTshave significant impact on students' academicperformance in SOM, Makurdi.

Research Questions

The following research questions were raised to guide this study:

i. What is the level of knowledge of ICT among students of SOM, Makurdi?
ii. To what extent do students of SOM,Makurdi make use of ICTs?
iii. Doesknowledge and use of ICTs have significant impacton students' academic performance in SOM, Makurdi?

Hypothesis

The following null hypothesis was formulated and tested at 0.05 level of significance:

H_0: Knowledge and use of ICTs have no significant impacton students' academic performance in SOM, Makurdi.

Conceptual Review

ICT can be described as a complex varied set of goods, applications and services used for producing, distributing, processing, transforming information, telecoms, television and radio broadcasting, hardware and software, computer services and electronic media (Ozorji, 2010). ICT represents a cluster of associated technologies defined by their functional usage in information access and communication, of which one

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embodiment is the Internet. Bandele (2006) sees ICT as a revolution that involves the use ofcomputers, internet and other telecommunication technology in every aspect of human endeavour. He also posited that ICT is simply about sharing and having access to data with ease. ICT is often associated with high-tech devices, such as computers and software, but ICT also encompasses more "conventional" technologies such as radio, television and telephone technology (UNESCO, 2013).

ICT is regarded as the super highway through which information is transmitted and shared by people all over the world. Jimoh in Ozoji (2010) defines ICT as the handling and processing of information (texts, images, graphs, instruction, etc.) for use, by means of electronic and communication devices such as computers, cameras, and telephone. Ofodu (2007) also refers to ICT as electronic or computerized devices, assisted by human and interactive materials that can be used for a wide range of teaching and learning as well as for personal use. From these views, ICT could simply be defined as processing and sharing of information using all kinds of electronic device, an umbrella that includes all technologies for the manipulation and communication of information.

Theoretical Review

Planning Model for the integration of e-learning is the theory underpinning this study. The theory was developed by the Conference Board of Canada in 2001. The Planning model is used to integrate e-learning in workforce development. It is used in ICT mediated learning where careful planning is required to avoid pitfalls, such as: allowing decisions to be driven by technology, overlooking existing educational and ICT systems, unclear statements of objectives to be achieved and underestimating the front-end and ongoing funding requirements.The model for Integration of ICT has four distinct phases: Planning, Building,Integrating and Improving.

E-Learning Planning Process

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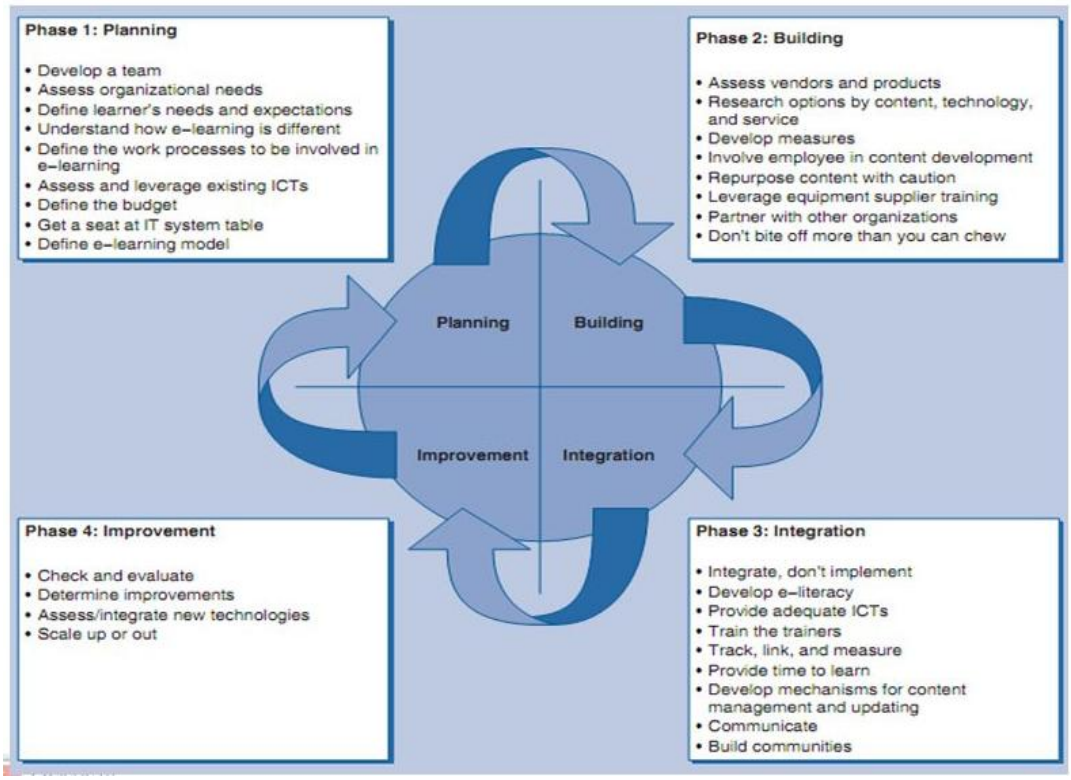

Figure 1: Planning model for integrating ICT in education
Source: The Conference Board of Canada as cited in Murray(2008, p.26)

Application of the Planning Model for Integrating ICT to the Study

Three distinct phases of planning model for integrating ICT: planning, integration and improvement may explain the decision-making process that informs the use of ICT among students and teachers, as discussed below:

- **Planning phase:** An organization, teacher or student who intends to use ICT inteaching or learning assesses the needs of the organization, teacher or learner (student) in relation to the capacity of the learning technologies. Assessment of previous e-learning experience and benefits of ICT should also be made. Description of how ICT will be used as well as determination of the cost of ICT materials should also be made.
- **Integration phase:** The aim of this phase is to promote ICT integration amonginstructors (teachers) and learners (students) by providing professional development and collecting data as the process evolves. Integration means collaborative approach that can assist in building successful ICT community. E-learning programmes such as Computer appreciation, Microsoft word and Microsoft access to assist learners in becoming familiar with ICTs can be developed. Provision of adequate ICTs to ensure availability and accessibility of ICT materials in sufficient quantities is equally involved in this stage. Adequate time to learn with ICT in line with content consideration should also be provided.
- **Improvement phase:** A teacher or student who uses ICT is in a position to identify thestrengths and weaknesses of those ICTs and also in a position to integrate technologies that facilitate and enhance learning.

Research Method

The area of this study is geographically confined to School of Midwifery, Makurdi. Makurdi Local Government Area (LGA) of Benue State has a population of 4,780,389 persons with (NPC, 2006).

The target population of the study comprised of students of School of Midwifery, Makurdi categorized as follows; Year One = 162, Year Two = 83 and Year Three = 37, Total population = 282.No specific sampling technique was use due to manageable size of the population.Hence, the sample consists of all the students.

Census survey design was adopted for this study. Census survey is a study of every unit, everyone or everything, in a population. It is

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known as a complete enumeration, which means a complete count. The census survey design seeks to collect data from all the population with regard to students' knowledge and extent of use of ICTs among students.

A researcher-based questionnaire titled "Knowledge, Accessibility and use of ICTs Questionnaire" (KAUICTQ) was developed and used for data collection. It contained 11 items which measured variables of the study, the instrument was presented on a 4-point positively rating scale with response format of Strongly Agree (SA)=4, Agree (A)=3, Disagree (D)=2 and Strongly Disagree (SD)=1.The instrument was divided into Sections I and II respectively.

In confronting the validity of the instrument, both face and content validity were ensured. Besides thorough scrutiny by an ICT Professional Educator who ascertained the clarity of items, appropriateness in grammar, construct being measured, the instrument along with the objectives of the studies were given to other experts for validation; an expert in Measurement and Evaluation/ICT Instructor and a Nurse Tutor,all from School of Nursing and Midwifery, Makurdi. These resource persons were requested to vet theitems in terms of clarity of words and appropriateness to the target population, add any item which is relevant but was not included in the instrument and to remove irrelevant and ambiguous statements in order to improve the structure of the items on the instrument. The instrument was reviewed, restructured and rearranged to meet the requirement of the study. Every advice was appropriately incorporated into the instrument. The instrument was adjudged valid by the experts.

Reliability of Instrument

In order to ascertain the reliability of the items on the questionnaire, a pilot study was carried out. 30 students of School of Nursing, Makurdi who were not part of the study but possessed similar characteristics with the research sample were randomly selected for the pilot study. The data collected were analyzed using Cronbach Alpha which is suitable for both dichotomously scored and continuous items to determine the internal consistency (reliability) of the instrument. The reliability index of 0.88 was obtained for the instrument.Therefore,the questionnaire usedforthestudy with this indexwasconsidered reliable.

The researcher personally administered the questionnaires upon permission from the administrators of the school. A total of 282 copies of questionnaires were administered to the respondents and retrieved on the spot using the face-to-face method. This was done in clusters according to category of students by admission year/Set.This approach was aimed at minimizing the instrument's attrition rate. Data from completed copies of questionnaires were collated for statistical analysis.

Descriptive statistics of mean and standard deviation were used to answer the research questions. A cut-off point of 2.50 was used for decision-making arising from the analysis. Mean scores from 2.50 and above was accepted as having significant influence (remarked as Agree), while mean scores below 2.50 was accepted as having no influence (remarked as Disagree).Chi-square (χ^2) statistics was used in testing the hypothesis at 0.05 alpha level of significance.

II. RESULTS

Results of this study have beenanalysed, presented and interpretation,as well as the tested hypothesis respectively.The presentation, analysis and interpretation of data organized around the five research questions have been presented in different tables with $\bar{X}$ as mean andSD as Standard Deviation.

Table 1: Mean and Standard Deviation on Knowledge and Use of ICTs by Students of SOM Makurdi

Item No	Item Description	$\bar{X}$	SD	Remark
1	Have you heard of ICT before?	3.11	0.88	Agreed
2	If agreed, through what source?	3.39	0.92	Agreed
3	Are you computer literate?	3.14	0.7	Agreed
4	If agreed, for how long have you been using computer?	3.14	0.95	Agreed

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5	Do you use computers in browsing the internet?	2.75	0.99	Agreed
6	Do your lecturers use data projectors in teaching?	2.89	1.01	Agreed
7	Do you use cell phones in browsing the internet?	2.83	0.9	Agreed
8	Do you make video conferencing?	2.84	0.91	Agreed
	Cluster mean/standard deviation	**18.89**	**5.61**	**Agreed**

Table 1 shows that the mean ratings for items 1 – 8 were above the cut-off point of 2.50. The cluster mean of 18.89 with the standard deviation of 5.61 is above the cut-off point of 2.50. This shows that students are computer literate and are making use of the available ICTs in SOM, Makurdi.

Table 2: Mean and Standard Deviation on Frequency and Extent of Use of ICTsby Studentsof SOM, Makurdi

Item No	Item Description	Frequency (f)	Percentage (%)	$\overline{X}$	SD	Remark
9	**How often do you make use of the ICT facilities?**			**3.19**	**1.25**	**Agreed**
	Daily.	16	5.8			
	Once in few days.	66	24.3			
	Once a week.	115	42.3			
	Once in a month.	0	0			
	Not at all.	75	27.6			
10	**What are your reasons for using ICT facilities?**			**2.7**	**0.61**	**Agreed**
	Personal purpose.	21	7.7			
	Academic purpose.	39	14.4			
	Other purposes.	212	77.9			
11	**What functions do you use ICTs for?**			**3.53**	**0.75**	**Agreed**
	Sending SMS.	6	2.2			
	Chatting with friends.	23	8.4			
	Making voice calls/ video calls.	63	23.2			
	Browsing the internet/sourcing for information.	180	66.2			
	Cluster mean/standard deviation			**0.71**	**0.87**	**Agreed**

Table 2 shows that the mean ratings for items 9 – 11 were above the cut-off point of 2.50. The cluster mean of 0.71 with the standard deviation of 0.87 is less than the cut-off point of 2.50. Thefindings showthat students of SOM Makurdi made use of ICTsmostly once a

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week(42.3%), once in few days(24.3%), or not at all (27.6%). Findings further show that students who use ICTs mostly use them for purposes other than academic purposes (77.9%), as 66.2% also indicated using ICTs for browsing the internet/sourcing for information.

Testing the Hypothesis

Hypothesis 1: Knowledge/use of ICTs has no significant impact on students' academic performance in SOM, Makurdi.

Table 3: Chi-square Test on whether Knowledge and Use of ICTs haveSignificant Impact on Students' Academic Performance in SOM, Makurdi

Opinion	Observed N	Expected N	Df	Level of Sig.	Chi-Square Calc.	P-Value
Strongly Agree	6	68	3	0.05	274.618	0.00
Agree	23	68				
Disagree	62	68				
Strongly Disagree	181	68				

From Table 3, the calculated Chi-square was 274.618; df=3; and p=.00<0.05. Since probability value of 0.00 is less than the Alpha level of 0.05, the null hypothesis which states that knowledge and use of ICTs have no significant impact on students' academic performance in SOM, Makurdi is, therefore, rejected, as findings of the study showed that students' level of knowledge and use have significant impact on students' academic performance in SOM, Makurdi.

III. DISCUSSION OF FINDINGS

The finding of this studyrevealedthat the students of SOM Makurdi are computer literate and are making use of the available ICTs in SOM, Makurdi.Thestudy also showed that the students made use of ICTs rarely for academic purpose and mostly for other purposes like browsing the internet or sourcing for information. The finding is in consonance with Ugwuanyi, Chiegwu, Osuagwu and Ogbu (2017) whose findings showed that most students hadreceived ICT training and had good knowledge of same, and that most of their knowledge of ICT was based on Microsoft Office Word and internet.However, this finding disagrees withFansanmi (2003) who found that ICT facilities were readily available and that the level of ICT utilization was very low.Findings of Adeyanju and Olakeye (2010) also disagree with this finding. Their study indicated a low-level utilization of ICT equipment in the schools.

Findingsof this study alsorevealed thatstudents of SOM Makurdi made use of ICTs mostly once a week (42.3%), or not at all (27.6%). The study also revealed that knowledge and use of ICTs have significant impact on students' academic performance in SOM, Makurdi.This finding agreeswith Hussain, Suleman, Din and Shafique (2017)who founded that ICT positively affects students' academic achievement.Again, the study by Adeyanju and Olakeye (2010),which revealed that ICT equipment like the internet services, printers, photocopying machines, Xerox and handsets were only occasionally utilized due to non-availability of theequipment, is in consonance with this finding.Hence, the study indicated a low-level utilization of ICT equipment in the schools. However, Mbaeze, Ukwandu and Anudu (2010) differthat,there was no statistically significant relationship between ICTs and students' academic performance.

IV. CONCLUSION

ICT has definitively transformed the teacher–student relationship, which implies a new kind of training for tomorrow's teachers. Students seem to be far ahead of their teachers in their use of the Internet to learn about the modern developments and they are sometimes better informed on their areas of study.One of the most important impacts of ICT on education is that tomorrow's professionals of diverse fields must be well prepared to cope with changing world's behaviours.This studyrevealsthat knowledge and use of ICTs have significant impact on students' academic performance in SOM, Makurdi.Hence, the research is of benefit to the nursing profession because it serves as an eye-opening tool to stakeholders in the nursing profession to appreciate and use ICTs in teaching and learning, as this

enhances their academic performance thereby translating into efficient application of same in their clinical practices.

Recommendations

In light of the findings of this study, the researcher therefore recommends the following:

1. Government, as well as individuals and organizations should join hands to facilitate the provision of the required ICT resources in SOM, Makurdi.
2. SOM Makurdi should ensure constantpower supply to ensure a steady use of internet services within the school premises.
3. SOM, Makurdi should provide for use the relevant educational software packages that will meet the need of tutors and students so as to evoke positive use and competence from the tutors and students as they use technologies.
4. SOM, Makurdishould keep pace with development in e-learning and improve conditions for teachers and students.

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