ASSESSMENT OF SCHOOL ENVIRONMENT WITH ICT FACILITIES IN TEACHING AND LEARNING; A STUDY OF SOME SELECTED SECONDARY SCHOOLS IN SOKOTO METROPOLIS

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ABSTRACT

This research focuses on the assessment of school environment with ICT facilities in teaching and learning, a study of selected schools in Sokoto metropolis. The study is descriptive in nature and uses a closed ended questionnaire on students and teachers use of ICT in teaching and learning. The total number of eighty one (81) students and eight (8) teachers responded to the instrument. It was revealed that school environments were conducive enough to enable effective use of ICT in teaching, school environment is essentially equipped with ICT facilities, students are not allowed frequent access to ICT facilities and teachers do not effectively use ICT facilities to aid teaching and learning. The study therefore recommended that teachers increase their competence in ICT, use ICT in teaching frequently so as to encourage and inculcate the habit of positive use of ICT in students and also students should be allowed accessibility to ICT facilities more often for the proper use of ICT in schools.

Keywords: ICT, Teaching, Learning, Environment, secondary schools

INTRODUCTION

Education in a general sense is a form of learning in which the knowledge, skills, values, beliefs and habit of a people are transferred from one generation to the next. This can be through storytelling, discussion, teaching, training and or research in education which may also include informal transmission of information from one human being to another. It is a process of learning and acquiring information. Formal learning in a school or university is one of the most common types;

though self-teaching and so called "life experiences" can also qualify. Communities around the world place a high value on educating people of all ages, whether formally or informally, it is widely believed that constant exposure to new ideas and skills makes people better workers, thinkers and societal contributors (Dewey 1944*)*.

The primary purpose of the teaching and learning process is to bring about in the learner desirable change in behaviour through critical thinking. This process does not take place in a vacuum but rather in an environment structured to facilitate learning. Stoner, Freeman and Gilbert (1996) described the environment of an organization as all elements relevant to its operation and they include direct and indirect action elements. School facilities, constitute the major components of both direct and indirect action elements in the environment of learning. Several studies have shown that a close relationship exists between the physical environment and the academic performance of students. Nwagwu (1978) and Ogunsaju (1980) maintained that the quality of education that children receive bears direct relevance to the availability or lack thereof of physical facilities and overall atmosphere in which learning takes place. The school facilities consist of all types of buildings for academic and non-academic activities, equipment for academic and non-academic activities, areas for sports and games, landscape, farms and gardens including trees, roads and paths. Others include furniture and toilet facilities, lighting, acoustics, storage facilities and packing lot, security, transportation, ICT, cleaning materials, food services, and special facilities for the physically challenged persons.

The art of teaching involves the use of both creative and demonstrating skills in enhancing the delivery of instruction. Teaching in the context of this study is a process of creating technology-based learning environment that will engage students in learner-centered activities that enable them to think, collaborate, construct meaning, and acquire knowledge, skills and attitude to foster learning. Okoro (2002) defined learning as a process by which knowledge, skills, habits, facts, ideas and principles are acquired through study, instruction or experience.

> Education is at the very core of economic development and a key to ending poverty. In the world economy today, every Nation's success depends on the education of its people. Information and Communication Technology (ICT) will increasingly be at the center of the education process. ICT offers new and creative ways to combine classroom experience, home learning, global outreach, and connectivity of the students and teachers to the burgeoning world of online learning. Classrooms everywhere, from primary schools to higher education, will be dramatically transformed in exciting and enriching ways. (Dewey*1944)* Mobile broadband has fundamentally changed the way we live our lives. The potential to the revolutinalize the field of education is just beginning. In fact, our latest figures (November 2013) show that mobile broadband subscription will surpass two billion in 2013, and mobile subscription will exceed 9.3 billion by 2019. This means that today a teacher or student with a mobile device has instant access to millions of articles books, essays, academic research, and instructions and lectures on every imaginable subject.(*www.Nigeria.com/mtn)*

The Networked Society has created an unprecedented platform to increase the availability of education for all. It can break down the barriers that used to exist between knowledge and traditional schools and the libraries that were the gatekeepers of this knowledge. It can simplify access to content and experts, overcoming traditional constraints of time, location and collaboration. And it can enable lifelong learning as children globally will need to develop their knowledge, skills and competence throughout their lives in an effort to improve income and grow as human beings.(www.elmoglobal.com)

"Connect to learn" is one of the most widely used ICT software in rural areas primary and secondary schools today, and this is due to its relevance in building a social foundations for the establishments of ICT to improve teaching and learning in rural schools today. However based on recent experiences, it is evident that ICT always comes with its own challenges especially in rural areas; these challenges can include its (ICT) need for sufficient power supply, adequate maintenance, making students to become lazy especially in areas of consulting literature for

research purpose etc. But be that as it may in spite all these challenges posed by ICT, it (ICT) always brought with it potential s, greater opportunities which if adequately utilized can always outweigh its (ICT) challenges. This study discuss ICT in teaching and learning structure, its integration and status in education sector, impact and the limitations to its infusion in the Nigerian educational system and suggests ways of improvement.

REVIEW

ICT (information and communications technology or technologies) is an umbrella term that includes any communication device or application encompassing radio, television, cellular phones, computer and network, hardware and software, satellite systems and so on, as well as various services and applications associated with them. Such as video conferencing and distance learning. ICTs are often spoken in a particular context, such as ICTs in (Rouse, 2005). Also, ICT is the digital processing and utilizing of information by the use of electronic computers. It comprises the storage, conversion and transmission of information (Okauru, 2011). The study, development, application, implementation, support or management of computer based information systems. The term is commonly used as synonyms for computers and computer network but it also encompasses other information distribution technologies such as television and telephones (Chandler, Daniel, Munday, I August, 2012.)

All the above definition shares a similar notion that information has to be generated and shared. They also assert that, such information must be digital or electronic. The definition generally do not restrict ICT and IT only computer, they mention telecommunication equipment (mobile phone, printers, scanners etc.) as well. They isn't much difference in the definition above however Margaret Rouse goes further to explain ICT as applying to software and not only hardware as seems to be the case in other definition. Therefore, ICT/IT is a general term that describes the process of creating modifying, storage and machine alike globally, using several different electronic technologies, to achieve an outcome (be it recreational or otherwise).

Learning by Means of ICT: ICT as an Educational Resource

ICT can be a helpful means to executing tasks more quickly and more efficiently and, in this way, (in) directly interferes with learning itself. In the meantime, this interference has become the central starting point for a large number of applications. As soon as ICT partly takes over the role of disseminator of (Meta cognitive) knowledge and skills, we speak of ICT-based learning. This means activities executed by the teachers and pupils themselves until now, with the aid of textbooks, handbooks and tests. The computer contributes to the social interactive learning process that provides ready knowledge or transforms information clusters into significant knowledge. ICT is used here in direct relation to concrete learning contents. There are three important dimensions of multimedia use ICT as instructor, assessor and supervisor.

Well known examples are the many application programmes and types of computer-based education by which the computer makes the pupils exercise specific learning contents on the basis of concrete instructions. Also a number of pedagogical computer games (so-called infotainment) have this function. Automated assessment systems offer teachers a number of advantages when drawing up, administering and assessing tests and examinations as well as processing them in clear tendencies and visual presentations. They save time and lead to quality improvement. These automated assessment systems are also designed to give the pupils the advantage to use them for self-assessment in each stage of the learning process. In this way they get a better understanding of the quality of their study approach and are better prepared to the actual final assessment. Besides giving assistance in course writing (or independent learning packages) by integrating the course content, this type of software also delineates pathways to absorb the learning content at one's own pace. They contain a lot of possibilities to help the pupil control his own learning process at his own speed, according to his own capacities.(Myungnghee*et al.,* 2011). (De Craemer, 1999).

You can speak of an intelligent tutoring system if it tries to take over the role of the individual coach. Such a program indicates how you can deal with different learning contents and study them. It is interactive as it

responds to the pupil's attitude and to the level of knowledge and mastery this attitude reveals. Just like a good teacher this system holds three types of knowledge: about the learning contents, about the pupil who uses the system and about the best strategy to support the pupil during his learning process. By means of an electronic learning environment the pupil is able to experiment step by step and to correct his errors immediately. Communicative and negotiation skills can be practiced virtually but in a sufficiently realistic way or within a real business environment.(Eurostat 2000).

Using ICT as an educational resource allows teachers to differentiate as regards learning content and assistance in the learning process. This leads to experiences of success among pupils and helps pupils who are tired of learning to enhance their motivation to learn. These extra possibilities are not an automatic consequence of the decision to introduce ICT as an educational resource in a teaching/learning environment. There are a number of reflections that could play a crucial role in the social interaction that is necessary in the learning process. Some people think that ICT and the Internet in particular are not yet able to meet the high expectations. Indeed, some sources emphasize that there is little proof of effective learning gains as a result of learning through multimedia. The same sources argue that ICT integration as regards support (the provision of infrastructure and training) is ahead of its educational aspects: the teaching methods and use of ICT. Compared to the many Policy plans and the focus on infrastructure, relatively little attention is paid to pedagogical research and development. The indicators designed in the framework of the European policy plan "designing tomorrow's education" are typical of this trend. Almost all of them relate to infrastructure (the much talked of pupil/computer ratios) and training. From this point of view, the criticism that didactics monitoring an efficient ICT integration are lacking, should be taken seriously. This does not necessarily mean that investments in infrastructure are superfluous. Indeed, it is evident from the preceding that a successful integration of ICT necessitates simultaneous measures in many fields. Developing teaching methods, building a modern infrastructure; promoting adapted educational resources and fostering a

permanent professional development are all part of that process, and a single aspect cannot be tackled without paying attention to another. However it should be clear to everyone that different actors are responsible for these different partial aspects. Each of the actors should be prepared to take this responsibility seriously. (European Education Partnership, 1999) (European Schoolnet 2000).

Other critics lay emphasis on the possible physical and psychological dangers of frequent computer use or of a premature introduction of it in education. We should also take these criticisms seriously. An adapted infrastructure, a well-balanced computer use and a correct ICT use are issues on which the awareness raising actions should focus. Finally, there is the critique that questions the added value of ICT – apart from learning. Until now, digital exchanges and participation in Internet forums did not stimulate social participation or reinforce social cohesion. Virtual communities appear to be rather poor reflections of social networks. These remarks are very true but should be confronted with the many and new possibilities of e-government and e-learning.

ICT as a Building Block of a Powerful Learning Environment

The different characteristics of ICT and the ways in which it can be used may prove to be an added value for learning and teaching. Indeed, ICT can boost the creation of an optimal teaching/learning environment, containing all components of the learning polymorph. In the most far-reaching implementation of a multimedia teaching/learning environment, all abovementioned educational potentialities of ICT are integrated. In such a powerful learning environment the pupil can choose between various (combinations of) media to carry out his learning tasks. There are written and oral texts, still and moving images and sounds. Moreover, this environment has the advantage that it is interactive and fosters communication with people from all over the world. Electronic learning environments have an extra added value as they enable teachers to exchange lesson preparations, course programmes and educational resources in a swift and efficient manner.(Feys 2000).

Furthermore, the initial knowledge as well as the expertise and the final skills of the learner can be checked with the aid of databases. On the basis of measurements the learning method and educational attitude of the learner can be discovered and then be translated in study hints and counseling. In this model, the learner is monitored to a high extent by programmes and materials (external monitoring), but also continuously makes choices himself (self-monitoring). He does not only base himself on the concrete situation but also on his experience with the assignments he has carried out until then. He can immediately obtain a definite answer because the online instructor follows and registers his movements and in addition gives him the opportunity or even instructs him to assess his progress. This teaching/learning environment model offers a wide range of possibilities to achieve the right balance between the independent search experiments of the learner and a sufficiently systematic guidance, taking the individual differences between pupils into account. It is evident that when describing this model it should be stressed that programmes and resources will never fully take over the necessary support and external monitoring of the learning process of the pupils. The teachers and peers still are important actors in the guidance and support of the learning process of each pupil, as learning will always be a social and interactive experience. During the learning process basic skills play a crucial role, as they stimulate explicit formulation of and reflection on opinions, strategies, lines of thinking and solutions.(Institute for Prospective Technological Studies (1999), (Holemans, 1999).

Undoubtedly, less far-reaching variations of the above-mentioned multimedia teaching/learning environment will emerge in the long run. These variations must allow the creation of an appropriate and, what is more, a powerful environment which does justice to the needs and capabilities of the pupils and provides for the necessary support and guidance by teachers and peers. A justified introduction of ICT should be directed at a maximum use of the possibilities and, simultaneously, at the prevention of a vision of education that is too technological.

Role of ICT in Education Sector

Nowadays, the role of Information and Communication Technology (ICT), especially internet in the education sector plays an important role, especially in the process of empowering the technology into the educational activities. Education sector can be the most effective sector to anticipate and eliminate the negative impact of ICT. Technologies (internet) in another side can be the most effective way to increase the students' knowledge. Being aware of the significant role of ICT (internet) in our life, especially in the educational activities, education authorities should be wise enough in implementing the strategies to empower ICT in supporting the teaching and learning process in the classroom. ICT is not just the bloom of the educational activities, but also it will be the secondary option to improve the effective and meaningful educational process. (OECD 2000).

The main purpose of the strategy for Information and Communication Technology Implementation in Education is to provide the prospects and trends of integrating Information and Communication Technology (ICT) into the general educational activities. There are some unavoidable facts in the modern education.

- The ICT has been developing rapidly recently, therefore, in order to balance it, the whole educational system should be reformed and ICT should be integrated into educational activities.
- The influence of ICT, especially internet (open source tool) cannot be ignored in our students' lives. So, the learning activities should be reorientation and reformulated, from the manual source centered to the open source ones. In this case, the widely use of internet access has been an unavoidable policy that should be anticipated by school authorities.
- The presence of multimedia games and online games by internet has been another serious problem that should be wisely handled by the educational institutions. The students cannot be exterminated from this case. They can have and do with it wherever and whenever they want. Schools, as a matter of fact, do not have enough power and time to prevent or stop it after school times. Meanwhile, most parents do not have enough time to accompany and control their children. So, the students have large opportunities to do with multimedia games or

online games or browsing the negative and inappropriate sites. Having been addicted, students will have too little time to study, and even do not want to attend classes, in such situations education institutions play an important role to eradicate these problems. One of which is by facilitating the students to do edutainment or educational games. Schools can let their students be familiar with educational games adjusted by their teachers. Besides, they can also support or facilitate their students to have their own blogs in the internet. A lot of Web Blog providers are free to the users, such as Word Press. In their blogs, the students can create and write something, like an article, poem, news, short stories, features, or they can also express their opinion by an online forum provided in the internet. They are able to share experiences throughout their blogs to others from all over the world. It will be an interesting activity for them, and it will lessen their time to visit negative and inappropriate sites.(OECD (1999), (OECD (2001).

By doing so, our young generation will get more and more information and knowledge by browsing in the internet. They can also create innovation in web design that may be out of the formal curriculum content, but it will be useful for their future.

- The implementation of ICT in education has not been a priority trend of educational reform and the country has paid little attention to it. Therefore they should be an active participation, initiative and good will of the schools and the government institutions to enhance ICT implementation at school.

- The teachers should be the main motivator and initiator of the ICT implementation at schools. The teachers should be aware of the social change in their teaching activities. They should be the agent of change from the classical method into the modern one. They must also be part of the global change in learning modification.

PROBLEM STATEMENT

Many pupils learn in crowded, poorly finish and unfinished classrooms, and often have to share scares textbooks. Many teachers are poorly qualified and poorly deployed, but in any case are often trying to do a good job with a minimum of basic resources. The curriculum is often

seen as too diverse and in some ways irrelevant for many of the pupils and their life needs. Many teachers, head teacher, and other education support staff, are poorly prepared for the management and quality assurance tasks demanded of their roles, but are also often trying to work to the best of their ability in isolated and under-resourced contexts. (Nigerian Educational Level Development Plan 2012). Having review relevant literature on this study, the focus still remain to assess school environment with ICT facilities in selected secondary schools within Sokoto Metropolis. To achieve the stated objective of the study, the following research questions were developed to guide the study

RESEARCH QUESTIONS

1. How conducive is the school environment with the use of ICT for teaching and learning?
2. How equipped are the school environment in providing ICT facilities?
3. What are the level of student commitment to the use of ICT for teaching and learning?
4. How effective are teachers using ICT in teaching?

METHODOLOGY

Population of the Study

The population of this study comprises of two secondary schools in Sokoto state metropolis, both are private schools. The number of students used in both schools i.e. Tarbiyya Academy and Iman international school is eighty one (81), while the number of teachers in both schools were eight (8). However the sum total of the SS II students of the two selected secondary schools together from which the sample is shown

Validation of Instruments

The closed ended questionnaires for the students and teachers were carefully structured and passed to the course supervisor, during the process, most of the questions were edited, moderated, reframed, altered or completely deleted and all the necessary corrections were affected by the researcher.

Reliability of the Instruments

The reliability for student's instrument was ascertained using Alpha crunch and the value was 7.05, while that of the teachers was 7.00 reliable. This indicated that the instrument is reliable for the research work. The instruments were subjected to pilot study; it was administered to forty (40) students and six (6) teachers from secondary schools across Sokoto metropolis. The data collected was computed using SPSS packages and the result indicted a strong reliability.

Method of Data Collection

The research was collected using two types of questionnaire, questionnaire on conduciveness of school environment, effective use of ICT facilities in learning for students and their performance. Then teachers conduciveness of school environment and competency in the their use of ICT facilities in the aching

Method of Data Analysis

Responses of the questionnaires were analyzed by means of simple statistical frequencies and percentages, the responses were thus presented in tables, with detailed interpretation and explanation. This is because simple frequency and percentages will give a clearer picture of the responses on each variable collected as the data of the research

RESULT AND DISCUSSION

Demographic Analysis of Students

This study was conducted to assess school environment with ICT facilities in teaching and learning of two secondary schools in Sokoto metropolis. The population of the study was: students 81(32.6%), teachers 8(6%).

Table 1. Responses of Students on School Environment

S/N	SCHOOL ENVIRONMENT	YES	%	NO	%
1	Are the school buildings enough for teachers	64	64	19	19
2	Are the school buildings enough for students	71	71	12	12
3	Do you have enough classrooms for students	76	76	7	7
4	Does the school have adequate toilets for teachers	54	54	29	29
5	Does the school have adequate toilets for students	69	69	14	14

Table 1 presents the responses of the students to items on school environment, the table shows that item one, student responses (Yes, 64% ∝ No 4%) which implies that school buildings are enough for teachers. Item number two student responses (Yes, 71% ∝ No 12%) This shows that school buildings are also enough for students. Item three student responses shows (Yes, 76% ∝ No,7%) which indicates that there are enough classrooms for students. Item four, student responses, (Yes, 54% ∝ No 29%), showing that there are adequate toilets for teachers. Item number five, student responses (Yes, 69% ∝ No 14%) which implies that there are also adequate toilets for students.

Table 2. Responses of Teachers on School Environment

S/N	SCHOOL ENVIRONMENT	YES	%	NO	%
1	Are the school buildings enough for teachers	2	2	4	4
2	Are the school buildings enough for students	5	5	1	1
3	Do you have enough classrooms for students	4	4	2	2
4	Does the school have adequate toilets for teachers	4	4	2	2
5	Does the school have adequate toilets for students	6	6	0	0

The responses of teacher to items on school environment, the table shows that in item one, teacher responses (Yes, 2% ∝ No 4%) which implies that school buildings are enough for teachers. Item number two teacher responses shows. (Yes, 5% ∝ No 1%). This shows that school buildings are also enough for students. Item three teachers responses shows (Yes, 4% ∝ No, 2%) which indicates that there are enough classrooms for students. Item four teachers responses (Yes, 4% ∝ No, 2%) showing that there are adequate toilets for teachers.Item number five, teacher responses (Yes 6% ∝ No 0%) which implies that there are also adequate toilets for students.

Table 3. Responses of Students on laboratories

S/N	LABORATORIES	YES	%	NO	%
1	Do you have computer laboratories in the school	81	81	2	2
2	Are there equipment in the computer laboratory	78	78	5	5
3	Are there chairs (furniture)	78	78	5	5
4	Do you have language laboratories	45	45	38	38
5	Is the language laboratory well equipped	59	59	24	24
6	Are there chairs (furniture)	58	58	25	25
7	Do you have science laboratories	83	83	0	0
8	Are there chairs in the science laboratories	81	81	2	2
9	Are there equipment in the science laboratories	82	82	1	1

Table 3 presents the responses of the students to items on Laboratories. The table shows in item one, students responses (Yes, 81% ∝ No, 2%), implying that there are computer laboratories in the school. Item two, students responses (Yes, 78% ∝ No, 5%) showing that there are equipments in the computer laboratories. Item three, student responses (Yes, 78% ∝ No, 5%) showing there is furniture in the computer laboratories. Item four, students responses (Yes, 45% ∝ No 38%) indicating there are language laboratories in the school. Item five (Yes, 59% ∝ No, 24%) which implies that the language laboratory is well equipped. Item six (Yes, 58% ∝ No, 25%) it indicates that there are chairs (furniture's). Item seven, student responses (Yes, 83% ∝ No 0%) implying there are science laboratories in school. Item eight student laboratories in school (Yes 81% ∝ No 2%) showing there are chairs (furniture) in the science laboratories item nine, student responses (Yes, 82%, ∝ No 1%) indicating there are equipments in the science laboratories.

Table 4. Responses of Teacher on laboratories

S/N	LABORATORIES	YES	%	NO	%
1	Do you have computer laboratories in the school	6	6	0	0
2	Are there equipment in the computer laboratory	6	6	0	0
3	Are there chairs (furniture)	6	6	0	0
4	Do you have language laboratories	6	6	0	0
5	Is the language laboratory well equipped	6	6	0	0
6	Are there chairs (furniture)	6	6	0	0
7	Do you have science laboratories	6	6	0	0
8	Are there chairs in the science laboratories	6	6	0	0
9	Are there equipment in the science laboratories	6	6	0	0

The responses of teachers to items on laboratories. The table shows in item one, teacher responses (Yes, 6%∝ No 0%), implying that there are computer laboratories in the school. Item two teacher responses (Yes, 6% ∝ No, 0%) showing that there are equipments in the computer laboratories. Item three, teacher responses (Yes, 6% ∝ No 0%) showing there is furniture in the computer laboratories. Item four, teacher response (Yes 6% ∝ No, 0%) indicating there are language laboratories in the school. Item five, (Yes 6% ∝ No 0%) indicating the language laboratories are well equipped. Item six, (Yes, 6% ∝ No 0%) which implies that there are chairs (furniture's) in the laboratory. Item seven, teacher responses (Yes 6% ∝ NO 0%) implying there are science laboratories in school. Item eight teacher responses (Yes 6% ∝ No 0%) showing there are chairs (furniture) in the science laboratories item nine, teacher responses (Yes, 6% ∝ No, 0%) indicating there are equipments in the science laboratories.

Table 5. Responses of Students on ICT Facilities

S/N	ICT FACILITIES	YES	%	NO	%
1.	Do you have computers at home	66	66	16	16
2.	Do you know how to use computer	76	76	6	6
3.	Do you use computers for studies	67	67	15	15
4.	Do you have computers in school	81	81	1	1
5.	Are taught how to use computer in school	72	72	10	10
6.	Are you allowed to use computers in the classrooms	13	13	69	69
7.	Are you allowed to use computers individually	56	56	27	27
8.	Do you share computers while learning in the classroom	7	7	76	76
9.	Do you use computer to learn all the subjects in the classroom	3	3	80	80
10.	Are you allowed to access to computer anytime	21	21	62	62

The table above shows the responses of students on ICT Facilities. Item one, student responses (Yes, 66% ∝ No 16%) which shows that most students have computers in their various homes. Item two, (Yes, 76% ∝ No 6%) indicating that majority of students are able to use computers. Item three, (Yes, 67% ∝ No, 18%) which implies that students use computer to study It four, (Yes 81% ∝ No 1%) showing item five, student responses (Yes, 59%, ∝ No 24%) while teacher responses (Yes, 6% ∝ No, 0%) showing that the language laboratory is well equipped. Item 6, student responses (Yes, 58% ∝ No, 25%) while teacher responses shows (Yes, 6% ∝ No, 0%) indicating there is furniture in the language laboratories in the school the presence of computer in the schools. Item five, (Yes, 72% ∝ No 10%) implying that students are taught how to use computers in school. Item six, (Yes, 13% ∝ No 69%) indicating that students are not allowed to use computers in the classroom. Item seven, (Yes, 56% ∝ No 27%) showing that students are allowed to use computers individually. Item eight (Yes, 7% ∝ No, 76%) showing that students do not share computers while learning in the classrooms. Item nine, (Yes, 3% ∝ No 80%) which implies that students. Do not use computers to learn all subjects in the classroom. Item ten, (Yes, 21% ∝ No 62%) indicating that students are not allowed access to computer anytime.

Table 6: Responses of Teachers on ICT facilities.

S/N	ICT FACILITIES	YES	%	NO	%
1.	Do you use computers to teach all subjects?	**6**	**6**	**0**	0

Table 6 Presents response from teachers on ICT FACILITIES. Item one (Yes, 6% ∝ No 0%) which implies that teachers do not use computers to teach all subjects in the classroom.

Table 7.Students Responses on Conduciveness of Effective Teaching and Learning

S/N	CONVULSIVENESS OF EFFECTIVE TEACHING AND LEARNING	YES	%	NO	%
1.	Do you have chairs in the classroom	81	81	2	2
2.	Do you have desk in the classroom	81	81	2	2
3.	Is the classroom congested for learning	46	46	37	37
4.	Is the methodology of the teacher ideal while teaching	77	77	6	6
5.	Is there a good relationship between a teacher and student	78	78	5	5
6.	Are you comfortable with the teaching and learning environment	76	76	7	7

The above table presents student responses of items for "conduciveness of effective teaching and learning". Item one, (Yes, 81% ∝ No, 2%) which implies that there are chairs in the classroom. Item two, (Yes 81% ∝ No 2%) indicating there are desk in the classrooms. Item three, (Yes, 46% ∝ No, 37%) showing that the classrooms are not congested for learning. Item four, (Yes, 77% ∝ No 6%) indicating that the methodology of the teacher is ideal while teaching. Item five, (Yes, 78% ∝ No 5%) which implies that there is a good relationship between teacher and students. Item six, (Yes, 76% ∝ No 7%) also indicating that students are comfortable with the teaching and learning environment.

Table 8. Teacher Responses on Conduciveness for Effective Teaching and Learning

S/N	CONVULSIVENESS FOR EFFECTIVE TEACHING AND LEARNING	YES	%	NO	%
1.	Do you have desk in the classroom	5	5	1	1
2.	Is the classroom congested for learning	1	1	5	5
3.	Is there a good relationship between a teacher and student	0	0	6	6
4.	Are you with the teaching and learning environment	5	5	1	1

Table eight shows teacher responses of items is conclusiveness for effective teaching and learning. Item one, (Yes, 5% ∝ No 1%) showing that there are desk in the classrooms for teachers. Item two, (Yes, 1% ∝ No 5%) showing that the classroom is not congested for learning. Item three, (Yes, 0% ∝ No, 6%) indicating there is no good relationship between teacher and student. Item four, (Yes, 5% ∝ No 1%) which implies that the teachers are comfortable with the teaching and learning environment. The researchers have so far presented in detail the data collection in the conduct of the study. All the information gathered from the use of research instrument as responses of the respondents is now going to be discussed with reference to the research questions, all the data collected was based on the assessment of school environment in the use of ICT Facilities in teaching and learning process of some selected schools in sokoto metropolis.

Research Question 1: How conducive is the school environment with the use of ICT for teaching and learning?
Students and teachers of both schools rated their school environment highly conducive enough to facilitate the use of ICT in teaching and learning.

Research Question 2: How equipped are the schools environment in providing ICT facilities teaching and learning?
School environment were found to have been adequately equipped, having computer laboratories and other ICT facilities, Ringstaff (1995), Murray and Campbell (2000), Billowes (1999), and others. It was emphasized that the change in teaching and learning while integrating

information and communication technologies is a long process which requires a lot of resources and depends on every individual teacher and of course a well equipped environment.

Research Question 3: what are the levels of student commitment to the use of ICT in learning?

The data was recorded to have high percentages on Yes column pertaining questions about computer literacy of students, availability of computers in their various home, which indicates that students are computer literates do have computers at homes and are also taught how to use them in schools while high percentage of No responses were found on questions regarding accessibility to ICT faculties implying that students are not allowed access to computers anytime which might be attributed to lack of enough computers, management and supervision. Lack of qualification development is not the only barrier to the integration of technologies into the teaching/learning process. Lawton (1994) notes that accessibility is one of a number of problems. If the teachers and students are required to use such resources as information and communication technologies, they must have access to these technologies. It is also very important that these technologies function in an indefectible way, i.e., it is important to make overall technical provision (Lai 2001).

Research Question 4: How effective are the teachers using ICT in teaching?

Teachers were also found to have low effective use of ICT facilities in teaching which could be attributed to lack of competence and accessibility. Sinco (2002) states that "lack of teacher competencies to the use of certain software" are a barrier to ICT integration. Hargreaves (1994) and CEO Forum (1999) claim that information and communication technologies will be efficiently used in lessons only if teacher qualification development will be oriented specifically to the needs of the teachers and demands of the system of education

Conclusively as ICT integrates into the learning and teaching process and the whole system of education is a rather complicated process, new conceptions, strategies, plans and models have to be developed by the Ministry of Education and school administration which make full use of the potential of new technologies. An attempt to integrate information and communication technologies will be fruitful and efficient process only if it is preceded by proper planning provided by the Ministry of Education, Science and proper provision of resources for schools. The whole learning/teaching and change process of integrating the ICT has to be flexible, and its efficiency depends on the motivation model developed by the school and preparation of the whole academic staff to implement innovations.

RECOMMENDATION

The present curriculum for ICT in education aims at realizing the goals of the national policy of ICT in schools education and the national curriculum framework. Given the dynamic nature of ICT, the curricula, emphasizing the core educational purposes, is generic in design and focuses on a broad exposure to technologies, together aimed at enhancing creativity and imagination of the learners we need to do more to embrace ICT in schools, if employed effectively high quality learning. The following are the recommendation:

a. Support: using ICT to allow us to do things more effectively or efficiently but without changing the fundamental curriculum or pedagogic approach.
b. Extend: using ICT to present things in new ways or using ICT to access resources which would otherwise be difficult to access.
c. Transfer: allowing us to do new or different things that would be possible without the technology and thereby changing the curriculum or pedagogy.
d. Engagement: involving leaner's in activities through the motivational influence of technology or the functional use of technology (e.g access from home as well as school) or social engagement (e.g with fellow leaner's or between families and school).
e. Inclusion: using ICT to overcome learner disabilities or disadvantages.

f. Improvement: saving time, being able to enrich a learning experience or using ICT to make a learning outcome possible which might otherwise not have been possible.

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