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AVAILABILITY AND UTILIZATION OF COMPUTERS IN SECONDARY SCHOOLS IN ZANGON KATAF LOCAL GOVERNMENT OF KADUNA STATE, NIGERIA

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Abstract
The study investigated the "Availability and utilization of Computers in Secondary Schools in Zangon Kataf Secondary School of Kaduna State, Nigeria". Three research questions was raised so as to achieve the objectives of the study. How many computers are available in the secondary schools in Zangon Kataf Local Government Area? What are the uses of computers in the secondary schools in the Local Government Area? What are the challenges encountered with the use of computers in secondary schools in the Local Government Area? *A quantitative research methodology was used, while survey research design was adopted and Questionnaire was the instrument used to collect data. The responses from the sampled schools were studied and analyzed, Using tables, frequency count and percentages. The findings showed that the computers in the schools are never adequate for teaching-learning process;* most of the computers in the secondary schools are used for administrative purposes. *The study further revealed that the schools are lagging behind in the usage of computer in teaching and learning process. In view of this, a number of recommendations were made amongst which were: Government should provide enough funds for schools to purchase computer for instructional purpose and make available suitable computer environment in our secondary schools. Government should embark on massive computer literacy training programme like conferences, workshops, seminars which enlighten people on the need for computer education. For government to provide computer education in all secondary schools which is paramount in this digital age.*

Keywords: Availability, Utilization, Computers, Secondary Schools, Nigeria.

Introduction
The importance of computer skills and knowledge for teaching, learning and job performance in organizations especially secondary schools cannot be over emphasized. In the era of just-in-time technology, just-in-time training is now a

critical part for success in organizations (Mohsin and Sulaiman, 2013). The secondary schools prepare students for university educations in Nigeria. It is a fundamental level of education that lays foundation for admission and choice of career options for students in Nigeria. Secondary school curriculum in Nigeria is designed to encourage all students to achieve their career, intellectual and social potential as well as to understand the relevance of learning in their daily lives (Ahmadi & Lukman, 2015).

Computer education is the effort or the ability to make the generality of the people computer literate. Computer literacy is the ability to be able to read, write and speak the language of the computer. It can also be looked at as a process of educating the people on how to use a computer to run a program and diverse application including business, industry and commerce (Okorie, 2012). According to the National Policy on Computer Education (2006), it is expected that by the end of secondary education, the child has acquired reasonable competence in software such as word processing, spreadsheet, database analysing programs that allow learners interact with the computer the way they desire (Ayogu, 2008). It therefore means that to achieve these objectives as stated in the National Policy on Education, strategies are needed.

In modern world, the computer is being gradually applied in all aspects of human endeavour. It has been stressed that the application of computer will enhance effectiveness and efficiency in this rapidly growing and technologically changing world. Computer education is being advocated because it is almost certain that computer literacy will have as much impact on career opportunities in the fast-growing information age (Adamu and Bello, 2012). The relevance of computer education is therefore, hinged on its utility value. The National Policy on Education (NPE, 1981, revised in 1988, 1991, 1998 and 2004) introduced the teaching of computer studies in Nigerian schools. The inclusion of the study of computer studies in the school curriculum was aimed at providing opportunity for every student to become computer literate.

Statement of the Problem

The world is advancing at a rapid rate, events have moved to the electronic stage with the computer at the centre. This development has brought a lot of innovation and revolution into teaching and learning. The world is now in the age of information technology or computers age, hence, there is a need to keep abreast of time. One of the ways of achieving this is through the introduction of computer education in our institutions of learning. Computer education is the effort or the ability to make the generality of the people computer literate. Computer literacy means ability to tell the computer what you want it to do and understand what the computer says. To be computer literate amounts to be able to read, write and speak the language of the computer (Ajibade, 2006, Bada, Oyewusi, Ojedokun, & Adewole 2010).

The government of Kaduna State has introduced the use of computers as aid to learning in secondary schools yet it has not been fully implemented. Some of the schools do not have computers, some have but they are not accessible to students. Similarly, some students do not have knowledge on the use of computers and there are not enough facilities that will enhance the use of computers for learning. This research therefore, tries to find out the causes of the lack of computers or inadequate computers in these schools, ineffective use of available computers as well as the challenges on the use of computers in Secondary schools in the local government area.

Objectives of the Study

The objective is set out to achieve the following:

i. To ascertain the numbers of computers available in the secondary schools in Zangon Kataf local government area.
ii. To find out the use to which available computers are put to and to what extent in Zangon Kataf local government area.
iii. To find out the challenges associated with the use of computers in Zangon Kataf local government area.

Research Questions

Based on the statement of problem above, the following questions were formulated to guide the study.

i. How many computers are available in the secondary schools in Zangon Kataf Local Government Area?
ii. What are the uses of computers in the secondary schools in the Local Government Area?
iii. What are the challenges encountered with the use of computers in secondary schools in the Local Government Area?

Review of Related Literature

According to (Ajibade, 2006). Computer education is the effort or the ability to make the generality of the people computer literates. Computer literacy means ability to tell the computer what you want it to do and understand what the computer says. To be computer literate amounts to be able to read, write and speak the language of the computer. Computer education encapsulates computer literacy, Computer Assisted Instruction and Computer Appreciation. Fajola (2001) asserts that the computer is diligent and consistent in its mode of operation as it does not suffer from tiredness or lack of concentration like human beings. Computers perform multi-functional roles in teaching and learning processes at all levels. At the primary and secondary levels of education, students can explore and generate learning through computer programmes.

According to Adekemi (2001), information can be stored in manual files in the computer magnetic disc and retrieved when needed. The computer can provide a convenient technique for designing and developing a course of instruction. It can equally provide dynamic interaction between students and instructional programme not possible with most media.

Okoro, (2016) Computers in education are used in the classroom teaching learning processes through computer aided instruction (CAI), computer assisted learning (CAL), and e-learning. The uses of computers by the teachers however assist in the curriculum contact delivery. Computers in the school system assist in the academic environment to store, display, transmit, and analyse data by the educational researchers. The learning and teaching of computer in secondary schools is essential for promotion and adoption of the technological advancements and benefits of computer. In line with this, Ogbuiyi, (2015), stated that the increase use of computer by students and academics alike is an important measure of technological development. He further stated that the use of computer is now dominant in all areas of human endeavours more especially in academic institutions. According to Ekolam (2000), a child if allowed to use the computer during learning will develop rudimentary skills in the use of the computer in text writing, computation and data entry activities in addition to being able to use the keyboard and the mouse in accessing other information on the computer. To achieve what Ekolam said, more computers are needed in schools and more time for lessons also. Educational

administrative functions which include keeping both students and staff records, admission/registration process, planning and decision making by the management, accounting, personnel selection etc can be done efficiently and effectively with computer system The official administrative drudgery in educational institutions can be better managed through computer technology. Computers bring great speed and accuracy to each of these administrative tasks, along with the convenience of storing large quantities of information on a compact disk (Thomas, 1987, Chijioke 2013).

According Ogbuiyi, (2015), African countries especially Nigeria lacks the funding and capacity to effectively implement computer trainings in secondary schools, inadequate computer in the schools and lack of computer literacy and sponsorship to computers/IT training program are the major challenges encountered in Nigeria. Poor service caused by capacity constraints of the communication network, lack of infrastructure to support technology hardware and software, scarcity of financial resources, and an unreliable electric supply in Nigeria hinders computer usage in Nigeria (Akanbi & Akanbi, 2012; Nwabueze, Nwabueze, & Egbra, 2013; Tayo, Thompson, & Thompson, 2015). Nwokike (2015), revealed that non availability and acute shortage of this new technological equipment impede their integration in teaching. Furthermore, poor preparation of classroom teachers to integrate ICT effectively or collaboratively, lack of sufficient computer systems to go round the students due to exorbitant costs, the students enrolment which soars every year, the erratic nature of power supply in Nigeria, the natural tendency for human to oppose innovation at their first appearance and laziness on the part of some teachers to learn ICT for instruction in schools.(Afolabi, 2000, Onasanya 2009, Tugbiyele, 2011, Olokooba, Okunloye, Abdulsalam and Balogun, 2017).

Methodology

This study adopted quantitative research methodology, and survey research design was used. Survey research involved an evaluation of some secondary schools in Zangon Kataf local government area. Survey research design was used to obtain facts by collecting the data directly from the population or sample. (Wilson, 2010). The population of the study involved the fifty-eight (58) secondary schools in Zangon Kataf local government area of Kaduna state. Purposive sampling technique was used in selecting the twenty (20) schools because they all have at least one computer so they are used as samples. The principal or the computer instructor were chosen to be the sampling population because they are looked upon to be able to provide the needed data for the research. Twenty questionnaires were administered one per school and Data were analysed with the use of computer software called statistical package for the social science (SPSS). Results are obtained and presented in tables, frequency counts, and simple percentages.

Data Analysis

Table 1: What is the Number of Available Computer in your School?

S/N	Response	Frequency	Percentage
1.	1 – 5	12	60
2.	6 – 10	5	25
3.	11 – 20	3	15
4.	More than 20	-	-
	Total	**20**	**100**

From the above table, 12 representing 60% of the respondents' schools have between 1-5 computers. It further reveals that all the school has at least a computer. There are only 15% of schools that have between 11-20 computers. The analysis shows that there are only very few computers in the schools in Zangon Kataf local government and the possible reason is government's inadequate support in the provision of computers and conducive environment for computer education to take place. This agrees with Nwokike (2015), revealed that non availability and acute shortage of this new technological equipment impede their integration in teaching in the State.

Table 2. Are the Available Computers Adequate for Effective Teaching and Learning in the school?

S/N	Response	Frequency	Percentage
1.	Adequate	-	-
2.	Not adequate	18	90
3.	Averagely	2	10
	Total	**20**	**100**

The table above reveals that 90% of the respondents agree that the level of computer provision for their schools are not adequate which indicates that effective learning will not be achievable with few available computers. This is supported by Okebukola (2017), computer is not part of classroom technology in over 90% of public schools in Nigeria, thus the chalkboard and textbooks continue to dominate classroom activities. This is an indication that the students are still lagging behind in the trend of changes in the world. This presupposes that there is the tendency for the teachers and students to be denied the opportunities with ICT offers in the teaching-learning activities. There is the need to replace the traditional pedagogical practices that still underpin the educational system in the country, hence the need for the application of ICT in Nigerian secondary schools.

Table 3. For what purpose do you use the Computers in your School?

S/N	Response	Frequency	Percentage
1.	Teaching and learning	6	30
2.	Leisure and Games		
3.	Business	-	-
4.	Communication	-	-
5.	Administration	14	70
	Total	**20**	**100**

The table above, depicts 14 respondents representing 70% responded that they use the available computers in their schools for Administrative purposes only, 30% responded for Teaching and learning purposes. This is a clear indication that most of schools that have computers make use of their computers for school administration rather than teaching and learning which is needed most in this technological era. Educational administrative functions which include keeping both students and staff records, admission/registration process, planning and decision making by the management, accounting, personnel selection etc can be done efficiently and effectively with computer system The official administrative drudgery in educational

institutions can be better managed through computer technology. Computers bring great speed and accuracy to each of these administrative tasks, along with the convenience of storing large quantities of information on a compact disk (Thomas, 1987, Chijioke 2013).

Table 4: For how long do Students make use of the Available Computer Per Day during Lessons?

S/N	Response	Frequency	Percentage
1.	None at all	12	60
2.	Less than 30 minutes	-	-
3.	30 minutes	6	30
4.	1 hour	2	10
5.	2 hours	-	-
	Total	**20**	**100**

In table 4 above, 12 which is representing 60% of the respondents agree that they do not use computer for students learning process while 30% make use of the available computers in learning for 30 minutes and only 10% use the computers for one hour in lessons with students. It is very clear that the use of available computers in students learning in the local government area is very poor. According to Ekolam (2000), a child if allowed to use the computer during learning will develop rudimentary skills in the use of the computer in text writing, computation and data entry activities in addition to being able to use the keyboard and the mouse in accessing other information on the computer. To achieve what Ekolam said, more computers are needed in schools and more time for lessons also.

Table 5. What are the challenges associated with the use of computer in your school?

S/N	Response	Frequency	Percentage
1.	Irregular Power Supply	2	10
2.	Inadequate fund	4	20
3.	Inadequate government support	12	60
4.	Inadequate Computer Literate Teachers	-	-
5.	Lack of Maintenance	2	10
6.	Others	-	-
	Total	**20**	**100**

Table 5 shows that 60% of the challenges associated to the use of computers in secondary schools in Zangon Kataf Local Government Area is due to government inadequate support. It further reveals that 20% of the problems is due to inadequate fund, only 10% is irregular power supply. This is supported by Ogbuiyi, (2015) that lacks of funding and capacity to effectively implement computer trainings in secondary schools, inadequate computer in the schools and lack of computer literacy and sponsorship to computers/IT training program are the major challenges encountered in Nigeria. Poor service caused by capacity constraints of the communication network, lack of infrastructure to support technology hardware and software, scarcity of financial resources, and an unreliable electric supply in Nigeria hinders computer usage in Nigeria.

Summary of Findings

1. The numbers of computers in the schools are few in secondary schools in the local Government
2. The study reveals that the computers in the secondary schools are never adequate for teaching-learning process.
3. The available computers are only used for 30minutes or at most 1hour for students' learning and only in private schools.
4. Most of the computers in the secondary schools are only used for administrative purposes.
5. Government is not very supportive in terms of purchasing of computers and ensuring that computer education is made available in the secondary schools of the local government.
6. Finally, the finding of this study has shown that secondary schools in Zangon Kataf local government area are lagging behind in the usage of computer in teaching and learning process.

Conclusion

The study reveals that computer is very essential and a versatile tool for teaching and students' learning. This is because the present age of technological advancement has brought changes into virtually human endeavours including teaching and learning. Acquisition of computer literacy skills as well as good face-value certificate in computer education is necessary for all and sundry.

Based on the study, it is concluded that availability and use of computer in secondary schools is an essential aspect of information literacy and its absence can create a very big gap between the students and the information global society.

It also concluded that there is computer usage in the school for administrative purposes and not very much for learning. This has led to very little time given to students to make effective use of available computers for learning. And lastly, computer is an integrative part of ICT and the use of ICT in learning is the order of today's information age

Recommendations

1. Government should provide enough funds for schools to purchase computer for instructional purposes and make available suitable computer environment in our secondary schools.
2. Government should embark on massive computer literacy training programme like conferences, workshops, seminars which will enlighten people on the need for computer education.
3. The State Commissioner of Education through their local inspectors of Education should monitor the implementation of computer education programme in the local government.
4. Government should employ technologists and technicians to take care of computer facilities and equipment and to carry out routine repairs within schools.
5. Government should set up standby generators and uninterruptable power supplies (ups devices) to tackle epileptic or inconsistent power supply in order to support learning in schools.
6. Lastly, government should employ applicants with B.Sc. (Ed.) and B.Ed. Computer Education to teach the subject in our secondary schools.

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