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ASSESSMENT OF COMPUTER STUDIES INSTRUCTION CHALLENGES AMONG SENIOR SECONDARY SCHOOLS IN IKOT EKPENE LOCAL GOVERNEMENT AREA

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Abstract

This study was to find out the computer studies instruction challenges among senior secondary schools in Uyo. The study adopted the descriptive survey design of correlation type. The study area was Ikot Ekpene Local Government Area. The main instrument of the study was a questionnaire. Face and content validation of the instrument was carried out to ensure that the instrument has the accuracy, appropriateness, completeness and the language of the study under consideration. The researcher subjected the data generated for this study to appropriate statistical techniques. The study concluded that there are some basic strategies that could be adopted in order to improve the teaching of computer studies in secondary schools. The study is of the view that computer studies should provide sound basis for further training in computer studies at the tertiary level of education thus should be relied upon to enable students acquire the basic skills and knowledge needed to either secure a job and earn a living or to pursue further studies in the area computer and information science. The study recommended that the school administrators should as a matter of urgency liase with private sectors to provide computers and other instructional materials needed for teaching of computer studies. Parents through the PTA and other major stakeholders of our education should assists our secondary schools by donating instructional facilities like laptops, desktop computers, multimedia, generating sets, internet etc to enable students practice and acquire the skills of computing.

INTRODUCTION

Education is one of every human being's essential rights. Education equips a person for life's obstacles. As a result, Gujjar (2010) believes that education is important not only for the delivery of knowledge, but also for the development of a child's whole personality. There are three stages of education in Nigeria: elementary, secondary, and postsecondary. Secondary education is the intermediate level between elementary and secondary school. It also educates pupils to contribute to society as productive members (Jegede2013). Secondary school is viewed as the entrance to delivering not just an educated population but also a competent workforce in industrialized nations. Secondary education is currently being regarded as the cornerstone of the educational system in the twenty-first century, according to the World Bank in Etim (2006). As a

result, high-quality secondary education is critical to ensuring a bright future for both people and countries.

The terms "computer studies" and "computer literacy" have been used interchangeably; in some circumstances, computer studies has been referred to as "computer education," while in others, it has been referred to as "computer literacy." It signifies the same thing in every case. Computer education refers to the endeavor or capability of making the general public computer literate. Computer literacy refers to the ability to read, write, and speak the computer's language. It may also be seen of as a method of teaching individuals how to use a computer to execute a program and a variety of applications, such as business, industry, and commerce (Okorie, 2012). According to Edhuze (2003), computer studies included teaching and instilling in the student the fundamental abilities necessary to autonomously control the computer in order to attain educational objectives. He went on to say that computer studies as a topic is designed to help students develop the skills and competences needed in today's digital world of competition. After graduation, they will have such fundamental abilities and competences that they will be familiar with computer terms and procedures. As a result, computer studies is a topic designed to help individuals comprehend the function, applications, and limits of computers, as well as to give a chance to study current information processing technologies.

The National Policy on Computer Education was adopted and introduced in 1988, with the goal of incorporating computer studies into the high school curriculum (Abimbade, 1999). The following are some of the computer curricular contexts specified by the policy on computer education at the secondary school level: A basic awareness of how computers function, a grasp of the fundamental principles of computer operation, and hands-on experience utilizing pre-programmed programs that are relevant to the students' interests as teaching aids in various topics. According to the National Policy on Computer Education (2006), the kid should have gained sufficient competency in software like as word processing, spreadsheets, and database analysis applications by the end of secondary school, allowing learners to engage with the computer in the manner they choose (Ayogu, 2008). As a result, solutions are required to attain the goals set out in the National Policy on Education.

The computer is progressively being employed in many facets of human endeavor in the contemporary world. In this fast increasing and technologically changing world, it has been emphasized that the use of computers will improve effectiveness and efficiency. Computer education is being promoted since it is practically guaranteed that in the rapidly evolving information age, computer literacy will have just as big of an influence on job choices (Adamu and Bello, 2012). As a result, the utility value of computer education determines its relevance. Computer studies were first taught in Nigerian schools under the National Policy on Education (NPE, 1981, updated

in 1988, 1991, 1998, and 2004). The introduction of computer studies in the school curriculum was intended to provide every student with the chance to become computer literate. The study of computer science has had a significant impact on both students and society. However, as compared to other parts of the globe, where computers are used in every aspect of human endeavor, including workplaces, schools, businesses, research centers, communication, and hospitals, to name a few, the usage and study of computers in Nigeria is relatively new. The complexity of today's educational setting has complicated information and instruction to pupils, as well as the nature of learning and teaching in general. As a result, the teacher's responsibility in fostering learning has become more difficult. The new position include not only the transfer of material to students, but also the investigation of issues related to learning and instruction so that students may get the most out of the teaching and learning process. Computers are currently employed when a large amount of data must be handled, complicated operations must be performed, or real-time access to centralized information from random places is required, such as in education, telemedicine, telecommunicating, and a variety of other fields (Adewopo, 2015). The study of computers in school aims to assist students in coping with current technology progress, equipping them with knowledge and competences or abilities in program and administrative administration, and improving the learning process. Students are required to acquire computer appreciation or application skills rather than merely what a computer is and can accomplish. Students should be taught in such a manner that they can not only perceive and understand computers, but also be able to successfully manage their own learning, reinforce it, and apply such information or training in real-world situations. The teaching of computer science has become a little more sophisticated and hard as a result of this new method. It has been noted that teaching and studying computer science in schools has proven to be difficult. People often complain about insufficient learning and teaching resources, such as equipment, facilities, and computers (Aghadino, 2014). It is thought that scientific education in general, and computer science education in particular, is plagued by a variety of issues (Adamu, 2010). This has been ascribed to the sluggish speed of learning and computer application. This assumes that there are issues with computer science education teaching and learning. As a result, one is compelled to inquire, "What actually is the situation?" What are the issues that arise while teaching computer science education? In light of this, the purpose of this research was to evaluate the challenges connected with computer science education utilizing Ikot Ekpene as a case study. The following are the precise goals:

1. To find out students-related difficulties in learning computer in Senior secondary School
2. To determine School-related difficulties affecting learning of computer in Secondary Schools
3. To find out strategies in improving learning of computer in Senior secondary Schools.

Computer Studies in Senior secondary School

In senior secondary schools, there is a huge need for computer science. The world has become a global village, where information is disseminated in seconds and workplaces are transitioning to a paperless environment (Edhuze, 2003). All of this is due to digitalization, which is aided by information and communication technology equipment including computers, the internet, fax machines, the global system of mass communication (GSM) or mobile phones, and satellites (Usoroh, 2008). This digitization can only be beneficial if a society is computer literate, and the adjustments that are required to become a computer literate society are mostly taught in secondary schools. This is a significant difficulty for schools, since it is their obligation to graduate students who are capable of functioning in the digital era. As a result, computer literacy is required in a society like ours if we want to be a part of the global ICT consumer.

Many energetic Nigerians have set up plans for assisting its population become computer literate in an effort to help them overcome their backwardness in computer and digital know-how. Such strong measures would aid in the narrowing of the gap between Nigeria and the developed world. In accordance with this, he also said that computer literacy and IT skills provide opportunities for self-employment, as a skilled computer literate individual may end up running a business center, programming, or even tele-engineering. It may also help people who are starting a company with speed, data management, accuracy, and information processing. Computer literacy is becoming one of the most important requirements in many established job interviews. Many individuals have been unable to find employment for which they are qualified due to a lack of computer knowledge and abilities (Ayogu, 2008).

In our educational system, using a computer as a facility is both feasible and required. Its usage may help pupils communicate more effectively. Not just in schools, but also in workplaces, hospitals, libraries, and households, computer communication has played and continues to play a significant role. At the secondary school level, computers allow pupils to connect with others through e-mail at a rapid, accurate, and comfortable pace (Okonkwo, 2006). It will just take a few seconds to send and receive data electronically. In information processing, a computer can quickly filter or search through large amounts of data. Regardless of the distance between the two locations, computer connectivity makes any information required quickly and publicly accessible (Okonkwo, 2006).

Secondary school instructors are also faced with difficulties when it comes to computer science. Teachers have sought training in order to gain confidence in their management of computer-related courses as a result of these issues. Such training also aids in the development of relationship with pupils, as well as the appreciation of its problem-solving capacity (Okonkwo, 2006). He went on to note that their understanding of computer science aids them in scheduling lessons, printing report cards, and storing and updating student records. He observed that guidance counselors often utilize these

information to help students choose a professional path. Okebukola (2017) also claimed that computers are not included in classroom technology in Nigerian public schools. As a result, in most Nigerian secondary schools, the blackboard and textbooks continue to dominate classroom activity. Why is Nigeria trailing behind if a nation like Uganda, which has less than a quarter of Nigeria's resources, is currently using ICT facilities to assist secondary school pupils become better information users? (Aduwa &Iyamu, 2005). The explanation is simple: mismanagement of the country's vast resources and political leaders' incapacity to prioritize Nigeria's developmental requirements (Okebukola, 2017). Without a question, the private sector in Nigeria has embraced ICT to remain afloat in the present hard economic environment. Multimedia technology has been used by the banking, insurance, manufacturing, and multinational oil firms to provide novel answers to their present difficulties. If Nigeria wants to be a major player in the global market of ideas and prepare its citizens for the new environment of today and tomorrow, the country should embrace functional Computer studies (ICT) in secondary school for the following reasons: ICT as teaching and learning aids; ICT as a management tool; ICT as an economic development tool; ICT as a high technological development tool (Aduwu&Iyamu, 2005).

Problems of Computer Studies in Senior secondary Schools

There are various barriers to effective computer science teaching and learning in Nigerian secondary schools. Cost, insufficient infrastructure, a lack of expertise, insufficient software, and restricted Internet connection are among them (Aduwa &Iyamu, 2005).

Cost: In most industrialized nations, the cost of computer hardware and software continues to fall, but in developing countries like Nigeria, the cost of computers is many times higher. In the United States, a personal computer may cost less than a month's pay, yet in Nigeria, a single computer may cost more than two years' salaries. The majority of Nigeria's public secondary schools lack teaching tools such as computers, software, multimedia, projectors, and white boards (Aduwa &Iyamu, 2005). Aside from the basic computers, peripheral expenditures such as printers, monitors, paper, modems, and additional disk drives are out of reach for most secondary schools. The costly internet connection prices are also out of reach for the schools.

Inadequate Infrastructure: Infrastructure problems in the Ikot Ekpene Local Government Area of Akwa Ibom State are a severe hurdle to computer science teaching and learning. Other infrastructure, like as power, was designed to work with computer equipment under regulated settings. For a long time, the government has struggled to provide consistent and dependable energy to every corner of the country, including Ikot Ekpene Local Government Area in Akwa Ibom. There is now no portion of town that can brag of having power available 24 hours a day, with the exception of maybe locations where government officials dwell. After a period of power outage, costly domestic equipment such as refrigerators, deep freezers, and stoves have been

destroyed by an increase in electrical supply. Due to erratic power supply, electronic equipment such as radios, televisions, video recorders, and even computers have been destroyed. It's difficult to maintain high-tech equipment like computers running when the electrical supply isn't reliable and consistent, particularly when weather conditions are harsh, as they are in various parts of the nation. Due to the high quantities of dust in the region during the dry season, electronic equipment has a limited life expectancy. The majority of residents in Akwa Ibom's Ikot Ekpene Local Government Region do not have access to reliable power, preventing secondary schools in the area access to electronic equipment including as radios, televisions, video recorders, and laptops. The limited internet connections accessible in Akwa Ibom's Ikot Ekpene Local Government Area are only available if you subscribe.

Insufficiently skilled personnel: Nigeria lacked not just the necessary information infrastructure, but also the human skills and expertise required to completely incorporate ICT into secondary education (Aduwa &Iyamu, 2005). The requirement for locally qualified employees to install, maintain, and support Computer Systems cannot be overstated while teaching computer studies (ICT) in secondary schools. There is a severe scarcity of qualified individuals in the fields of application software, operating systems, network administration, and local technicians to maintain and repair computer infrastructure. In Nigeria, those who are assigned to use computers do not get proper training, and in the worst-case scenario, no training at all.

In Nigeria, most secondary school instructors lack the necessary abilities to properly incorporate technology in the classroom. As a result, in secondary school instruction, the old chalk and duster technique still reigns supreme. In Nigerian secondary schools, information transmission through ICT is poor or non-existent (Anao, 2003). Teachers at Nigeria's secondary schools need to be taught in educational technology and how to integrate computers into the classroom. According to Carlson and Firpo (2001), instructors need effective tools, approaches, and support in order to build computer-based projects and activities that are specifically tailored to increase the quality of teaching in necessary areas and student learning.

Software that isn't up to par: The ultimate power of technology, without a doubt, is content and communication (Salomon, 2009). Though software developers and publishers in industrialized nations have long attempted to create software and multimedia with universal applicability, many items do not integrate into curriculum across countries owing to disparities in education standards and criteria. Software that is culturally and educationally acceptable for the Nigerian educational system is scarce (Aduwa &Iyamu, 2005). In developing nations like Nigeria, there is a significant gap between appropriate software supply and need. According to Salomon (2009), there are convincing indicators from many nations that the availability of relevant and adequate software is a key hurdle impeding computer adoption. According to Aduwa and Iyamu (2005), even if Nigeria attempts to solve the software issue by developing software that is tailored to its educational philosophy, it would face two key challenges. For starters,

developing appropriate software for the country's educational system is too expensive. Second, the nation is short on competent computer software designers. People must be trained in software design in order to overcome this.

Limited Internet Access: Nigerians have limited access to the internet since there are just a few Internet service providers who offer internet gateway services. Nigerians in conjunction with international information and communication corporations construct these Internet providers. Customers are often exploited and scammed by many of these businesses, which offer substandard services. The few trustworthy providers that provided dependable services charged exorbitant rates, restricting Internet access. In Nigeria, the most difficult technical hurdle is establishing a dependable cost for Internet access. In a nation where only about half of the population has a computer, the few reputable Internet service providers that have spent significant sums of money in the industry have a relatively limited customer base. In order to return their investment in a fair amount of time, they must charge certain fees.

Methods to Improve Computer Studies

In order to meet the problems of globalization in this day, realistic solutions for strengthening computer studies in Nigerian secondary schools must be implemented. Among the measures that may be used to improve computer studies are:

Increasing the amount of money available for computer studies: Adequate finance is critical to the success of education or educational programs. To put it another way, appropriate finance is required for educational progress in any nation, developed or developing. It has been the study of government in implementing projects in Nigeria since the colonial era, according to Olaitan (2008). This was accomplished via the development of yearly budgets, which were typically made public through the media (Olaitan, 2008). Physical facilities are built up and maintained, equipment is acquired, commodities and services are delivered, and manpower is engaged and maintained, all with the help of money.

Improving the Availability and Supply of Instructional Facilities for Computer Studies Teaching: Receiving instruction is a kind of teaching (Nwachukwu, 2001). As a result, the concepts of teaching and instructing are linked in terms of their goals of influencing knowledge (Nwachukwu, 2001). The primary goal of every educational institution is to assist students in learning. Each component (school, teacher, and student) established their own aim to accomplish this. For them to attain the purpose of education by providing for various individuals, all of these goals must be congruent. Scholars and educators have been able to develop various instructional approaches and facilities for use in education in order to meet the needs of various individuals. Instructional methods, which are different types of instructional approaches, refer to assistance provided to learners to speed up their absorption.

Improving Methodology required for Teaching Computer Studies: It cannot be overemphasized that the successful integration of ICT facilities (Computer) into the school depends on teacher become aware of the need of using ICT to provide access to a wider variety of materials for themselves and their students (Etuk, 2007). They must also be persuaded of the superiority of ICT facilities in the classroom over conventional teaching methods. According to Etuk(2007), teachers must be properly educated in order to be morally responsible enough to understand and ensure that ICT is not used in the classroom as a substitute for a teacher, but rather as a means of enhancing innovation, creativity, reflectiveness, confidence, and self-reliance in both the teacher and the students.

Theoretical Framework

Downes and Siemens' Conectivism Learning Theories

George Siemens and Stephen Downes created connectivism, a learning theory for the digital era, based on their examination of the limits of bahaviourism, cognitivism, and constructivism to explain the impact of technology on how we live, communicate, and learn (wikipedia encyclopedia, 2010). Connectivism also tackles the issues that many businesses confront when it comes to knowledge management. For knowledge stored in a database to be regarded as learning, it must be linked to the correct individuals in the proper context. The flow of information inside an organization is a critical component of its effectiveness.

Connectivism is significant to this subject since it may be used to school administration and leadership. It is a huge problem to manage available resources in the school for optimum educational accomplishment of targeted educational goals. Because comprehensive information cannot reside in a single person's head, a new way to producing an overview is required. Furthermore, different teams with a variety of perspectives are an important framework for thoroughly examining ideas. Aside from that, there's the issue of innovation. The majority of today's revolutionary ideas began as a fringe element. The capacity of an organization to promote, nurture, and integrate the effects of many perspectives on information is important to its survival in the knowledge economy.

RESEARCH METHODS

Research Design

A survey research design was used in this study. According to Osuala (2001), a survey research design focuses on individuals and their opinions, beliefs, motivation, and behavior. The design was deemed appropriate since the research would collect data from secondary school students in Ikot Ekpene. Computer Studies is taught in the Ikot Ekpene Local Government Area of Akwa Ibom State.

Area of the Study

Population of the Study

The population of the study comprised all the Senior secondary School (JSS 1-JSS III) Students in public (Government-Owned) Secondary Schools in Ikot Ekpene L.G.A.

Sample and sampling techniques

The research used a random selection approach to choose 200 pupils from the general community. Ten (10) public secondary schools were employed in the study. A total of twenty (20) JSS students were chosen at random using a basic random selection approach. Male and female students and instructors were included in the sample.

Instrument for data collection

In order to collect the essential data for the study, the researcher used a standardized four-point rating scale questionnaire. The questionnaire was divided into two sections: part "A" included the respondents' biographical information, and section "B" had fifteen (15) questions.

Validation of Instrument

Two specialists in Measurement and Evaluation, as well as my supervisor, tested the instrument for face validity before it was used in the research. The instrument underwent a thorough examination and was found to be in need of repair.

Reliability of Instrument

In this study, the researcher used the Internal Consistency technique to determine the reliability of the pre-study replies acquired using the research instrument by applying the Cronbach Alpha test. SPSS version 17.0 was used to conduct the study. The results of the test are shown below.

Method of Data Collection

Personal visits were made to the ten (10) selected schools for the distribution of the questionnaire. Two hundred (200) copies were distributed to selected students. Two hundred (200) completed copies were also collected back.

Method of Data Analysis

The collected data were analyzed using appropriate statistical technique such simple percentage analysis

Data Analysis

Research question 1

What are students-related difficulties affecting teaching of computer studies in secondary schools?

Table 1: Mean Responses on Students-related Difficulties Affecting learning of computer studies.

ITEM STATEMENT	SA 4	A 3	D 2	SD 1	X	S.D	DECISION
Students tend to show lack of interest in computer lessons	150	25	15	10	4	2.57	Accepted
Lack of practical makes students devote less time to computer lessons	100	70	25	5	3.4	2.55	Accepted
Students lack adequate problem solving and analytical skills	170	25	5	-	3.9	2.74	Accepted
Students do not secure adequate textbooks	110	60	20	10	3.4	2.56	Accepted
Peer group influence and poor parental upbringing	90	65	25	20	3.2	2.47	Accepted

In table 1, item1 with mean response of 4 accepted that students tend to show lack of interest in computer lessons. Item 2 with mean score of 3.4 also accepted that lack of practical makes students devote less time to computer lessons. Item 3 with mean score of 3.9 accepted that students lack adequate problem solving and analytical skills. Item 4 with the mean score of 3.4 also accepted that students do not secure adequate textbooks. Item 5 with the mean score of 3.2 accepted that Peer group influence and poor parental upbringing leads to difficulties in teaching of computer studies. Item 1,2,3,4 and 5 have mean scores above 2.50. This indicates that respondents accepted in all the items there are some student-related difficulties affecting teaching of computer studies in secondary schools.

Research Question 2: What are the School-related Difficulties Affecting Learning of Computer Studies?

Table 2: Mean responses on school-related difficulties affecting teaching of computer studies.

ITEM STATEMENT	SA 4	A 3	D 2	SD 1	X	S.D	DECISION
Poor and unconducive environment	130	50	15	5	3.7	2.63	Accepted
Lack of instructional materials for effective teaching and learning	200	-	-	-	4	2.82	Accepted
Propensity of large class size	180	15	5	-	3.8	2.76	Accepted
Lack of adequate supervision	100	60	20	20	3.2	2.50	Accepted
There are Inadequate and unqualified teachers	150	30	10	10	3.8	2.65	Accepted

In table 2, item 6 with mean response of 3.7 accepted that poor and unconducive environment makes learning computer hard. Item 7 with mean response of 4accepted that there is lack of instructional materials for effective teaching and learning. Item 8 with mean response of 3.8 also accepted that propensity of large class size makes teaching of computer hard. Item 9 with mean response of 3.2accepted that there is lack of adequate supervision. Item 10 with mean response of 3.8 agreed that there are inadequate and unqualified teachers. Item 6, 7, 8, 9 and 10 all have mean scores above 2.50. This indicates that respondents agreed on item 6 to 10 that there are school related factors that makes teaching computer hard.

Research Question 3
What are the strategies for improving the learning of computer studies?

Table 3: Mean Responses on Strategies for Improving the learning of Computer studies

ITEM STATEMENT	SA 4	A 3	D 2	SD 1	X	S.D	REMARK
Motivation of students should be part of the pedagogical innovations	100	80	20	-	3.4	2.59	Accepted
Parents should provide the necessary academic background for their children	40	130	20	10	3.1	2.42	Accepted
The teacher should develop well planned lessons prior to their delivery	130	50	13	7	3.8	2.62	Accepted
Sufficient number of computer teachers should be trained for the Programme.	100	60	15	25	3.3	2.49	Accepted
Government should provide sufficient tools and equipment for the teaching of computer studies	120	80	-	-	3.6	2.66	Accepted

In table 3, item 11 with mean score of 3.4 accepted the statement that motivation of students should be part of the pedagogical innovations. Item 12 with mean score of 3.1 also accepted that Parents should provide the necessary academic background for their children. Item 13 with mean response of 3.8 accepted that the teacher should develop well planned lessons prior to their delivery. Item 14 with mean response of 3.3 accepted that sufficient number of computer teachers should be trained for the programme. Item 15 with mean score of 3.6 accepted that government should provide sufficient tools and equipment for the teaching of computer studies. Item 11, 12, 13, 14, and 15all have mean scores above 2.50. This indicates that respondents accepted in item 11 to 15 that there are possible strategies to curb difficulties encountered in teaching computer studies in secondary schools.

Discussion of findings

Research question 1:

What are students-related difficulties affecting learning of computer studies in secondary schools?

Table 1 with item 1, 2, 3, 4, and 5 dealt with research question 1. It was the opinion of the respondents that the student-related difficulties which includes Students lack of interest in computer lessons, lack of practical which makes students devote less time to computer lessons, students lack of adequate problem solving and analytical skills, students do not secure adequate textbooks, peer group influence and poor parental upbringing of secondary school students in Ikot Ekpene Local Government Area. This finding is in agreement with the findings of Aghadino (2014) who observed that the teaching and learning of computer studies in schools has not been quite easy. Often time, people talk about inadequate equipment, facilities, and computers instructional resources for learning and teaching exercise. This proves to a very high extent that student related factors also contribute to difficulties in teaching computer in secondary schools. Dittimiya (2002) stressed that if the above difficulties are not solved, it will greatly affect the development of human resources needed for national development.

Research question 2:

What are the school-related difficulties affecting learning of computer studies?

The result of the findings revealed that poor and unconducive environment, lack of instructional materials for effective teaching and learning, propensity of large class size, lack of adequate supervision, inadequate and unqualified teachers. The responses from item 6 to 10 revealed to a very high extent school related factors as one of the difficulties in teaching computer studies among secondary school students in Ikot Ekpene Local Government Area. This finding is in agreement with Afolabi (2003) and Grissom (2005) who emphasized that the teacher is expected to be academically, physically and intellectually fit in society at large. It was further intimated that the teacher skills, disposition and most especially teacher professional's status could affect their efficiency at desirable behavior and enhance the academic achievement of the students.

Research question 3: What are the strategies for improving the learning of computer studies?

The finding also revealed that it was the opinion of the respondents that motivation of students should be part of the pedagogical innovations, parents should provide the necessary academic background for their children, the teacher should develop well planned lessons prior to their delivery, sufficient number of computer teachers should be trained for the Programme, Government should provide sufficient tools and equipment for the teaching of computer studies. The opinions of the respondents from item 11 to 15 accepted that there are innovative strategies for

improving the teaching of computer studies. This findings is in support of Gary (2011) who asserts that the availability of quality human resources such as staffing, personnel management is necessary because of global competition, technological advancement, economic challenges and fast changing world of work. The findings of the study revealed that to achieve this, there is need to de-emphasize employment based on paper certificates, proven ICT experts as computer teachers be employed, consistent staff developmental activities to be planned, developed and followed up, providing scholarships to teachers and students who distinguishes themselves as well as developing and maintaining appropriate channel of communication between teachers, students and superiors staff like principals, education secretaries etc.

Implication of the Findings

The conclusions of this research have ramifications for the Ministry of Education, Commission of Education, and Local Government education secretaries and supervisors in Akwa Ibom State, as well as curriculum developers, teachers, and school administrators, as well as the general public.

The research revealed the challenges and techniques that may be used to enhance computer science education in secondary schools in Akwa Ibom State's Ikot Ekpene Local Government Area. According to the findings, the solutions outlined will increase students' performance in terms of obtaining appropriate computer skills that would prepare them for self-employment or paid work after school.

This study's conclusions have ramifications for computer science professors. Instructional delivery methods are activities that will improve students' grasp of computer science courses. This means that instructors must stay up with the latest innovations in information and communication technology in order to provide pupils with the necessary abilities. They should put up personal effort in obtaining new skills and information that their jobs need, as well as ensuring that proper teaching strategies are used in the classroom during the transmission of knowledge.

Conclusion

The research finds that certain fundamental measures for improving computer science instruction in secondary schools might be implemented. Computer studies, according to the study, should provide a solid foundation for further computer studies training at the tertiary level of education, and thus should be relied upon to enable students to acquire the basic skills and knowledge needed to either secure a job and earn a living or pursue further studies in the field of computer and information science.

Recommendations

Based on the findings of the study, the researcher hereby makes the following recommendations:

1. School administrators (Education Secretaries and Principals) should guarantee that computer instructors are supported on retraining programs at least twice a year via workshops, seminars, and conferences so that they may gain the most up-to-date technology abilities in their chosen profession.
2. School officials should work with the private sector as soon as possible to offer computers and other instructional resources for computer science classes.
3. Parents, through the PTA, and other major stakeholders in our education should help our secondary schools by donating instructional equipment such as laptops, desktop computers, multimedia, generator sets, and the internet, among other things, to allow students to practice and acquire computing skills.

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