

AVAILABILITY AND UTILIZATION OF INSTRUCTIONAL MATERIALS ON STUDENT' ACADEMIC PERFORMANCE IN SENIOR SECONDARY SCHOOLS IN IDEMILI NORTH LOCAL GOVERNMENT AREA

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Abstract

The study examined effect of availability and utilization of instructional materials on students' performance on computer in senior secondary schools. A survey design was used in the study. The population of the study comprised all the computer studies teachers that are currently teaching computer studies in the 13 public secondary schools in Idemili North Local Government Area. Simple random sampling technique was used in selecting the sample for the study. The sample size for the study comprises of 80 teachers. The research instrument was structured questionnaire. The instrument for the study was validated by two lecturers in the Department of Science Education, Nnamdi Azikiwe University, Awka. The reliability of the study was carried out using Cronbach Alpha reliability technique and the coefficient of 0.76 was obtained. The data collected was analyzed using frequency counts, percentage and mean. The findings of the study revealed that instructional materials are highly available for teaching computer studies in secondary schools and also that in teachers' and students' views, the available instructional materials are not utilized for teaching computer Studies in senior secondary schools in Idemili North Local Government Area. Based on results obtained from the study it was recommended among others that Government should provide support to computer studies teachers so that they may obtain the desired educational facilities for the effective teaching of computer studies in secondary schools and teachers should indicate the instructional materials that are not adequately available to the school authorities and the government.

Introduction

Education is a catalyst to the development of individuals, society and the nation as a whole (Asiru, 2014). Education can be explained as the course of an individual's intellectual development, planning and understanding. According to Asiabaka (2010), Education is the most powerful tool which you can use to change the world.

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Education is the key to national development. It provides the intellectual capability needed by man to harness the human and material resources for scientific and technological advancement. Furthermore, it is an instrument for the realization of a nation's growth and development because the level of a nation's literacy determines her extent of development. The type of education that must be the priority of any nation must depend on the need of such nation (Bello, 2021). Therefore, for national development and particularly, sustainable development of every nation, the education of such nation should include science education because it is the fusion between the elements of science and education, to produce a simplified and comprehensible concept of science that can be understood by individuals not traditionally part of the scientific community (Ayeni, 2021).

Science Education has a role in everyday life. Science Education encourages students to think about natural phenomena or phenomena with scientific methods as scientists and prepares students to become citizens who are responsive to the things around them (Sahlan, 2013). If students are not provided with scientific education needs the society will feel the impact. People that are not literate in science might tend to harm themselves and others around them when they are ignorant of standard operating procedures of certain chemical reagents in the laboratory (Lukum, 2015). Science education aims at producing scientist for national development as well as individuals who will be self-reliant and competent in their specialization. According to Hornby (2010) to become competent means that a person has the ability or power to demonstrate knowledge, skills and attitudes that are sufficiently required to perform a given task. Science education subjects are taught at the junior and senior secondary school levels all over the country. At the senior secondary school level, it encompasses subjects like physics, biology, chemistry and mathematics. While at the junior secondary school level, it involves basic science, mathematics, basic technology, physical and health education and computer science.

Computer science study, as part of science education, is the study of ways of representing objects and processes. It involves defining problems, analyzing problems, designing solutions and developing, testing and maintaining programs. It is about how computers compute. It is not about learning how to use the computer, it is much more than computer programming. The major focus of these courses is the development of programming skills, which are important for the success in future postsecondary studies. Computer studies deals with the study of computer systems, and its application in solving the problems of everyday living (Anaehobi, 2020). Computer studies as stipulated by the federal and state government of Nigeria (Nigeria Tribune as cited in Anaehobi, 2020) was received with open arms and regarded as a technological innovation in educational practice in Nigeria institutions of learning. Computer studies as a subject has become one of the most fast growing and far reaching developments in Nigeria secondary schools (Bawa, 2016). It helps to build a strong foundation for students who wish to further their studies and training in specialized areas of science. It is a subject through which students are taught the rudiments of using the computer to store and process information accurately and efficiently (Okebukola as cited in Bawa, 2016). The process seeks to equip the students with skills and knowledge that can make them use the computer effectively (Adamu & Bello, 2012). Effective teaching of computer studies requires the use of realia or virtual realia (instructional materials/resources). In this modern age, teaching is supported by technologies (instructional materials/resources) such as multimedia projectors, interactive whiteboards, 3-dimensional display devices, among others.

Instructional resources refer to anything a teacher uses in teaching and learning situation from small stones, pieces of papers, small sticks, sample of leaf, chalk board, maps, charts, radio, television, computers, and so on (Abdullahi, 2015). Instructional resources are vehicles that convey messages/information from transmitting sources which may be human or non-human to the receiving end (students/learners). Instructional resources are prerequisites to effective teaching and learning process as it supports learner active participation (Bawa, 2016). Instructional resources are teaching aid or materials used to illustrate the teaching process and make instruction

more comprehensive to the learner. According to Agina (2005) instructional resources are concrete or physical objects which provide sound, visual or both to the sense organs during teaching. Afforma in Achimugu (2017) defined instructional resources as materials that facilitate teaching and learning activities and consequently the attainment of the lesson objectives.

Instructional resources are in three main types: visual aids which appeal to the sense of sight (examples are charts, maps, objects and pictures). Audio aids which appeals to the sense of hearing (examples are; radio, radio cassette, record player and gramophone) and audio visual aids which appeal to the sense of sight and hearing (examples are television, computers, projects and video films). Mwangi (2006) noted that instructional resources help in enhancing retention, stimulating student interest and making learning more permanent by providing firsthand experience with the realities of the physical and social environment. When proper instructional resources are available and being utilized by teachers, they help to improve students' academic performance.

Academic performance is a major aspect of school system. It has been conceived as the reflection of students' ability in academic work (Okeke, & Attah, 2010) which shows how well a student performs in test and examination (Olibie, & Ezeoba, 2013). Academic performance of students is an area that is given wide research over the years. This is due to the poor students performance showcase in public school examinations (Agreement& Ontiretse, 2011). Instructional resources therefore, are essential and significant tools needed for teaching and learning of school subjects to promote teachers' efficiency and improve students' performance.

Despite the importance of instructional resources in teaching and learning process; the performance of computer students still remains poor. Several factors have been identified by researchers as being responsible for the persistent poor performance of students in senior secondary school certificate examination. Some of these factors include use of inappropriate instructional resources and poor teaching methods by the teachers. Eze and Nwafor (2012) added that lack and non-use of instructional resources is also a major contributing factor to students' poor performance in science subjects, computer studies inclusive. Nevertheless it is still debated by experts that even where the instructional materials are available, their utilization for effective teaching and learning has been questionable.

Against this backdrop, this study therefore sought to investigate the availability and utilization of instructional resources on students' academic performance in computer studies in senior secondary schools in Idemili North Local Government Area of Anambra State.

One of the major problems facing education sector in Nigeria is the students' non-acquisition of skills and poor academic performance of secondary school students in both internal and standardized examinations in computer studies. It has become a great concern for researchers, educators and all education stake-holders over the years. The inability of students to manipulate computers and the students high failure rate has been attributed to many factors including the use of inappropriate instructional resource, poor teaching method, lack of instructional resources, and non-use of instructional resources in teaching and learning of science subjects including computer science in our senior secondary school in Nigeria (Afolabi, 2009). This study therefore deemed it necessary to look specifically into the availability and utilization of instructional resources on students' academic performance in computer studies in senior secondary schools in Idemili North Local Government Area

The main purpose of the study was to ascertain the availability and utilization of instructional resources on students' academic performance in computer studies in senior secondary schools in Idemili North Local Government Area. Specifically, the study sought to find out the

1. Instructional materials available for teaching computer studies in senior secondary schools in Idemili North Local Government Area.

2. Teacher's utilizations of the available instructional materials for teaching computer studies in senior secondary schools in Idemili North Local Government Area.

Review of Related Literature

Availability of Instructional Materials

Uzuegbu, Mbadiwe and Anuobi (2013) asserted that availability relates to 'how much instructional resources are on hand to which students and teachers have access to. They further postulated that availability of instructional material encompasses the ability of the resources to perform its required function at a stated instance and over a period of time. According to Pena (2021), instructional resources are essential and significant tools needed for teaching and learning to promote a teacher's efficiency and capture the student's attention in a classroom situation. Instructional resources are materials or tools locally made or imported that could make tremendous enhancement of lesson impact if intelligently used (Isola, 2010). There is a purpose for the use of instructional materials According to Okobia (2011) the purpose of instructional resources is to promote efficiency of education by improving the quality of teaching and learning. Generally, instructional resources are classified into audio-aids; that appeal to the sense of hearing alone; visual aids-those that appeal to the sense of sight and audio-visual aids; those that appeal to both senses of hearing and sight at the same time (Awolaju, 2016).

Effective teaching and learning requires a teacher to teach the students with instructional resources and use practical activities to make learning more vivid, logical, realistic and pragmatic (Akinleye, 2010). However for effective teaching and learning to take place, instructional resources must be made available and also be utilized properly by both teachers and students.

Hence, the availability of instructional resources in schools can have a significant effect on the quality of education that students receive.

Instructional Resources

Instructional resources are materials which assist teachers to make their lessons explicit to learners. They are devices which present a complete body of information and largely self-supporting rather than supplementary in teaching and learning (UNESCO, 2015). Instructional resources include all forms of information device which both teacher and learner can use as sources to obtain knowledge, new idea and to acquire new skills and competencies (Audu, 2002). Instructional resources include all materials including instruments and resources that aid the teacher in realizing his/her objectives in the teaching-learning process. These include textbooks, charts, improvised workbook and so on (Ifeoma, 2013).

Instructional resources are materials or tools locally made or imported that could make tremendous enhancement of lesson impact if intelligently used (Isola, 2010). They are objects or devices, which help the teacher to make a lesson much clearer to the learner. Instructional resources are didactic materials which are supposed to make learning and teaching possible. Instructional resources are said to be objects or things the teacher can use in the classroom while teaching in order to ease off his/her teaching activities.

Instructional resources are also described as concrete or physical objects which provide sound, visual or both to the sense organs during teaching (Agina-obu, 2005). They are in various classes, such as audio or aural, visual or audiovisual. Thus, audio instructional resources refer to those devices that make use of the sense of hearing only, like radio, audio tape recording, and television. Visual instructional resources on the other hand, are those devices that appeal to the sense of sight only such as the chalkboard, chart, slide, and filmstrip.

Audio-visual instructional resources however, are a combination of devices which appeal to both the sense of hearing and seeing such as television, motion picture and the computer. Among the instructional resources the classroom teacher uses, the visuals out-numbered the combination of the audio and audio-visual (Oladejo, Olosunde, Ojebisi & Isola, 2011).

Instructional resources are essential and significant tools needed for teaching and learning of school subjects to promote teachers' efficiency and improve students' performance. They make learning more interesting, practical, realistic and appealing. They also enable both the teachers and students to participate actively and effectively in lesson sessions. They give room for acquisition of skills and knowledge and development of self- confidence and self- actualization (Olayinka, 2016). Instructional resources whether visual and audio-visual aids, concrete or non-concrete, used by teachers improves the quality of teaching and learning activities in all subjects (Fadeiye, 2005). They are tools used by teachers to aid explanations and make learning of subject matter understandable to students during teaching learning process (Oluwagbohunmi & Abdu- Raheem, 2014).

Instructional resources are intermediary or mediating materials used in instruction or teaching learners so as to make the learning objectives clearer and more understandable. Listening to explanation of a subject matter may not absolutely lead to a better understanding of that particular subject matter, but, the use of instructional resources provides clarity on issues that are of learning interest to the learners (Ezimah, 2004).

Academic Performance

Academic performance according to Cambridge University Reporter (2003) is frequently defined in terms of examination performance. Academic performance refers to what the students have learned or what skills the student has learned and is usually measured through assessments like standardized tests, performance assessments and portfolio assessments. Academic performance is the extent to which a student, teacher and institution have performed their short and long term educational goals. Academic performance can also be said to be the level of schooling one has successfully undergone and the ability to attain success in one's studies; For example, when one receives good grades in results. Academic performance can be measured by the final grade score of a student in a subject or course of study.

A student's academic performance can be measured on the poor or good performance of the student and this can be attributed to some factors, such as family background, environmental factors, peer groups, motivation, emotional state of the individual, curriculum content, aids to instruction, teacher's ability and capability, individual differences etc. Individual difference in learning can also be affected by factors like intelligence, personality of the learner, conscientiousness etc. Relatively, academic performance is important because it shows the core value attached to teaching and learning. It is as well relevant to working people as it aids them to tackle the demands of their profession.

Computer Studies and Utilization of Instructional Resources

Computer is explained as a device that accepts data, store data, process mathematical calculations and give out information when required. Some factors that led to inefficiency in teaching and learning computer studies in secondary schools include lack of professionally trained computer science teachers, inadequate computers, lack of support infrastructural facilities, inadequate instructional resources, general students apathy and indifference in computer studies, lack of motivation and encouragement to the students and lack of incentive and motivation for teachers (Ehondor & Omoruyi, 2013). Teaching computer studies as a subject in Nigerian secondary schools helps students to develop competence in the basic skills and understanding of computers. It also helps to develop the habit of analytical data base concept; helps to effectively utilize the computer in solving problems; helps in developing necessary background in computer studies to enhance further education; creating a technological based education at the secondary school level, among others (Fisusi, 2000).

Empirical Studies

Fredrick (2016) carried out a research on the availability and usage of material resources for teaching computer studies in senior secondary schools in Enugu state, Nigeria. The research design was survey. Five research questions and five hypotheses guided the study. The five null hypotheses were tested at 0.05 level of significance.

The instrument for data collection was the researcher's structured questionnaire which contained seventy-nine items. The split half method was used to determine the reliability of the instrument and reliability coefficient of 0.82 was obtained. The instrument was administered to all the 275 computer studies teachers that constituted the population for the study. The data from samples were analyzed using mean and Z- test statistics. The result of the study indicated that material resources for teaching computer studies are not available in most of the senior secondary schools in Enugu state. The study also indicated low availability in some schools as well as low usage of the available material resources for teaching computer studies in senior secondary schools in Enugu state. Based on the findings, Educational implications were pointed out and it was recommended that government should provide computer in senior secondary schools in Enugu state and ensure that they are being adequately maintained. It should also take steps to enhance teacher's competence in the use of computer facilities to facilitate teaching and learning of computer studies in senior secondary school in Enugu state. This study is related to the present study in that it investigated availability and usage of material resources for teaching computer studies. Notwithstanding, they differ in that Fredrick (2016) carried out the analysis of the study using using mean and Z- test statistics while the present study used mean and standard deviation.

Bawa (2016) examined the effects of instructional materials in promoting secondary schools students' academic performance in computer science in Kebbi State, Nigeria. The study adopted quasi experimental with a pretest and post-test, non-equivalent comparison design. Purposive sampling was used to select two JSS3 intact classes of 31 and 34 students from Government Girls Secondary School Birnin Kebbi and Salamatu Hussaini Girls Secondary School Birnin Kebbi as experimental and control groups respectively to participate in the study. An instrument titled Computer Science Achievement Test (CSAT) was validated by experts and reliability coefficient of 0.93 was obtained using Kuder Richardson 21 (KR-21). The instrument was used for the pretest and post-test. Two research questions were answered and the hypothesis formulated was tested at 0.05 level of significance. Data were analyzed using mean and z-test. Findings revealed that there was significant difference in the academic performance of the students taught using instructional material (computer) and those taught using conventional instruction. The finding was in favor of the experimental group. Thus instructional material was found effective. It was recommended among others that education board should commit itself to providing relevant and economically enhanced instructional materials to secondary schools and more computers should be provided to schools for effective delivery in the teaching of computer studies in secondary schools. This study is related to the present study in that it looked at the effects of instructional materials in promoting secondary schools students' academic performance in computer science. However, they differ in that Bawa (2016) examined only the effects of instructional materials in promoting secondary schools students' academic performance in computer science in Kebbi State, Nigeria, while this present study focused on the effects of availability and utilization of instructional resources on students' performance in computer in senior secondary schools which was carried out in Idemili, Anambra State, Nigeria.

Osuafor (2016) carried out a study on the availability and utilization of information and communication technology (ICT) resources in the teaching of agricultural science in the secondary schools in Anambra state. Four research questions guided the study. The design of the study was descriptive survey. A total of 76 agricultural science teachers found in two randomly selected educational zones were used for the study. A researcher developed instrument was used for data collection. The instrument was validated by two expert in measurement and evaluation and agricultural science teacher. A reliability coefficient index of 0.76 was obtained. Data were analyzed using percentage, mean and standard deviation. Results show that most of the information and communication technology resources needed for teaching agricultural science were not available in most of the secondary schools studied. The study recommended among all other things that agricultural science teaching and

learning should make use of different types of software. This study is related to the present study in that it investigated the availability and utilization of information and communication technology (ICT) resources. Nevertheless, they differ in that Osuafor (2016) focused on ICT resources and agriculture science, while this present study focused on Instructional resources and students' performance in computer.

Akpan and Onoh (2017) analyzed the effects of the accessibility and utilization of instructional materials by teachers on the academic performance of secondary school students in Ikwuano Local Government Area of Abia State, Nigeria. Multi-stage sampling procedure was used in the selection of the sample size. The sample size for the students was 120 students and 120 teachers. The instruments for data collection was the questionnaire used for a pre-test and a post-test data collection. Data collected were analyzed using mean and simple percentage. The findings were that the disposition of the teachers affected the accessibility and utilization of instructional materials, and that students who were taught with instructional materials performed better than those who were not. Based on the findings it was recommended that teachers should be made to undergo periodic trainings to update themselves on the modern trends in instructional technology. The local, state or national education resource centres should establish an instructional material bank within the reach of the teachers so that they could easily access one when the need arises. It was also recommended that there is the need to expand the scope of instructional materials from chart, pictures etc to overhead projectors, slides and web-based instruction for personalized learning which will involve the modern trends in information and communication technology.

This study is related to the present study in that it investigated the effects of the accessibility and utilization of instructional. It however differs from the present study because it was carried out in Abia State and multi-stage sampling procedure was used in the selection of the sample size, while this present study was carried out in Anambra state and simple random sampling technique was used to select the sample size of the study.

Abdu-Raheem (2016) carried out a research on Effects of instructional materials on secondary schools students' academic achievement in social studies in Ekiti State, Nigeria. The study employed descriptive survey design. The population for the study comprised of all Junior Secondary School Class II students from among which 180 were sampled. The instrument for the study was a 30 multiple-choice self- designed Social Studies Achievement Test (SSAT). The instrument was validated by specialists in Social Studies Test and Measurement and Educational Management. Test-re-test method and estimation of internal consistency was used to ascertain the reliability. The reliability co-efficients of 0.73 was obtained. The study generated four hypotheses that were tested at the significance level of 0.05. Analysis of variance was used to analyse the data collected. The study found that there was a significant difference in the pre-test and post-test of students in the experimental group and control groups. The study also found that gender effect was not statistically significant in social studies. The study concluded that students who were taught with instructional materials performed better than those taught without. The study therefore recommended that teachers of Social Studies should employ the use of essential instructional materials for their teaching and also improvise where and when the materials are not available. It therefore becomes imperative to have concerted efforts among parents, school and the government to make available important and necessary instructional materials to teachers of Social Studies for enhanced teaching and consequently improve achievement of students in the subject. This study is related to the present study in that it investigated the effects of instructional materials on secondary schools students' academic achievement. Notwithstanding, they differ because the study was carried out on social studies in Ekiti state while the present was carried out on biology in Anambra state.

In the empirical studies previous work relating to the presents study were reviewed. The similarities and differences between the previous works and the present study were also explained. The use of instructional resources is very pertinent in the teaching and learning of computer studies, because it does not only improve the

teacher's efficacy but it also improves students' academic performance. However for this materials to be utilized by teachers and students, it must be made available to the school and also be at the teachers and students disposal.

METHOD

Research Design

The research design is a descriptive survey design. Since this study seek to elicit opinion of computer studies teachers in secondary schools in Idemili North Local Government Area then a descriptive survey design was appropriate for it.

Population of the Study

The population of the study comprised all the computer studies teachers totalling 35 that are currently teaching computer studies in the 13 public secondary schools in Idemili North Local Government Area (Anambra State post primary schools service commission, 2023)

Sample and Sampling Technique

Simple random sampling technique was used to select 4 government schools out of the 13 government secondary schools in Idemili North Local Government Area, since it was not possible for the researcher to use the whole government secondary schools in the Local Government. Afterwards, a balloting simple random sampling technique was used to select the participants. Numbers 1 to 80 were written in pieces of papers, folded and put inside a ballot box, the teachers who picked from 1 to 20 from each of the four schools were selected. This was done in the 4 different secondary schools selected to make up the sample size. A total of 80 teachers were selected and they formed the participants of the study.

Instrument for Data Collection

The research instrument used for this study is the questionnaire. The researcher made use of research question as guide to develop the research instrument / questionnaire. The questionnaire is made up of two sections. Section 'A' contains information on personal data which the respondent is to fill. It includes; the name of the school, age and gender while section 'B' contains questions actually meant for the study. The instrument is informed of checklist which required the respondents to tick (✓) against any of the following responses in likert scales;

Strongly Agree (SA) 4 points

Agree (A) 3 points

Disagree (D) 2 points

Strongly Disagree (SD) 1 point

Section B has four clusters. Cluster one which covered Instructional materials available for teaching computer studies in senior secondary schools in Idemili North Local Government Area. Cluster two covered teachers' utilizations of the available instructional materials for teaching computer studies in senior secondary schools in Idemili North Local Government Area. Cluster three covered factors that militate against the utilization of available instructional materials for effective teaching of computer studies in senior secondary schools in Idemili North Local Government Area, while cluster four consist of items which covered strategies for enhancing the utilization of instructional materials for effective teaching of computer studies in senior secondary schools in Idemili North Local Government Area.

Cluster I was constructed in a way that the respondents had to choose one of the response of two point scale of Available (A) and Not Available (NA); Cluster II was constructed in a way that the respondents had to choose one of the response of two point scale of Utilized (U) and Not Utilized (NA); Cluster three and four was constructed in a way that the respondents had to choose one of the response options of four-point rating scale of: Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD).

Method of Data Collection

The researcher shared the questionnaire herself through hand delivery and monitored the whole data collection exercise. The questionnaire was retrieved from the respondents immediately after completion for data analysis.

Method of Data Analysis

For research question 1 and 2 the data collected were analyzed using frequency counts and percentage. The cut-off for accepting availability (A) and utilization (U) was 50% and above while any items which scored below 50% was taken as not available (NA) and not utilized (NU). For research question 3 and 4 descriptive statistics, namely: the mean (\bar{x}) and standard deviation (SD) was used. The cut off point for accepting mean score for research questions as agreed or disagreed was 2.50, with decision rule that any weighted mean score from 2.50 and above was taken as agreed, while weighted mean scores below 2.50 was taken as disagreed.

Data Presentation and Analysis

Research Question 1: What are the instructional materials available for the teaching of computer studies in senior secondary schools in Idemili North Local Government Area?

Table 1: Frequencies and Percentage of available instructional materials available for teaching computer studies in senior secondary schools in Idemili North Local Government Area.

S/N	Items	Available		Not Available		Remarks
		Freq.	%	Freq.	%	
1	Charts	5	100	0	0.00	A
2	projectors	5	100	0	0.00	A
3	Servers	2	40.0	3	60.0	NA
4	Software	3	60.0	2	40.0	A
5	Hardware	3	60.0	2	40.0	A
6	Disk drive	4	80.0	1	20.0	A
7	System Unit	3	60.0	2	40.0	A
8	Joystick	5	100	0	0.00	A
9	Routers	4	80.0	1	20.0	A
10	Flash drive	5	100	0	0.00	A
11	Prepared slides	1	20.0	4	80.0	NA
12	Power Surge	5	100	0	0.00	A
13	Printers	4	80.0	1	20.0	A
14	Scanners	3	60.0	2	40.0	A
15	Whiteboard	5	100	0	0.00	A
16	Markers	5	100	0	0.00	A
17	Floppy disk	5	100	0	0.00	A
18	Textbooks	5	100	0	0.00	A
19	Mouse	5	100	0	0.00	A
20	Keyboard	3	60.0	2	40.0	A
21	Monitor	3	60.0	2	40.0	A
22	Memory card	3	60.0	2	40.0	A
23	Webcam	0	00.0	5	100.0	NA
Overall Percentage		74.8		25.2		A

Data in Table 1 show that items 3, 11 and 23 have below 50%. This indicates that servers, prepared slides and webcam are not available for teaching computer studies in secondary schools in Idemili North Local Government Area. On the other hand, items 1, 2, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21 and 22 recorded

average that is 50% or above. This indicates that instructional materials like charts, projectors, software, hardware, disk drive, system unit, joystick, routers, flash drive, power surge, printers, scanners, whiteboards, markers, floppy disk, textbooks, mouse, keyboard, monitor and memory card are available for teaching computer studies in secondary schools in Idemili North Local Government Area. The overall percentage of 74.8 indicates that instructional materials are highly available for teaching computer studies in secondary schools in Idemili North Local Government Area.

Research Question 2: What are the instructional materials utilized by the computer studies teachers in senior secondary schools in Idemili North Local Government Area?

Table 2: Frequency and Percentage of teacher's utilization of instructional materials available for teaching computer studies in senior secondary schools in Idemili North Local Government Area.

S/N	Items	Utilized		Not utilized		Remarks
		Freq.	%	Freq.	%	
1	Charts	64	55.6	40	34.7	U
2	Projectors	16	13.9	93	80.8	NU
3	Servers	30	26.0	81	70.4	NU
4	Software	51	44.3	60	52.1	NU
5	Hardware	52	45.2	59	51.3	NU
6	Disk drive	51	44.3	60	52.1	NU
7	System Unit	27	23.4	83	72.1	NU
8	Joy stick	23	20.0	87	75.6	NU
9	Router	32	27.8	81	70.4	NU
10	Flash drive	18	15.6	90	78.2	NU
11	Prepared slides	32	27.8	81	70.4	NU
12	Power surge	47	40.8	55	47.8	NU
13	Printers	24	20.8	81	70.4	NU
14	Scanners	31	26.9	78	67.8	NU
15	White board	19	16.5	89	77.3	NU
16	Marker	11	9.56	98	85.2	NU
17	Floppy disk	25	21.7	83	72.1	NU
18	Textbooks	85	73.9	24	20.8	U
19	Mouse	18	15.6	92	80.0	U
20	Keyboard	54	46.9	53	46.0	U
21	Monitor	58	50.4	50	43.4	U
22	Memory card	68	59.1	37	32.1	U
23	Webcam	51	44.3	56	48.6	NU
Overall Percentage			33.4		58.9	NU

Data in Table 2 show that items 1, 18, 19, 20, 21, 22 and 23 have 50% and above. This indicates that the view of computer studies teachers' instructional materials like charts, textbooks, mouse, keyboard, monitor and memory card are utilized for teaching computer studies in secondary schools in Idemili Local government Area. On the other hand, items 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17 and 23 recorded an average that is below 50%. This indicates that computer studies teachers' instructional materials like projectors, servers, software, hardware, disk drive, system unit, joystick, routers, flash drive, prepared slides, power surge, printers, scanners, whiteboards, markers, floppy disk and webcam are not utilized for teaching computer studies students in secondary schools in Idemili South Local Government Area. The overall percentage of 58.9 indicates that in teachers view,

instructional materials are not highly used in teaching computer studies in secondary schools in Idemili Local Government Area.

Conclusion and Recommendations

The findings of the study revealed that instructional materials are highly available for teaching computer studies in secondary schools in Idemili North Local Government Area. The findings of this study revealed that in teachers' and students' views, the available instructional materials are not utilized for teaching computer Studies in senior secondary schools in Idemili North Local Government Area. The findings of the study is contrary to that of Fredrick (2016) whose findings revealed that the instructional materials for teaching computer studies are not available in most of the senior secondary schools. Federick's findings also concur with the findings of Osuafor (2019) who discovered that most of the information and communication technology resources needed for teaching science were not available in most of the secondary schools. The findings of the study agreed with Fredrick (2016) whose findings revealed that there is low availability of instructional resources in some schools as well as low usage of the available material resources for teaching computer studies in senior secondary schools.

Recommendations

Based on the findings of the study, the following recommendations were made:

1. Government should provide support to computer studies teachers so that they may obtain the desired educational facilities for the effective teaching of computer studies in secondary schools.
2. Government should organize workshops and seminars for teachers towards the acquisition of the necessary knowledge and skills needed to utilize the available instructional materials.

References

- Achimugu, L. (2016). Factors affecting the effective implementation of senior secondary education chemistry curriculum in Kogi state, Nigeria. *International Journal of Scientific and Research Publications*, 6(5), 562-566.
- Achimugu, L. (2017). Availability and utilization of instructional materials for teaching Chemistry in senior secondary schools. *International Journal of Novel Research in Education and Learning*, 4(3), 33-43.
- Adigun, J., Onihunwa, J., Irunokhai, E., Sada, Y., & Adesina, O. (2015). Effect of Gender on Students' Academic Performance in Computer Studies in Secondary Schools in New Bussa, Borgu Local Government of Niger State. *Journal of Education and practice*, 6(33), 1-7.
- Agbo, I. S. (2015). Factors influencing the use of information and communication technology (ICT) in teaching and learning computer studies in Ohaukwu local government area of Ebonyi state-Nigeria. *Journal of Education and Practice*, 6(7), 71-86.
- Agina-Obu, T. N. (2005). The relevance of instructional materials in teaching and learning. *Theories and practice of teaching*, 9-12.
- Amadi, G. E., Juliet, M. C., & Cornelius, N. U. (2022). Availability and utilization of teaching resources for effective computer science education for youth empowerment in Anambra state. *International Journal of Advance Research, Ideas, and Innovations in Technology*.

- Awolaju, B. A. (2016) Instructional Materials as Correlates of Students' Academic Performance in Biology in Senior Secondary Schools in Osun State. *International Journal of Information and Education Technology*, Vol. 6, No. 9.
- Asiabaka, L. P (2010), Perceptions of Imo state primary school teachers or the primary school component of the universal.
- Asiru, T.A. (2014). "Primary education and national development in Nigeria", *International Journal of Special and General Education*, 3, 155-165.
- Ayeni, M. F. (2021). The Challenges and Prospects of Science Education Development in Africa, *Mediterranean Journal of Social Sciences*, 12(4.) DOI: <https://doi.org/10.36941/mjss-2021-0033>
- Bawa, N. (2021). Effects of instructional materials (computer) in promoting Secondary Schools students' academic performance in Computer Science in Kebbi State, Nigeria. *Nigeria (July 15, 2021)*.
- Bello, M. A. (2021). Issues and Trends in Science Education for Sustainable Economic Development in Nigeria, *New Trends in Science, Technology, Management and Social Sciences in Africa*, 64-78.
- Bukoye, R. O. (2019). Utilization of instruction materials as tools for effective academic performance of students: Implications for counselling. In *Proceedings* (Vol. 2, No. 21, p. 1395). MDPI.
- Chesimet, M. C., Githua, B. N., & Ng'eno, J. K. (2016). Effects of Experiential Learning Approach on Students' Mathematical Creativity among Secondary School Students of Kericho East Sub-County, Kenya. *Journal of Education and Practice*, 7(23), 51-57.
- Chikumba, P. A. (2011). Student performance in computer studies in secondary schools in Malawi. In *E-Infrastructures and E-Services for Developing Countries: Second International ICST Conference, AFRICOM 2010, Cape Town, South Africa, November 25-26, 2010, Revised Selected Papers 2* (pp. 113-121). Springer Berlin Heidelberg.,
- Eric, A., & Ezeugo, C. R. (2019). Physical resources availability and the academic performance of students in the universal basic education scheme, Rivers State. *International Journal of Innovative Development and Policy Studies*, 7(1), 13-23.
- Fife-Schaw, C. (2012). Quasi-experimental designs. *Research methods in psychology*, 75-91.
- Hornby, A. S. (2010). *Oxford Advance Learner Dictionary of current English*. London: Oxford University Press.
- Lukum, A 2015 Evaluasi program pembelajaran IPA SMP menggunakan model countenance stake. *Jurnal Penelitian dan Evaluasi Pendidikan*. 19(1), 25-37.
- Nnorom, M. R. (2012). Availability and usability of basic science laboratory facilities for teaching basic science in upper basic secondary schools. In O. Abonyi (Ed), 53rd Annual Conference Proceeding of Science Teachers Association of Nigeria (STAN), 183 – 189, Ibadan, HEBN publishers PLC.

- Okobia, E. O. (2011). Availability and teachers' use of instructional materials and resources in the implementation of social studies in junior secondary schools In Edo State, Nigeria. *Rev. Eur. Stud.*, 3, 90.
- Olayinka, A. R. B. (2016). Effects of Instructional Materials on Secondary Schools Students' Academic Achievement in Social Studies in Ekiti State, Nigeria. *World Journal of Education*, 6(1), 32-39.
- Osuafor, A., & Okonkwo, I. (2013). Influence of family background on academic achievement of secondary school biology students in Anambra State. *African Research Review*, 7(3), 156-167.
- Osuala, E. C. (2004). Principles and methods of business and computer education. *Enugu: Cheston Agency Ltd.*
- Sahlan, M. & R. (2013). Pengembangan instrumen asesmen dengan pendekatan kontekstual untuk mengukur level literasi sains siswa. *seminar nasional evaluasi pendidikan*, 177–190.
- Peni, S. A., Danjuma, M., & Musa, E. (2021). Availability and utilization of instructional materials in teaching computer studies in secondary schools in Gwandu metropolis, Kebbi State. *Nigerian Online Journal of Educational Sciences and Technology*, 3(2), 37-44.
- Suberu, S. (2013). An evaluation of students' general interest in computer studies and its impact on subject performance in Ado local government area of Ekiti State. *Information Systems, Development Informatics & Business Management*, 4(2) 41-50
- Uzuegbu, C. P., Mbadiwe, H. C., & Anulobi, J. C. (2013). Availability and utilization of instructional materials in teaching and learning of library education in tertiary institutions in Abia State. *Wudpecker Journal of Educational Research*, 2(8), 111-120.