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EFFECT OF COMPUTER-ASSISTED INSTRUCTIONAL STRATEGIES ON SECONDARY SCHOOL STUDENTS' ACADEMIC ACHIEVEMENT IN COMPUTER STUDIES IN AWKA-SOUTH LGA, ANAMBRA STATE

Vincent, Karachi Nzubechukwu[1]& Achufusi-Aka, Nonye Ngozi[2]
1, 2-Department of Science Education, Nnamdi Azikiwe University, Awka, Anambra State.
n.n.achufusi-aka@unizik.edu.ng

ABSTRACT

The study determined the effect of computer-assisted instructional strategies on secondary school students' academic achievement in computer studies in Awka-South Local Government Area, Anambra State. The study was guided by two research questions and two hypotheses. The study used a quasi-experimental research design, specifically the pretest-posttest control group design. The population of the study was all the 1884 SS1 students enrolled in computer studies. The research sample size was 66 SS1 (34 males and 32 females) students drawn from two schools out of the 18 public secondary schools in the study area using purposive sampling technique. The instrument used to collect data was a 50-item Computer Studies Achievement Test (CSAT). The reliability of CAT was established using Kuder-Richardson 20 was yielded a reliability index of 0.76. The experimental group was taught using computer-assisted instructional strategies, while the control group was taught using the lecture method. To answer the research questions, mean and standard deviation were used, and ANCOVA was used to test the null hypotheses at 0.05 level of significance. The findings show that students taught using computer-assisted instructional strategies performed better and had a higher achievement in computer studies than those taught using the lecture method. There was an interaction effect of gender and method of instruction on students' academic achievement in computer studies. Based on the findings, it was recommended, among other things, that computer studies teachers should employ computer-assisted instructional strategies while teaching students in the classroom.

Keywords: Computer-Assisted, Instructional Strategies, Academic Achievement, Analysis of Covariance

Introduction

The information and skills people need to make a positive contribution to society can be acquired through education. It makes it feasible for people to think and behave in ways that benefit societal growth. Ughamadu, Anagor, and Chike (2021), asserted that education is critical to a country's scientific and technological advancement because it gives students the necessary knowledge, vital skills, and desired behaviors that enable them to become independent and positively impact the society. Basic knowledge of computer studies when taught at grass root in secondary school can aid in supporting a country's technical advancement. Computer studies is the study of how computers work

and are used to process and distribute data. Computer studies, for Nwafor, Okpala, and Oka (2019), is the study of computer science and the meaning of algorithmic and computer processes, including their applications, designs of hardware and software, and social ramifications. This technology-based course gives students the opportunity to learn how to use computers and gain essential knowledge and abilities. In a similar spirit, Ezeanyika and Okigbo (2021) described computer studies as a senior high school course that strives to offer students the tools they need to use computers effectively. Computer studies is described as the study of the theory, design, use, and analysis of computer equipment according to Adigun, Onihunwa, Irunokhai, Sada, and Adesina (2015). Students who study computers obtain the skills and information essential to staying up to speed with the quickly growing global technological trends. According to Adigun et al. (2015), the core of the secondary school computer studies curriculum understands the computer itself—that is, how it functions, what it can do, how it can do it, and why it does it. The majority of senior high school instructors still employ the lecture approach while implementing computer studies programs.

The lecture method is a teacher-centered teaching style that uses a textbook, chalkboard, and student notebook to direct instruction. The lecture technique is a chalk-talk teaching strategy that sets the teacher as the main actor and the learners in the passive corner of the classroom, according to Ojonugwa, Igbo, Apeh, and Ndukwu (2020). Under the lecture method, students merely listen and take notes while teachers give the lesson with little to no explanation. Idika (2021), students who attend lectures are not able to enhance their critical thinking and reasoning skills since they spend too much time taking notes, essentially starring at the board, or simply listening to the teacher. However, though the lecture method style works well for covering a lot of ground with a lot of students, it might not be able to fully fulfill the vast range of demands of students. The computer-assisted technique is one unique teaching strategy that could match students' learning demands.

Moving visuals are utilized in the computer-assisted instructional technique to teach students. A computer-assisted teaching technique, according to Bello, Kamar, Yushau, and Abubakar (2022), is the use of graphics, animations, and videos, or even text combined with images and videos, to explain particular concepts or happenings during the lesson. Slides are used to present lessons to students in computer-assisted instruction. The computer-assisted package contains audio to go along with the slides, so teachers can easily go over any of the lesson's harder-to-explain information. A computer-controlled machine and a response entry device make a teaching-aided package known as a computer-assisted instructional technique, (Opesemowo and Omideyi 2023). This software mixes text, images, sound, and video to boost learning through engagement and increase educational outcomes. The programming and designing of educational resources to appear as moving visuals and be displayed on a projector for explanation and presentation of a subject in the classroom is known as

computer-assisted instruction in the context of this study.

In order to allow students to learn at their own pace in the classroom, computer-assisted teaching offers content in the form of text, images, and slides. Microsoft PowerPoint and other computer-based software can be used to teach students through computer-assisted instruction. Emiri (2020), computer-assisted instruction incorporates a number of telecommunication technologies in the teaching and learning process, including laptops, projectors, PowerPoint presentations, and projector slides. The study will leverage the Senior Secondary School Computer Studies curriculum, which will be turned into digital lessons, images, text, and videos for usage in CAI software. Students in the experimental schools will be exposed to treatment through the installation of CID software on their computers, while students in the control groups will continue to receive education as usual. By enabling students to actively participate in the teaching and learning process, computer-assisted integration during instructional delivery has the potential to increase academic achievement. The examination result of students who have received classroom instruction is academic accomplishment.

Academic achievement, as described by Ikwuka and Adigwe (2021), is a result of education or learning and is often judged by in-full or continual evaluation. Test and in-full results are used to evaluate the achievement of the students. Academic achievement, as asserted by Enoch and Asogwa (2021), is a measure of a student's complete accomplishment as evidenced by their achievement on standardized tests. One significant criterion for judging the knowledge and abilities that students exposed to classroom learning experiences is their academic success. Academic achievement, as employed in this study, is a learning target that is determined by students' exam grades or scores. Students in computer studies at secondary schools in Anambra State, Nigeria, in general, seem to frequently perform poorly academically. Edeh et al,(2021) offered evidence for this uncomfortable state by displaying a constant negative trend in the academic achievement of computer studies students in senior secondary schools in Nigeria.

The Anambra State Ministry of Education (2020) provided the WAEC results analysis. It shows that for the years 2017, 2018, and 2019, 16,123, 19,124, and 21,543 applicants respectively took the Computer Studies WAEC examination in Anambra State public secondary schools. Of those applicants, 8,192, 9,019, and 11,276 obtained credit or above. These applicants comprised 50.8%, 47.2%, and 52.3% of the total population that took the examination. In 2017, 2018, and 2019, the percentage of candidates that failed computer studies was 49.2%, 52.8%, and 47.7%, respectively. These findings frequently cause anger and frustration for the candidates, their parents, and other family members. Similar to this, Ezeanyika and Okigbo (2021) highlighted that although computer studies are crucial for the advancement of the country, society, and individuals, an analysis of students' achievement in computer studies suggests that students' success and skills have not increased. This is backed up by reports on

students' achievement in computer studies supplied by the WAEC Chief Examiner in 2020. Nwafor, Okpala, and Oka (2019), the achievement assessment of the students in the computer studies examinations, which was reviewed by the Chief Examiner, revealed that most of the students had demonstrated little to no understanding of the contents of the syllabus, as evidenced by their responses. While academic achievement is frequently evaluated in terms of individual work and intelligence, it is critical to explore how gender dynamics affect educational opportunities and outcomes.

The behavioral features and social roles that distinguish males and females are commonly referred to as gender. Japari, Luka, and Anthony (2021) describe gender as stereotyping, which is a bundle of widely accepted views about what constitutes correct conduct and interests for men and women. In a similar vein, gender was described by Odo and Nwachukwu (2020) as a social or cultural construct that incorporates the features, acts, and roles that society gives to men and women. Operationally, gender is defined as the roles that society allocates to men and women based on their physical and biological qualities. However, some experts believe that male learners outperform female students; others do not share this opinion. As such, Adigun et al. (2015), pointed that male students outscored female students academically in computer studies by a tiny margin. Similarly, male students outpaced female students in the mean achievement scores of computer studies, according to Ezeanyika and Okigbo's (2021) research. Contrary, according to Edeh et al. (2021), female students surpassed their male counterparts in terms of academic achievement in computer studies when taught via computer-assisted instructional approaches. As a result, it is apparent that gender is still a concern, especially when it comes to students' achievement in computer studies. For this reason, more research is essential, and this study should take gender into account.

It is now vital to look for novel techniques to boost computer science instruction due to changes and developments in the educational system. Information technology is being substantially implemented in the educational system. In a similar manner, Usman and Jilang (2018) pointed out that the growth of computer technology has radically revolutionized how teaching and learning are conducted. They went on to say that the most sophisticated and advanced type of programmed instruction available today, computer-assisted instruction, has been integrated into educational systems, profoundly altering the nature of teaching and learning. In this day and age, where robotics is a required subject and information and communication technology is used in every subject, the question now is whether incorporating computer-assisted teaching into computer studies classes can pique students' interest and improve their academic performance. This resulted in an evaluation of the impact of computer-assisted instructional approaches on students' interest and achievement in computer science at Awka South's public secondary school.

Statement of the Problem

The importance of computer studies in the modern educational curriculum cannot be overstated. As the world becomes increasingly digitized, proficiency in computer studies equips students with essential skills that are critical for their academic and professional success. However, the persistent reliance on outdated teaching methods in Awka-South LGA poses a threat to students' ability to fully grasp and excel in this subject. The potential benefits of CAI strategies in this context are significant, as these strategies offer interactive, student-centered learning experiences that can make computer studies more engaging and accessible. Despite the recognized advantages of CAI strategies, there is a notable lack of empirical research focusing on their impact within the specific context of Awka-South LGA. Much of the existing research has been conducted in more developed regions or different geographical contexts, resulting in a gap in localized evidence that could inform educational practices and policies tailored to the needs of students in this area. This gap is particularly concerning given the unique socio-economic and educational challenges faced by schools in Awka-South LGA, which may influence the effectiveness of CAI strategies.

The rapid pace of technological advancement necessitates continuous evaluation of instructional methods to ensure they remain relevant and effective in meeting the evolving educational needs of students. The absence of robust empirical data on the implementation and outcomes of CAI strategies in Awka-South LGA limits educators' ability to adopt evidence-based practices that can enhance student engagement and academic performance in computer studies. This situation underscores the need for targeted research to explore the potential of CAI strategies in this specific context. The current educational climate in Awka-South LGA is characterized by a pressing need for innovative solutions that can address the shortcomings of traditional teaching methods and improve students' academic outcomes. Given the critical role of computer studies in preparing students for the demands of the digital age, it is imperative to investigate how CAI strategies can be effectively integrated into the educational framework to foster greater academic achievement in this subject. Therefore, this study aims to examine the effect of computer-assisted instructional strategies on secondary school students' academic achievement in computer studies in Awka-South LGA, Anambra State.

Purpose of the Study

The purpose of the research is to determine the effect of computer-assisted instructional strategies on secondary school students' interest and achievement in computer studies in Awka-south Local Government, Anambra State. In particular, the research aims to determine:

1. The differences in the mean achievement scores of students taught computer studies using computer-assisted instructional techniques and those taught using lecture methods in Awka-south LGA.

2. The differences in the mean achievement scores of male and female students taught computer studies using computer-assisted instructional techniques in Awka-south LGA.
3. The interaction effect of gender and method of instruction on students' academic achievement in Awka-south LGA.

Research Questions

1. What is the difference in the mean achievement scores of students taught computer studies using computer-assisted instructional techniques and those taught using lecture methods in Awka-south LGA?
2. What is the difference in the achievement scores of male and female students taught computer studies using computer-assisted instructional techniques in Awka-south LGA?

Null Hypotheses

The following null hypotheses were tested at the 0.05 level of significance.

1. There is no significant difference between the achievement scores of students taught computer studies using computer-assisted instructional techniques and those taught using lecture methods in Awka-south.
2. There is no significant difference between the achievement scores of male and female students taught computer studies using computer-assisted instructional techniques in Awka-south.
3. There is no significant interaction effect of gender and technique of instruction on the achievement scores of students taught computer studies in Awka-south.

Research Method

The study adopted a quasi-experimental design, specifically, the non-randomized pre-test, post-test control group design. The study was carried out in Awka south L.G.A of Anambra state. The population of the study comprised of 1,884 SS1 computer studies students from the eighteen (18) public secondary schools in the Awka south LGA of Anambra State during the 2023–2024 academic year, of which 739 were male and 1145 were female. The sample size of the study comprise of 66 SS1 (34 males and 32 females) computer studies students. The sample was drawn from two schools out of the eighteen (18) government secondary schools in Awka South Local Government Area, using the purposive sampling technique to ensure that the schools are far from each other to avoid possible interaction between the two research groups. A toss of the coin was used to assign the schools to the experimental group and the control group. Lastly, lucky dip sampling was also used to pick one arm of SS1 class each from the two schools to be used for the study because each of the sample schools has more than one arm of SS1. After the sampling, the experimental class consisted of 35 students (16 male and 19 female), while the control group consisted of 31 students (18 male and 13

female). The instrument that used for data collection was Computer Studies Achievement Test (CSAT). The CSAT was adapted from past WASSCE question items relating to the concept taught in this study. The CSAT is design into two portions; A and B. The goal of Section A of the CSAT is to produce data regarding the bio-data of the students. Forty multiple-choice questions (A–D) make up Section B of the CSAT.

The instrument was validated by to three experts, two from the Department of Science Education and one in the Department of Educational Foundations (Measurement and Evaluation) all from Nnamdi Azikiwe University, Awka. The reliability of CSAT was established using Kuder-Richardson (KR-20). This is because the items are dichotomously scored with either right or wrong answers and KR-20 is a suitable reliability estimate for determining the internal consistency of dichotomously scores items. CSAT was administered once to 40 SS1 Computer studies students in two schools not involved in the study. Their scores were obtained and the reliability index calculated which gave a coefficient value of 0.76.

The treatment was done in three phases. In the first phase, both the experimental and control groups took a pretest as part of the pre-testing and familiarization phase. Using the regular double time of 70 minutes given for computer studies in the selected schools, students were taught for four weeks as part of the second phase. The following summarizes the five weeks of therapeutic activities: An introduction to the computer system was covered in the first week of instruction. Input devices were taught to the students during the second week. The third week's themes were output devices. Computer software was taught to the students during the fourth week. The students in the control group received the same four lectures (one each week) via lecture method, the experimental group's teachers used computer-assisted instructional techniques. Post-testing was the last step following four weeks of education. Here, a post-test utilizing CSAT and CSIS were provided to the experimental and control groups. The scripts were then be gathered, graded, and scored. The CSAT consists of 40 questions, each earning one mark. There are 40 possible points. The sum of a student's scores for each item was utilized to calculate their overall score.

The research questions were answered using mean and standard deviation while the hypotheses were tested at 0.05 level of significance using Analysis of Covariance (ANCOVA). ANCOVA was used because the design adopted for the study (pretest-posttest non-randomized group design) resulted in initial group difference. Thus, ANCOVA was used to take care of the initial differences that may exist between the groups.

Presentation of Results

Research Question 1: What is the difference in the mean achievement scores of students taught computer studies using computer-assisted instructional techniques and those taught using lecture methods in Awka-south LGA?

***Table* 1:** Mean Pre-test and Posttest Academic Achievement Scores of Students taught Computer Studies using Computer Assisted Instructional Technique and those taught using Lecture Method

	Pre-test			Post-test			Mean Gain	Mean difference
Method	**N**	**Mean**	**SD**	**N**	**Mean**	**SD**		
CIA	49	14.02	3.23	49	31.08	3.66	17.06	12.51
LM	44	12.77	3	44	17.32	4.01	4.55	-12.51

Table 1 showed that students taught Computer Studies using computer assisted instructional technique had pre-test achievement mean score of 14.02 with standard deviation of 3.23, while their posttest mean achievement score was 31.08 with 3.66 value of standard deviation and mean gain of 17.06. Those students that were taught computer studies with lecture method had pre-test achievement mean score of 12.77 with standard deviation of 3.00, while their posttest mean achievement score was 17.32 with 4.01 value of standard deviation and 4.55 mean gains.

The mean achievement gain difference between students taught computer studies using computer assisted instructional technique and those taught using the lecture method was 12.51 in favor of the experimental group. The spread of score in the posttest is more homogenous among students taught using computer assisted instructional technique because the SD scores is smaller (3.66) compared to the SD score (4.01) of those taught using lecture method. The result indicated that students taught computer studies using computer assisted instructional technique had higher achievement score than those taught using lecture method.

Research Question 4: What is the mean achievement scores of male and female students taught Computer Studies using computer assisted instructional technique in Anambra State?

***Table* 2:** Mean Pre-test and Posttest Achievement Scores of Male and Female Students Taught Computer Studies using Computer Assisted Instructional Technique

	Pre-test			Post-test			Mean Gain	Mean difference
Gender	**N**	**Mean**	**SD**	**N**	**Mean**	**SD**		
Male	17	16	4.15	17	30	3.41	14	-4.69
Female	32	12.97	1.99	32	31.66	3.7	18.69	4.69

The result presented on Table 2 shows that the pretest mean achievement score of male students taught Computer Studies using computer assisted instructional technique was 16.00 with standard deviation of 4.15; their posttest mean achievement score was 30.00 with 3.41 value of standard deviation and 14.00 mean gain. The pretest mean achievement score of female students taught Computer Studies using computer assisted instructional technique was 12.97 with standard deviation of 1.99; their posttest mean score was 31.66 with 13.27 standard deviation and 18.69 mean gains.

The mean achievement gain difference between male and female students taught Computer Studies using computer assisted instructional technique was 4.69 in favour of female students. The results showed that the female students taught Computer Studies using computer assisted instructional technique had greater achievement mean gain score than their male counterparts.

Hypothesis 1: There is no significant difference between the mean achievement scores of students taught Computer Studies using computer assisted instructional technique and that of those taught using lecture method in Anambra State.

***Table* 3:** Summary of ANCOVA on Difference between the Mean Achievement Scores of Students taught Computer Studies using Computer Assisted Instructional Technique and those taught using Lecture Method

Source of variation	SS	Df	MS	F	P-value	Decision
Corrected Model	4651.508	2	2325.754	195.025	.000	
Intercept	1646.782	1	1646.782	138.090	.000	
Pretest	259.931	1	259.931	21.796	.000	
Method	3864.879	1	3864.879	324.087	.000	S
Error	1073.288	90	11.925			
Total	61867.000	93				
Corrected Total	5724.796	92				

Table 3 shows that at 0.05 level of significance, 1df numerator and 92 df denominator, the calculated F is 324.087 with P-value of .000 which is less than 0.05. Thus, the null hypothesis was rejected. Therefore, there is significant difference between the mean achievement scores of students taught Computer Studies using computer assisted instructional technique and that of those taught using lecture method in Anambra State.

Hypothesis 2: There is no significant difference between the mean achievement scores of male and female students taught Computer Studies using computer assisted instructional technique in Anambra State.

***Table* 4:** Summary of ANCOVA on Difference between the Mean Interest Scores of Male and Female Students taught Computer Studies using Computer Assisted Instructional Technique

Source of variation	SS	Df	MS	F	P-value	Decision
Corrected Model	95.148	2	47.574	4.004	.025	
Intercept	1139.344	1	1139.344	95.896	.000	
Pretest	64.693	1	64.693	5.445	.024	
Method	73.175	1	73.175	6.159	.057	S
Error	546.526	46	11.881			
Total	47979.000	49				
Corrected Total	541.673	48				

Table 4 shows that at 0.05 level of significance, 1df numerator and 48 df denominator, the calculated F is 4.004 with P-value of .057 which is greater than 0.05.

Thus, the null hypothesis was not rejected. Therefore, there is no significant difference between the mean achievement scores of male and female students taught Computer Studies using computer assisted instructional technique in Anambra State.

Hypothesis 3: There is no significant interaction effect of gender and technique of instruction on the mean achievement scores of students taught Computer Studies in Anambra State.

***Table* 9:** The Summary of ANCOVA for Testing Significance of Interaction Effect of Gender and Technique of Instruction on the Mean Achievement Scores of Students Taught Computer Studies

Source	SS	Df	Mean Square	F	Sig.	Decision
Corrected Model	4917.519	4	1229.380	134.013	.000	
Intercept	1264.544	1	1264.544	137.846	.000	
Pretest	287.402	1	287.402	31.329	.000	
Gender	2990.017	1	2990.017	325.937	.000	
Method	.617	1	.617	.067	.000	
Method * Gender	265.048	1	265.048	28.892	.000	S
Error	807.276	88	9.174			
Total	61867.000	93	.	.	.	
Corrected Total	5724.796	92				

Table 10 shows that at 0.05 level of significance, 1df numerator and 92df denominator, the calculated F is 39.814 with p-value of 0.038 which is less than 0.05. Thus, the null hypothesis was rejected. Therefore, there is significant interaction effect of gender and technique of instruction on the mean interest scores of students taught Computer Studies.

Discussion of Findings

The finding of the study revealed that students taught computer studies using computer assisted instructional technique had higher achievement score than those taught using lecturer method. This agreed with the finding of Ukaigwe and Goi-tanen (2022) which revealed that students taught with computer-assisted instructional strategy recorded higher mean achievement scores than those taught using lecture instructional method. This also supported the finding of Agwagah, Arua and Abugu (2019) which indicated that the mean achievement of students exposed to computer assisted instructional approach is higher than those exposed to lecture method in secondary schools. The agreement in findings could be attributed to the fact that the studies were conducted in the same level of education using students with similar maturity level. This finding could be explained by the fact that computer-assisted instruction technique combined texts, graphs and images which make learning process more interactive and engaging, than that of lecture method which makes lesson too boring and student to be passive listeners. The teachers' use of CAI technique in teaching Computer Studies stir up the enthusiasm needed by students to engage in teaching activities and understand lesson taught and thereby improve their

academic achievement than the lecture method of technique.

It was also found that there is significant difference between the mean achievement scores of students taught Computer Studies using computer assisted instructional technique and that of those taught using lecture method in Anambra State. This affirmed the finding of Ukaigwe and Goi-tanen (2022) which indicated that the achievement score of students taught with computer-assisted instructional strategy significantly differed from that of those taught with traditional instructional strategy. This is in line with the finding of Gongden, Yame and Gongden (2020) which indicated that a significant different between the mean interest scores of students taught using computer-assisted instructional technique and those taught using lecture method in favor of the experiment group. The same level of education in which the studies were conducted could account for the agreement in the findings. The reason for is significant difference between the mean achievement scores of students taught Computer Studies using computer assisted instructional technique and that of those taught using lecture method could be the interactive learning environment created by CIA technique to improve the understanding and retention of lessons presented to students.

It was revealed that female students taught Computer Studies using computer assisted instructional technique had greater achievement mean gain score than their male counterparts. This is in line with the finding of Ekundayo (2022) which revealed that female students using computer assisted instructional technique had a little higher mean achievement score than their male counterparts. This also supported the finding of Agwagah, Arua and Abugu (2019) which indicated female students taught mathematics using CAI approach has slight higher mean scores than their male counterparts. This disagreed with the finding of Muchiri (2018) which revealed male students have better academic achievement mean score than female students after exposure to computer-assisted strategy. The difference in geographical location and time span of the studies could account for the disagreement in the findings. The possible reason for this finding could be attributed to the different pattern of behavior, attitude and expectation of male and female students. Male students may probably prefer to get involved in more social and sports activities compared to the female students which could influence their academic achievement mean score when taught with computer assisted instructional technique.

It was also found that there is no significant difference between the mean achievement scores of male and female students taught Computer Studies using computer assisted instructional technique in Anambra State. This disagreed with the finding of Owenvbiugie and Ebhomien (2021) which showed that there was a significant difference between male and female students taught business studies using computer assisted instruction. This also affirmed the finding of Ekundayo (2022) which indicated that there was no significant difference between the achievement of male and female students using computer-assisted instructional technique. This findings could be explained

by the fact that computer assisted instructional technique equal learning opportunity to both male and female students in secondary schools.

It was found that there is significant interaction effect of gender and technique of instruction on the mean achievement scores of students taught Computer Studies in Anambra State. This supported the finding of Owenvbiugie and Ebhomien (2021) which indicated that there is a significant interaction effect between teaching method and gender on students' achievement taught business studies using computer assisted instruction (CAI). This disagreed with the finding of Nwosu and Ndanwu (2023) which showed that there was no significant interaction effect of teaching method and gender on the mean achievement scores of students. The two studies were conducted in different levels of education using varied participants of different maturity level which could account for the disagreement in the findings. This finding shows that gender and technique of instruction has combined effect on the academic achievement of students in Computer Studies. Any increase and decrease in gender of learners in the classroom and change in the technique of instruction applied by teachers has combined effect on the academic achievement of students in Computer Studies.

Conclusion

Based on the findings, it is concluded that computer-assisted instructional technique is an effective technique of teaching Computer Studies in secondary schools in Awka South L.G.A. of Anambra State. The teachers' use of computer-assisted instructional technique in Computer Students at secondary school level has significant effects on the academic achievement of male and female students. Computer-assisted instructional technique is more effective than and superior to lecture method of teaching Computer Studies in secondary schools.

Recommendations

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

1. Teachers should use computer-assisted instructional technique in teaching Computer Studies to improve the academic achievement of male and female students.
2. Post Primary Schools Service Commission should expose teachers to annual training programme on use of computer-assisted instructional technique to enable them upgrade their skills in the technique using the presenting lessons to bring about improvement on academic achievement of students.
3. State Ministry of Education should develop standardized software on computer-assisted instructional technique and make them available for teachers to boost their morale in using it to improve students' academic achievement in Computer Studies.

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