# EXTENT OF USE OF COMPUTER-BASED ASSISTED INSTRUCTION AND COMPUTER MANAGED INSTRUCTION IN TEACHING OF BUSINESS STUDIES IN PUBLIC JUNIOR SECONDARY SCHOOLS IN ANAMBRA STATE

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## **ABSTRACT**

This study investigated the extent of use of computer-based assisted instruction and computer managed instruction in teaching of business studies in junior public secondary schools of Anambra State. Two research questions and two null hypotheses guided the study. Descriptive survey design was adopted for the study. The population of the study consisted of 289 Business Studies teachers comprising 43 males and 246 females in the 262 junior public secondary schools in Anambra State. The entire population was studied because it is small and manageable. "Computer-based Assisted and Computer Managed Instruction for Teaching Business Studies Questionnaire" (CACMTBSQ) designed by the researchers was employed as the instrument for data collection. The instruments were subjected to face validation. The reliability of the instrument were established using Cronbach Alpha. The result gave coefficient values of .78 for Computer-Based Assisted Instruction cluster, and 0.75 for Computer Managed Instruction cluster with overall coefficient value of 0.81. Data analysis was done using mean scores, standard deviation and t-test. The findings of the study revealed that computer-based assisted instruction and computer managed instruction are use in teaching of business studies in public junior secondary schools in Anambra State. The findings also revealed that: business studies teachers with 6 years teaching experience and above and those with less than 6 years teaching experience disagreed on the extent to which computer-based assisted instruction are used in teaching of business studies; male and female business studies teachers agreed on the extent to which computer managed instruction are used in teaching of business studies. The study concludes that computer managed instruction and computer-based assisted instruction are use in teaching of business studies in public junior secondary schools in Anambra State. The study recommends amongst others that workshops on innovative teaching strategies should be organized for business studies teachers annually to enable them update their knowledge and skills especially in the area of information and communication technology.

**Key Words:** Innovative Strategies, Business Studies, Computer Managed Instruction, and Computer-Based Assisted Instruction,

## INTRODUCTION

One of the major issues and concern of nations across the globe is to provide education for human empowerment and development in order to enhance individual sustainability and national development. Nigerian National Policy on Education (FRN, 2004) states that for functional education to be relevant and practical based requires an acquisition of appropriate skills and development of competencies as equipment for the individual to live and contribute to the development of his society. This implies that the quality of instruction

at all level has to be practical oriented towards inculcating the values of acquisition of competencies necessary for self-reliance and poverty reduction. In Nigeria, our education is made up of informal and formal system. Informal education is a term used to describe any form of learning that is outside the standard school setting while formal education involves learning normally delivered by trained teachers in systematic way within a school, academy, college, institute or university (Kim & Dopico, 2014). Formal system of education is designed based on standard curriculum for effective teaching process.

In the school curriculum, subject is designed for the attainment of educational goals. One of such subject is the business studies which is offered in Nigerian secondary schools at junior secondary school levels. For effective educational goal attainment, business studies need to be effectively taught with effective strategies in order to attain the required goals. Effective teaching strategies must not be taken for granted if a nation would boast of being economically, technologically and educationally developed (Ferdinand, 2017). Teaching strategies according to Umezulike (2007) is the process of planning and carrying out teaching task in order to achieve educational goals. Akuezuilo in Gambari, Yusuf and Thomas (2015) says that teaching strategies include not only the manner of presentation that the teacher employs but everything that he does in the way of arranging conditions, grouping students, guiding activities, making assignments and providing information to aid learning. In the light of this, Adebayo (2013) stressed that, for teaching of business studies to be effective and meaningful, there is need for personnel (teachers) to acquire relevant degrees and experiences in their profession. According to Nigeria Educational Research and Development Council (NERDC) (2008), business subject programme requires personnel with holders of Nigeria Certificate in Education in Business Education, Holders of Higher National Diploma (HND) in Business Administration, but they should be encouraged to go for one year training in business education. The emphasis on proper planning using qualified personnel is to ensure mastery and effective use of appropriate innovative teaching strategies in imparting knowledge, skills, and competencies in the world of work for socio economic and technical development.

Business studies form a means of laying foundation for national, technological, economical advancement and for higher education (NPE, 2004). According to Okolocha and Onyeneke (2013), business studies equips its recipients with personal skills, consumer skills and Knowledge for clerical and managerial abilities needed to adapt to changing economic and business realities and these skills made them to be wealth and job creators rather than wealth and job seekers. Aliyu (2016) see business studies as comprehensive, practical and skill subjects, while Ogben and Amachi (2018) maintains that business studies equip students with knowledge and skills that help them to find a job after schooling or create their own employment. Business studies is an integrated pre-vocational course taught at the junior secondary school level which comprises of commerce, book-keeping, office practice, shorthand and typewriting (Achor, Samba & Ogbeba, 2010). Business studies are naturally dynamic and their contents respond to the changes in the business world.

As a result of this dynamic nature of Business Studies, the teachers need to review their knowledge and skills regularly if they must remain relevant and also produce school leavers

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who would meet the needs of the business world. They are part of vocational education which encourages the use of the intellectual capacity and practical in acquiring specific training required in business and industry. They provide valuable skills which put students in line for some of the important professions such as accountancy, banking, secretaryship, and others. One of the objectives of the Business Studies is the provision of orientation and basic skill with which to start a life of work for those who may not undergo further training. In spite of this laudable objective, present day students still perform below expectation in business studies Junior Secondary School Certificate Examination (JSSCE).

The teaching of business studies requires application of different strategies or techniques to make it interesting and meaningful. Strategies in this study refer to the teachers' techniques used in the classroom, his activities, behaviour and/or actions taken to improve students' interest, participation and performance in his subject. Strategies are unique to subject matter and vary from teacher to teacher. It could be an expertise, talent or trait. These teaching strategies can be classified into traditional teaching strategies and innovative teaching strategies.

Traditional classroom teaching methods are no longer effective to achieve current learning standards. Technological approaches alone cannot provide students with deep and meaningful learning experience. But the combination of both can help an educational institution stand at the top. Students who have grown up with interactive technology do not pay attention to old traditional classroom lectures. What educators need to do is provide students with relevant and engaging learning experience. Traditional approaches become effective in enhancing education, only if they are combined with technological approaches. Any method using computers or modifying the existing conventional chalk-talk method are innovative if they ultimately serve the attainment of core objective of teaching.

Innovative teaching strategies on the other hand involve the use of digital and ICT based tools in teaching. Krishna (2013) identified the following innovative teaching technologies that are used in education delivery to include: technology-driven classroom, cross-curricular connections, smart interactive boards, computer-based assisted instruction, collaborative learning, activity-based learning and learning labs, digitalization in teaching, e-learning, flipped classroom, computer managed instruction (CMI), modeling and simulation and teleconferencing. Similarly, Mandula, Meda and Jain (2012) identifies the following innovative teaching technologies that are used in education delivery to include: technology-driven classroom, cross-curricular connections, smart interactive boards, computer-based assisted instruction, collaborative learning, activity-based learning and learning labs, digitalization in teaching, e-learning, flipped classroom, computer managed instruction (CMI), modeling and simulation and teleconferencing. But two innovative teaching strategies namely computer-based assisted instruction and computer managed instruction were covered in this study.

Audu and Agbo (2010) view computer-based assisted instruction as an instructional technique in which the computer instructs the students and the computer contains a stored instructional programme designed to inform, guide, control and test the students until a prescribed level of proficiency is reached. Okebukola (2013) postulates that computer-

based assisted instruction can be applied to all ages and forms of education, from preschool to professional school and even in many employment areas. It can also be used in a wide range of fields including all the main disciplines in elementary and secondary school. The term Computer-Assisted Instruction (CAI) describes digital systems that are designed to assist in the learning process, specifically those that can be tailored to the needs of the individual student. When originally defined, CAI described systems comprised of discrete hardware and software, tailored to different teaching methodologies and focused upon a curriculum core. This is an automated instructional technique in which a computer is used to present an instructional programme to the learner through an interactive process. Audu and Agbo (2010) view computer-based assisted instruction as an instructional technique in which the computer instructs the students and the computer contains a stored instructional programme designed to inform, guide, control and test the students until a prescribed level of proficiency is reached. Sharma (2017) sees computer-based assisted instruction as an interactive instructional technique whereby a computer is used to present the instructional material and monitor the learning that takes place. Eyo (2018) views computer-based assisted instruction as a self-learning technique, usually off-line or online using the computer as a tool to facilitate and improve instruction. Computer-based assisted instruction is simply the type of instruction aided by a computer controlled display and a response entry device which uses a combination of text, graphics, sound and video to enhance the learning process through interaction, to achieve certain instructional goals and improve educational outcomes.

Okebukola (2013) postulates that computer-based assisted instruction can be applied to all ages and forms of education, from pre-school to professional school and even in many employment areas. It can also be used in a wide range of fields including all the main disciplines in elementary and secondary school. The characteristics of computer-based assisted instruction include learner controlled instruction, prompt feedback to the learner, self-pacing, adaptability of instruction, multiple-user approach and random access facilities. Computer-based assisted instruction uses diverse applications to present topics, test students' understanding, receive immediate feedback and summarise students' performance (Patel, 2013).

Computer Managed instruction (CMI) on the other hand is an instructional strategy whereby computers are used by teachers to organize student data and make instructional decisions, or for activities in which the computer evaluates students' test performances, guides them to appropriate instructional resources, and keeps records of their progress (Park & Lee, 2013). Computers are tools that can be used not only to assist teachers as they teach but also to help with classroom management. CMI is an instructional strategy whereby the computer is used to provide learning objectives, learning resources, record keeping, progress tracking, assessment of learner performance, prescribe and control individualized lessons. The student does not necessarily interact with the computer system. The learner may be on-line to take tests. In addition, the computer can diagnose the learning needs of students and prescribe optional sequences of instruction for them. This mode of instruction employs use of computer in management of adjunct functions/instruction-related tasks such as material generation, lesson plan preparation, schedule preparation,

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attendance monitoring, student's performance assessment, individualized education plans preparation, student reinforcement, communication

Park and Lee (2013) describes the functions of CMI as diagnosis, prescription, data collection, and data reporting capabilities. The design of CMI is focused on providing an administrative level of support concerned with test scoring, recording the number of objectives achieved, and possibly the time it takes to complete instructional units. CMI-based systems may be used to provide management support on four broad areas in the system flow. Initially, the system constructs, marks, and analyzes tests for diagnostic or assessment purposes. Then, it keeps records of a learner's performance and progress through the courses. Based on knowledge about each learner and the structure of the course, the system provides guidance for each learner and provides direction or advice on the option or route through structured course materials. Finally, the system reports the learner's performance and progress to each individual learner, the teachers, and the management of the educational institution. CMI-based systems allow the use of computer technology to oversee the learning process.

Computer-based assisted instruction and computer managed instruction interact with the teacher in a friendly manner so as to motivate students into learning achievement. Business studies teachers use computer-based assisted instruction and computer managed instruction during instructional delivery which allows them to make proper illustrations of those business concepts that are always difficult to illustrate. Appropriate use of these technologies motivates students to learn and also improve their performance. At the same time, it helps the teachers to take care of individual differences of the students. The ability to use computer-based assisted instruction and computer managed instruction depends on the professional experience of business studies teachers.

Khurshid and Zahur (2013) report that teachers with more professional qualifications were more aware of the computer-based assisted instruction and computer managed instruction than teachers with less professional qualifications. The search for highly qualified teachers has resulted in ever increasing demands for certification in both subject matter and pedagogy but equating teacher quality with teacher qualifications has not had the predicted results. Teachers have a great influence on students during the process of transferring knowledge and enhancing students' cognitive growth that is why it becomes necessary for a teacher to try to comport himself well at all times since there is a strong chance of his student trying to emulate his behaviour, speech and attitude to life. Teachers are said to gain extensive experience of successful and unsuccessful performances throughout their years of teaching, this assumption generated an in-depth research into how teachers who have been involved in teaching for different period of time perceive their teaching (Fives, 2010). But the persistence poor performance of junior secondary schools student makes one to question whether the teachers actually utilize these innovative teaching strategies (computer-based assisted instruction and computer managed instruction).

Some moderator variables like gender and experience were included in the study. Gender is the range of physical, biological, mental and behavioural characteristics pertaining to and differentiating between masculinity and feminity. Udry cited in Oriakhi and Ujiro (2015) noted that depending on the context, the term may refer to biological sex (i.e. the

state of being male, female or intersex), sex based social structure (including gender roles and other social roles) or gender identity. This category permits an understanding of socially predefined roles for men and women as perpetrators of unequal hierarchical relations (Steinfeldt, et al 2012). The gender of business studies teachers might influence their use of computer-based assisted instruction and computer managed instruction.

Also business studies teachers' experience can influence their ability to adopt computer-based assisted instruction and computer managed instruction. Yusuf and Afolabi (2010) revealed that most school teachers lacked the skills to fully utilize technology in curriculum implementation. Buabeng-Andoh, (2012) observed that the majority of teachers who reported a negative or neutral attitude towards the integration of ICT in teaching and learning lacked the required skills that would allow them to make an informed decision. Hence a teacher who is not computer literate will find it difficult to fully integrate computer-based assisted instruction and computer managed instruction into the teaching-learning process in the education system.

From the existing studies, no recent study was found to have been done by researchers on the extent of use of computer-based assisted instruction and computer managed instruction for effective teaching of Business Studies in the study area. This creates a gap in literature which the present study aims to fill by investigating the extent of use of computer-based assisted instruction and computer managed instruction for effective teaching of business studies in public junior secondary schools in Anambra State. Based on the foregoing, the study examined the extent of use of computer-based assisted instruction and computer managed instruction for effective teaching of business studies at junior secondary schools in Anambra State.

## **Purpose of the Study**

The main purpose of this study is to examine the extent of use of computer-based assisted instruction and computer managed instruction in teaching of business studies in public junior secondary schools in Anambra State. Specifically, the study seeks to:

- 1. Determine the extent to which computer-based assisted instruction is used in teaching of business studies in public junior secondary schools in Anambra State.
- 2. Investigate the extent to which computer managed instruction is used in teaching of business studies in public junior secondary schools in Anambra State.

## **Research Questions**

The study was guided by the following research questions;

- 1. To what extent is computer-based assisted instruction used in teaching of business studies in public junior secondary schools in Anambra State?
- 2. To what extent is computer managed instruction used in teaching of business studies in public junior secondary schools in Anambra State?

#### **Hypotheses**

The following null hypotheses were formulated and tested at .05 level of significance.

1. There is no significant difference in the mean rating of business studies teachers with 6 years teaching experience and above and those with less than 6 years teaching

- experience on the extent to which computer-based assisted instruction are use in teaching of business studies in public junior secondary schools in Anambra State
- 2. There is no significant difference in the mean rating of male and female business studies teachers on the extent to which computer managed instruction are use in teaching of business studies in public junior secondary schools in Anambra State.

#### **METHOD**

The study adopted descriptive survey research design. This design was appropriate for this study because the researcher collected data from the respondents through a few representatives and analyzed them in order to ascertain the innovative strategies required for effective teaching of Business Studies in junior secondary schools in Anambra State. The study was carried out in Anambra State. Anambra State is one of the states in South East Nigeria. Anambra has three senatorial zones namely Anambra North, Anambra South and Anambra Central. Anambra has six education zones namely Onitsha, Ogidi, Nnewi, Aguata, Awka and Otuocha. Anambra state has 261 public secondary schools located in urban and rural areas. Anambra was selected for the study because of the government emphasis and efforts in improving the teaching strategies adopted in secondary schools in Nigeria, Anambra State in particular, especially now that there is Covid-19 pandemic ravaging the world. The pandemic has ushered new and innovative teaching strategies particularly online teaching and learning to curtail the spread of the pandemic. Therefore, carrying out this study helped to expose computer-based assisted instruction and computer managed instruction that will help to enhance the teaching and learning of business studies.

The population of the study consisted of 289 Business Studies teachers comprising 43 males and 246 females in the 262 junior public secondary schools in Anambra State (Post Primary Schools Service Commission Headquarters Awka, 2021). Since the population of the study is small and manageable, the researcher decided to study the entire population. Therefore, the entire population was studied hence the sample size for the study is 289. The instrument for data collection was self structured questionnaire titled "Computer-based Assisted and Computer Managed Instruction for Teaching Business Studies Questionnaire" (CACMTBSQ) designed by the researcher. Consultations with experts in measurement and evaluation and ideas gathered from literature review guided the construction of the instrument. The instrument consisted of two sections, A and B. Section A elicited information on the demographic information of the respondents. The demographic information such as gender, school location, academic qualification and years of experience were covered in Section A. Section B contains 20 items which elicited information on the computer-based assisted and computer managed instruction studied. Section B contains two clusters for computer-based assisted and computer managed instruction and each cluster contains 10 items.

The face validity of the instrument was established by four experts comprising two lecturers in Vocational Education and two in Measurement and Evaluation, all in the Department of Vocational Education, Chukwuemeka Odumegwu Ojukwu University, Igbariam Campus. The instrument was trial-tested on a representative sample of 30 Business Studies teachers randomly selected from public junior secondary schools in

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Enugu State. The scores of the respondents were subjected to statistical analysis to determine the internal consistency of the items of the questionnaire. This was done using Cronbach Alpha. The choice of Cronbach Alpha is in line with Howith and Cranner (2011) who recommended Cronbach Alpha as a statistical tool for determining internal consistency of a research instrument. The results gave Alpha coefficient values of .78 for Computer-Based Assisted Instruction and .75 for Computer Managed Instruction while the overall reliability coefficient is .81 which indicated a positive and very high reliability.

A total of 289 copies of the instrument were distributed to the sample respondents. Out of the 289 copies returned 264 copies were properly filled and found relevant to the study. The remaining 25 copies of questionnaire were either not returned or misplaced on the process. This gave a response rate of 93.1%. Hence, the analysis in this section was based on the 264 relevant copies.

The data collected from the Business Studies teachers were analyzed using mean and standard deviation. Mean was used to answer the research questions earlier formulated in the study while the standard deviation was used to ascertain how homogenous or heterogeneous the opinions of the respondents are in relation to the items in the questionnaire administered. Thereafter, t-test was employed to test the hypotheses formulated at .05 level of significant with the aid of Statistical Package for Social Sciences (SPSS). The decision rule is that the null hypothesis was rejected where the p-value is less than significant value of .05, otherwise, the null hypothesis was accepted.

#### RESULTS

**Research Question One:** To what extent is computer-based assisted instruction required for effective teaching of business studies in public junior secondary schools in Anambra State?

Table 1: Mean Responses on the Extent Computer-based Assisted Instruction is Use in Teaching of Business Studies in Public Junior Secondary Schools in Anambra State (N=264)

S/N	Aspect of Computer	N	X	SD	Remarks
	Assisted Instruction				
1	Using a computer is necessary in teaching and learning of business studies	264	4.8	2.90	Very High Extent
2	Computer-based assisted instruction possess the quality of arousing enthusiasm for active participation of students	264	3.7	1.90	Very High Extent
3	Teachers use computers to encourage and support collaborative work among students	264	4.0	2.93	Very High Extent
4	Teachers use computer-based assisted instruction to integrate ICT activity into teaching and learning of business studies	264	3.6	1.87	Very High Extent
5	Computer-based assisted instruction enhance the use of computers for curriculum and classroom purposes	264	3.9	1.86	Very High Extent
6	Computer-based assisted instruction ensures the effective communication of the subject content to the students at the beginning of the term	264	3.9	1.91	Very High Extent
7	Students have open access to information in the library through computer-based assisted instruction	264	2.7	.77	High Extent
8	Provides avenue for sufficient interaction with students in classroom	264	3.4	1.94	High Extent
9	Computer-based assisted instruction improves the quality of teaching learning related activities	264	3.0	.85	High Extent
10	Computer-based assisted instruction facilitate interaction and collaboration not only among learners but among teachers	264	3.3	2.84	High Extent
	Cluster Mean		3.6	2.86	Very High Extent

Results displayed in table 1 showed that the respondents agreed that computer-based assisted instruction to very high extent is use teaching of business studies in public junior secondary schools in Anambra State as indicated by the cluster mean response of 3.6. This implies that the Business Studies teachers believed that computer-based assisted instruction to very high extent is use in teaching of business studies in public junior secondary schools in Anambra State.

**Research Question Two:** To what extent is computer managed instruction use in teaching of business studies in public junior secondary schools in Anambra State?

Table 2: Mean Responses on the Extent Computer Managed Instruction is use in Teaching of Business Studies in Public Junior Secondary Schools in Anambra State (N = 264)

$\frac{(N-2)}{S/N}$	Aspects of Computer Managed Instruction	N	x	SD	Remarks
1	Using computer managed instruction is appropriate to local setting and teaching environment and conditions	264	3.3	1.84	High Extent
2	Teachers make use of ICT to supported peer and team learning	264	2.5	.91	High Extent
3	Computer managed instruction provide opportunity to develop technology competencies for instructors and learners	264	3.9	2.94	Very High Extent
4	Computer managed instruction provides in-depth coverage of learning content by teachers	264	3.8	1.01	Very High Extent
5	The nature of lesson delivery is the one that encourages ability of the students	264	3.5	1.50	Very High Extent
6	It may not be a suitable approach for dull students	264	3.3	1.88	High Extent
7	Encourages teachers to develop proficiency in the use of computers.	264	3.9	2.88	Very High Extent
8	Computer managed instruction create interdependent teaching and learning environment for teachers and learners	264	3.5	1.01	Very High Extent
9	Computer managed instruction quickly grabs attention and keeps the students focused	264	3.6	1.70	Very High Extent
10	Computer managed instruction enhance students rate of learning, adaptability and self-reliance	264	3.8	1.84	Very High Extent
	Cluster Mean		3.5	2.51	Very High Extent

Results as shown in table 2 indicates that the respondents agreed that computer managed instruction to a very high extent use in teaching of business studies in public junior secondary schools in Anambra State as indicated by the cluster mean scores of 3.5. This implies that the Business Studies teachers believed that computer managed instruction to a very high extent is use in teaching of business studies in public junior secondary schools in Anambra State.

# **Hypotheses**

**Hypothesis One:** There is no significant difference in the mean rating of business studies teachers with 6 years teaching experience and above and those with less than 6 years teaching experience on the extent to which computer-based assisted instruction are use in teaching of business studies in public junior secondary schools in Anambra State

Table 5: t-test Analysis of the Mean Score of Business Studies Teachers with 6 years Teaching Experience and above and those with less than 6 years Teaching Experience on the extent to which Computer-based assisted Instruction are use in Teaching of Business Studies

Source of variation	N	$\overline{X}$ SD	df	t- cal	<i>P</i> -value	Decision
Above 6	215	3.65				
Years		1.36	508	4.96	.000	Significant
Teaching	49					
Experience		3.91				
Below 6		1.69				
Years						
Teaching						
Experience						

Table 5 shows that business studies teachers with 6 years teaching experience and above and those with less than 6 years teaching experience differs on the extent to which computer-based assisted instruction are use in teaching of business studies was significant. The null hypothesis therefore was rejected (4.96, p < .05). This shows that the mean rating by business studies teachers with 6 years teaching experience and above (Mean=3.65) was significantly less than the mean rating by business studies teachers with less than 6 years Teaching Experience (Mean =3.91), therefore the null hypothesis was therefore rejected. **Hypothesis Two:** There is no significant difference in the mean rating of male and female business studies teachers on the extent to which computer managed instruction are use in teaching of business studies in public junior secondary schools in Anambra State.

Table 6: t-test Analysis of the Mean Score of Male and Female Business Studies Teachers on the Extent to which Computer Managed Instruction are use in Teaching of Business Studies

Source of variation	N	X	SD	df	t- cal	<i>P</i> -value	Decision
Male	16	3.51 3.65					
				508	.71	.132	Not Sig
Female	248						
		3.49	3.67				

Table 7 reveals that male and female business studies teachers in junior public secondary schools did not significantly differ in their mean ratings of the extent to which computer managed instruction are use in teaching of business studies public junior secondary schools in Anambra State, (p-value > .05). Therefore, the null hypothesis of no significant difference between the groups was not rejected.

#### DISCUSSION

The findings of this study indicated that computer-based assisted instruction is use in teaching of business studies in public junior secondary schools in Anambra State. This implies that computer-based assisted instruction is one of the innovative strategies required for the effective teaching of business studies in public junior secondary school.

The finding from the corresponding hypothesis revealed that there is a significant difference in the mean rating of business studies teachers with 6 years teaching experience and above and those with less than 6 years teaching experience on the extent to which computer-based assisted instruction are use in teaching of business studies in public junior secondary schools in Anambra State. This agrees with the findings of Achor, Samba and Ogbeba (2010) that experienced teachers effectively used innovative teaching strategies than less experienced teachers. Also, Khurshid and Zahur (2013) revealed that more experienced teachers utilised innovative teaching strategies than the less experienced ones.

The findings of this study indicated that computer managed instruction is use in teaching of business studies in public junior secondary schools in Anambra State. This indicates that computer managed instruction is one of the innovative strategies required for the effective teaching of business studies in public junior secondary school.

The finding from the corresponding hypothesis revealed that there is no significant difference in the mean rating of male and female business studies teachers on the extent to which computer managed instruction are use in teaching of business studies in public junior secondary schools in Anambra State.

## CONCLUSION

The study investigated the extent to computer-based assisted instruction and computer managed are use in teaching of business studies in public junior secondary schools in Anambra State. The data generated were subjected to statistical analysis and the following became evidence. The study found that computer-based assisted instruction and computer managed instruction are use in teaching of business studies in public junior secondary schools in Anambra State. The study also found that there is a significant difference in the mean ratings of business studies teachers with 6 years teaching experience and above and those with less than 6 years teaching experience on the extent to which computer-based assisted instruction are use in teaching of business studies. The study also found that there is no significant difference in the mean rating of male and female business studies teachers on the extent to which computer managed instruction are use in teaching of business studies.

Based on the foregoing, the study concludes that computer managed instruction and computer-based assisted instruction are use in teaching of business studies in public junior secondary schools in Anambra State. Therefore, these strategies that could be adopted to improve teaching and learning of business studies in junior secondary schools are established in this study, if the teachers and students could make use of them and if the government and schools would provide equipment and materials for use in teaching and learning business studies in Anambra State, the teaching and learning of business studies would be improved.

#### RECOMMENDATIONS

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

- 1. The study recommends that a workshop on innovative teaching strategies should be organized government in conjunction with school management for business studies teachers annually to enable them to update their knowledge and skills especially in the area of information and communication technology. This will help them in their digital age where most of the innovative teaching strategies are computer based.
- 2. Qualified and competent business studies teachers only should be employed by government to teach business studies in secondary schools in public junior secondary schools in Anambra State. The essence is to ensure that they are proficient enough in using innovative teaching strategies to impact knowledge on the students.
- 3. The government, schools and ministries should provide facilities, equipment and machines to aid business studies teachers in their teaching. Government should give financial rewards and awards to teachers who use innovative teaching strategies for teaching business studies in order to motivate others to implement its usage.

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