IMPACTS OF COMPUTER-ASSISTED INSTRUCTION ON STUDENTS’ PERFORMANCE IN CIVIC EDUCATION IN SENIOR SECONDARY SCHOOLS, KADUNA STATE, NIGERIA

BY

Jummai Andil GARBA

DEPARTMENT OF EDUCATIONAL FOUNDATIONS AND CURRICULUM
FACULTY OF EDUCATION
AHMADU BELLO UNIVERSITY,
ZARIA, NIGERIA

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BY

Jummai Andil GARBA
B.Ed., M.Ed (ABU)
PI4EDFC9001

A THESIS SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES, AHMADU BELLO UNIVERSITY, ZARIA, IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DOCTOR OF PHILOSOPHY IN EDUCATION (CURRICULUM AND INSTRUCTION)

DEPARTMENT OF EDUCATIONAL FOUNDATIONS AND CURRICULUM, FACULTY OF EDUCATION, AHMADU BELLO UNIVERSITY, ZARIA, NIGERIA

SEPTEMBER, 2018
DECLARATION

I hereby declare that the work in this thesis entitled “Impact of Computer Assisted Instruction on Students’ Performance in Civic education in senior Secondary schools in Kaduna State Nigeria” has been carried out by me in the Department of Educational Foundations and Curriculum. The information derived from the literature has been dully acknowledged in the text and a list of references provided. No part of this thesis was previously presented for another degree or diploma at this or any other Institution.

___________________________  _______________________  
Jummai Andil Garba              Date
CERTIFICATION

The thesis entitled “IMPACT OF COMPUTER-ASSISTED INSTRUCTION ON STUDENTS’ PERFORMANCE IN CIVIC EDUCATION IN SENIOR SECONDARY SCHOOLS IN KADUNA STATE, NIGERIA” by JUMMAI ANDIL GARBA meets the regulations governing the award of the degree of Doctor of philosophy in Education (Curriculum and Instruction) of the Ahmadu Bello University, and is approved for its contribution to knowledge and literary presentation.

Dr. A. A. Dada
Chairman, Supervisory Committee

Prof. (Mrs.) H. O. Yusuf
Member, Supervisory Committee

Dr. S. U. EL-Yakub
Member, Supervisory Committee

Dr. Musa Idris Harbau
Head of Department

Prof. S. Z. Abubakar
Dean, School of Postgraduate Studies
DEDICATION

This research work is dedicated to the entire family of L. Garba Maimagani and in memory of my late brother, Ishiyaku. It is also dedicated to my mother, Mary (Mairo) and my siblings for their kind assistance.
ACKNOWLEDGEMENTS

With sincere gratitude to God for making it possible for me to conduct and complete this research work, by empowering, protecting, sparing and inspiring all the stakeholders in the process to contribute their best towards this success.

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ABSTRACT

The study investigated the impact of computer assisted instruction on students’ academic performance in civic education in senior secondary school, Kaduna State, Nigeria. The researcher was motivated by WASSCE Chief Examiner reports 2014/2015 which shows that most of the students who sat for civic education had problems among others, poor expression, inadequate knowledge of the subject matter. These inadequacies are associated with pedagogical approach used by the teachers, as majority of civic education teachers used conventional teaching method. The research sought to achieve seven objectives which include to ascertain the differences between the performance of students taught Civic Education using Computer Assisted Instruction and those taught using conventional method in senior secondary schools in Kaduna state; examine the differences between the performance of students taught limitation of human right using Computer assisted instruction and those taught using conventional method in senior secondary schools in Kaduna state; to investigate the difference between the academic performance of urban and rural located Secondary school students taught responsible parenthood using Computer assisted instruction in senior secondary schools in Kaduna State, among others. Seven corresponding research questions and seven null hypotheses were raised to guide the study. The study used quasi-experimental research design, the pre-test, non-equivalent control group design were used. The study which lasted for 10 weeks was conducted in public senior secondary schools in Kaduna state, Nigeria. Specifically, students of SSII with population of 139,776, out of which, 580 were sampled with consideration of the school location. The instrument tagged Civic Education Performance Test, (CEPT) was used for data collection. This instruments was validated and pilot tested which showed a reliability coefficient of 0.87. The data gathered were analyzed using both descriptive and inferential statistics. The research questions were answered using mean and standard deviation while the formulated hypotheses were tested using Independent t-test and ANOVA at the alpha level of 0.05. The
study found that CAI is very effective in improving academic performance of students above average irrespective of the topics lifted from civic education curriculum content. Inferring from the findings, the study concluded that use of CAI is capable of improving students’ academic performance above average when used in teaching civic education. The study therefore recommended among others that Civic Education teachers should embrace the use of Computer assisted instruction in teaching Civic Education in Senior Secondary Schools as it is capable of improving students’ academic performance in civic education irrespective of topics lifted from civic education curriculum. Government should provide school facilities in all schools in both rural and urban areas. The facilities may be in form of infrastructural facilities (Digital Centre, Computer Laboratory rooms) equipment (projector, computers) and consumable materials (software, Computer Assisted Instruction Software and white board). Availability of these will encourage teachers to use computer assisted instruction rather than using conventional teaching methods at all times, use of computer for instruction should be incorporated into Teacher Education Curriculum in order for potential teachers to acquire necessary skills needed to impact knowledge via Computer Assisted Instruction.
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<td>ACEA</td>
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<td>CAI</td>
<td>Computer Assisted Instruction</td>
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<td>CBE</td>
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<td>CPU</td>
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<td>ITC</td>
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<td>JAMB</td>
<td>Joint Admission and Matriculation Board</td>
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<td>NCA</td>
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<td>NPE</td>
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<td>SD</td>
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<td>SPSS</td>
<td>Statistical Package for Social Sciences</td>
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<td>UTME</td>
<td>Unified Tertiary Matriculation Examination</td>
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<td>WAEC</td>
<td>West African Examination Council</td>
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OPERATIONAL DEFINITION OF TERMS

Impact: This concept is referred to as either positive or negative changes brought about by one variable factor on another.

Civic Education is an important component of education that motivates citizens to participate in the public life of a government and democracy, to use their rights and to discharge their responsibilities with the necessary knowledge and skills.

Computer Assisted Instruction: This refers to as an interactive instructional strategy in which computer electronic devices are used to present lessons.

Information and Communication Technology: This refers to as all electronic/computerize Computer Assisted Instruction facilities used in teaching and learning process, assessing information, storing, disseminating, managing and processing data.

ICT Driven Instruction: These refer to all computer electronic devices employed in delivery of lessons by teachers in the classroom.

Academic Performance: This is referred to as the perceived impact of the use of Computer Assisted Instruction on students’ performance.
CHAPTER ONE
INTRODUCTION

1.1. Background to the Study

Teaching methods and instructional techniques in the classrooms have been changing and this is influenced by technological advancements. Technology has changed the whole pattern of human life. The benefit of cyber age technology is the development of computer for sustainable development. Computer is a general purpose machine, consisting of digital circuitry that accepts (inputs), stores, manipulates, and generates (outputs) data as numbers, text, graphics, voice, video files, or electrical signals, in accordance with instructions called a programme. The principal characteristics of a computer are: it responses to a specific set of instructions in a well-defined manner and it can execute a prerecorded list of instructions (a programme). It is also concerned with the way these different uses work with each other to enhance teaching and learning for sustainable development.

Instruction is a statement or explanation of something that must be done, often given by someone in authority. Pratt (2008), viewed Instruction as the activities of educating or instructing; activities that impart knowledge or skill written or spoken directions for carrying out a procedure or performing a task. Effective mode of instruction includes visual elements such as pictures, diagrams, and flowcharts that illustrate and clarify the text. Computer Assisted Instruction is the process which written and visual information is presented in a logical sequence to a learner through a computer. The student learns by reading the text material presented or by observing the graphic information displayed. Some of the programmes provide audio-visual presentation with an option to the student to select audio presentation in addition to the visual media. Each
The Federal Ministry of Education (2010), identified the role of Information Communication Technology policy on education amongst other as: “The policy provides the needed guidance on what is expected in the entire process of ICT integration in education to all stakeholders in education. Its’ implementation therefore should lead to a speedy transformation of the teaching, learning. The realization of this policy statement lies basically in the capability of the key implementers of the nation’s educational policy that is teachers to integrate ICT-Driven instructional aids through Computer Assisted Instruction (CAI) in their day to day classroom activities for effective pedagogy. Computer-based education (CBE) and computer-based instruction (CBI) which CAI is one of their generic term; are referred to virtually any kind of computer use in educational settings. Computer-assisted instruction (CAI) is a narrower term and most often refers to drill and-practice, tutorial, or simulation activities offered either by themselves (computer) or as supplements to traditional, teacher directed instruction. The more predominate use of CAI is that, CAI is being incorporated into the general education classroom as a means of deepening and expanding students’ understanding of the material. CAI application may come from the teacher, instructors and or from the learners. In this wise, the subject or topic to be learnt will have to be analyzed and broken down into programme(s) before being presented to the learner. The teacher may do this, and when he does, we are looking at the Computer Assisted Instruction from the teacher’s point of view (Ismail, Imran, Mukaila, 2011). He has the knowledge, and the expertise to provide instruction for learners; hence, this authority in his packaging of materials he thinks suitable for the learner. CAI from teacher point of view refers to the use of computer as a tool to facilitate and improve instruction (Okediran in Ismail,
Imran, Mukaila, 2011). CAI has a major benefit of individualizing instruction by presenting varied and flexible experiences to the individual learner and takes care of learners’ differences. It makes use of guided discovery and inquiry method thereby ensuring the application of proven effective teaching methods, to the learner. In applying the CAI mode of instruction, the computer is fed in sequential manner with what to teach, the steps to be followed, how to evaluate success, how and when other classroom activities are to be carried out (Okafor, 2009).

The Federal Republic of Nigeria (FRN, 2013) in the National Policy on Education states that education is an instrument for effecting national development and hence, makes the incorporation of ICT into teaching-learning process a vital instructional tool in fostering the national educational goals. The winds of change in today’s education sector have made information communication technology to be programmed towards meeting the set educational goals, however, there are challenges and concerns as a result of knowledge explosion due to the introduction of ICT in almost every field of human endeavour which teaching is not left out. Therefore, teachers need to be conscious of the quality of teaching which is determined by employing quality teaching aids such as, charts, models-static and working specimen and slides, (Sansanwal, 2009), Since it is agreed that CAI are information handling tools that can be used in producing, storing, processing, distributing and exchanging of information, it therefore implies that it could help teachers to be more effective in work-life and resourceful in content management. Hence, these will make teaching tasks less cumbersome and productive thereby improving students’ academic performance. The utilization of CAI is meant to serve as an orientation stimulus to support the teacher’s teaching strategies and not to replace them. A shift from the conventional ‘‘chalk and talk’’ form of teaching to CAI could make teaching-learning process more real.
Civic Education as a subject was introduced into the Nigerian Senior Secondary School Curriculum by National Council on Education at its meeting in Ibadan in December, 2005. The new curriculum came into existence as a result of desire to bring the reality of everyday societal living to the students at their age of critical thinking and reasoning about the events happening around them. The objectives of teaching Civic Education are: Promote the understanding of the inter-relationship between man/woman, the government and the society; highlight the structure of government, its functions and the responsibilities of government to the people and vice-versa; enhance the teaching and learning of emerging issues, and inculcate in students their duties and obligations to the society (Federal Ministry of Education, 2012).

The above stated objectives could be achieved in students offering Civic Education through the use of computer assisted instruction which has such advantages in teaching-learning process because CAI brings with it several potential benefits as a teaching/learning medium. These include self-paced learning, self-directed learning, the exercising of various senses and the ability to represent content in a variety of media. However, the ability and capability, as well as the effectiveness of teachers to incorporate teaching strategies such as utilization of CAI in achieving the lesson objectives at the classroom level will definitely enhance teaching and learning processes. ICT has not revolutionized teaching methods but rather the subject content. This implies that computer assisted instruction does not replace the teaching strategies but rather offer supportive devices to enhance improve content delivery.

Students’ academic performance is one if not the main determinant of effectiveness of any curriculum implementation. All stakeholders such as parents, school administrators, government, curriculum planner and others largely depends on students’ academic performance in taking decision regarding effectiveness and continuity of any
educational programme. The academic performance of civic education students’ reported by WAEC Chief Examiners show that most students who sat for Civic Education in the year 2014-2015 had problems among others poor expression, lack of understanding the subject, lack of communication, illogical presentation of ideas, poor handwriting, dearth of standard textbooks, lack of qualified teacher, and also the inability of teachers to cover the required syllabus (WAEC, 2014). Yusuf (2010), observed that Civic education as a new subject in Nigerian school is dominated by conventional teaching method. These could be due to none familiarity with other teaching strategies such as Computer Assisted Instruction which has been tested in others subjects such as Biology (Yusuf, 2010), Physics (Adeyemo, 2012), Mathematic (Yusuf, Kajuru & Musa, 2013) and reported to be more effective over the conventional teaching method.

However, other relevant researchers have questioned the aims and effectiveness of teaching similar subject in recent years due to lack of content knowledge and skills among the graduates and more so their ability to perform. Therefore, if Nigeria will meet up with the global technological advancement through the use of CAI, then education must be given utmost priority and teacher education must be the vanguard since no nation can rise above the standard of her teachers (FRN,2013). The Federal Ministry of Education (2010) has mandated the integration of ICT in education for speedy transformation of the teaching, learning and administration of education as a positive step in the right direction. Therefore, based on the aforementioned, it becomes pertinent that a study on the ‘’Impact of CAI on students’ performance in Civic Education in senior secondary School in Kaduna state, Nigeria’’ be conducted to ascertain its impact on the learners.
1.2. Statement of the Problem

The patterns of teaching and learning process today, is expected to shift from the conventional method to a more flexible approach, which is learner-centred. This learner-centred approach makes students to influence the content, activities, materials and pace learning, the student is placed at the centre of learning process thereby enhances independent learning. Despite the relevance of CAI in education, coupled with the huge investment of both Federal and State government such as ICT driven project known as “school Net” which was intended to equip all secondary schools in Nigeria with Computer and communication technologies as well as the donations from Non-Governmental organizations of CAI facilities to secondary schools in Nigeria to improve performance.

It appears that majority of secondary school teachers in northern Nigeria are still reluctant, ineffective in the use of CAI even when the facilities are readily available. This is in line with Beetheng and Sim (2008), asserted that there is still a long way to go before secondary school teachers in developing countries like Nigeria will be able to take advantage of the opportunity provided by the 21st century technology and this was substantiated by Adomi (2010), discovered that 75 percent of teachers in Nigerian secondary schools has little or no experience regarding ICT in education. In the same alignment, Yusuf, Maina and Dare (2013), revealed that most school teachers lack the skills to fully utilize technology in curriculum implementation hence the traditional chalk and duster approach still dominates in school pedagogy. These challenges as perceived could be as a result of teachers lack the competence to employ skills of using CAI teaching strategies and perhaps lack of steady power supply.

The objectives of teaching Civic Education is to expose the younger ones to the emerging issues that can make them to be functional members of their country who is
equipped with necessary skills and knowledge needed for sustainable national development and to be able to use such knowledge to solve Civic problems within and across the border. Civic education as school subject present the real picture of the happening in the society to the learners, teaching such subject in abstract format will not only confuse the learner but the affective and psychomotor domain of educational objective will be left untouched. The teaching and learning of Civic Education need to reflect the new technological advancement taking place in the present day global village. With the aid of various components of IT, Civic education can be taught and learnt.

According to WASSCE (see appendix A), candidates are having inadequate knowledge of the subject matter, inability to express themselves, and lack of qualified teacher with teaching strategies. The previous research emphasized on teacher’s non-utilization of CAI in teaching but none of them inquired on how effective is the method in teaching an art based subject like civic education. This study therefore investigated the impact of CAI on student’s academic performance in Civic Education in senior Secondary in Kaduna State, Nigeria.

1.3 Objectives of the Study

The general objective of this study is to determine the impact of Computer Assisted Instruction on students’ performance in Civic education in Senior Secondary Schools in Kaduna State, Nigeria. The specific objectives are to:

1. ascertain the differences between the performance of students taught Civic Education using Computer Assisted Instruction and those taught using conventional method in Senior Secondary Schools in Kaduna state;

2. examine the differences between the performance of students taught concept of limitation of human right using Computer Assisted Instruction
and those taught using conventional method in Senior Secondary Schools in Kaduna state;

3. investigate the difference between the academic performance of Urban and Rural Students taught responsible parenthood using Computer Assisted Instruction in Senior Secondary Schools in Kaduna State;

4. determine the impact of Computer Assisted Instruction and conventional method on the performance of students taught democracy and national development in Senior Secondary Schools in Kaduna state;

5. identify the difference between the academic performance of students taught dangers of political apathy using Computer Assisted Instruction and those taught using conventional method in Senior Secondary Schools in Kaduna state; and

6. investigate the impact of Computer Assisted Instruction and conventional method on the performance of students taught citizenship in Senior Secondary Schools in Kaduna state.

7. Determine the difference between the academic performance of Students from South, Central and North Senatorial zones taught Civic education using Computer Assisted Instruction in Senior Secondary Schools in Kaduna state?

1.4 Research Questions

In line with the stated objectives the following research questions were formulated to guide the study:

1. What is the difference between the performance of students taught Civic Education using Computer Assisted Instruction and those taught using conventional method in Senior Secondary Schools in Kaduna State?
What is the difference between the performance of students taught limitation of human right using Computer Assisted Instruction and those taught using conventional method in Senior Secondary Schools in Kaduna State?

To what extent is the difference between the academic performance of Urban and Rural students taught responsible parenthood using Computer Assisted Instruction in Senior Secondary Schools in Kaduna state?

To which extent does the use of Computer Assisted Instruction and conventional method have impact on the performance of students taught democracy and national development in Senior Secondary Schools in Kaduna state?

To what extent is the difference between the academic performances of students taught dangers of political apathy using Computer Assisted Instruction and those taught using conventional method in Senior Secondary Schools in Kaduna state?

What is the impact of Computer Assisted Instruction and conventional method on the performance of students taught citizenship in Senior Secondary Schools in Kaduna state?

To what extent is the difference between the academic performance of Students from South, Central and North Senatorial zones taught Civic education using Computer Assisted Instruction in Senior Secondary Schools in Kaduna state?
1.5. Research Hypotheses

The following null hypotheses were formulated and tested in the study:

**Ho$_1$:** There is no significant difference between the academic performances of students taught Civic Education using Computer Assisted Instruction and those taught using conventional method in Senior Secondary Schools in Kaduna State;

**Ho$_2$:** There is no significant difference between the academic performances of students taught limitation of human right using Computer Assisted Instruction and those taught using conventional method in Senior Secondary Schools in Kaduna State;

**Ho$_3$:** There is no significant difference between the academic performance of Urban and Rural students taught responsible parenthood using Computer Assisted Instruction in Senior Secondary Schools in Kaduna state;

**Ho$_4$:** There is no significant difference in the performance of students taught democracy and national development using Computer Assisted Instruction and those taught using conventional method in Senior Secondary Schools in Kaduna state;

**Ho$_5$:** There is no significant difference between the academic performances of students taught dangers of political apathy using Computer Assisted Instruction and those taught using conventional method in Senior Secondary Schools in Kaduna state.

**Ho$_6$:** There is no significant difference between the performances of students taught citizenship using Computer Assisted Instruction and those taught using conventional method in Senior Secondary Schools in Kaduna state.
H07: There is no significant difference between the academic performances of Students from South, Central and North Senatorial zones taught Civic education using Computer Assisted Instruction in Senior Secondary Schools in Kaduna state

1.6. Basic Assumptions

This study is based on the following assumptions:

1. the performance of students taught civic education using Computer Assisted Instruction and those using conventional method in Senior Secondary Schools in Kaduna State, Nigeria are the same;

2. the performance of students taught civic education using Computer Assisted Instruction and those taught limitation of human right using conventional method in Senior Secondary Schools in Kaduna State, Nigeria are the same;

3. students in the urban centres are likely to perform better when taught responsible parenthood than those in rural areas due to readily available of computers and its needed resources such as light, instructors and so forth;

4. use of Computer Assisted Instruction stimulate students’ performance than the conventional method when taught democracy and national development in Senior Secondary Schools in Kaduna state;

5. all the students taught dangers of political apathy using Computer Assisted Instruction and conventional method in Senior Secondary Schools in Kaduna state have the same scores and

6. students taught citizenship using Computer Assisted Instruction will perform better than those taught using conventional method in Senior Secondary Schools in Kaduna state.
7. There will be difference in the performance of the students from south, central and north senatorial zones taught civic education using Computer Assisted Instruction among Senior Secondary school Kaduna State

1.7 **Significance of the Study**

The result of this study will be of immense benefit to: head teacher, teachers, students, and School management, Ministry of education and Ministry of science and technology, computer programmers, curriculum planners, NGOs’ and examination bodies in the following ways.

This study will be of benefits to head teachers or principals because it is targeted towards knowing how the use of Computer Assisted Instruction will enhance students’ performance. This will help them to see the importance of Computer Assisted Instruction and its relevance to effective and functional classroom teaching exercise for better performances of their students academically and this will in turn boosts the image of the school in the community. More so, the study will make school administrators to see the need for continuous training of their teachers who are ICT literate and train those who are not for better service delivery.

Teachers as an important factor in this research will find this study helpful in so many ways. Specifically, some teachers who are reluctant/illiterate in the use and knowledge of ICT will see the need for it, if they want to remain relevant in the teaching profession in the present dispensation and also ensuring the success of students. In addition, teachers who are faced with the problem of overcrowded classrooms can be supported with Computer Assisted Instruction to carry out their teaching effectively. In fact, this study will be an eye opener and image booster for teachers if they adopt this instructional strategy because lessons can be planned and be taught without necessarily the teacher being present all-through in the classroom.
This study will be significant to the students of Civic education in Senior Secondary Schools by exposing students to IT in school as this will give an insight to what is expected of them, this will help the students to put more interest in using Computer Assisted Instruction to enhance their academic performance and also help them perform better in the field of work. It will help them to understand the effect of using IT facilities in teaching and learning for academic performance,

The study will be of significance to the school managements by revealing the area of weaknesses in using IT; helping them to refocus their attention on using IT in teaching and learning for academic performance. This is so because it is the school management who is concerned with the day-to-day running of the school as they can use the report as a guide to financing and supplying IT facilities to the department and ensuring all the necessary improvements. They can also use the report to correct any lapses in terms of supply and use of the facilities.

Similarly, the result will also be of great significant to the Ministry of education (MOE) as well as Ministry of Science and Technology (MST), as they are the principal determinants in pedagogic aspect of IT and teacher education training programme in Nigeria. The findings of the study will enable them to understand the situation and position of IT in teacher training and pedagogy.

The study will be of great benefit to computer programmers and school administrations of secondary schools in the sense that, this study will give an insight of what is expected of them in planning for the students and teachers in the future, if they want to turn out trained teachers for the 21st century classroom and labour market. Also the design, planning and development of software will reflect the principles and practical application of CAI with the classroom context and help them to provide for individualized instruction to meet special needs.
Most importantly, the study will be of significance to the curriculum planners as it will afford them the opportunity of streamlining many educational tasks. It will provide them with the vision to plan for a wide range of field, including all the main disciplines in elementary, secondary and tertiary institutions. The findings will help the curriculum planners to integrate and enhance the skills of search and development of in-class activity into the curriculum content. The study will help them to easily plan for a higher order thinking skills, critical thinking skills, and problem solving skills. Also, the inculcation of CAI into education system will be of great value to the curriculum planners in the sense that, it will equip them with the innovative skill of planning for people with physical limitations, learning disabilities and language limitations.

The NGOs and philanthropic organizations who are interested in educational advancement of the nation will see possible areas that require ICT facilities in schools for their support and donations.

The findings of this research will prompt WAEC and other examination bodies to review its strategy and provide them with the needed framework in the full implementation of CAI in assessing the students’ performance without any delay just as the deputy director, quality department of the Joint Admission and Matriculation Board (JAMB), while delivering a speech at the 2014 national workshop in Ado-Ekiti on the use of computer-based test for final year students of secondary schools says that, “no candidate wishing to gain admission into a university, polytechnic or college of education would have the option of writing the Unified Tertiary Matriculation Examination (UTME) by the usual paper-based option come 2015”. The JAMB director further states that there was “nowhere in the world today where public examinations, such as the UTME, are written with pencil or biros, he added that the benefits of the computer-based test will include release of result not lasting over 72 hours, absence of
familiar examination malpractices, zero result seizure as well as absence of external influence”.

Furthermore, research result can also spur further work on the area of computer application in teacher training. The findings will enable them to know the extent studies have been carried out in this field and it will also be a source for literature review to researchers. Computer assisted instruction is a very vital innovation that improves the academic performance especially in civic education.

1.8 Scope of the Study

This study investigated the impact of Computer-assisted Instruction on students’ performance in civic education in senior secondary schools in Kaduna state, Nigeria. The study focused on but not limited to the impact of computer assisted instruction on students of civic education in senior secondary students (SS II) in Kaduna state, Nigeria. Specifically, the study is delimited to performance of urban and rural students in civic education in Kaduna state, Nigeria and effectiveness of CAI was examined on selected topic lifted from civic education curriculum which include: citizenship education, responsible parenthood, Limitation of Human Right, democracy and National development, danger of political apathy, Drug and drug abuse, traffic regulation and relationship.
CHAPTER TWO
REVIEW OF RELATED LITERATURE

2.1 Introduction

Computer-assisted instruction can be a great asset to the education industry and curriculum, as long as they are not overused. Too much of any kind of teaching can lead to monotonous and frustration in the students. An attempt will be made in this chapter to review related literature on aspects of computer application in teaching and learning. Thus, the review will be presented under the following sub-headings: Conceptual framework, Concept of Education, Concept of Civic Education, Concept of Computer Assisted Instruction, Concept of Academic Performance, Theoretical framework, Use of Computer Assisted Instruction, Need for integration of Computer Assisted Instruction in the delivery of quality instruction, Civic education in secondary Schools, Civic Education Curriculum, The sequence of Computer Assisted Instruction in Civic Education, The role of the teacher in Civic Education, Academic Performance in Civic Education, Computer Assisted Instruction as determinants of student performance in Civic Education, Empirical studies and Summary.

2.2 Conceptual Framework

The clamoring for enhancing teaching and learning process with use of computer is growing steadily on the premises of its effectiveness when used in diverse way to delivered instruction, (Aubineau, 2007). Use of computer in teaching give teacher opportunity to deliver instruction in a systematic manner where by all the component of instruction (teaching, resources, motivation, evaluation, examination) are integrated and interconnected using system approach. The use of computers in schools may conveniently be divided into learning about computer and learning with, from or through computers. Knowledge of computer may be thought of as a continuum, ranging from
skills and awareness of computers as learning and education tools at the continuum, through programming in higher and lower level languages, and to solid-state physics at other end of the continuum. The terminology concerning computers as a learning medium differs and there are no universally agreed-upon definitions among those frequently encountered are: (a) Computer-assisted instruction (CAI) where computer acts as teaching new skills or concepts or providing practice for learners. Software in this mode is often referred to as drill practice, and tutorials. (b) Computer-based learning (CBL) or computer-assisted learning (CAL), which includes various categories such as simulations and modeling, instructional games, problem-solving, information handling, and demonstrations (Anderson, 2008). According to Fourie (2009), CAI is an interactive instructional technique whereby a computer is used to present the instructional material and monitor the learning that takes place. It is also known as computer-assisted learning (CAL), computer-based education (CBE), and computer-based training (CBT). CBT allows the students to direct own progress.

CAI learning uses a combination of text, graphics, sound and video in learning process. It is especially useful in distance learning situations. The explosion of the Internet as well as the demand for distance learning has generated great interest and expansion of computer-assisted instruction. Jones International University in 1993 was the first to provide degrees entirely through Internet courses. It received full accreditation by the North Central Association of Colleges and school (NCA) on March 5th, 2009. Currently there are more and more tertiary institutions offering web-based courses and programmes (Helfer, 2009). The computer has many purposes in the classroom, and it can be utilized to help a student in all areas of the curriculum. CAI refers to the use of the computer as a tool to facilitate and improve instruction. CAI programme use tutorials, drill and practice, simulation, and problem solving approaches to present topics,
and they test the student’s understanding. These programme let students progress at their own pace, assisting them in learning the material. The subject matter taught through CAI can range from basic civic education facts to more complex concepts in civic education, history, science, social studies and language arts (Helfer, 2009).

Many educational software programmes follow the same design as programmed instruction. Students receive some instructional material, followed by a “probe” (a small test), if they respond correctly, they move on to the next lesson, if they do not, they repeat the lesson or receive a different lesson covering the same material. This approach is called Computer Assisted Instruction (CAI). Thomas (2007), quoted Lepper and Gurtner (1989), and Roblyer (2010), was of the opinion that “CAI suffers from some of the same problem as programmed instruction. It is often repetitive, and it reduces learning to discrete units that sometimes obscure the relationship between ideas. CAI is better suited for drill and practice than for building concepts and promoting comprehension. Research has shown that when used in addition to regular instruction, CAI improves students’ motivation and academic achievement”.

However, Welberge (2009), examined 377 research studies, selected according to criteria for quality of research designs that had compared Computer Assisted Instruction with traditional classroom instruction. Seeking to compare educational methods for difference in effects on learning, he found in all cases that Computer Assisted Instruction combined with classroom teaching was superior to classroom instruction without computer assistance. The computer was found to be particularly effective with the handicapped, elementary students and secondary students.
The use of computer in education industry is still very low. Despite the computer is an innovation to education. Computers take over most of the drudgery of schooling such as classifying children according to abilities, preparing timetable, schedules, and so on, computer allocate learning resources to individuals and groups, computer maintain progress cards and preserve them confidentially, they provide easy access to files of information for reference and guidance, they provide direct interaction between student and subject-matter to be learned, and they engage the students in tutorial interaction and dialogue.

The most existing innovation in the educational system is the use of Computer Assisted Instruction (CAI). CAI in which the pioneer efforts occurred around 1960 following the introduction of computers into higher education. A number of larger-scale, heavily funded CAI projects have been conducted since then, with their results having implications for the future use of CAI as a classroom tool. Two major types of CAI are identified as adjunct (first used by Victor Bunderson Kearsley, 2009). CAI encompasses materials that supplement or enrich the learning situation, for example: short (half-to-one-hour) CAI programme that support or illustrate concepts discussed in the regular classroom. Primary CAI materials, conversely, provide instruction of a substitute or stand-alone variety and are usually of longer duration (Chamber & Sprecher, 2009).

2.2.1 Concept of Education

The concept of Education stems from the nature of education, which is like a diamond which appears to be of different colours (nature), when seen from different angles or points of views or philosophy of life. There are four important reasons for different definition and interpretation of education. One is the complex nature of human
personality, complex nature of environment of a society, different philosophies of life, and different educational theories and practices (Aggarwal, 2009). Education is a process which draws out the best in the child with the aim of producing well balanced personalities culturally refined, emotionally stable, ethically sound, mentally alert, morally upright, physically strong, socially efficient, spiritually upright, vocationally self-sufficient and internationally liberal (Aggarwal, 2009). Education is a process of bringing about changes in the behaviour and disposition of individuals that are socially acceptable (Umar, 2013). Education is the aggregate of all processes by means of which a person acquires abilities, attitudes, skills and other forms of behaviour that are positive in the society in which he lives (Umar, 2013).

2.2.2 Concept of Civic Education

Civic Education seems to be a new field of study/subject in Nigeria. But, history shows that the subject was taught in 1950s-1970s but abandoned owing to no identified reasons; possibly because of inconsistence in education policies. However, its emergence in Nigeria’s educational history marks a new dawn in educational sectors. Its study becomes even more imperative now that Nigeria faces political, social and religious crises. Indeed, the national civic, political, and economic landscape remained beset by the same age-old problems that have always hindered national development. Nigerian nation has been (and still being) characterized of ethnic chauvinism, religious clashes, social and civic crises. These bedeviling problems call for urgent attention. Critics and analysts have continuously advocated for civic education at all levels of education particularly at secondary level. Federal government has hearkened and heeded to such clarion call by introducing Civic Education in schools’ curriculum.

With the reintroduction, the challenges seem to be that of workforce (trained teachers) to handle the new subject and heartiness of reading or instructional materials,
especially, text books. Civic education covers a wide range of topics that cut across many areas of human endeavor like general human values like justice, honesty and so forth, which guarantee peace and harmony in the society. Other aspects are emerging health/social issues such as HIV/AIDS, youth empowerment, citizenship education and its goals, democracy – its characteristics, pillars and importance; human rights – its characteristics and categories; cultism; drug – its abuse and effects, responsible parenthood, traffic regulations, interpersonal and communal relationship, political apathy and its dangers; human trafficking – its causes and effects, and so forth.

Moreover, owing to social, religious and political crises in Nigeria, the country’s unity seems to be standing on the keg of gun powder as well as highly threatened. But the reintroduction of Civic Education and its study in Primary and Secondary schools provides another hope of reorientation and reintegration. Civic Education is a kind of education that provides students with a rich knowledge and understanding of their responsibilities as citizens (Alexander, 2012). It is a study of how man could become an effective quality citizen in the society as well as how government works and functions. Civic Education aims at imparting the knowledge and skills that we need for effective participation in the community, government and politics. Civic education is an important component of education that motivates citizens to participate in the public life of a government and democracy, to use their rights and to discharge their responsibilities with the necessary knowledge and skills. It is vital to state that a free society must ultimately depend on its citizens, and that the way to infuse the people with the necessary qualities is through civic education.
2.2.3. Concept of Computer Assisted Instruction

It is obvious that the use of CAI means different things to many people. Some defined it in the way it is practiced in the field and others in the way it is taught in the school. Scholars in Computer education over the years have tried with appreciable level of success to define the term CAI. As observed by Udoh (2013), that Computer assisted instruction is summarily described by some scholars in three perspectives: Some believe that it is education for computer teachers, while Some said it consist of two parts: (a). office and education, (b). programme of information and competencies needed in the Computer world, and (c). Some said it involves the study of technologies and related services and acquisition of practical skills. In the view of Anao (2011), Computer Assisted Instruction simply means an educational process which has its primary aim preparing of people for role in enterprise. He categorized the roles into four: (a) As employee; (b) as entrepreneur; (c) as employer; and (d) as self-employed.

In a related view, Adeshina (2007), opined that CAI is education for vocation which encompasses; attitude, skills and knowledge needed to manage personal computer. That it is included in all types of educational delivery system-elementary, secondary and post-secondary. In another opinion, Magnus (2007), argued that computer assisted instruction is normally used in two distinguishable senses:

i. A general mono-dimensional sense - as education in Computer subjects as shorthand, typing and bookkeeping relegating it to just secondary school.

ii. A special bi-dimensional sense - as subjects taught and skills for work. He concluded that Computer Education is:

a. That form of institution that both directly and indirectly prepares the Computer man for his calling.
b. Total activity which is planned organized and developed in favour of preparation of youths for responsible economic participation in the country. It encourages the preparation for office occupation such as secretary, stenographer, bookkeeper, data processor, computer analyst and accountant and also education for knowledge in economic, financial and marketing.

Consequently, Medone (2007), established that CAI is that aspect of total educational programme that provides the knowledge, skills and understanding needed to perform in the Computer world as a producer and or consumer of goods and services. In another development, Aliyu (2010), remarked that computer assisted instruction is a deliberate intent of teachers to inform students about economic and computer concepts and skills that may be of use in later life. The central point from the above definitions is the positioning of training for specific jobs and developing ability to use these skills in the computer. Njoku (2010), defined CAI as an educational programme that equips an individual with functional and suitable skills, knowledge, attitudes and values that would enable him or her operate in the environment he or she find himself. In his view, computer assisted instruction is an embodiment of vocational knowledge and skills needed for entire level employment and advancement in a broad range of computer carrier. One of the five goals of education in Nigeria is that education shall build a land of full bright opportunities for all citizens, empower people with desirable skills, knowledge and value to perform specific functions so as to become self-reliant.

(a) Help you appreciate the world around you and contribute maximally to the social and economic development of the nation.
(b) Empower you in such a way that you will develop your intellectual capability that would help you to make informed decisions in all spheres of life.

(c) Help you become a judicious spender and develop proper values for the achievement of healthy living and growth of the nation.

(d) Understand the political framework of a nation so that you can contribute to national economy and development of your country (Njoku, 2010).

This in line with NCCE (2012), the Minimum Standard for Nigeria Certificate in Education indicates that the following are the objectives of the students using CAI programme:

(a) Produce well qualified and competent graduates and related educational institution,

(b) Produce teachers who will be able to inculcate the vocational aspects of computer education into society,

(c) Produce teachers who will be involved in the much desired revolution of vocational development right from primary and secondary schools, and

(d) Equip students with necessary competencies so as to qualify for post NCE programmes in computer education.

Equip graduates with skills that will enable them to engage in a life of work and self-employment. In the same vein, National Policy on Education (2013), described Computer assisted instruction as that aspect of education which leads to the acquisition of practical and applied skills as well as basic scientific knowledge. It thus goes without saying that the study of technologies, related science and the acquisition of practical skills, attitudes, understanding and knowledge in relation to occupations in various sectors of economic and social life are of paramount importance. Osuala (2007), saw
CAI as a programme of instruction which consists of two points; office education and general computer education that provide students with information and experiences which are deeded by all in managing personal computer affairs and in using the services of computer. In the legal perspective, computer assisted instruction is a term that encompasses a number of methods used to teach Students the fundamentals of computer practices. These methods range from formal education degree programme to school-to-work opportunity system or cooperative education, (United State legal unit, n.d.).

In view of Aina (2007), Computer assisted instruction encompasses knowledge, attitudes, and skills needed by all citizens in order to effectively manage their personal computer and economic system. Perceived in this sense, CAI is an embodiment of classroom learning and practical skills acquisition programme. According to Ezeji (2007), Computer assisted instruction is a field which provides training for individuals to enable them acquire skills, knowledge, and attitudes required for gainful employment both with the private and the public sector and equally to become self-reliant. It also trains the individuals to acquire the right attitudes towards the economy and to be able to take part in making economic decisions for the development of his nation. National-building on the other hand is the individual’s contribution in the area of economy, agriculture, industrialization, commerce, defense, and so on to the development or growth of the nation. Oyedele (2010), explored that computer assisted instruction is a broad and diverse discipline that is included in all types of educational delivery system; primary, secondary, and post-secondary. It equally believes that the programme can begin at any level, it can be interrupted for varying period of time, and it can be continued throughout the life span of an individual.
Based on the aforementioned conception, CAI covers a wide range of activities in a given society by educating and preparing people, among other things, for a career in enterprises which covers knowledge and skills that will make them secure gainful employment and self-reliant and enhances the academic performance. It has been observed also that CAI cannot be separated from information and communication technology as they provide individuals with skills, knowledge, competency and job opportunities that are needed in the world of work. Therefore, this study sees the impact of computer assisted instruction as that part of educational programme aimed at developing competences needed to function effectively in an occupation and enhancing the academic performance of students.

The structure of CAI is based on programme objectives: Computer education has three basic career skills training:

i. Vocational skills- trained to be secretaries, store keepers and record keepers.

ii. Executive skills- trained to be office managers, marketing managers and financial managers.

iii. Professional skills- trained to be accountants, auditors and administrators.

These skills training are provided at three basic levels, Gohdes and Wandal (2012), said that:

a. Elementary level has the following objectives;

b. Giving the child opportunities for developing manipulating skills.

c. Providing basic tools for further educational advancement and preparation for trade and craft of the locality.
Secondary school has a prevocational and academic structure;

1. **Junior secondary:**
   - Introduction of prevocational orientation imparting simple marketable skills

2. **Senior secondary:**
   - i. Prepare for useful living
   - ii. Preparation for higher education and
   - iii. Development of occupational knowledge, skills and attitudes
   - d. Post-secondary is grouped into three categories based on structure:

   1. **Polytechnic offers Diploma and Higher Diploma certificates aimed at:**
      - i. Training middle cadre technicians and men and women
      - ii. Providing skills for immediate employment.

   2. **Senior Secondary School** is for the training of teachers for Secondary Schools with three basic objectives:
      - i. To train professional teachers for the lower levels
      - ii. To help produce large number of vocational teachers for Secondary Schools and trade centres.
      - iii. To meet the need of Universal Basic Education.

   3. **University,** in this case Students have the choice to enroll for general Computer courses, or to enroll for particular degree. It aimed:
      - i. To provide vocational teachers’ need for Secondary School.
      - ii. To provide manpower direfully needed in the Colleges.

For the sake of this study, the use of computer assisted instruction will be considered at Senior Secondary School level. Computer Education is structurally
designed to train teachers. The participants (Students) are required to specialize in any of the areas based on interest. Studies have shown that every student at the NCE 1 and 2 levels is expected to participate in all the areas and that specialization takes effect in NCE 3 for most of the colleges. This is evidenced in the study by Ekpenyong (2013) and NCCE (2012), that NCE Computer education programme has two options (areas):

a. Secretariat and
b. Computer Education.

This study will be focusing on the impact of computer assisted instruction on students’ performance in civic education in SS II, which according to Osuwa (2007), was defined as that aspect of that provides an individual with skill and knowledge in computing occupational and data processing for gainful employment. For a student to be able to enroll into the NCE programme and specialize in any of the areas there is a minimum standard of entry requirement. According to the minimum standard (NCCE, 2012), this refers to specific admission requirement into the NCE Computer education programme. The eligibility can either be for the pre-NCE Computer or the Direct Entry NCE Computer.

The pre-NCE computer requires a minimum of three credits and a pass in Mathematics and English Language. And the candidate must attend a selection interview. Transition from pre-NCE to NCE-1 Computer requires at least a D grade in the final pre-NCE exams. For the Direct NCE Computer entry, a candidate must have three credits in any of; Economics, Principles of Account/Bookkeeping, Computer method, Shorthand, Typewriting and Commerce, in addition, a credit in Mathematics and English Language. These credits must be obtained in not more than two sittings. To graduate at this level, a student will complete a duration of 3 years minimum and a maximum of 5 years, upon
which the student will have to earn a total of 103 credits units, (Ekpenyong, 2013; NCCE, 2012).

Computer Assisted Instruction (IT) has been defined in so many ways by different scholars but all geared towards the same direction. Among these include: Shitu and Unogu (2013), who defined Computer Assisted Instruction as simply technology arising from scientific and technological progress in computer sciences, electronics and telecommunication, which enable us to process, store, retrieve and disseminate valuable information, text, sound, and video forms. In line with this, Encarta (2009), viewed Computer assisted instruction as diverse and rapidly expanding spectrum of computer technologies that assist the teaching and learning process. Olabimitant (2010), also defined Computer Assisted Instruction as the combination of networks, hardware, and software as well as the means of communication, collaboration and engagement that enable the processing, management and exchange of data, information, ideas and knowledge. He went further to stress that IT includes; GSM mobile phones, personal computers and internet which is the central tools that give impetus to the most radical exchange known today.

Onilude and Adesanya (2007), viewed IT as electronic network-embodying complex hardware and software-lined by a vast array of technical protocols. This definition reveals that the use of ITs involves technical link up which when properly followed will result to fast and easy flow of information. This definition was also supported by Chuma (2011), who also referred to IT as the group of technologies that is revolutionizing the handling of information and embodying a convergence of interest between electronics, computing and communication. Chuma (2011), also sees IT as the electronic means of capturing, processing, storing and disseminating information. The
author identified IT as a phenomenon which encompasses all devices and technology employed in information handling and which facilitates communication between man and the electronic environments. In this vain, Basil (2007), defined IT as any technology that is used in gathering, storing and retrieval of information that can be textual or numeric, pictorial and vocal forms using a combination of all the multi-media including computer and telecommunications. Computer Assisted Instruction includes software, hardware and even connectivity, all these according to the scholars can only be possible through the use of IT. IT as computer-based tools used by people to work with information and communication processing needs of an organization. It encompasses the computer hardware and software, network and several other devices (such as video, audio, photograph camera, and so forth) that convert information (text), image, and sound, and so on into common digital form.

In line with this Nigeria National Policy for Information and Technology (NNPIT) (FRN, 2007), defined IT as “computer ancillary equipment, software and firmware (hardware) and similar procedures, services (including support services) and to related resources. The same document (FRN, 2007), defined IT as any equipment or inter-connected system or sub-system of equipment that is used in the automatic acquisitive storage manipulation, management, control, display, switching, interchange, transmission or reception of data or information. This definition shows how IT can help to access, process, gather, manipulate and save information over time which increases the value of such information. Olojo (2010), viewed CAI as a learning process created by interaction with digitally delivered, content, network-based services and tutoring, mediated learning using computer whether from a distance or in face to face classroom setting (computer assisted instruction), it is a shift from traditional education or training
to ICT-based personalized, flexible, individual, self-organized collaborative learning based on a community of learners, teachers, facilitators, experts.

The use of internet technologies to enhance knowledge and performance, offer learners control over content, learning sequence, pace of learning, time, and often media, allowing them to tailor their experiences to meet their personal learning objectives, and transforming the role of the teacher shift toward applying adult learning theory, where educators will no longer serve mainly as the distributors of content, but will become more involved as facilitators of learning and assessors of competency. Historically, there have been two common mode: distance learning and computer assisted instruction (learning). Distance learning uses information technologies to deliver instruction to learners who are at remote locations from a central site. While CAI (also called computer-based learning and computer based training) uses computers to aid in the delivery of stand-alone multimedia packages for learning and teaching, enabling learners to be more active participants, engaged with the content (Means, Toyama, Murphy, Bakie & Jones, 2009). Increasing the availability of learning experiences for learners who cannot or choose not to attend traditional face-to-face offerings, assembling and disseminating instructional content more cost-efficiently, enabling instructors to handle more students while maintaining learning outcome quality that is equivalent to that of comparable face-to-face instruction.

There are many Computer Assisted Instruction facilities, which according to Laudon, Laudon and Brabston (2011), includes; computer hardware, computer software data management technology and networking and telecommunication technology.

1. Computer hardware - is the physical equipment used for input, processing, and output activities in an information system. It consist computer of various sizes and
shapes (including mobile handheld devices; various input, output, storage devices, and telecommunication devices) that link computers together.

2. Computer software - consists of the detailed, preprogrammed instructions that control and coordinate the computer hardware components in information system.

3. Data management technology - this consist of the software governing the organization of data on physical storage media.

4. Networking and telecommunications technology - it consist both physical devices and software, links various pieces of hardware and transfers data from one physical location to another. Computers and communications equipment can be connected in networks for sharing voices, data, images, sound and video. A network links two or more computers to share data or resources, such as printer. Internet is a global “network of networks” that uses universal standards to connect different networks with more users in more countries around the world. It has internal uses called intranets and uses outside the organization are called extranets. World Wide Web is a service provided by the internet that uses universally accepted standards for storing, retrieving, formatting, and displaying information in a page format on the internet.

2.2.4 Concept of Academic Performance

Performance of students has for long generated a lot of interest among educators, researchers, government officials, parents and the students themselves. Many studies have examined the factors that influence students’ performance in primary and secondary education as well as at the tertiary level, with the purpose of enhancing learning at these stages and reducing drop-out. Performance of students, according to Gouch (2010), can generally be referred to as the way and manner student’s deals with their studies and how they cope with or accomplish different tasks given to them by their teachers. In other
words, it is students’ ability to study and remember facts and being able to communicate knowledge verbally or down on paper. Lafer and Markert (2009), explained that there are two broad groups of definitions of academic performance. The first one refers to numerical scores of a pupil’s knowledge, which measure the degree of a pupil’s adaptation to school work and to the educational system. The second group is a more subjective one, as its determination of academic success in reliant upon the student’s towards his academic achievement and himself, as well by the attitudes of significant others towards his/her success and him/herself. From these definitions, student’s performance has to do with their ability to not only understand and assimilate facts, but to be able to recall these facts in the future.

In his view, Otoo (2008), said that academic performance is the capacity to achieve when one is tested on what one has been taught. Academic performance is related to content and intellect, meaning that academic performance depends on the Learner’s competence. Annie, Howard and Stroke (2010), defined academic performance or academic achievement as the outcome of education-the extent to which a student, teacher or institution has achieved their educational goal. In education institutions, success is measured by academic performance or how well a student meets the standards sets out by the local government and the institution itself (Annie, Howard & Stroke, 2010). From these definitions, academic achievement is considered as the outcome of learning that has taken place. A performer can be an individual or a group of people engaging in a collaborative effort. Performances is measured on the basis of six component of educational objectives which are; level of knowledge, levels of skills, levels of identity, personal factors and fixed factors. It is the process of accomplishing an action under particular conditions. For instance, a student’s performance in the school will determine his future career. Aka (2011), perceived academic performance as the
index of general mental abilities which are responses to test of different kinds. A major indicator of effective teaching in educational institutions is high academic performance of the pupils/students. However, effectiveness of a teacher would dictate the realization of the institution’s objectives and ultimately the objectives of education. In view of the investment of government and parents on the education of a child, nothing short of high academic performance is expected from educational institutions.

Academic performance, explained Rothstein (2008), referred to a successful accomplishment or performance in particular subject area. It is indicated by grades, marks and scores of descriptive commentaries. Academic performance, continued Rothstein, also refers to how students deal with their studies and how they cope with or accomplish different tasks given to them by their teachers in a fixed time or academic year. Kobaland and Musek (2011), defined academic performance as performance on task with measures including comprehension, quality and accuracy of answers of test, quality and accuracy of problem solving, frequency and quantity of desired outcome, time or rate to solution, time on task, level reasoning and critical thinking, creativity, recall and retention, and transfer of tasks.

In the past, academic performance was often measured by ear (Wiggins & McTighe, 2013). Measuring of academic performance is a challenge since student performance is a product of socioeconomic, psychological and environmental factors. It is commonly measured by examinations, practical or continuous assessment but there is no general agreement on how it is best tested (Hoxby, 2011). Teacher’s observations make up the bulk of the assessment, and today’s summation or numerical method of determining how well a student is performing is a fairly recent invention. Grading system came into existence in America in the late Victorian period, and was initially criticized due to high subjectivity. Today, changes have been made to incorporate
differential student’s abilities, and exploration of alternate method of measuring performance is on-going. Hoxby (2011), posited that performance in school is evaluated in a number of ways. For regular grading, students demonstrate their knowledge by taking written and oral test, performing practical, presentations, turning in homework and participating in class activities and discussion. Teachers evaluate in the form of letter or number grades and side notes to describe how well a student has done.

2.3 Theoretical Framework

This section presented the theory upon which this study was built. The study used Cognitive learning theory which is concerned with how individuals gain knowledge and how they use it to guide decisions and perform effective actions. This theory try to understand the mind and how it works. To achieve this, computer is view as a model of the brain and employ much of the terminology and concepts of information processing

2.3.1. Cognitive Learning Theory

Cognitive Learning theory which this study depends on is rooted in the work of Ivan Pavlov, who was able to train dogs to salivate at the sound of a bell. According to Fritscher (2009), cognitive theory is a learning theory that explains human behaviour by understanding the thought processes. The theory postulates that humans are logical beings that make the choices that make the most sense to them. The cognitive theory focuses on different aspects of instruction and how those aspects can either facilitate or hinder learning. This means that if students are taught by particular means like the computer, it enhances learning depending on the way it is taught. This is significant to this study in that if students are taught civic education using PowerPoint, it will enhance their performance. Therefore, the use of Cognitive theory which this study adapts as a theory of learning emphasizes strategies that focus the learner’s attention, promote encoding and retrieval, and provide for meaningful, effective practice across learning
environments and curriculum. Cognitive information processing theory also emphasizes
the use of graphic organizers and emphasizing words that are important in text (Reiser &
Demqsey, 2007). Information processing is a commonly used description of the mental
process, comparing the human mind to a computer. Cognitive theories look beyond
behaviour to explain brain-based learning.

Cognitive theories view learning as involving the acquisition of reorganization of
the cognitive structures through human process and store information. Cognitive theory
focus on how students make meaning of new information and experience and also
emphasize the role of active mental processing in learning. Kanusi (2008), further
explained that cognitive approach supports the opinion that if we want to understand
learning, we have to study the abilities of individuals to recognize their psychological
field, that is , their inner world of concepts memories into the reflection of the outer
experience. This approach accents the manner which individuals use to explain and
understand what is happening around them. The cognitive approach does not perceive
individuals as mechanical creations of their environment but as active elements in the
process of learning, as someone who is trying consciously to sort the information
received from the outside world. This could therefore be said that, students who are
taught Civic education using Computer Assisted Instruction could likely learn well
because they are active participants in the learning process. Cognitive domain according
to Bloom (1956-1964) is one of the best known educational domains. This domain
focuses on intellectual skills of the learner. It includes six educational objectives which
are referred to as Bloom’s hierarchical taxonomy and they are: evaluation, synthesis,
analysis, application, comprehension and knowledge. The domains are as follows;

<table>
<thead>
<tr>
<th>Educational Objective Level</th>
<th>Mental Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation</td>
<td>exercise of learned judgment</td>
</tr>
</tbody>
</table>
Syntheses
create new relationship

Analysis
performing relationship

Application
use of generalization in specific instance

Comprehension
translates, interpret and extrapolate

Knowledge
recall and recognition.

According to Huba, Edward and Freed (2009), learning objectives are building blocks to conceptual content knowledge and the skills that enable students to build their own understanding of any subject. Learning objectives are measurable statements of what students should recall, understand and be able to do as a direct outcome of a particular learning activity. Each learning activity students engage in at least one learning objective. Some activities will have more than one. Learning objectives are defined as what you want the students to know or understand after they have finished the learning activity (Huba, Edward & Fred, 2009). Learning is a relatively permanent change in an organism’s behaviour due to experience (Myers, 2008). In psychology and education, learning is commonly defined as a process that brings together cognitive, emotional, and environmental influences and experiences for acquiring, enhancing, or making changes in one's knowledge, skills, values, and world views (Ileris, 2007). It is also thought of as the way in which information is absorbed, processed, and retained. Learning Theories are elaborate hypotheses that describe how exactly this procedure occurs; Learning theories have two chief values according to Hill (2010). One is in providing us with vocabulary and a conceptual framework for interpreting the examples of learning that we observe. The other is in suggesting where to look for solutions to practical problems. The theories do not give us solutions, but they do direct our attention to those variables that are crucial in finding solutions.
Learning is acquiring knowledge or developing the ability to perform new behaviours. It is common to think of learning as something that takes place in school, but much of human learning occurs outside the classroom settings, and people continue to learn throughout their life time (Hill, 2010). This process could be explained through several theories, some of which include; behaviourist, cognitive, constructivist, and social learning theories. Presently teachers make use of these theories in their classrooms in order to maximize the learning potentials of students and also to create a better learning environment inside the classrooms. Learning theories emphasize the role of environmental influence in shaping the way a person develops. In this view, child development is guided by both deliberate and unintended learning experience in the home, peer group, school, and community. Therefore, childhood growth is significantly shaped by the efforts of parents, teachers and others to socialize children in desirable ways. What is implied is that learning theories provide the principles that explain how people can use a bicycle or computer. It also explains how children acquire social skills, emotional self-control, reasoning strategy, and the physical skills of walking and running (Hill, 2010).

2.4 Uses of Computer Assisted Instructions

In stating the uses of Computer Assisted Instructions, Taplin (2008), synthesized the various uses to include:

i. Computer Assisted Instructions solving facilitates students-student and student-teacher interactions.

ii. Is a forum where the teacher has a fair and objective assessment of the students’ ability.

iii. Computer Assisted Instructions provides a flexible teaching session with the teacher knowing when, where and how to intervene.
iv. Computer Assisted Instructions places teacher’s role as a guide, as a leader and as an instructor.

v. Computer Assisted Instructions provides for students to discover laws and rules.

vi. Computer Assisted Instructions provides the student to discover the answers. It makes the whole lesson more interesting.

However, professional organizations such as the National council of teachers of mathematics (NCTM, 2000 & 2009), have recommended that the Computer Assisted Instructions should be organized around problem solving, focusing on:

a. Developing skills and the ability to apply these skills to unfamiliar situations.

b. Gathering, organizing, interpreting and communicating information.

c. Formulating key questions, analyzing and conceptualizing problems, defining problem and goals, discovering patterns and similarities seeking out appropriates data, experimenting, transferring skills and straight to new situations.

d. Developing curiosity, confidence and open-mindedness (NCTM, 2009, p. 2-3).

The ultimate goal of any computer assisted instructions or programme is to improve students’ performance. The specific goals of computer assisted instructions in civic education are to:

i. Improve students’ willingness to try civic education and improve their perseverance when solving problems.

ii. Improve pupil’s self concepts with respect to the abilities to solve civic education
iii. Make students aware of the problem solving strategy.

iv. Make students aware of the value of approaching civic education in a systematic manner.

v. Make students aware that many problems can be solved in more than one way.

vi. Improve student abilities to select appropriate solution strategies.

vii. Improve student abilities to implement solution strategies accurately.

viii. Improve student abilities to get more correct answers to civic education.

However, Raninga (2010), proved CAI as an effective method for teaching Mathematics to 7th grade students as compared with traditional method. Ragasa (2008), found CAI more effective than traditional lecture method for teaching introductory economics statistics to students. Cotton (2009), reviewed fifty nine research studies exploring effectiveness of CAI and concluded that the CAI utilized as a supplement to the teacher directed instruction resulted in superior students’ achievement.

Moreover, since technology use is fully integrated into larger learning system, it is very difficult to isolate the technology variable and determine whether any observed gains are due to technology use or to some other factor or combination of factors. Regarding the impact of CAI on students’ performance in Civic education, Tinio (2010), observes that CAI can enhance the quality of education in several ways: by increasing learner motivation and engagement, by facilitating the acquisition of basic skills, and by enhancing teacher training. CAI are also transformational tools which, when used appropriately, can promote the shift to a learner-centered environment.
2.4.1 The Role of Secondary School Teachers in the Use of CAI for Classroom Instruction

The use of CAI in classroom instructions makes instructional delivery very useful and teaching and learning easier and CAI can contribute to universal access of education, equality in education, the redelivery of quality learning and teaching. The use of CAI for instruction in SSS classes improves the quality of subject in the teaching and learning process. CAI if use appropriately can be an effective tool in supporting classroom instructions. CAI is used as the major way of providing the instructional experience of classroom teaching.

Teachers are among the pillars of a progressive society, they bear the responsibility of teaching, are the main source of knowledge and values for children. The role of a teacher in society is significant and valuable, it has a lot of influence on the society and no other personality can have such influence than that of the teacher. Students are deeply affected by the teacher’s love and affection, his character, his competent, and his moral commitment. A good teacher becomes a model for his student, the students try to follow their teacher in his manners, costume etc. Therefore, the teachers need to have access to resources that will provide ideas and material for different classroom applications. These resources include CAI facilities. ICT gives teachers access to information through on-line journals, joining discussion forums, downloading lesson ideas and plans, exploiting teaching resources and record keeping.

CAI tools are machine or devices (hardware) in that they occupy space need to be operated, can be switched on and off etc. CAI tool are like a person in that they interact in a two-way relationship with students and teachers. This has implications for teachers in deciding to use CAI in the classroom. The teacher and perhaps students need to know how to operate the CAI tool and know how to overcome problems which may occur.
when using it. For many teachers, CAI implementation may require change in attitudes and classroom practice. However, Jegede (2008), on attitudinal characteristic and teachers ICT use level discovered that each of the attitudinal construct such as self-efficacy, competence and level of usage are significantly related and they predict ICT usage among teachers. Teachers constitute the facilitator and entrepreneurs in CAI learning environment. Teacher’s level of ICT awareness and usage depends upon teachers’ related factor, related behaviour will impact its use. Its therefore, mandatory for teachers to acquire the necessary ICT skills to enhance ICT usage in the classroom. However, most teachers do not make use of the potential of ICT to contribute to the quality of learning environments, obviously, the use of ICT will not only enhance learning environments but also prepare next the generation for future lives and careers.

2.4.2 Need for integration of Computer Assisted Instruction in the Delivery of Quality Instruction

Information and Communication Technology (IT) has become an indispensable part of contemporary world. Abolade and Yusuf (2012), stated that the school system globally has equally being affected in a number of ways. The school, through teachers must make use of technology so as to prepare students for the future. This idea is very important because the world is becoming complex; it requires sophisticated knowledge to handle it. According to Willis (2008), general computer (operating system, word processing, spreadsheet, data base, and telecommunication) is not sufficient to prepare per-service teacher to use technology in their classroom. What is needed is professional literacy- a basic understanding of how computer and related technology can be used in education, as well as specific novice, skills for integrating technology into the curriculum at the grade level and in subject pre-service teacher plans to teach. This revealed the need for quality teacher education programme, meant to develop in service and trainee
teachers’ quality IT training for successful Information Technologies integration in instruction. There are some competencies required by serving and pre-service teachers to perform better at work. This is elaborated by the International Society for Technology in Education (ISTE) (2010). ISTE noted that educational computing and technology is an emerging field and that the preview of the field covers knowledge and skills about the use of computer and related technologies in delivery, development, prescription and assessment of instruction, effective use of computers as an aid to problem solving, school and classroom management, educational research and computer science education. Therefore professional literacy on computer knowledge is required. The International Society for Technology in Education outlined three principles of ICTs in teacher education as follows: First is that ICTs should be infused into the entire teachers’ education programme. The second is that ICTs should be introduced in context and finally, that students should be made to experience innovative technology support learning environment in their teacher education programme.

In the same vein, Krirschner and Davis (2011), also highlighted good practice for both pre-service and in-service programme for teachers training in ICTs. The following observations serve as benchmark for the need of integrating ICT into teacher education programme:

i. teacher become sufficiently competent to make personal use of ICTs;
ii. teacher becomes competent to make use of ICT as mind tool;
iii. become master of range of educational paradigms that make use of ICT;
iv. sufficiently competent to make use of ICT as a tool for teaching;
v. master a range of assessment paradigms which make use of ICT; and
vi. understanding the policy dimension of the use of ICT for teaching and learning.

Information and Communication Technology according Abolade and Yusuf (2012), has the potential to accelerate, enrich and deepen basic skills in reading, writing, calculating and the science. Similarly, Computer Assisted Instruction motivates and engages students in learning as they are encouraged to be more independent and responsible for their own learning. Likewise, it helps to relate academics to the practice of today’s work as the influence of Computer Assisted Instruction is pervasive in every field. ISTE (2010), identified four major levels of training for teachers. These are educational and technology literacy endorsement- this programme is meant to prepare teachers of computer literacy and computer application, which can help the teacher with general foundation and other skills to deliver instructions in technology rich settings. Secondly, the secondary computer science education programme which provides content area and professional education in secondary computer science. Thirdly, it is the computer science education initial degree programme meant to provide programme standards for preparation in computer science as the primary area of certification. Finally, the educational computing and technology advanced programme standard is designed to prepare candidates to serve as educational computing coordinators or specialist. These are the basic standard to the development of ICTs in teacher education programme. According to FRN (2013), teacher education shall continue to take recognizance of changes in the curriculum, teachers shall be regularly exposed to innovations in their profession. In-service training shall be develop an integral part of continuing education and shall also take care of all inadequacies. There is need for teachers to be versatile in the use of Computer Assisted Instruction in the contemporary knowledge age as being recognized by Nigerian Teacher Institute. The value of
Computer Assisted Instruction in teaching and learning encourages the inclusion of competent of Computer Assisted Instruction in the Nigeria teacher education programme. Willis (2008), also noted that the general teacher training in Nigeria teacher training institution do not provide future teachers with the kind of experience necessary to use technology effectively in their classroom. Willis emphasized the need for training institutions to provide teachers with the requisite knowledge and skills to be able to use technology effectively. This very is necessary because new and practicing teachers will regularly come in contact with new technologies they have not experienced before; they will need to be taught how to approach and master new technologies as well as existing technologies already in classroom. Krischner and Davis (2011), observed that integration of computer into the learning experience will enhance learning and increase the students’ ability to apply knowledge and skills to future problem solving situations. Computer Assisted Instruction base assessments are beginning to provide complex performance tasks with which students can use various ICT tools and collaborative facilities to find or create the appropriate knowledge and apply it to solve their problems. The value of Computer Assisted Instruction in secondary school cannot be over emphasized; therefore, institution should embrace ICT in order to encourage students to learn faster and efficiently.

Computer Assisted Instruction is also relevant to education as stated by Perkins (2009), ICT in education offers a wide variety of ways to improve our educational system. Computer Education software is an application software that records and processes Computer Education transactions within functional modules such as accounts payable, accounts receivable, payroll, and trial balance. It functions as Computer Education Information System. He analyzes these attempted improvements in terms of
how well they have contributed to accomplishing the following three basic and enduring goals of education:

1. Acquisition and retention of knowledge and skills.
2. Understanding of one's acquired knowledge and skills.
3. Active use of one's acquired knowledge and skills (transfer of learning, ability to apply one's learning to new settings and ability to analyze and solve novel problems).

These three general goals—acquisition and retention, understanding, and use of knowledge and skills, help guide educational systems throughout the world. According to Abdullahi and Shittu (2013), the relevance of Information and Communication Technology to education includes:

1. ICT facilitates access to resources, teachers and learners no longer have to solely rely on printed books and other materials in physical media housed in libraries (and available in limited quantities) for their educational needs. With the internet and the world wide web, a wealth of learning materials in almost every subject and in a variety of media can now be accessed from anywhere at any time of the day and by an unlimited number of people.
2. It also facilitates access to resources persons—mentors, experts, researchers, and their materials, professional Computer leaders, all over the world.
3. ICT equips the learner to be fully productive in the world of work toward self-actualization and develop competencies required for personal or employment use. It makes the students become better prepared for work that increasingly involves the use of ICT.
4. ICT have also been used to improve access to and quality of teachers; through providing better teacher professional development (teacher in-service).
tutorials are also offered, with some courses requiring occupational face-to-face meetings and it enhances teacher training.

5. ICT can be used to improve the way that instructional methods are delivered by making instruction more efficient, less expensive and more assessable. It also provides teachers with access to curricular materials and other resources.

6. It facilitates the acquisition of basic skills and brings the transmission of basis and concepts that are function of higher other thinking skill and creating can be facilitated by ICT through drills and practices.

7. It provides digital age literacy which involves the use of images, graphics, charts and graphs.

8. It increases the learner’s motivation and engagement. It exposes and stimulates to learn with more ease.

9. ICT is used to improve the delivery and access to education, make the school more effective or more productive engendering variety of tools to support and facilitate teacher’s professional activities.

Students/teachers need to be competent and master Computer Assisted Instruction and ICT in general to enable them impact on their students. However, competency is very necessary especially to the new teacher in the use of a variety of software, particularly, software that have specific application in various discipline. There is some computers software that is important for all students such as word processing, data processing, and spreadsheet. Likewise, there are some packages that are particularly meant for some area of discipline. More so, there are different competencies required by students/teachers in application of Computer Assisted Instruction in education. This was summarized as follows:
a. Students/teachers to become competent to make personal use of Computer Assisted Instruction.

b. Competent masters of a range of education.

c. Paradigms that make use of Computer Assisted Instruction.

d. Sufficiently competent to make use of Computer Assisted Instruction as mind tools.

e. Competent to make use of Computer Assisted Instruction as a tool for teaching.

f. Competent in mastering a range of assessment paradigms which make use of Computer Assisted Instruction.

g. Competency in understanding the policy dimensions of the use of ICT teaching and learning. Competency in ICT gives the teacher confident and boosts his moral.

ISTE (2010), said that educational computing and technology is an emerging field and that the purview of the field cover knowledge and skills about the use of computer and related technologies in delivery, development, prescription and assessment of instruction, effective use of computer as an aid to problem solving, school and classroom management, educational research, electronic information access and exchange, personal and professional productivity and computer science education. The need for students (teachers) competency in ICT skill cannot be over emphasized due to the rate at which the society is moving in all facets especially, in the educational industry. For any society to embrace any change, teachers are most expected to fully involve in the process of change. This is necessary especially in the teachers’ education, because the knowledge is passed down to teacher in the making, who will later pass it to students. According to Adeshina (2007), no one can give what he does not possess.
2.4.3 Preparation of Computer Assisted Instruction Package

Preparation of effective CAI programmes follows a step by step process. The development of a CAI can be based on the ADDIE instructional system design model which consists of five phase: Analysis, Design, Development, Implementation and Evaluation. The ADDIE model provides a means for identifying the target audience’s needs and reinforce the use of this information for the design and development of the CAI. Throughout the implementation phase, necessary feedback should be obtained to determine the effectiveness of the CAI.

2.4.4 Steps of Developing a Computer Assisted Instruction Package for Lesson

The CAI package can be based on one individual topic or it could be a large packages consisting of several individual lessons.

According to Vanaja and Rajasekar, (2010), a team of developers is utilized in the production of a CAI lesson. A typical team consist of one faculty member, who is the designer / programmer, and a professional who is the CAI designer / programmer, and a student who does the coding. The systems approach is used for development of a single lesson using CAI which consists of four phase: planning, development, evaluation, and dissemination.

a. Planning: In the planning phase, a faculty member identifies a need for using CAI in a course. The faculty member in consultation with a CAI specialist writes a proposal outlining the use of CAI in a topic. Identifying the target audience, defining the objectives, providing the content and flow of the lesson, and suggesting an evaluation plan.
b. Development: During the development phase, the CAI professional works with the faculty member to best adapt the content to the interactive computer environment. A detailed display-by-display design of the lesson, referred to as a script, is produced on paper. Interaction on every display, with appropriate feedback for correct responses, is written into the script, along with alternative paths that the user might see, based on their responses. The script is reviewed by the subject head teacher, by subject teacher as colleagues, and by a team of lesson designers, revisions are made based on the reviewer’s suggestions. When the script is approved by the subject head teacher it is given to the student programmer to begin the coding. While being programmed the lesson undergoes a similar review and revision cycle, at various points in its development the lesson is reviewed by the CAI professional and content expects. Major changes can be incorporated into the developing lesson at this stage. When the complete lesson is on the computer, it is formally reviewed by programmers, designers and expects. A revised lesson is then readied for student testing.

c. Evaluation: The lesson is usually assigned to the subject heads, students before the next term that the course will be taught. Formative data on users’ responses, requests for helps, and individual branching sequences are kept by the computer for each user. The programmer and designer use this information to further refine the lesson. The improved version is used with students in subsequent semesters while the lesson enters the next phase of the systems approach.
d. Dissemination: The lesson is then ready to begin the publication process with a course-ware company. More reviews and revisions are required with emphasis on editing, style, format and consistency. It is then published by the course-ware company and made available to the public.

2.5 Civic Education in Secondary Schools

The rationale for this new innovative curriculum on Civic Education for Senior Secondary School came into existence as a result of desire to bring the reality of everyday societal living to the students at their age of critical thinking and reasoning about the events happening around them. This is with a view of helping them acquire knowledge, attitude, values and basic skills that will help them become responsible and disciplined members of their societies (FME, 2012). In order to achieve this goal, the students need the appropriate information which they can gather through participation for the purpose of applying what they have learned to their daily experiences.

The major contents of Civic Education were derived from the existing Social Studies Education which for many years’ people believed to be an amalgam of all subjects in the Social Science Humanities. The qualified and practical professions of social studies know that this is not true. However, the disarticulation of Civic Education content from Social Studies has helped to build the content of Civic Education. Addition of current issues of world concerns such as HIV/AIDS, Drug Abuse, Human Trafficking, entrepreneurial skills and so on etc were infused into the relevant contents of the new Senior Secondary School Curriculum. In general, the Curriculum pays particular attention to the achievement of the Millennium Development Goals (MDGs) and the critical elements of the National Economic Empowerment and Development Strategies (NEEDS).
Since the Curriculum represents the total experiences to which all learners must be exposed, the content, performance objectives, activities for both teacher and learners, teaching and learning materials and evaluation guide are provided. The prescription represents the minimum content to be taught in the schools in order to achieve the objective of the new Senior Secondary programme. Civic education is not complete until students possess a set of appropriate civic dispositions. Civic dispositions are those habits of the heart and mind that are conducive to the healthy functioning of the democratic system. Examples include civility, open-mindedness, compromise, and toleration of diversity (as in the case of Nigeria). All of which are prerequisites of a civic life in which Nigerian people can work out the meanings of their democratic principle and values.

Therefore, civic education does not merely inculcate behaviour and skills that fit a person for a predetermined society, but have a vital role to play in equipping people to act on and change their environment. So, in a complex and pluralistic society like Nigeria with varying and distinctive tribes, cultures and religions, have ready flow of information and a general international idea in favour of a better democratic society made possible through civic education (Alexander, 2012). This, in turn, gives the majority of the people the opportunity to have sound knowledge of the workings of the society denied many of our fore bearers. We (Nigerians) can now become the rulers of our own destinies if only we have the will, skill and some measure of freedom from want and fear.

2.5.1. Objectives of Civic Education

The study of civic education in schools is very important. The purpose of civic education is to prepare and motivate youth to participate in civic society. It seeks to provide youth with basic knowledge and understanding of the government and political
process of their nation, and encourage them to engage in the wide range of activities that make up participation including voting, party membership, issue organization at the grass root level, policy-making, candidacy and work with local Non-Governmental Organization (NGOs) (Alexander, 2012). In fact, studies have shown that the greater an individual’s civic knowledge, the more likely they are to participate in public affairs. Thus, the basic objective of the civic education is to encourage citizens to participate fully in political life of a community and be committed to the fundamental values and principles of a society in a democratic form. Therefore, the general objectives of civic education are as follows:

1. Promote the understanding of the inter-relationship between man/ woman, the government and the society,
2. Highlight the structure of government, its functions and the responsibilities of government to the people and vice-versa,
3. Enhanced the teaching and learning of emerging issues,
4. Inculcate in the students their duties and obligations to the society (FME, 2012).

2.5.2 Civic Education Curriculum

Following the Federal Government reform in education and the need to attain Sustainable Development (SD) and the critical targets of the National Economic Empowerment and Development Strategies (NEEDS), which can be summarized as: value-reorientation, poverty eradication, job creation, wealth generation and using education to empower the people, it has become imperative that the existing Curricula for Senior Secondary School should be reviewed and re-aligned to fit the reform programme. The National Council on Education (NCE) at its meeting in Ibadan in December 2005, directed the NERDC to carry out this assignment. The NCE also approved a new Senior Secondary School Curriculum structure namely: Senior
Secondary School (Science and Mathematics), Senior Secondary (Humanities), Senior Secondary School (Business) and Senior Secondary School (Technology), listing relevant subject for each stream.

In response to these developments, a High Level policy Committee on Curricula Development (HLPC), made up of critical stakeholders and chaired by NERDC, took the initiative to provide the guidelines for re-structuring the Curriculum. Between January 2007 and March 2008, the NERDC convened a meeting of experts and also organized several workshops to produce the Senior Secondary School Curriculum, which would ensure continuity and flow of themes, topic and experiences from Junior Secondary School one to Senior Secondary School three levels.

The Curriculum reflects depth, appropriateness, and interrelatedness of the curricula contents. Also, emerging issues which covered value orientation, peace and dialogue, including rights education, family life/HIV and AIDS education, entrepreneurial skills among others were infused into the relevant contents of the new curriculum taught in schools in order to achieve the objectives of the new programme (FME, 2012).

2.5.3 Teaching Methods for Civic Education in Secondary Schools

Various Scholars have listed many teaching methods and techniques or strategies that are used in teaching different subjects like Civic education at the secondary schools. However, the study will only discuss lecture method, demonstration method, and project method, which are commonly used by teachers in teaching Civic education in secondary schools. More so, the study will focus on the use of Computer assisted instruction in teaching Civic education in Senior Secondary Schools in Kaduna state.

Teaching has been defined in many ways by different authors. Fadare (2007) defined teaching as the action of someone who is trying to assist others to reach their
fullest potentials in all aspect of development. Isah (2012), describes teaching as a process/act of imparting the required knowledge/skills to learner(s) by a professional in order to achieve the desired objectives. Furthermore, Muhammed (2012), is of the view that teaching is an interaction between the teacher and the learner. Owoso (2009), stated that the aim of teaching is to facilitate learning, stressing that there are many teaching methods and techniques used by teachers in teaching their students. For a teacher to communicate a topic from a subject matter, he needs to decide how to go about it. He must select one or more ways or methods of doing so effectively. Therefore teaching methods are the techniques adopted and used by teachers in transferring learning in a classroom teaching learning process. A lecture method is often used by teachers of civic education in secondary schools.

a. Lecture Method

Lecture is a planned talk intended to supply information to meet a specific objective. It is a method that involves telling, the teacher tells and sometimes illustrates, while the learners listens and watch. It is not suitable for Young learners and should be used in exceptional condition. Lecture method of instruction is the process of speaking to students while they sit and listen to the teacher. He emphasized that in lecturing method, the teacher acts as a conference organizer while the students listen as the audience mere passive listeners and note takers (Ogwa, 2007).

However, in Nigeria schools today, lecture method is still the most frequently used method of teaching. But in Secondary Schools, lecture method is not supposed to be so frequently used at that level of education. The educational technology grant programme of the Academic Information Technology Advisory Committee (2006), stressed that presenting a lecture without pausing for interaction with the students can be ineffective regardless of the teacher’s skill as a speaker. The committee further disclosed
that the use of pauses during lecture for direct oral questioning creates interaction between teachers and students.

But, when classes are large, the teacher cannot possibly interact with all the students at each point. The learning effectiveness of lecture method has been questioned as a means of reaching a large group at one time with a condensed, organized body of information providing students with lesson objectives before the lecture will enable them listen more efficiently learning the objectives rather than writing throughout the lectures.

The lecture method is just one of several teaching methods. The word lecture comes from the Latin word Lectus, from 14th century, which translates roughly into “to read”. The term lecture, then, in Latin, means “that which is read”. It wasn’t until the 16th century that the word was used to describe oral instruction given by a teacher in front of an audience of learners

Today, lecturing is a teaching method that involves, primarily, an oral presentation given by an instructor to a body of students. Many lectures are accompanied by some sort of visual aid, such as a slideshow, a word document, an image, or a film, some teachers may even use a whiteboard or a chalkboard to emphasize important points in their lecture, but a lecture doesn’t require any of these things in order to qualify as a lecture. As long as there is an authoritative figure (in any given context) at the front of a room, delivering a speech to a crowd of listeners, this is a lecture.

The “lecture method” in the civic education classroom is a means by which “the expert” presents the materials of the course in an organized way to “the learners”, going from theory to examples and back again. The learners typically takes notes and try to pick up as many ideals and insights as they can from the expert during those class hours when the method in use. In civic education classes, extensive use of a blackboard during lecture is common.
To be effective, the method requires that the expert and the learners possess both background and skill sets. Among other things, the teacher should possess mastery of his or her subject way beyond the details of the course, as well as skills of exposition and delivery—with-style. The learners must come to the class with a solid foundation in course pre-requisite and have the ability to concentrate for many minutes in a row. They must have the skill of effective note taking and be well organized. There are as many disadvantages to the lecture method as there are advantages.

**Advantages of the Lecture Method**

The lecture method has a few advantages that have kept it as standard approach to teaching civic education for so long. Below is a list according to Ogwa (2007):

1. **Teacher Control:** Because the lecture is delivered by one authoritative figure—a teacher, professor, or instructor of some other kind—that person has full reign of direction of the lesson and the tone of the classroom. They alone are able to shape the course, and so lectures remains highly consistent when it comes to what kind of information is delivered and how it’s delivered.

2. **New Materials:** Lecturers are literally just long-winded explanations of information, deemed important by the lecturers. As such, students can absorb large quantities of new material.

3. **Effortless:** The lecture method makes the learning process mostly effortless on the part of the students. Who need only pay attention during the lecture and take notes where they see fit? Because so little input is required from students, it’s the most clear, straight forward, and uncomplicated way to expose students to a large quantities of information
as explained above and in a way that is controlled and time sensitive.

Students just need to know how to take good note.

**Disadvantage of the Lecture Method**

What is funny about the lecture method is many of the pros listed above could actually be seen as cons, as well, many don’t see the nature of the lecture method as helpful in the least and this can be seen as explanations as to why listed below.

i. One way: people who are against the lecture method see it as a one-way street, teachers dictates information to students, who have little to no opportunities to provide their own input, or protest the information being delivered (Ogwa, 2007). What if the teacher is wrong, or what if the student disagree with the teacher on a fundamental ideology in their lecture? Well, the student just have to sit down and take it, sometimes, the student will even be forced to agree with the lecture if they want a passing grade. If the lecture is on a sensitive topic, over which there is much conflicting discourse, you can imagine the problems this might cause.

ii. Passive: Not only do people see the lecture method as a biased, one-way road, but they also see it as a wholly passive experience for students. This isn’t just harmful because of the ways described above. Not being actively engaged in a discussion over certain material can make the material itself seem worthless to a student. After all, the point of an education isn’t to be programmed to think a certain way, according to your instructor’s lectures, but to critically analyze the information being provided and learn how to apply it in different contexts. If a student has no place to opportunity, the course material with the person delivering the lecture, they will receive only a shallow understanding of the subject being
discussed. Simply put, they might even be bored by the material because they will have no opportunity to learn how the subject applies to them on a personal level.

iii. Strong Speaker Expectations: The lecture method can be disadvantageous to the teacher, as well. Not all academics can be expected to have the same level of public speaking skill, what if a teacher is a genius in his or her field, knows the materials from every angle, and is enthusiastic about the subject but has trouble speaking in front of large groups? The quality of a teacher’s course should not suffer because they are unable to prepare a decent lecture. Just as being lectured to might not be the learning method of choice for many students. Being the one that is expected to do the lecturing might not be the best way for every instructor to present their course materials. But because the range of academic teaching methods are so limited, they are usually expected to do exactly that, potentially losing the elements of their lesson plan that makes it so strong.

The teacher in lecture method has a great responsibility to guide the thinking of the students and so he must make himself intelligible to them. Unlike other methods where motivations can come from subsequent activities, in the class students interest depends largely on the teacher. Comprehension by the class is the measure of success of the lecture to insure comprehension, two approaches may be used. The first is to have repetition or approach from another angle of thought. The second is to remove the causes of difficulty by using verbal and concrete illustrations. Hence, while preparing the teaching lecture, the following four steps are followed in the planning phase of preparation:
i. Establishing the objective and desired outcomes.

ii. Researching the subject;

iii. Organizing the material

iv. Planning productive activities

In all stages of preparing for the teaching lecture, the teacher should support any point to be covered with meaningful examples, comparison, statistics or testimony.

Rehearsal: Teacher should rehearse the lecture to build self-confidence.

Lecture method is based on three sources which makes it an effective tool teaching

i. Schemata theory: it uses what students already know by building on their existing background.

ii. Meaningful verbal learning - presents information in a systematic way.

iii. Active learner involvement: uses teacher questioning to involve students actively in the leaning process.

b. Demonstration Method

It is a method that combines showing and explanation. Bonet (2007), seen it as “method that is often used to enhance manipulative skill acquisition and or development”. Demonstration involves an individual who has already acquired the skill (teacher) showing the person who is yet to acquire the skill (learner) how to do something or how to bring something about. Demonstration is commonly used in Sciences and Vocational related subjects, but it is equally effective across disciplines and educational levels. Bonet (2007), saw that a demonstration method usually involves a process in which the learner follows a manner. Demonstration method according to Ogwa (2007), is often used to teach fundamental operation of content in a system. He opined that demonstration method and lecturing can explain the steps of an operation or
of an experiment while performing them. Demonstration method of teaching is mostly used in teaching practical works for skill acquisition. For example, in the teaching of activities in the family and school like discipline, punctuality, sweeping of compounds, cooking different diets or food and washing clothes, the demonstration methods is apt. Demonstration method of instruction according to Nwachukwu (2007), is one of the very effective methods applied by the teachers in achieving objective of learning in real life situation like the art of population census, voter’s registration among others. Its success is based upon imitation as a factor in learning and is well known that imitation is natural instinct which figured greatly in all types of education, for demonstration to be effective, the teacher should:

1. Plan the demonstration
2. Prepare students for the demonstration
3. Carryout the demonstration process and re-state the important point connected with it.

Demonstration can be carried out in the class or class demonstration or done in groups as group demonstration and can also be an individual demonstration. It is possible for students to learn how to perform manipulative operations by reading or being told how to do them. However, they can learn faster and more effectively when they are shown how the work is done. Demonstration enhances students’ rate of comprehension of specific objectives.

c. Project Method

The project method at the same time is one of the teaching methods for the teaching of Civic Education. It is a means by which students develop independence and responsibility and practice social democratic modes of behaviour. In the opinion of Isah
(2012), project method is a child or learner centered method where the learner is more active than the teacher. It can be used in all subjects.

Through the method, the pupils conduct the activities while the teacher guides and gives assistance. Project method can be used on individual as well as grouped learners. This method evolved from educational ideas of John Dewey (an American educationist). He argued that education should prepare the child to fit in very well in the society to this effect, the child should be allowed to take full part in the society which means that the learning we have in the society should not be mainly in the classroom but from other parts of the society. The idea was further developed by the followers of John Dewey into what we call project method.

There are at least three things which a well-planned and carefully executed project is supposed to do for children viz:-

1. Project help to present children with real life problems which they should be able to solve mostly by thinking and working together in cooperation;

2. To bring the children into actual contact with the lives and activities of their neighborhood for instance, the children could carry out a project on “The local crafts and occupations of our people. These topics will bring contacts between the children and the community;

3. By the end of the project, the children have usually gained more and new knowledge about a topic and have developed more skills.

It was greatly influence by Dewey’s problem method of teaching and it is an original work of Patrick who advocated purposeful activity, problem solving and the needs and interest of the individual child in action, learning and conduct. The underlying principle of the method according to them is that learning takes place through direct contact with materials. A project method implies a practical problem, which a student
and the teacher plan to execute. The planning and the executing must be concrete in nature. It should involve the design, arrangement of materials, availability of equipment and tools and a good environment for the activity. On the part of the teacher, he/she must have an excellent understanding of the individual after learning has taken place. The execution should meet the following objectives: to encourage the individual, to assist the individual for specific changes. It is a learning activity selected, planned, designed and executed by learners collectively or individually to clarify facts, acquired new knowledge, skills, appreciation and to solve identified problems under the teacher’s guidance and supervision. Therefore, the role of the teacher in providing guidance and direction to students should not be completely eliminated. This is because students tend to exaggerate their power of execution and to select project that are beyond them leading to the production of crude projects which defeat the purpose of the project method.

In summary, conventional teaching methods are teacher-centred approach of learning. It is the methods constantly used in teaching many subjects including Civic Education in secondary schools but to meet the globalization demand, a modern teaching method such as Computer Assisted instruction (CAI) should be explored for use in teaching the Civic Education subject if it will yield good effect. One of the recommended teaching methods by the FME (2007), is the Computer assisted instruction, a part of ICT. CAI refers to the use of computer as a tool in teaching and training. It includes drill and practice, tutorials, simulations, instructional management, supplementary exercises, data base management, word processing and other types of computer applications. Computer assisted instruction as a supplement to conventional teacher-directed instruction produces achievement effects superior to those obtained with the traditional approach alone. CAI is the use of computer and component electronics in providing learning experiences and
self directed instructions to a learner using tutorial and simulation package, with little or no assistance from an instructor (Akundeye, 2007).

2.5.4. Resources for the Implementation of Civic Education Curriculum

Idowu (2015), succinctly categorized the resources for implanting civic education curriculum into three broad categories:

Human Resources: Human resources refers to effective coordination of civic teachers' activities towards attaining civic objectives. This has to do with recruitment which involves engaging academically and professionally qualified persons to translate civic objectives into classroom implementation within the school system. It is a person legally certified as qualified to guide learners to develop civic knowledge, dispositions and skills within a formal instructional context.

Instructional Materials/Resources: Classroom civic implementation requires using textual (reading and non-reading) materials and audio-visual (electronically and non-electronically operated) materials, (including audio tape recorders, video tape recorders, etc), individually or collectively in any civic classroom (Aduwa-Ogiegbaen & Imogie, 2005). These materials stimulate classroom efficiency and enrich the quality of civic lessons thus integrating these materials reinforces classroom interactions via exposure to diverse learning experiences individually or in groups (Okobia, 2011).

Other instructional materials: Other instructional materials such as charts, diagrams, posters, pictures, or maps which could be produced locally at low cost are inadequate. Regardless of the fact that audiovisual materials like televisions, computers and video recorders help to practicalise the teaching of civic education, there is either inadequate or complete absence of these materials in both urban and rural schools (Okobia, 2011). This call for the need to improvised using local available materials that can enhance teaching and learning.
2.5.5 The Sequence of Computer Assisted Instructions in Civic Education

The sequence of computer assisted instructions in Civic Education includes the following steps:

**Step I: Identifying the Problem** - The problem should be identified out of the experience of each student and placing the problem before the students in the class or individually as the occasion demand. The teacher should help in providing students with sources of information which could help identifying the problem. He should guide the students in analyzing the information obtained so as to formulate problem. The teacher should guide the students with the aid of questions and others techniques of teaching.

**Step II: Defining and Delimiting the Problem in Civic Education** - The student should read the problem first in order to comprehend the general manner. He should re-read the problem more. Thoroughly with a view to finding out what he is expected to do. The problem should be interpreted, it should be narrowed down to a manageable size.

**Step III: Verification** - The student should check the reasonableness of the solution obtained by seeing how it fits the conditions of the identified problem. If the solution is supported, then the problem is solved. Otherwise, the approach is revised and the process is repeated until the answer is obtained. This may require trying out an alternative hypothesis rather than one used earlier on.

2.5.6 The Role of CAI Usage by Teachers in Classroom Instructions

ICT in classroom instructions can have a considerable impact on the practice of teachers, especially when CAI is conceptualized as a tool that supports a real change in the pedagogical approach. The teachers need to change their roles and classroom organization, they need to invest in preparing, introducing managing new learning arrangements, and likewise need to acquire basic ICT skills.
Teachers determines the applications that will add value to instructions in their subject area, putting in mind that they need to be aware and move along with new innovation in the education industry, so as to cope with the new trend. Teachers can take their time to discover that CAI do not mean extra work rather they are intended to actually make their work easier and competent., teachers who use ICT for classroom instructions have to demonstrate the levels of energy, hard work and perseverance. Teachers who early adopted the use of ICT are required to be resourceful and being able to overcome many barriers to make things work. Planning lessons involving computers can take considerable time and demands complex scheduling and resources and teachers using computers in the classroom should not act in isolation from each other. Teachers need access to resources which will supply ideas and material for different classroom instructions. However, Mishra and Koehler (2006) and Unwin (2007), for example, have cautioned against the use of ICT facilities without a conceptual framework or without a clear understanding of why and how the ICT will contribute to students’ learning. These insights have led some education institutions to realize that pedagogically sound integration of ICTs in teacher requires more than technical support; it also needs professional development for teachers to use ICTs in their teaching and learning process.

2.6 Academic Performance in Civic Education

The word performance has to do with the resultant effect of a given task, performance may be positive or negative. Performance is the ability of a learner to excel in a given task. The outcome of an action whether in school or out of school situation speak for the result acquired. It is a process of assessing the worth of an action. Especially, in a school system, academic performance of learner is either good or bad. Brian (2007), found a positive correlation between attitude and academic performance of students while Kelvin (2012), discovered that when a student possessed high academic
self-efficacy, that student is more likely to indicate an increase in knowledge and confidence in dealing with the subject. However, Pedrosa (2006), reported that, those students who mostly come from deprived socio-economic and educational background performed relatively better than others coming from higher socio-economic and educational areas.

Wendy (2011), stated that, declining sense of obligation to ones parent’s correlates with a similar decline in academic achievement. Ali, Zubairu, Hamid, and Awais (2013), pointed out that children learning outcome and educational performance are influenced by the nature and standard of school attended by an individual. “Performance is related to what a learner can do after he might have been taught”. The performance of a learner in school may be positive or negative. Positive performance means that the learner is doing or reporting well while on the other hand, negative performance implies that the learner is not reporting well. It is common knowledge however, that performance of students in civic education at the secondary school level in Nigeria is not encouraging despite the importance attached to it both as academic discipline and as knowledge that everybody needs in the society as stipulated by the National Policy on Education (FRN, 2013).

2.6.1. Computer Assisted Instruction as Determinants of Students’ Performance in Civic Education

Governments face the challenge of identifying ways to use their scare resources and raise the quality of education, thus, the provision of IT to schools is generally accepted as modern instrumental tools that enable educators to modify the teaching methods they use in order to increase students’ performance. IT is now adopted as a method of teaching (that is, the use of Desktop, Laptop computers, software, peripheral and connections to internet in the classrooms).
Studies carried out to link IT with students’ performance in the classroom have produced mixed results. On one hand, some research demonstrated that there is no evidence of key role for IT in higher education. On the other hand, some studies showed a significant impact of IT on student’s achievements. The provision of IT to schools and its use for education purposes can increase student’s achievements in at least two ways as reported in Carrillo, Onofa and Ponce (2010), that:

1. The availability of IT in the classroom shifts the level of educational inputs and could thus, affects students learning outcomes. It increases vector of school input by providing infrastructures to school (Computer laboratories and software) and training to teachers; therefore, this can potentially improve learning outcomes.
2. Exposure to IT may increase the cognitive abilities of students allowing them to learn faster.

Improving the quality of education and training is a critical issue, particularly at a time of educational expansion. Tinio (2010), in her study observed that IT can enhance the quality of education in several ways: by increasing learner motivation and engagement, by facilitating the acquisition of basic skills, and by enhancing teacher training. IT are also transformational tools which, when used appropriately, can promote the shift to a learner-centered environment. She went further to state some of the ways IT has improved teaching/learning in Educational system which include:

(a) Motivating to learn: Computer Assisted Instruction kept in media such as videos, television and multimedia computer software that combine text, sound, and colorful, moving images can be used to provide challenging and authentic content that will engage the student in the learning process. Interactive radio likewise makes use of
sound effects, songs, dramatizations, comic skits, and other performance conventions to compel the students.

**b) Digital Age Literacy:** Functional literacy ability to decipher meaning and express ideas in a range of media; this includes the use of images, graphics, video, charts and graphs or visual literacy Scientific literacy Understanding of both the theoretical and applied aspects of science and mathematics Technological literacy Competence in the use of information technologies Information literacy Ability to find, evaluate and make appropriate use of information, including via the use of IT Cultural literacy Appreciation of the diversity of cultures Global awareness Understanding of how nations, corporations, and communities all over the world are interrelated.

**c) Effective Communication:** Teaming ability to work in a team collaboration and ability to interact smoothly and work effectively with others interpersonal skills Personal and social and be accountable for the way they use IT and to learn to use IT responsibility for the public good. High productivity ability to prioritize, plan, and manage programme and projects to achieve the desired results Ability to apply what they learn in the classroom to real-life contexts to create relevant, high-quality products to listen and become involved in the lessons being delivered. More so than any other type of IT, networked computers with Internet connectivity can increase learner motivation as it combines the media richness and interactivity of other ITs with the opportunity to connect with real people and to participate in real world events.

**d) Facilitating the acquisition of basic skills:** The transmission of basic skills and concepts that are the foundation of higher order thinking skills and creativity can be facilitated by Computer Assisted Instruction through drill and practice. Educational television programme such as *Sesame Street* use repetition and reinforcement to
teach the alphabet, numbers, colors, shapes and other basic concepts. Most of the early uses of computers were for computer-based learning (also called computer-assisted instruction) that focused on mastery of skills and content through repetition and reinforcement.

(e) **Enhancing teacher training**: ICTs have also been used to improve access to and the quality of teacher training. For example, institutions like the Cyber Teacher Training Center (CTTC) in South Korea are taking advantage of the Internet to provide better teacher professional development opportunities to in-service teachers. The government-funded CTTC, established in 1997, offers self-directed, self-paced Web-based courses for primary and secondary school teachers. Courses include “Computers in the Information Society, “Education Reform,” and “Future Society and Education.” Online tutorials are also offered, with some courses requiring occasional face-to-face meetings. The internet offers many resources and tools for teachers, scholars and students, such as electronic mail, on-line searches of world libraries, curriculum ideas, software, journals, instructional games, weather data and general information on topics such as politics, global issues and other cultures. The benefits of internet based educational technology for complementing standard educational practices are numerous. For example, internet based educational materials provide expert instruction to a very large audience. Their flexibility, reusability, and availability any-where any-time basis make them extremely cost effective. These educational materials can be regularly updated and upgraded to deliver state of the art instruction on a continuous basis. Internet mediated e learning also enables those who reside in remote locations or who are physically confined to receive these educational programme.
Various studies have shown that programmes that provide computer assisted instruction can positively or negatively influence students test scores. For instance, Coastes and Humphrey (2008), study concentrated on face-to-face and online teaching to understanding college economics revealed that the average scores on understanding economic are almost 15% higher for the face-to-face than the online format. While, Tino and Skidmor (2007), found that students on the online format of Statistical class exams scores 14.1% less than the traditional format. To clarify the differences in Banerjee, Coles and Linden (2009), the role of ICT in higher education found that computer assisted mathematics instruction raised mathematics scores of fourth-grade students reported that instructional computer programme for pre-algebra and algebra in United State had a positive effect on test scores. According to Houtsonen (2009), who examined the significance of the impact of ICT for teaching and learning of Geography, concluded that learners in classes where ICT was used as a teaching aid generally learn more than those in other classes, they performed better on average in cognitive test, learn faster, enjoy the lessons more and were in general happier in their academic work. Thus, ICT environment produce better result than conventional teaching environment.

Students must therefore, continuously strive to create learning environment and experiences that will enable students to construct their own knowledge rather than embrace the traditional teaching methods of knowledge transfer. He equally reported that ICT deliver better quality work and higher marks for assignment and saves plenty of time because in the study more than 70% of the students have the potentials for more effective use of academic time.

Going by these findings, Youssef and Dahmani (2008), reported that Fuchs and Woessman stated in their study using international data from the programme for
international student. Assessment showed that while the bivariate correlation between availability of ICT and students’ performance is strongly and significantly positive, but the correlation becomes small and insignificant when other student environment characteristics are taking into consideration. Leuven, Lindahl and Webbink (2007), have shown that although no significant difference in the performance, but there is a consistent negative and marginally significant relationship between ICT use and some students’ achievements measures. This is in connection with the study conducted by Islam and Fouji (2010), on the impact of ICT on student’s performance, their findings indicated that the virtue of correlation coefficient was 0.012 and the significant level was 0.904 which means that there is a weak positive relationship that existed between students’ performance in higher education and ICT. But naturally, student performance and ICT are highly interrelated. They said the factors that affected the result are students’ attitude that is, whether the students spend most of their time for the purpose of listening/hearing music, watching movies and so on while using computer.

More so, Byrne and Willis (2010), stated that teachers’ characteristic which has to do with behaviours of the teachers (process) with the training of the students (produce) in ICT particularly in the United States was effective. That ICT is transforming teaching integrated effectively. ICT is seen as a cartelist of system, community, school and classroom reform because it provides opportunities to shift from teacher-centred to student-centred learning. They said that this will increase the pedagogy of the teacher which in effect is most likely to improve the outcomes of disadvantaged students because it attends to individual needs and provides a variety of curriculum and assessment strategies to promote students’ capability across a range of learning outcomes.

ICT may have an impact on teacher quality and characteristics and so students’ performance. This may bring a complementary effect- the teacher actions may be
complemented by the use of ICT; teachers are acting as learners in the new setting of education because they learn from peers and also from students. IT to Ranjani, Karuarathne and Weligamage (n.d) brings an organizational change structure and in process of classroom activities. That the usage of computers in the classroom is more often based on the vision of the teachers and their believes about IT. In some cases, when IT is introduced, without changes in an organization may lead to decrease in students’ performance.

Another issue of importance is shown in the study by Ibrahim (2011), on the effect of technology on students’ performance who indicated that, learning through collaborative inquiry by the use of ICT can provide realistic and complex environments which furnishes the students with investigative tools and data resource when linked to classroom instruction for the purpose of interaction. When ICT is integrated into the classroom, students’ collaboration increases the amount of information available since students sharing during class time with others as well wither partners was effective. Furthermore, collaboration among students was found to be effective especially when two students work together on one computer. The students at the keyboard provide more answers during discussion while the other student asked more questions. Ibrahim (2011), also indicated that Kulik who studied how technology improve performance when application was integrated into the activities of the typical instructional learning system were effective when they were integrated into the regular classroom instruction, especially when adequate amount of time was given to students.

In this regards, some of these studies focused on mathematics and languages through the process of using ICT in the class might be the same but the skill of doing the task vary especially in variables determining performance in the subjects. Though Computer education is related to math but variable in approaches and this study will
want to see if the use of ICT in Computer education class can have any effect on the performance of students.

2.6.2. Impact of Computer Assisted Instruction on School Location

Several studies on the past decades shows that educational aspiration of student who study in the rural areas lag behind those of their counterparts in the urban centred. This could be as a result of some factors affecting the school location and the teaching methodology adopted by the teachers which affects the student academic performance (Okoro & Etukudo, 2007). The search for methods of procedures for effective pedagogical approach has engendered developing new strategies such as computer assisted instruction. In a related study carried out by Bhatti, Pareek and Dhamija (2013), shows that computer assisted instruction is more effective in attaining Matrix Algebra than the conventional method. Furthermore, the study revealed that there is no significant difference observed in attaining Matrix Algebra between the students and urban students.

Computer assisted instruction play a significant role in improving academic performance. Evidence strongly supports the use of computer assisted instruction in the place of teaching Science through the conventional method (Purushothaman, 2013; Idayavani & Shanthi, 2007), on effectiveness of computer assisted instruction on achieving higher cognitive skills submitted that CAI has the tendency to eliminate lingual, regional and ethical biases between teacher and students. Also, Dange (2013) revealed amongst others that computer assisted instruction as a method of teaching Science is equally both in the rural and urban schools.
2.6.3. Challenges Surrounding the Use of Computer Assisted Instruction

It has been identified that, employing Computer Assisted Instruction aid to facilitate learning, the subject instructions are not always the issue but how to use it and its availability to use. Basing our discussion on foreign experience, Computer Assisted Instructional aid are available in large quantity “the increased quality and quantity of Computer Assisted Instructional aids, are producing a slit form the traditional audio visual aids approach to the more comprehensive and efficient learning resource concepts”.

Despite the bright prospect of Computer Assisted Instructional aid to the teaching and learning process, the ICT- facilities are still grossly lacking in Nigeria let alone its circulation to the secondary schools across the nation. A lot of challenges are confronting the use of Computer Assisted Instructional aids in Nigerian secondary schools some of the revealing in the forgoing includes:

a) Teachers’ Professional Knowledge and Technical Know-how:

Since information communication and technology (ICT) is a fairly new area of importance in education especially in developing communities like Nigeria. Due to the technicalities involved, there is the need for teachers to understand how it can affect the teaching and learning situation. The first aspect to understand is the operational functionality of the materials. As much as materials differ in terms of technical components, design and set-up, they also differ in terms of functionality. Some are multi-dimensional; capable of various functions such as giving logical outcomes, manipulating information and so forth. Without the teacher being knowledgeable enough in the use of Computer-Assisted Instructional aids, he cannot create change and make meaningful impact in his
learners. Teachers’ knowledge has a great impact on the effective application of Computer-Assisted Instructional aids because the teacher needs to understand the sequential presentation of the instructional gadgets that will suit the interests of the learner and it appropriateness with the instructional tasks. For instance, a teacher who is not computer literate would find it difficult to operate the system and manipulate it to achieve his instructional objectives or even with partial knowledge of the operational function of the computer system, they might be wrongly used thereby creating a wrong impression to the students. Okojie (2010) supported this view that old brigade teachers are unwilling to change to the ICT way of instruction but rather the long age old method of instruction.

b) Lack of Computers: Computers are still very expensive and despite efforts by the government agencies, NGO’s, corporate organization and individual donations to some schools, there still remain a large percentage of the schools unable to purchase computers for use by their students due to the cost.

c) Lack of Constant Power Supply: Urenyere (2012), there are still schools not yet connected to electricity; Nigeria being a developing country, the government has not been able to connect all parts of the country to the national electricity grid. Consequently, those schools that fall under such places especially in some rural areas which cannot afford to purchase a power generating set are left handicapped and may not be able to offer computer studies. It quite embarrassing that even the urban centres are faced with the challenges of epileptic power supply.

d) Computers are still expensive in Nigeria: In Nigeria, a country with high rate of inflation, majority of the individuals and schools cannot afford to buy a
computer and some consider it as a luxury. Even some fairly used computer systems cost as much as N45,000 while branded new ones are still being sold between N80,000 and above.

e) Broken down Computers: While some schools have benefited from used computers donated to them, some have not been adequately equipped with the same on maintenance and repair, hence its very common to see a school’s computer laboratory full of broken down computers; some repairable and some beyond repairs. This has actually been a major problem because the government has not put strict measures on any persons, NGO or corporate bodies willing to donate computers to avoid donating the fairly used ones thereby making the schools to be seen as a dumping ground.

f) Lack of Internet or slow connectivity: Most schools are not able to connect to the World Wide Web (www), due to the high costs involved in the connectivity. On average, it may cost approximately $160 per month to connect to about 16 computers on a bandwidth of 128/64kbps. This is considered as very expensive in addition to the running cost of the school.

g) Increased moral degradation: Internet pornography, chatting, cyber-crimes and other anti-social behaviours is a worrying emerging problem amongst youth today. These have led to increase in moral decadence among youths who spend much of their time both during the day and at night on the internet.

h) Environmental factors: Part of the application of Computer-Assisted Instruction in the teaching-learning process is the target for whom the materials are to be used and the setting or vicinity where the learning should take place. The degree of satisfaction derived by students in respect to comfort of the learning
environment in a great deal will determine the effectiveness and efficiency of the instructional process in the classroom.

i) Time Constraints: Time is also a serious problem or factor that impedes the effective use of Computer assisted Instructional aids because the time that is allotted for a particular lesson like civic education on the timetable might not be enough for the teachers to present his contents alongside with judicious use of the materials provided will affect the wholesome delivery of the content.

j) Poor Maintenance Culture: Materials available for teaching sometimes are poorly mal-handled by both the teachers and school authority. Non-availability of well spacious resource room for the proper keep of both the locally manufactured and the commercially purchased instructional facilities limits the durability and life span of those materials. Many of the teachers use materials occasionally without the proper servicing of those materials after used for the future use, (Torruam & Abur, 2013).

k) Inadequate Funding: Nzewi (2009), pointed out that the cost of obtaining a good computer is still expensive to purchase in adequate number for schools, most schools cannot afford to maintain internet connections. Despite the fact that Nigeria is blessed with resources that make it rich, the challenge of corruption and fraudulent practices has bedeviled the nation resulting to poor development of education industry.

l) Burglary: The fact that computers are still very expensive in Nigeria; this makes them a target for thieves who usually have ready markets to sell them. However, this has made many schools to incur extra expenses trying to secure the
computer laboratories with burglar proof to prevent theft. These therefore, make some schools shy away from purchasing computers for their students.

2.7 Empirical Studies

Several studies have been conducted on Computer Assisted Instruction by other researchers and found to have a bearing with this present studies. These studies were looked into and they include some of the following reviewed.

The first is a work carried by Osakwe (2010). “The Influence of Information and Communication Technology (ICT) on Teacher education and Professional Development in Delta State, Nigeria”. The main focus of the study was to investigate the influence of Information and Communication Technology (ICT) on Teacher Training in Delta state, Nigeria. The study was a survey research and the population comprised all teacher trainers (students) of Senior Secondary School in Delta state. The Sample size for the study was 135 students out a total population of 220. The respondents were randomly selected using the stratified sampling technique. The instrument for data collection was questionnaire. Data analysis was carried using Pearson’s Product Moment Correlation coefficient Statistics in the Statistical Package for Social Sciences (SPSS) version 13. Four Null Hypotheses were formulated for the study and all were tested at the alpha level of 0.05 significance. The data collected were analyzed, the result revealed that there was no significant relationship between ICT and lesson presentation and access to information on teaching materials. The study also revealed a non-significant relationship between ICT and students’ effective learning and professional supports. Based on the findings and conclusion, Information and Communication Technology has great influence on Teacher Education and Professional Development in Delta State in Nigeria.

The methodology applied in the present study for collection of data was different from the past study, because the current study used in-class experiment in collecting
data and mean for data analysis. But the study provided a good source of material for evaluating the significance of Computer Assisted Instruction in enhancing learning. However, the reviewed study did not indicate the population of the study from which the samples of 135 students were selected as well as the research design.

Oliver and Bernard (2010), conducted a study on “Assessing the State of Acquisition, Availability and Adequacy of Information and Communication Technology (Computer Assisted Instruction) resources to support Computer Teacher Education Delivery in Tertiary Institutions in Adamawa State”. The survey research design was adopted for the study. A total of 38 respondents constituted the population of the study which included Computer Educators, Managers of Computer Teacher Education programmes and Computer Assisted Instruction Managers drawn from tertiary institutions. The Instrument for data collection was questionnaire. A test re-test reliability method was used to test the reliability of the instrument. Three (3) research questions were raised and two (2) null hypotheses were tested using the ANOVA Statistic at 0.05 level of significance. The result from the test revealed significant differences in respect of difference of ICT resources in affected institutions. Similarly, there was no sampling technique for the study. It was also observed that the population from which sample size drawn was not stated. The study concluded and recommended for collaborative efforts by major stakeholders and in particular ICT-based multinationals to be more socially responsible by assisting institutions in the area of acquisition of ICT resources.

The reviewed study was conducted in one state. The study also covered students in higher institutions in Adamawa State, but covered the students as part of population for the study which does not really give only view of those involved – that is, students and students. The previous study was relevant to the current study because both focused
on Computer Assisted Instruction facilities but differs as the previous study was conducted in tertiary institutions and on the effect of IT skills on Computer Education Students’ Academic Performance. The study provided the researcher with insight on the inadequacy of ICT resources and that no pedagogical considerations were given to curriculum in use; that of Computer teacher education ICT cognate conceptual and technical skills.

Another study carried out by Yusuf (2010), titled “The effects of computer assisted instruction on secondary school students’ performance in biology”. This study was also designed to investigate the influence of gender on the performance of students exposed to CAI individualized or cooperative learning settings package was examined. The study employed the use of quasi-experimental research design. The target population of this research was the first year secondary biology students in Oyo town and Ibadan city, Nigeria. The sample for the study comprised 120 first year Senior Secondary School students (SS I) sample from three private secondary schools, in Oyo state, Nigeria. Three null hypotheses were raised and tested at the alpha level of 0.05 significance. The scores of students in the three groups were analyzed using ANOVA. The results revealed that there was no significant difference in the performance of male and female students exposed to CAI in either individual or cooperative settings. Based on the research findings recommendations were made on the need to develop relevant CAI packages for teaching biology in Nigerian secondary schools. The previous study was related to the present research as it was conducted on the effect of computer assisted instruction on students’ performance in Senior Secondary Schools. The previous study also used quasi-experimental research design which was similar to the present study. Despite this similarities, the study differs as it was carried out to determine the effect of computer assisted instruction on students’ performance in Biology, while the present study
determined the impact of computer assisted instruction on students’ performance in Civic Education. The previous study used SS I students as respondents while the present study used SS II students. Likewise, the previous study used ANOVA for data analysis while the present study used t-test.

Oyedeko (2010), also conducted a research study on “Teacher’s perception of the contribution of Information and Communication Technology (ICT) facilities to the students’ academic performance in Christian Religious Education (CRE) in Epe Local Government Area in Lagos State”. The target population of the study comprised of 200 primary school teachers, selected through census from 15 schools in Epe Local Government Area, Lagos State, Nigeria. All the 200 teachers made up of 115 females and 85 males were used for the study. Three research questions were formulated among which was what is the teachers, perception of ICT contribution to academic performance of pupils in CRE. Three null hypotheses were stated which include; there is no significant relationship between teachers’ perception of ICT contribution and academic performance of pupils in CRE among others. A modified questionnaire known as Teacher’s Perception of ICT Contribution to Pupils Performance with $r = 0.75$ Cronbach alpha was used to gather data for the study. Data collected were analyzed using percentages and t-test statistics was used to test the null hypotheses. The three null hypotheses were rejected.

The result of the study indicated that teachers had strong perception that ICT contributed a lot to the academic performances of the pupils in CRE. Furthermore, the results indicated that teachers perceived differences in the pupils’ academic performance when ICT was used to teach CRE than when it was not used. Moreover, irrespective of gender, teachers have the perception that ICT contributed immensely to the pupil’s performance in CRE. The present study was related to the past study because they both
examined the effect of Information and Communication Technology (ICT) facilities on the academic performance of students in a given subject area. Both past and the present research study used t-test to test the null hypotheses. The differences between the present and the past study was on the location of the study and the methodology: while the present study covered SS II students in Kaduna state, Nigeria, the past study covered only one state that is, Lagos state, Nigeria which have the characteristics and peculiarities of large population. Also the past study was on primary school teachers, the present study used SS II students. The reviewed study provided the researcher with relevant information and relevant knowledge about the research study from the completed past research. It has also helped the researcher to gain more research experience from the past research study and also made the researcher conversant with research methods, design, population, sample, objective, instruments, null hypotheses, data collection and analysis, the result and conclusion.

Mbaeze (2010), conducted a study which investigated the “Influence of Information and Communication Technologies (ICTs) on Students’ Academic Achievement in Psychology in Imo State University, Owerri”. The design adopted for the study was a cross-sectional study. The population for the study was 412 and a sample of 120 respondents was drawn using random sampling method. The instrument for data collection was structured questionnaire on the usage of ICTs on students’ academic performance. Data analysis was done using Chi-square statistic. Four null hypotheses were postulated and tested in the study at 0.05 level of significance. The study found out that prior experience, determination, dedication, perseverance and efforts were ingredients for the achievement of high academic performance and that intelligence and environment were vital for academic performance of students. The present study is similar with past study because it was based on the effect of Information and
Communication Technology (ICT) facilities on the academic performance of students. On the other hand, the present and past research work were different based on location and type of respondents. The past study was in Owerri, Imo State which is in South-East Nigeria and the subject used for the study were undergraduates in the university, while the present study is on Senior Secondary Schools offering Civic education in Kaduna state, Nigeria and the subject are SS I students. The present study used Quasi Experimental design, while the past study used cross-sectional design. The past study was conducted on psychology, while the present study was on Civic education using Computer assisted instruction.

Okorie (2010), carried out a study titled “Information and Communication Technology (ICT) and Educational Performance: Covenant University, Otta, Ogun state. The Inter-Relationship of Selected Critical Variables”. The study set out to measure the use of the internet as an information and communication tool in promoting educational performance and knowledge of Covenant University Undergraduates. It analyzed the inter-relationship of selected social and demographic and other relevant variables. A sample size of 378 was derived from a population of 7000 using random sampling method. A questionnaire was used as the data collection instrument and the data were analyzed for cross tabulation and chi square using SPSS. Four Directional Null Hypotheses were stated one of which is: There was a significant relationship and correlations between internet usage and the sex of the respondents. The Chi-square Test of Independence was used to analyze data. The null hypotheses were tested using the Chi-square statistic at 0.05 level of significance. The study revealed that there was a correlation among the critical variables. This present study used in-class experiment through pre-test and post-test, while the previous study used questionnaire as an instrument for data collection. The previous study used chi-square test in Statistical
Package of Social Sciences (SPSS), as a data analysis tool, while the present study applied t-test in analyzing data. Also the population for the study comprised of students’ application of Information and Communication Technology in teaching and learning in schools, which was significant to this present study because the present study was also targeting students. It has also helped the researcher to get relevant information and have gained more experience from the past research.

In a study carried out by Roblyer and Edward (2010), titled: ‘’The Effect of Computer-Assisted Instruction on Students’ Attitude and Performance in Economics Theory in Secondary Schools in Uasin Gishu District, Kenya’’. This study investigated the perception of students’ usage of CAI in Kenya’s Senior Secondary Schools. The survey method was applied in the study; the population of the study consisted of students from three Senior Secondary Schools students numbering 205, 105 in experimental groups while 100 in control groups. Data were analyzed using the analysis of variance (ANOVA). All statistical significance was tested at alpha=0.05 level. Analyses of the pretest achievement and attitude scores were conducted to establish the homogeneity of subject group. Result of achievement revealed that there was significant difference in the Economic performance and attitude of Students according to treatments. These indicated that there was need for students to engage in CAI group in Economic. Economic educators are encouraged to recognize the effectiveness of this alternative approach and to structure more CAI lessons in their classrooms, this study involves students’ active involvement in the learning process through frequent student-machine interaction. However, differences were found according to gender within treatment groups. As a result, there is need for further research to investigate whether the differences are coincidental or genuine. However, the study is relevant to the present study because it is purely educational and on the CAI application in education. Also the study only studies
the Effect of Computer-Assisted Instruction on student’s Attitudes and Performance in Economics. This is in line with present study which was to find out how CAI enhances teaching and learning.

Nwoke and Uzoma (2011) conducted a research on impact of Computer-Assisted Instruction on students Attitude toward Mathematics” in Port Harcourt, Rivers State. The purpose of the study was to determine whether students taught Mathematics with computer-assisted instruction will have improved attitude towards Mathematics. The researcher adopted the experimental research method using two groups pre-test, post-test/control design. The data for the study was collected. The researcher made use of attitude questionnaire titled ‘Computer-Assisted Instruction Usage and Students Attitude towards Mathematics” (CAISAM). The result shows that calculated T-value (0.96) is less than the table value (2.021) the result of the study revealed that, the use of computer-assisted program in teaching of Mathematics enlivens the attitude of the students towards the subject. The study conducted above is very much related to the present study because it deals with impact of computer-assisted instruction on students’ attitude towards mathematics of which 552 students were the targeted population; while the present study is on the impact of CAI Students Performance in Civic Education among SSII students and the sampled student comprised of 580 students. The previous study was conducted in south-south zone (Rivers State) while the present study was conducted in North Central (Kaduna State) of Nigeria. Furthermore, the study was based on impact of computer Assisted Instruction on attitude of students towards learning Mathematics while the present study focused on performance of students in Civic Education when CAI is used as Instructional Package.

Muhammad and Munawar (2012), carried out a study titled “Effectiveness of Computer assisted instruction in Urdu Language for Secondary School Students’
Achievement in Science”. This study examined the effectiveness of computer assisted instruction on students’ achievement in general science as compared with the traditional method of teaching. This experimental study was conducted in a public secondary school in Lahore, Pakistan. Post-test only control group experimental design was employed on paired groups matched with the respect to intellectual capacity of the students. The CAI programme comprising interactive tutorial in Urdu language was used for learning by the experimental group. The control group was taught the same content in the classroom by the teacher through textbook based lecture method, which is the traditional method of teaching in public schools in Pakistan. An achievement test assessing knowledge, comprehension and application components of learning was administered to both the groups after two months long treatment period. The study revealed that experimental group performed better on all the three components of the achievement test as compared to the control group. The CAI group also scored higher than the traditional method of teaching group in various content areas of general science.

A sample size of forty students out of total eighty 9th graders of general science group were selected on the basis of intellectual capacity measured on Raven’s Standard Progressive Matrices. As the groups were dependent on intellectual capacity, paired t-test was applied to compare the overall, by cognitive levels and by contents area achievements of the experimental and the control groups. Expected scores of the experimental group were also computed through the linear regression equation of the control group data. This study is related to the present research as it examined the impact of computer assisted instruction (CAI) on students’ achievement in Civic education as compared with the traditional method of teaching and also the study made use of quasi-experimental design which the present study also used.
Osaat and Nsereka (2012), carried out a study on the “Impact of Information and Communication Technology on Distance Education: The case of National Open University of Nigeria in Port Harcourt, Rivers State”. A survey design was used for the study. The population for the study was 2000 students of the National Open University of Nigeria (NOUN) in Port Harcourt, Rivers State Chapter, while the sample size was 200 (10%) of the population. Random sampling technique was used to select the samples. The instrument for data collection was structured questionnaire. Four specific objectives were raised and four research questions were also raised. The establishment of the reliability coefficient of Success Enhancement with the use of Information and Communication Technology Media in Education Distant learning (SEITMED) was done with test and re-test method, copies of the instrument were administered to 20 students in the schools which were not used in the study. The results were analyzed using Cronbach alpha (a) which yielded reliability coefficient of 0.89. The data collected through SEITMED were analyzed using descriptive statistics. Research questions were answered and analyzed using frequency weighted Mean Scores. The score of 2.50 was used as the criterion for decision on response to each item.

The study concluded that National Open University of Nigeria (NOUN) has not fully employed the ICT media that are currently made available, but still patronizing the use of study centres, and face-to-face weekend / evening conventional methods / classes which were found a bit ineffective especially considering the large students’ population involved. However, the little utilization of the available ICT media has proved successful as introduced and applied by NOUN and should be encouraged by students and all distant learning providers. The above study also recommended that ICT media should be used in distance education to reach greater population of workers and School dropouts. The past research was carried out in National Open University of Nigeria, Port Harcourt
Chapter, in Rivers State, while the current study covers Senior Secondary School in Kaduna state, Nigeria. The study provided empirical evidence that Information and Communication Technology (ICT) have serious impact on distance education.

Adeyemo (2012), also conducted a study titled “Impact of Information and Communication Technology (ICT) on Teaching and Learning of Physics in Lagos State”. The purpose of the study was to investigate the impact of ICT on teaching and learning of Physics, the population used for the study was one hundred and fifty-seven (157) Physics students and two (2) Physics teachers drawn randomly from two Senior Secondary Schools from each of the five educational districts out of the six educational districts available in Lagos State. The instruments used for the study were Information and Communication Technology Impact on Teaching and Learning Questionnaire (ICTITLQ). The data collected were analyzed using percentage and chi-Square. Three null hypotheses were postulated and tested at 0.05 level of significant. The research findings indicated that ICT had great impact on teaching and learning of Physics. The researcher did not indicate the number of research questions raised.

The research is not different from the on-going research because the past research was conducted in Senior Secondary Schools in Lagos State, while the current research is conducted in Senior Secondary School in Kaduna states. The review has helped the researcher with up-to-date and relevant information and also helped the researcher to acquire relevant knowledge about the past completed study that will enable the researcher to gain research experience and be conversant with research procedures. The literature review has also helped the researcher have good knowledge of how the ongoing research can fit into the past research study and provide any missing knowledge.
Yusuf, Kajuru and Musa (2013), conducted a study on effect of a Computer Mediated Systems Teaching Approach on Mathematics Achievement of Engineering Students in Nigerian Polytechnics” in Kaduna Polytechnic, Kaduna State. The purpose of the study was to determine the Mathematics Achievement Level (MALs) of students taught Mathematics using the Computer Mediated System Teaching Approach (CMSTA) and those not taught with the same approach and also to determine whether the MALs of the male and female students taught mathematics using the CMSTA differ. A quasi-experimental research design was adopted to carry out the study. The instrument for data collection was the Mathematics Achievement Test I and II (MATs I and II). Pre-test and post-test Non Equivalent Groups Design (NEGD) was used. The result showed that students taught mathematics using the CMSTA significantly outperformed those not taught with the same approach. Secondly, the result revealed that the male students taught mathematics using the CMSTA significantly outperformed their female counterparts. The above study conducted has relevance to the on-going research because it is based on the effect of computer mediated systems teaching approach on learning mathematics, while the on-going research is also based on finding the impact of CAI on the performance of students in Civic Education in senior secondary schools. The point of difference is that the above conducted study was on mathematics while the on-going research is on Civic Education as a subject. Secondly, the above research was carried out using Polytechnic students as population while the present study used Senior Secondary School Students.

A study by Nebert, William, and Stanley (2013) investigated the effect of the general computer usage on secondary school students’ performance in biology. This study used descriptive survey research design. This study used descriptive survey research design. The target population was secondary school biology students of Vihiga
county. Data collection was by use of questionnaires, interviews, and document analysis schedule. Sampling was by multistage sampling, purposive sampling, stratified sampling, proportionate sampling and simple random sampling. Sample size was 1003 students. BSQ was used to collect data concerning frequency of computer use (on a likert scale), attitude towards computer use, and the relationship between computer use and performance in biology. BTQ was used to collect data concerning factors that influence computer use by secondary school biology-students. Instrument were piloted and yielded a reliability coefficient of 0.76 and 0.85 respectively. The collected data was analysed using descriptive statistics such as frequencies, percentages and means and inferential statistics such as Pearson’s r, using the Statistical Package for Social Sciences (SPSS). The significance level of the difference between the data was done at the alpha value of 0.05. The study found that there is no relationship between the general computer use and performance in biology. This is because while some students use computers for academic purposes, others use them for non-academic purposes such as entertainment. For some other students the use of computers for academic and non-academic purposes offset each other. These are some of the reasons why there is no relationship between the frequency of computer use and performance in biology. Consequently, the null hypothesis that there is no significant relationship between frequency of computer use and performance in biology is accepted. The horizon of the two studies differ to some extent not withstanding both share commonality of testing the effect computer utilization on students’ academic performance while the reviewed previous study used student’s opinions as a sources of data the present study used students’ scores in teacher made test. The study enlightened the researcher that student’s previous usage of computer should not be seen as an extraneous variable that may create disparity in students’ academic performance when taught using CAI.
Olodu, Ilabor and Isidi (2014), carried out a study on Effects of Computer Assisted Instruction Package on Achievement of Pre-Service Integrated Science Teachers at Different Levels of Scientific Literacy. The study specific objectives were to determine the effects of computer assisted instruction package on academic achievement of pre-service Integrated Science teachers. The sample consisted of 79 pre-service Integrated Science teachers from two intact classes in two Colleges of Education in Delta North Senatorial District of Delta State. Two research questions and two hypotheses tested at 0.05 level of significance guided the study. Two instruments namely, Scientific Literacy Test (SLT) and Integrated Science Achievement Test (ISAT) were used for data collection. Before the commencement of treatment, ISAT were administered as pre-test to the experimental and control groups. While SLT was used for categorizing the subjects into High, Medium and Low levels of Scientific Literacy. At the end of the treatment, ISAT was administered on the pre-service teachers as post-test. Data collected were analyzed using Mean and Standard deviation to answer the research questions and Analysis of Covariance (ANCOVA) to test the hypothesis. Results show that CAIP enhanced achievement of Pre-service Integrated Science teachers better than the expository method. Pre-service Integrated Science teachers at high, medium and low levels of scientific literacy exposed to CAIP recorded higher mean achievement scores than those at the same levels of scientific literacy exposed to expository method of teaching. Based on the findings of this study, CAIP is recommended to Lecturers as an effective method for enhancing pre-service Integrated Science teachers’ achievement in Integrated Science in Nigeria Colleges of Education. The present and the reviewed previous study are similar in objectives, both focused on ascertaining the cause factors of computer assisted instructional package on students’ academic performance and the two study used Quasi experience of control and experimental group. Though the
reviewed previous study go deeper by categorizing integrated science knowledge into high, middle and lower level which warrant use of ANCOVA, the present study used t-test and ANOVA because is only comparing two group academic performance without any disparity of knowledge level while ANOVA was used examine the zonal connotation of students’ academic performance when CAI is used.

An experimental research conducted by Adedoja, G. O. & Fakokunde (2015) in order to determine the effects of computer-based instructional puzzle on students’ learning outcomes and retention in social studies was carried out using a pretest-posttest and delayed-test quasi-experimental design. Four junior secondary schools were purposively selected within Ilesa metropolis of Osun State. Intact class was used in each of the schools and a total of 141 participants were involved. The instruments for data collection were Students’ Attitude towards Social Studies Questionnaire and Social Studies Achievement Test. The results of pilot study on the two instruments used yielded reliability coefficient 0.73 for SASSQ and 0.89 for SSAT. Data collected at pretest, posttest and delayed-test were analyzed using Analysis of Covariance (ANCOVA) to test the hypotheses. The result showed that there is a significant main effect of treatment on students’ achievement in social studies. The study further revealed that there is significant main effect of treatment on students’ retention in social studies, with the experimental group on the higher side. Based on the findings, it was recommended that the use of computer-based instructional puzzles should be encouraged coupled with the provision of all the resources needed for proper implementation. The study is relevant to the present study in different ways; social studies and civic education are under the same curriculum which national value and religion both focus on moral upright of the learner and emergency of patriotic citizen. The researchers also used quassi experimental research of three stages while the present study only used two stages. The study use
ANCOVA due to the nature of the design while the present study used t-test and ANOVA. It’s find also encouraged researcher to embarked on this, as CAI was tested using social studies and result shows significant effect, would such effect be recorded when apply to CAI using a pure computer assisted instruction.

Aitokhuehi, & Ojogho J (2015) conducted a research on the impact of computer literacy on students’ academic performance in Esan West Local Government Area of Edo State, Nigeria. To guide the study, four (4) questions were raised and answered. This is to determine the impact of computer literacy in the academic performance of students in the senior secondary schools in Esan West Local Government Area of Edo State. Data were generated with the use of an instrument titled: Questionnaire on Students’ Computer Literacy Level and Computer Usage (QSCLLCU). One hundred and twenty (120) out of 1,200 final year students, representing 10% were used from the fourteen (14) existing secondary schools in Esan west local government area of Edo State, Nigeria. The findings revealed that: computer literate students perform better than non-computer literate; computer literate female students perform better than male students who are also computer literate; computer literate students who are not addicted to the use of computer facilities perform better than those who are addicted; computer literate students in co-educational secondary schools perform slightly better than those in single sex schools. Based on the findings, one of the recommendations was that, all the students in Esan West Local Government Area of Edo State should be taught how to use computer facilities to search for valid information related to their academic activities. The relevancy of this study lies in the interest of finding what impact computer literacy can exert on students’ academic performance, though the study was an expo-facto design that used data on student computer literacy and school demographic factors to predicts students’ academic performance. The present study was a quassi experimental design
that mainly focused on what impact computer assisted instruction can exert on students’ academic performance.

Susan, Kyle, and Michael (2017) conducted a study on the impact of computer usage on academic performance: Evidence from a randomized trial at the United States Military Academy. With objective of measuring academic performance of three categories of students expose to different form of integrating computer system into learning. To test the impact of allowing Internet-enabled laptops and tablets in classrooms, the study used quasi experimental design. They randomized classrooms into either a Control group classroom who were “technology-free,” indicating that students were not allowed to use laptops or tablets at their desk. The first treatment group, students were permitted to use lap-tops and/or tablets during class for the purposes of note-taking and classroom participation (e.g., using the “e-text” version of the course textbook). However, professors had discretion to stop a student from using a computing device if the student was blatantly distracted from the class discussion. The second treatment group Classrooms were subjected to “tablet only” the class allowed students to use their tablet computers, but professors in this group required tablets to remain flat on the desk (i.e., with the screen facing up and parallel to the desk surface). The sample of the study consists of students enrolled in West Point’s Principles of Economics course during either the spring semester of the 2014–2015 academic year or the fall semester of the 2015–2016 academic year, this gives a total 50 classrooms and 726 students. The instrument used for data collection is standardized test which was prepare by institution examination body. The results of the study suggested that permitting computing devices in the classroom reduces final exam scores by 0.18 standard deviations. By way of comparison, this effect is as large as the average difference in exam scores for two students whose cumulative GPAs at the start of the semester differ by one-third of a
standard deviation. The results also indicated that the negative impact of computers occurs in classrooms that permit laptops and tablets without restriction and in classrooms that only permit modified tablet usage. This was relevant to the present study because it gives an insight into kind of control that students need while using the computer assisted instructional package design for this study so the computer will not be a distracter to them. The similarity between the two studies integration of computer system into teaching and learning process and what implication such integration may have on students’ academic performance. Both use quassi experimental design but the previous study had two treatment group while the present only have one treatment group.

2.8 Summary

In this chapter, the theoretical framework – that is, Cognitive Learning theory is rooted in the work of Ivan Pavlov, which explained human behaviour by understanding the thought processes. Literatures related to the study were then reviewed. The review was done in stages. Literatures on the concept of Computer Education, Concept of ICT, and ICT as determinants for students’ performance were reviewed. The need for integration of ICT in the delivery of quality instructions was also reviewed. From the reviewed literature, it was discovered that Information and Communication Technology is very vital to the study of Computer Education and all aspect of life. This is because ICT has altered virtually all aspect of the human activities such as social, economic, political, and educational service delivery. Through ICT there has been a rise in the quality of educational delivery.

Concepts of Academic Performance, determinants of performance in Computer Education were reviewed. Students’ performances have been variously defined by researchers, many educators and researchers have argued that learning and performance in school are affected by different variables. Technology is now having great influence
on students’ performance. Seventeen empirical studies were reviewed and it was noted that Computer Assisted instruction has been greatly embraced in teaching and learning process because of its potentiality of improving students’ academic performance. It also stated that for the acquisition and development of competencies, skills, attitudes and attributes to function well in today’s world of work, Civic education student must be knowledgeable in ICT. Also pointed out was the need for all Civic education teachers to be equipped with skills in Computer Assisted Instruction as a panacea for improving the academic performance of students as well as good classroom practice. Teachers are no more the sole custodians of knowledge but with ICT, they now direct and assist learners in acquiring knowledge. Students in this ICT era as shown in the literature review are now taking a greater responsibility for their own learning, as they seek, find and share knowledge with others. Learners collaborate with others in accomplishing complex tasks, effectively using different systems for representing and communicating knowledge to others.
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

This chapter explains the research methodology used for the study. The explanation covered the research design, population of the study, sample and sampling techniques, determination of sample homogeneity, instrumentation, and validity of the instrument, pilot study, and reliability of the instrument, procedure for data collection, treatment plan, control of extraneous variables, and procedure for data analysis.

3.2 Research Design

The research design used for this study is quasi-experimental design. The pre-test, nonequivalent control group design was used. This implies that, intact classes (non-randomized groups) participated in the study. According to Sambo (2005) in Chibuzo (2012), quasi-experimental design permits the use of intact classes. Also the purpose of the research was to carry out an experiment using a control and experimental intact classes to find out the performance of students in civic education using the computer assisted instruction (CAI). Hence, the design was considered suitable for conducting the study. The design is illustrated in figure 1.

![Research Design Illustration](image)

Figure 1: Research Design Illustration

Where E = Experimental group

C = Control group
O₁ = Pre-test for both Experimental and Control groups

X₁ = Treatment for Experimental group (Computer Assisted Instruction)

Y = Lecture Teaching Method (No treatment)

O₂ = Post-test for both Experimental and Control groups

The research design for this study illustrated above where both the experimental and control groups were exposed to pre-test, the students in experimental group were taught using computer assisted instruction while those in control group were taught using traditional lecture teaching method. After the treatment, the two groups (experimental and control) were exposed to post-test. The result of the post-test was used to compare the performance of students in experimental and control groups.

3.3 Population of the Study

The target population for this study consisted of the entire senior secondary students (SS II) in public schools in Kaduna state. The schools were selected based on those that have operational computer facilities totaling 139776 students. There are three senatorial zones in Kaduna state with twelve educational zones. These are shown in Table 1.
Table 1: Population for the Study

<table>
<thead>
<tr>
<th>S/N</th>
<th>Senatorial Zone</th>
<th>Educational Zones</th>
<th>Schools</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Central</strong></td>
<td>Kaduna</td>
<td>45</td>
<td>32400</td>
</tr>
<tr>
<td></td>
<td>Birnin Gwari</td>
<td>15</td>
<td>8280</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rigachikun</td>
<td>21</td>
<td>10332</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SabonTasha</td>
<td>28</td>
<td>17304</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td><strong>North</strong></td>
<td>Giwa</td>
<td>9</td>
<td>3888</td>
</tr>
<tr>
<td></td>
<td>Anchau</td>
<td>11</td>
<td>5412</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Zaria</td>
<td>29</td>
<td>19662</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lere</td>
<td>10</td>
<td>4260</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td><strong>South</strong></td>
<td>Gwado gwado</td>
<td>8</td>
<td>3696</td>
</tr>
<tr>
<td></td>
<td>Kachia</td>
<td>17</td>
<td>8262</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Zangon Kataf</td>
<td>19</td>
<td>11628</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kafanchan</td>
<td>22</td>
<td>14652</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td><strong>12</strong></td>
<td><strong>234</strong></td>
<td><strong>139776</strong></td>
</tr>
</tbody>
</table>

*Source: Education Resource Centre, Kaduna, (2016 -2017).*

### 3.4 Sample and Sampling Techniques

The study adopted purposive sample technique in selecting six public senior secondary schools out of 234 schools with computer assisted instruction facilities in Kaduna state considering the nature of the research work (experimental). In each of the zone, two schools were randomly selected (one urban and one rural) given a total of 3 urban schools and three rural school. The study adopted the use of intact class approach where all the students in the class were involved in teaching and testing sessions. One stream of SS II classes was randomly selected for the study in each of the six schools. An intact class of the classes selected was used for the study. In all a total of 580 students participated in the study. The school drawn from the Central Senatorial District include G.S.S Kawo (Urban), G.S.S Ung/Boro (Rural), those from the North senatorial include
G.S.S Alhudahuda College, (Urban) G.S.S Giwa (Rural) while, those from the South Senatorial comprises of G.S.S Mahuta (Rural) and G.S.S Kachia (Urban). Each of the zone has one experimental and one control group. This is further illustrated in the table 2.

Table 2: Sample Size for the Study

<table>
<thead>
<tr>
<th>S/N</th>
<th>Senatorial Zone</th>
<th>No of Schools with Operational Computer</th>
<th>Population of SSII Students</th>
<th>Sample School Location</th>
<th>Treatment</th>
<th>Population of SSII Students in Sample School</th>
<th>Sample size of the Stream sampled</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Central</td>
<td>109</td>
<td>68316</td>
<td>Urban</td>
<td>Experiment</td>
<td>650</td>
<td>126</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>GSS Kawo</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>North</td>
<td>59</td>
<td>33222</td>
<td>Rural</td>
<td>Control</td>
<td>535</td>
<td>110</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>GSS U/Boro Alhudahuda College</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>GSS Giwa</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>South</td>
<td>66</td>
<td>38238</td>
<td>Urban</td>
<td>Experiment</td>
<td>568</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>GSS Kachia</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>GSS Mahuta</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>3</td>
<td>234</td>
<td>139776</td>
<td></td>
<td>3299</td>
<td>580</td>
</tr>
</tbody>
</table>

3.4.1. Determination of Sample Homogeneity

In order to determine homogeneity of the sample, the following factors were looked into to see whether the respondents have certain identifiable attributes. For example, entry requirement, syllabus, qualified manpower (teacher), availability of instructional resources (such as computer, projector, audio-visual aid among others), physical structures, students’ population rate and so forth. Some more factors that were considered while determining the sample homogeneity include the expected drop-out rate, and an unequal allocation ratio. This pre-research observation on homogeneity of
participants was done using rural and urban as a yardstick for drawing conclusion on the basis of difference in location. This observation conducted by researcher, it found that the samples are homogenous in nature in the sense that they share similar characteristics such as school type (co-education), using the same syllabus, use the same textbooks under the same admission requirement and their teachers are all trained in Nigeria high Institution.

3.5 Instrumentation

The instruments used for data collection in this study are: Civic Education Performance Test (CEPT); Civic Education Computer Assisted Instruction Package (CECAIP); and Lesson Plans (see Appendix B, C, and D). The CEPT test is a 50 item of multiple choice nature. The 50 item was used for pre-test while the same item was re-numbered for post-test respectively. Each question has four options A, B, C and D. The multiple items were drawn from the SS II syllabus of Senior Secondary School certificate examination for civic education but were lifted and adopted by the researcher.

3.5.1 Table of Specification

A Table of specification is a two-way chart which describes the topic to be covered by a test and the number of items or points which are associated with each topic. Table 3 presents the topics covered in this study.
<table>
<thead>
<tr>
<th>S/N</th>
<th>Topics</th>
<th>Cognitive Domain</th>
<th>Affective Domain</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Knowledge</td>
<td>Comprehension</td>
<td>Receiving</td>
</tr>
<tr>
<td>1</td>
<td>Citizenship Education</td>
<td>1, 9</td>
<td>2, 3</td>
<td>36, 37</td>
</tr>
<tr>
<td>2</td>
<td>Democracy and National Development</td>
<td>6, 27</td>
<td>10</td>
<td>26</td>
</tr>
<tr>
<td>3</td>
<td>Dangers of Political Apathy</td>
<td>38, 39, 40</td>
<td>30</td>
<td>11, 41</td>
</tr>
<tr>
<td>4</td>
<td>Human Rights</td>
<td>16, 23</td>
<td></td>
<td>14, 19</td>
</tr>
<tr>
<td>5</td>
<td>Drugs and Drug Abuse</td>
<td></td>
<td>12, 20, 25</td>
<td>13</td>
</tr>
<tr>
<td>6</td>
<td>Responsible Parenthood</td>
<td>21</td>
<td>7, 42, 43</td>
<td>17, 49, 48</td>
</tr>
<tr>
<td>7</td>
<td>Traffic Regulations</td>
<td>4, 8</td>
<td>24</td>
<td>32</td>
</tr>
<tr>
<td>8</td>
<td>Relationships</td>
<td>33</td>
<td>44</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>13</strong></td>
<td><strong>12</strong></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>
3.5.2 Treatment Package

The experiment commenced with the administration of pre-test to both the experimental and control groups. Teachers administered the pre-test to groups in their respective schools. In the pre-test, the Civic Education Performance Test (CEPT) was administered in groups. The exercise provided baseline data on students’ performance in Civic Education before the treatment. After the pretest, a period of training on the use of Civic Education Computer Assisted Instruction package developed by the researcher was given to the experimental group by the research assistant recruited and trained for the purpose of the study. The package was a ten-weeks interactive tutorial lessons on the Civic Education Curriculum Content. Specifically, the package covered: Citizenship Education, Democracy and National Development, Danger of Political Apathy, Limitation to human right, Drugs and drugs abuse, responsible parenthood, traffic regulations and relationships. A compact disc which contains Instructional Design on topic covered was slotted into the Computer and booting procedure followed. The students were instructed to pay attention because they were asked from what they learned by watching the computer screen (Appendix F). The control group was taught with the conventional plan (Appendix F) on chalkboard using explanation, demonstration as demanded. The treatment lasted for ten weeks. The post-test was administered to all the treatment groups immediately after the completion of the treatments. The teacher administered the post-test to both the experimental and control groups in their respective schools. In the post-test, the Civic Education Performance Test (CEPT) was administered on the groups. The exercise provided post treatment data on students’ performance in Civic Education after treatment.
3.5.3 Validity of the Instrument

The drafted Civic Education Performance Test (CEPT) used for pre-test and post-test was submitted to experts in curriculum and Measurement Specialist all from faculty of education, Ahmadu Bello University, Zaria. The instruments were subjected to thorough scrutiny and proof-reading by these experts who ensure that its contents are in line with the research questions. Among the observations of the expert is that the items of CEPT should be round up to 50 items which researcher effected as recommended. This support the views of Haugen and Becker (2008), and Sukon and Jawahir (2010), who stressed the need and significance of establishing the validity of research instrument by a panel of experts to determine if its items (contents) can elicit the desired data they are intended to elicit and this in essence is to ensure its content validity and also to ensure that necessary adjustments were made thereafter.

3.5.4 Pilot Study

In order to ascertain the reliability of the instruments, a pilot study was carried out in Government secondary school Bassawa with students of SS II classes. This school was used as pilot study since is not part of the schools used for the main study but share similar characteristics in all respects. Test-retest techniques was adopted. The researcher distributed the instrument to the students and supervised them till they complete it. Same instrument was re-administered after two weeks to same set of students. The main purpose of pilot study is to confirm the reliability and consistency of the instrument. The data collected from this administered instrument was subjected to statistical analysis.

3.5.5 Reliability of the Instrument

In order to test the quality of a treatment instrument (CEPT) that was used in the study, the researcher determine the reliability of Civic Education Performance Test (CEPT) using the data of the pilot study. The data obtained was subjected to statistical
tools using Cronbach Alpha which showed a reliability of 0.87 which indicates reliability of the instrument used for the study.

3.6 Procedure for Data Collection

The researcher collected an introductory letter from the Department of Educational Foundations and Curriculum, Faculty of Education, Ahmadu Bello University, Zaria. The letter was taken to the various sampled schools seeking their approval to use their school and to allow their students respond to the research instrument. Based on approval, the researcher carried out a briefing session with the research assistants to intimate them and train them on how the CEPT is to be administered. The data collection exercises last ten weeks. Each contact took two hours per week. The pre-test lasted for 20 minutes of the first contact of the first week with the students as shown in (Appendices D). After the pre-test and ten weeks of teaching through the use of computer assisted instruction, the instrument used for pre-test was rearranged and administered as post-test.

3.6.1 Treatment Plan

A total of ten weeks was used to cover the whole exercises involved in the study. The proposed treatment plan for the study is presented in Table 5: The study begins with administration of pre-test to both experimental and control group this stage is proceeded by intensive administration of the Treatment package to each of the group. The experimental group were taught using CAI while the control group were taught using conventional method. Control group were taught in their various classes using chalk and talk method. The experimental group were exposed to the treatment in the school digital centre. This lasted for 10 weeks and the stage was preceded by administration of post-test to both experimental and control group.
### Table 4: Treatment Plan

<table>
<thead>
<tr>
<th>Week</th>
<th>Topics</th>
<th>Duration</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>BT</td>
<td>Pre-test</td>
<td></td>
<td>Both Experimental and Control groups.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Experimental group taught using Computer Assisted Instruction, while</td>
</tr>
<tr>
<td>1</td>
<td>Citizenship education</td>
<td>40</td>
<td>Traditional (Lecture) method used to teach control group.</td>
</tr>
<tr>
<td>2</td>
<td>Capitalist democracy</td>
<td>40</td>
<td>,,</td>
</tr>
<tr>
<td>3</td>
<td>Dangers of Political Apathy</td>
<td>40</td>
<td>,,</td>
</tr>
<tr>
<td>4</td>
<td>Human Rights</td>
<td>40</td>
<td>,,</td>
</tr>
<tr>
<td>5</td>
<td>Drugs and drug abuse</td>
<td>40</td>
<td>,,</td>
</tr>
<tr>
<td>6</td>
<td>Symptoms of drug</td>
<td>40</td>
<td>,,</td>
</tr>
<tr>
<td>7</td>
<td>Responsible Parenthood</td>
<td>40</td>
<td>,,</td>
</tr>
<tr>
<td>8</td>
<td>Traffic Regulations</td>
<td>40</td>
<td>,,</td>
</tr>
<tr>
<td>9</td>
<td>Interpersonal Relationship</td>
<td>40</td>
<td>,,</td>
</tr>
<tr>
<td>10</td>
<td>Inter-Communal Relationship</td>
<td>40</td>
<td>,,</td>
</tr>
<tr>
<td>AT</td>
<td>Post-test</td>
<td></td>
<td>Both Experimental and Control groups exposed to post-test.</td>
</tr>
</tbody>
</table>

BT mean Before Treatment while AT mean After Treatment.

#### 3.6.2 Control of Extraneous Variables

In order to control and avoid major bias, the following factors were looked into: experiment bias, teacher variable, subject interaction and inter group variable.

**Experiment Bias:** In order to avoid experimental bias, the teaching was conducted by the researcher along with computer operators and class teachers who served as research assistant in experimental and control group respectively.

**Teacher Variable:** In order to ensure that errors which might arise from teacher variable would not affect the findings of the study, the researcher taught the students along with computer operators and the class teacher as assistant. This is to ensure uniformity of instruction across the groups. The lesson plans and the CAIP was prepared by the
researcher and not the teachers. These packages were not released to any of the research assistant before the commencement of the experiment. Lesson plan/note and computer software packages was uniform in all the participating schools. The students in the two groups were not informed that they were involved in any research process.

**Inter Group Variables:** In avoiding errors that can occur as a result of inter-group, the researcher sampled participating schools from each of the three Senatorial Zones in Kaduna State.

### 3.7 Procedure for Data Analysis

In the course of analyzing the data collected, the descriptive statistics such as means and standard deviation were used to respond to research questions. In testing the research hypotheses, the Independent sample t-test and Analysis of Variance (ANOVA) statistics were used in testing the formulated hypotheses in order to determine if significant impact of using computer assisted Instructions exist or not. This is according to Adedayo (2006); Flom (2010); and Ibrahim (2013), who suggested these inferential statistics when comparing two or more means. Null hypotheses 1-6 were tested using independent t-test while null hypothesis 7 was tested using ANOVA, all at p=0.05 (95%) level of significance. According to Olayiwola (2007), if the result of the p-value for any null hypothesis that is greater than 0.05, the null hypothesis will be accepted, but if otherwise, it will be rejected.
CHAPTER FOUR
RESULTS AND DISCUSSIONS

4.1 Introduction

This chapter dealt exclusively with the analysis and interpretations of the data gathered for this study. The main concern of this study was to examine the Impact of computer-assisted instruction on students’ performance in civic education in Senior Secondary Schools in Kaduna state, Nigeria. The study used 580 SS II students who were subdivided into control and experimental group. The control group were taught civic education using conventional method while the other group comprised of 296 SS II students (experimental) taught using Computer Assisted Instruction. Meanwhile, among the instrument distributed to the experimental group only 286 was valid for analysis while for the control group only 274 valid for analysis. This chapter therefore, focused on data presentation, analysis, and discussion of findings. The data, collected for this study were analyzed using descriptive statistics (mean and standard) and inferential statistics (t-test and ANOVA).

4.2. Description of Study Variables

This section presents various distribution of the participant in this study. These distributions range from the group participant belong to and the location of the participant schools.

Table 5: Distribution of the Respondents by Treatment

<table>
<thead>
<tr>
<th>Treatment Group</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>286</td>
<td>51.1</td>
</tr>
<tr>
<td>Control</td>
<td>274</td>
<td>48.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>560</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
Table 5 shows distribution of the participant on the basis of treatment group. 286 students were exposed to Computer Assisted Instruction representing 51.1% of the total participant while 274 participants were taught using conventional teaching method representing 48.9%. The varieties in the number of the participants is because researcher used intact class.

Table 6: Distribution of the Participant by Location of School

<table>
<thead>
<tr>
<th>Location</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>303</td>
<td>54.1</td>
</tr>
<tr>
<td>Rural</td>
<td>257</td>
<td>45.9</td>
</tr>
<tr>
<td>Total</td>
<td>560</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 6 shows distribution of the participant on the basis of school location. 303 students (51.1%) are from urban area while 257 (45.9%) students are from rural area. This shows that school in the urban area are having more population than those located in the rural areas.

4.3. Response to Research Questions

The main theme of this study was to find out the Impact of computer-assisted instruction on students’ performance in civic education in Senior Secondary Schools in Kaduna state, Nigeria. To determine the impact of computer assisted instruction on academic performance, scores obtained by students under each of the treatments (CAI and Conventional Method of teaching) was used. In answering each of the research questions for this study, means score and standard deviation was used as instrument for taken decision. Meanwhile, the Mean scores of the students under Experimental and control group in civic education before (pre-test) and after (post-test) the treatment are shown in Table 7
Table 7: Pre-test and Post-test Scores in Civic Education

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-Test</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td>286</td>
<td>50.3217</td>
<td>12.40266</td>
</tr>
<tr>
<td>Control Group</td>
<td>274</td>
<td>49.8029</td>
<td>12.0696</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>560</td>
<td>50.0623</td>
<td>12.23613</td>
</tr>
<tr>
<td><strong>Post-Test</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td>286</td>
<td>60.528</td>
<td>13.42154</td>
</tr>
<tr>
<td>Control Group</td>
<td>274</td>
<td>50.1058</td>
<td>12.32733</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>560</td>
<td>55.3169</td>
<td>12.874435</td>
</tr>
</tbody>
</table>

Table 7 shown difference in academic performance of the two group after exposing to the treatment. The performance of students under experimental group increase from average score of 50 to 61 while those under control group slightly increase from average 49.8 to 50.1. This implies that CAI positively impacted on students’ academic performance.

**RQ 1**: What is the difference between the performance of students taught Civic Education using Computer Assisted Instruction and those taught using conventional method in Senior Secondary Schools in Kaduna State?

In order to determine the difference in academic performance of the students taught civic education using CAI and those taught using conventional teaching method, the scores obtained by the two group in post-test was compared using descriptive statistics.
Table 8: Difference in Academic performance of Students Exposed to CAI and Convectional Teaching Method

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>286</td>
<td>60.5280</td>
<td>13.42154</td>
</tr>
<tr>
<td>Control</td>
<td>274</td>
<td>50.1058</td>
<td>12.32733</td>
</tr>
</tbody>
</table>

Table 8 showed that both experimental and control groups had mean scores of 60.528 and 50.106 with 13.422 and 12.33 standard deviations respectively. This shows that there was a mean scores difference of 10.423 between the experimental and control group. However, there standard deviation shows that there is high variation in the students’ scores.

**RQ 2:** What is the difference between the performance of students taught limitation of human right using Computer Assisted Instruction and those taught using conventional method in Senior Secondary Schools in Kaduna State?

In responding to research question two, the scores obtained by the two groups in “limitation of human right” in post-test was compared using descriptive statistics as shown in table 9.

Table 9: Difference in Academic performance of Students Taught Limitation of Human right Using CAI and Convectional Teaching Method

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>286</td>
<td>8.4755</td>
<td>1.69967</td>
</tr>
<tr>
<td>Control</td>
<td>274</td>
<td>6.9708</td>
<td>1.89250</td>
</tr>
</tbody>
</table>

Table 9 showed that both experimental and control groups had mean scores of 8.476 and 6.971 with 1.699 and 1.893 standard deviations respectively. This shows that there was a mean scores difference of 1.505 between the experimental and control group.
However, there standard deviation shows that there is slight variation in the students’ scores.

**RQ 3:** To what extent is the difference between the academic performance of Urban and Rural located secondary school students taught responsible parenthood using Computer Assisted Instruction in Senior Secondary Schools in Kaduna state?

The research question three was responded to using the scores obtained by urban and rural experimental group on “Responsible Parenthood” in post-test to compare using descriptive statistics as shown in table 10.

**Table 10: Difference in Academic Performance of Urban and Rural Located Students Taught Responsible Parenthood using CAI**

<table>
<thead>
<tr>
<th>Location</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban-Experimental</td>
<td>208</td>
<td>9.6538</td>
<td>2.19692</td>
</tr>
<tr>
<td>Rural-Experimental</td>
<td>78</td>
<td>9.7949</td>
<td>1.97622</td>
</tr>
</tbody>
</table>

Table 10 showed that both urban experimental and rural experimental groups had mean scores of 9.654 and 9.795 with 2.197 and 1.976 standard deviations respectively. This shows that there was a mean scores difference of 0.1411 between the urban experimental and rural experimental group. However, their standard deviation shows that there is slight variations in the students’ scores.

**RQ 4:** To which extent does the use of Computer Assisted Instruction and conventional method have impact on the performance of students taught Democracy and National Development in Senior Secondary Schools in Kaduna state?
This question was responded to by comparing the descriptive statistic of the experimental and control groups in “Democracy and National Development” in post-test as shown in table 11.

Table 11: Difference in Academic performance of Students Taught Democracy and National Development using Experimental and Conventional Teaching Method

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>286</td>
<td>9.5944</td>
<td>2.02524</td>
</tr>
<tr>
<td>Control</td>
<td>274</td>
<td>5.9526</td>
<td>1.87756</td>
</tr>
</tbody>
</table>

Table 11 showed that both experimental and control groups had mean scores of 9.594 and 5.953 with 2.025 and 1.878 standard deviations respectively. This shows that there was a mean scores difference of 3.6418 between the experimental and control group. However, their standard deviation shows that there is slight variations in the students’ scores.

RQ 5: To what extent is the difference between the academic performances of students taught dangers of political apathy using Computer Assisted Instruction and conventional method in Senior Secondary Schools in Kaduna state?

The research question three was responded to using the scores obtained by experimental and control groups in “Political Apathy” in post-test to compare using descriptive statistics as shown in table 12.

Table 12: Difference in Academic Performance of Students Taught Political Apathy Using CAI and Conventional Teaching Method

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>286</td>
<td>9.2587</td>
<td>2.21229</td>
</tr>
<tr>
<td>Control</td>
<td>274</td>
<td>6.4307</td>
<td>2.03376</td>
</tr>
</tbody>
</table>
Table 12 showed that both experimental and control groups had mean scores of 9.259 and 6.431 with 2.212 and 2.033 standard deviations respectively. This shows that there was a mean scores difference of 2.828 between the experimental and control group. However, their standard deviation shows that there is slight variations in the students’ scores.

RQ 6: What is the impact of Computer Assisted Instruction and conventional method on the performance of students taught citizenship in Senior Secondary Schools in Kaduna state?

The research question three was responded to using the scores obtained by experimental and control groups in “Citizenship” in post-test to compare using descriptive statistics as shown in table 13.

Table 13: Difference in Academic Performance of Students Taught Citizenship Using CAI and Conventional Teaching Method

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>286</td>
<td>8.7133</td>
<td>2.80256</td>
</tr>
<tr>
<td>Control</td>
<td>274</td>
<td>8.2555</td>
<td>3.69641</td>
</tr>
</tbody>
</table>

Table 13 showed that both experimental and control groups had mean scores of 8.713 and 8.256 with 2.803 and 3.696 standard deviations respectively. This shows that there was a mean scores difference of 0.4578 between the experimental and control group. However, their standard deviation shows that there are slight variations in the students’ scores.
RQ 7: To what extent is the difference between the academic performance of Students from South, Central and North Senatorial zone taught Civic Education using Computer Assisted Instruction in Senior Secondary Schools in Kaduna state?

The research question seven was responded to using the scores obtained by experimental groups from the three senatorial zones taught civic education using CAI. The descriptive statistics that answer the question is shown in table 14.

Table 14: Descriptive Statistics showing the Difference in the academic performance of experimental group from the three senatorial zone in Kaduna

<table>
<thead>
<tr>
<th>Senatorial Zones</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central</td>
<td>123</td>
<td>59.453</td>
<td>13.71206</td>
</tr>
<tr>
<td>North</td>
<td>76</td>
<td>61.0526</td>
<td>13.58518</td>
</tr>
<tr>
<td>South</td>
<td>87</td>
<td>61.7126</td>
<td>13.00707</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>286</td>
<td><strong>60.5664</strong></td>
<td><strong>13.45744</strong></td>
</tr>
</tbody>
</table>

Table 14 showed that the experimental groups from Kaduna Central North and South senatorial zones are having a men score of 59.45, 61.05 and 61.72 respective. This shows that there was a mean scores difference of 1 between the group. The standard deviation each of the zone is approximately 13.

4.4. Testing of Hypotheses

This section dealt with testing of the hypotheses formulated for this study in order to discovered influence of some independent variables on the findings of this studies via answering of research questions. In testing the hypothesis, Independent sample t-test was used to establish the difference in academic performance considering some independents
variable whether their influence on academic performance of students can be statistically significant at significant level of 0.05.

**Hypothesis 1:** There is no significant difference between the academic performances of students taught Civic Education using Computer Assisted Instruction and those taught using conventional method in Senior Secondary Schools in Kaduna State.

As established in research question one presented in table 8 that different existed in academic performance of student taught civic education using computer assisted instruction and those taught using conventional teaching method. Hypothesis one was formulated to establish whether the difference in the two group academic performance is statistically significant or not. In doing this, the two groups (experimental and control group) academic performance in post-test was compared using independent sampled t-test to establish the level of the difference, the outcome of this comparison is presented in table 15.

**Table 15: Independent sample t-test showing difference in academic performance of Senior Secondary School Student taught civic education using CAI and those taught using Conventional method**

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>Std.</th>
<th>Df</th>
<th>t-cal</th>
<th>t- A</th>
<th>Sig.(2-tailed)</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>286</td>
<td>60.52</td>
<td>13.42</td>
<td></td>
<td>558</td>
<td>9.299</td>
<td>0.05</td>
<td>.000</td>
</tr>
<tr>
<td>Control</td>
<td>274</td>
<td>50.10</td>
<td>12.32</td>
<td></td>
<td></td>
<td>1.96</td>
<td>.000</td>
<td>Rejected</td>
</tr>
</tbody>
</table>

Table 15 shows that there is significance difference in the academic performance of students taught civic education using CAI and those taught using conventional teaching method. This is deduced from table 14 that revealed calculated p-values (2tailed) of .000 < 0.05 alpha level. Looking at the mean score of the two groups,
students under CAI mean scores is higher (Approximately 61/100) compare to mean score of those under conventional teaching methods (Approximately 50/100). The hypothesis one that stated that “there is no significant difference between the academic performances of students taught Civic Education using Computer Assisted Instruction and those taught using conventional method in Senior Secondary Schools in Kaduna State” is here by rejected. This implies that academic performance of students taught Civic Education using Computer Assisted Instruction was better than those taught using conventional method in Senior Secondary Schools in Kaduna State.

**Hypothesis 2:** There is no significant difference between the academic performances of students taught limitation of human right using Computer Assisted Instruction and those taught using conventional method in Senior Secondary Schools in Kaduna State;

The study attempted to know whether the difference in academic performance of student taught limitation of human rights using computer assisted instruction and those taught using conventional teaching method were statically different or not. In doing this, the two groups (experimental and control group) academic performance in post-test was compared using independent sampled t-test to establish the level of the difference, the outcome of this comparison is presented in table 16.

**Table 16:** Independent sample t-test showing difference in academic performance of Student taught limitation of human rights using CAI and those taught using Conventional method

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>Std.</th>
<th>Df</th>
<th>t-cal</th>
<th>t- crit.</th>
<th>A</th>
<th>Sig.(2-tailed)</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>286</td>
<td>8.47</td>
<td>1.69</td>
<td>558</td>
<td>9.908</td>
<td>1.96</td>
<td>0.05</td>
<td>.000</td>
<td>Rejected</td>
</tr>
<tr>
<td>Control</td>
<td>274</td>
<td>6.97</td>
<td>1.89</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 16 shows that there is significance difference in the academic performance of students taught limitation of human right using CAI and those taught using conventional teaching method. Inferring from table 15 that revealed observed p-values (2tailed) of .000 < 0.05 alpha level. Looking at the mean score of the two groups, students under CAI mean scores is higher (Approximately 9/10) compare to mean score of those under conventional teaching methods (Approximately 7/10). The hypothesis two that stated that “There is no significant difference between the academic performances of students taught limitation of human right using Computer Assisted Instruction and those taught using conventional method in Senior Secondary Schools in Kaduna State;” is hereby rejected. That is to say; students taught limitation of human right using Computer Assisted Instruction performed better than those taught using conventional method in Senior Secondary Schools in Kaduna State.

Hypothesis 3: There is no significant difference between the academic performance of urban and rural located Secondary School students taught responsible parenthood using Computer Assisted Instruction in Senior Secondary Schools in Kaduna state.

Would there be different in students’ academic performance in civic education on the basis of school location when computer assisted is used as teaching method? If there is different would the difference be statistically significant or not? The research question three as presented in table 10 showed that the difference existed when the mean score of the two location is compare. In determining whether the difference existed in the academic performance of the urban and rural area is statistically significant, the scores obtained by each students in the two location in the post test was subjected statistic test of independent sample t-test. The outcome of the test is presented in table 17.
Table 1: Independent sample t-test showing difference in academic performance of urban and rural Senior Secondary School Student taught responsible parenthood using CAI

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>df</th>
<th>t-cal</th>
<th>t-crit.</th>
<th>α</th>
<th>Sig.(2-tailed)</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>208</td>
<td>9.55</td>
<td>2.19</td>
<td></td>
<td>284</td>
<td>0.49</td>
<td>1.96</td>
<td>0.05</td>
<td>.620</td>
</tr>
<tr>
<td>Rural</td>
<td>78</td>
<td>9.79</td>
<td>1.97</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 17 revealed that there is no significance difference in the performance of students in urban area and those in rural area taught responsible parenthood using CAI. Inferring from table 16 that revealed calculated p-values (2tailed) of 0.620 > 0.05 alpha level. Looking at the mean score of the two groups, urban located students and rural located students mean scores 9.5538 and 9.7949 respectively which is almost the same. The hypothesis three that stated that “There is no significant difference between the academic performance of urban and rural located Secondary School students taught responsible parenthood using Computer Assisted Instruction in Senior Secondary Schools in Kaduna state;” is here by retained. In other words, CAI was effective in improving students’ academic performance irrespective of school location.

Hypothesis 4: There is no significant difference in the performance of students taught democracy and national development using Computer Assisted Instruction and conventional method in Senior Secondary Schools in Kaduna state

The study attempted to know whether the difference in academic performance of student taught democracy and national development using computer assisted instruction and those taught using conventional teaching method will be statically different or not. In doing this, the two groups (experimental and control group) academic performance in post-test on test-item that belong to democracy and National Development was compared using independent sampled t-test to establish the level of the difference, the outcome of this comparison is presented in table 18.
Table 18: Independent sample t-test showing difference academic performance of Senior Secondary School students taught Democracy and National Development using Computer Assisted Instruction and conventional method in in Kaduna state

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>df</th>
<th>t-cal</th>
<th>t- a</th>
<th>Sig.(2-tailed)</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>286</td>
<td>9.59</td>
<td>2.02</td>
<td>558</td>
<td>22.04</td>
<td>1.96</td>
<td>0.05</td>
<td>.000</td>
</tr>
<tr>
<td>Control</td>
<td>274</td>
<td>5.95</td>
<td>1.88</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 18 shows that there is significance difference in the academic performance of students taught Democracy and National Development using CAI and those taught using conventional teaching method. Inferring from table 16 that revealed calculated p-values (2tailed) of .000< 0.05 alpha level. Looking at the mean score of the two groups, students under CAI mean scores is higher (Approximately 9/12) compare to mean score of those under conventional teaching methods (Approximately 6/12). The hypothesis four that stated that “there is no significant difference in the performance of students taught democracy and national development using Computer Assisted Instruction and conventional method in Senior Secondary Schools in Kaduna state” is here by rejected. This implies that, students taught Democracy and National Development using CAI performed better than those taught using conventional teaching method in Senior Secondary School in Kaduna State.
**Hypothesis 5:** There is no significant difference between the academic performances of students taught dangers of political apathy using Computer Assisted Instruction and conventional method in Senior Secondary Schools in Kaduna state.

In establishing whether the difference in students’ academic performance on the basis of topic taught using CAI and Convensional teaching method for experimental group and control group respectively will be statistically significant. In doing this, the two groups (experimental and control group) academic performance in post-test on test-item that belong to “danger of political apathy” was compared using independent sampled t-test to establish the level of the difference, the outcome of this comparison is presented in table 19.

**Table 19: Independent sample t-test showing difference in academic performance of senior secondary school students taught danger of Political Apathy using Computer Assisted Instruction and conventional method in Senior Secondary Schools in Kaduna state**

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>df</th>
<th>t-cal</th>
<th>t-α</th>
<th>Sig.(2-tailed)</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>286</td>
<td>9.25</td>
<td>2.21</td>
<td>558</td>
<td>15.73</td>
<td>1.96</td>
<td>0.05</td>
<td>.000</td>
</tr>
<tr>
<td>Control</td>
<td>274</td>
<td>6.43</td>
<td>2.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 19 shows that there is significance difference in the academic performance of students taught Democracy and National Development using CAI and those taught using conventional teaching method. Inferring from table 18 that revealed calculated p-values (2tailed) of .000 < 0.05 alpha level. Looking at the mean score of the two groups, students under CAI mean scores is higher (Approximately 9/14) compare to mean score of those under conventional teaching methods (Approximately 6/14). The hypothesis four that stated that “There is no significant difference between the academic performances of students taught dangers of political
apathy using Computer Assisted Instruction and conventional method in Senior Secondary Schools in Kaduna state” is here by rejected. In other words, students taught Dangers of Political Apathy using Computer Assisted Instruction performed better than those taught using conventional method.

**Hypothesis 6:** There is no significant difference between the performances of students taught citizenship using CAI and those taught using conventional method in Senior Secondary Schools in Kaduna state.

In establishing whether the difference in students’ academic performance on the basis of topic taught using CAI and Conventional teaching method for experimental group and control group respectively will be statistically significant. In doing this, the two groups (experimental and control group) academic performance in post-test on test-item that belong to “citizenship” was compared using independent sampled t-test to establish the level of the difference, the outcome of this comparison is presented in table 20.

**Table 20:** Independent sample t-test showing difference in academic performance of Senior Secondary School students taught Citizenship using Computer Assisted Instruction and those taught using conventional method in Senior Secondary Schools in Kaduna state

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>SD.</th>
<th>df</th>
<th>t-cal</th>
<th>t- α</th>
<th>Sig.(2-tailed)</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>286</td>
<td>8.71</td>
<td>2.8</td>
<td>558</td>
<td>1.66</td>
<td>1.96</td>
<td>0.05</td>
<td>.098</td>
</tr>
<tr>
<td>Control</td>
<td>274</td>
<td>8.25</td>
<td>3.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 20 shows that there is no significance difference in the academic performance of students taught citizenship using CAI and those taught using conventional teaching method. Inferring from table 19 that revealed calculated p-values (2tailed) of .098 > 0.05 alpha level. Looking at the mean score of the two groups, students under CAI mean scores is almost the same (Approximately 9/14) with means score of those under conventional teaching methods (Approximately 8/14). The hypothesis that stated that “There is no significant difference between
the performances of students taught citizenship using CAI and those taught using conventional method in Senior Secondary Schools in Kaduna state” is here by retained. This implies that CAI did not improved students’ academic performer when used to teach citizenship education.

**Hypothesis 7:** There is no significant difference between the academic performances of Students from South, Central and North Senatorial zone taught Civic education using Computer Assisted Instruction in Senior Secondary Schools in Kaduna state

In establishing whether there is difference in students’ academic performance on the basis of Senatorial zones when CAI is used in teaching civic education, the score obtained by experimental groups from each zones were compared, this is shown in table 21.

**Table 21: ANOVA showing difference between academic performance of SSII student from South, Central and North Senatorial zones taught civic education using Computer Assisted Instruction in Kaduna state**

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>284.128</td>
<td>2</td>
<td>142.064</td>
<td>.783</td>
<td>.458</td>
</tr>
<tr>
<td>Within Groups</td>
<td>51330.110</td>
<td>283</td>
<td>181.378</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>51614.238</td>
<td>285</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 21 shows that there is no significance difference in the academic performance of students from south, central and north senatorial zones taught civic education using CAI. Inferring from table 21 that revealed calculated p-values (2tailed) of .458 > 0.05 alpha level. The hypothesis that stated that “There is no significant difference between the performances of students from South, Central and North Senatorial zones taught civic education using CAI in Senior Secondary Schools in Kaduna state” is here by retained. This shown that the performance of students when CAI is used to teach civic education is irrespective of the senatorial zones that the school located.
<table>
<thead>
<tr>
<th>S</th>
<th>Hypotheses</th>
<th>Statistic</th>
<th>α</th>
<th>T</th>
<th>df</th>
<th>P</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>There is significant difference between the academic performances of students taught Civic Education using Computer Assisted Instruction and those taught using conventional method in Senior Secondary Schools in Kaduna State;</td>
<td>Independent sample t-test</td>
<td>0.05</td>
<td>9.299</td>
<td>558</td>
<td>.000</td>
<td>Rejected</td>
</tr>
<tr>
<td>2</td>
<td>There is significant difference between the academic performances of students taught limitation of human right using Computer Assisted Instruction and those taught using conventional method in Senior Secondary Schools in Kaduna State;</td>
<td>Independent sample t-test</td>
<td>0.05</td>
<td>9.908</td>
<td>558</td>
<td>.000</td>
<td>Rejected</td>
</tr>
<tr>
<td>3</td>
<td>There is no significant difference between the academic performance of Urban and Rural students taught responsible parenthood using Computer Assisted Instruction in Senior Secondary Schools in Kaduna state;</td>
<td>Independent sample t-test</td>
<td>0.05</td>
<td>.496</td>
<td>284</td>
<td>.620</td>
<td>Retained</td>
</tr>
<tr>
<td>4</td>
<td>There is significant difference in the performance of students taught democracy and national development using Computer Assisted Instruction and conventional method in Senior Secondary Schools in Kaduna state;</td>
<td>Independent sample t-test</td>
<td>0.05</td>
<td>22.043</td>
<td>558</td>
<td>.000</td>
<td>Rejected</td>
</tr>
<tr>
<td>5</td>
<td>There is significant difference between the academic performances of students taught dangers of political apathy using Computer Assisted Instruction and conventional method in Senior Secondary Schools in Kaduna state.</td>
<td>Independent sample t-test</td>
<td>0.05</td>
<td>15.730</td>
<td>558</td>
<td>.000</td>
<td>Rejected</td>
</tr>
<tr>
<td>6</td>
<td>There is no significant difference between the performances of students taught citizenship using Computer Assisted Instruction and conventional method in Senior Secondary Schools in Kaduna state.</td>
<td>Independent sample t-test</td>
<td>0.05</td>
<td>1.656</td>
<td>558</td>
<td>.098</td>
<td>Retained</td>
</tr>
<tr>
<td>7</td>
<td>There is no significant difference between the performances of students from South, Central and North Senatorial zones taught civic education using CAI in Senior Secondary Schools in Kaduna state.</td>
<td>ANOVA</td>
<td>0.05</td>
<td>-</td>
<td>285</td>
<td>.458</td>
<td>Retained</td>
</tr>
</tbody>
</table>
4.6. **Summary of Major Findings**

The study established that;

1. Academic performance of students taught Civic Education using Computer Assisted Instruction was better than those taught using conventional method in Senior Secondary Schools in Kaduna State.

2. Students taught limitation of human right using Computer Assisted Instruction performed better than those taught using conventional method in Senior Secondary Schools in Kaduna State.

3. Both urban and rural located Secondary School students taught responsible parenthood using Computer Assisted Instruction in Senior Secondary Schools in Kaduna state performed better. In other word, CAI was effective in improving students’ academic performance irrespective of school location.


5. Students taught Dangers of Political Apathy using Computer Assisted Instruction performed better and conventional method in Senior Secondary Schools in Kaduna state. In other words, Students taught using CAI performed better than those taught using conventional teaching method.

6. There was no difference between the performances of students taught citizenship using Computer Assisted Instruction and conventional method
in Senior Secondary Schools in Kaduna state. In other words, CAI did not improved students’ academic performer when used to teach citizenship education.

7. There was no significant difference between the performances of students from South, Central and North Senatorial zones taught civic education using CAI in Senior Secondary Schools in Kaduna state.

4.7. Discussions of Findings

The analysis of the data collected for this study provided some insight into the subject matter of this research work: Impact of Computer Assisted Instruction on Senior Secondary School student’s academic performance in Civic Education. The study was made up of a sample of five hundred and sixty students (560) subdivided into experiment and control group, rural and urban located schools. The scores that each of the participant obtained in Civic Education Performance Test (CEPT) after being exposed to the treatments (teaching civic education using CAI and Teaching Civic Education using Conventional Teaching Methods) were analyzed and used to answer the formulated researched questions. At the same time, it was used in testing the formulated hypotheses for the study.

The first hypothesis attempted to establish whether significant difference existed in academic performance of the students under each of the treatment used in carrying out the study. The result of the hypothesis revealed p-value 0.000 < 0.05 alpha level. The mean score of students under CAI is approximately 61% while that of students under conventional teaching method is approximately 50%. The finding of the study is in alignment with the WAEC comment on students’ academic performance in civic education in the senses that the performance of the student under conventional teaching method in this study is at average level. Their performance in WAEC was not reported to
be at failure but to some extent encouraging. The study also revealed that CAI is capable of improving students’ academic performance in civic education better than when conventional teaching method is used. The finding confirmed Carrillo, Onofa and Ponce (2010) assertions that availability of IT in the classroom shifts the level of educational inputs and could thus, affects students learning outcomes. It increases vector of school input by providing infrastructures to school (Computer laboratories and software) and training to teachers; therefore, this can potentially improve learning outcomes, more so, exposure to IT may increase the cognitive abilities of students allowing them to learn faster. Tinio (2010), in her study observed that IT can enhance the quality of education in several ways: by increasing learner motivation and engagement, by facilitating the acquisition of basic skills, and by enhancing teacher training. IT are also transformational tools which, when used appropriately can promote the shift to a learner-centered environment. CAI is a branches under IT (Information Technology) it has been proved through students’ academic performance in this study is more effective in improving students’ academic performance.

The second hypothesis was to establish whether there was difference in the academic performance of students taught concept of limitation of human right using computer and those taught using conventional teaching method. The statistical output of Independent t-test shown a significant difference. Inferring from table 15 that revealed observed p-values (2tailed) of .000 < 0.05 alpha level. The mean score of the two groups further shown the group that perform better than other. Students under CAI mean scores is higher (Approximately 9/10) compare to mean score of those under conventional teaching methods (Approximately 7/10). This hypothesis was rejected because there was significant difference between the academic performances of students taught limitation of human right using Computer Assisted Instruction and those taught using conventional
method in Senior Secondary Schools in Kaduna State. This shows that CAI is more effective when teaching concept related to limitation of human right.

The third hypothesis was formulated to know whether location of the school (rural and urban) can influence students’ performance when CAI is used in teaching Civic education. As shown in table 15, there is no significance difference in academic performance of students from rural and those from urban area when CAI is used for teaching civic education (responsible parenthood). As revealed in table 15, the calculated p-value $0.620 > 0.05$ alpha level. The average mean scores of both groups is approximately $10/16$.

The forth hypothesis examine difference in the academic performance of students’ taught democracy and national development using CAI and those taught using conventional teaching method in order to know whether CAI is effective for topic like Democracy and National development. Going by the output of independent t-test used for testing data obtained from the two groups, the output revealed that there was significant difference in the academic performance of the control group and experimental group. Inferring from table 17 that revealed calculated p-values (2tailed) of $.000 < 0.05$ alpha level. The mean score of the two groups shown that students under CAI mean scores is higher (Approximately $9/12$) compare to mean score of those under conventional teaching methods (Approximately $6/12$). This show that when CAI is used for enhancing teaching and learning, it has potentiality of improving students’ academic performance than what conventional teaching method can do.

The fifty hypothesis was on danger of political apathy as one of the topic coined to enlighten learner on importance of participating in political activities and how good governance can emerged via participation in political activities. A comparison of academic performance of the two groups (CAI & Conventional) shown a significant
difference in their academic performance. Inferring from table 18 that revealed calculated p-values (2tailed) of .000 < 0.05 alpha level. Looking at the mean score of the two groups, students under CAI mean scores is higher (Approximately 9/14) compare to mean score of those under conventional teaching methods (Approximately 6/14).

The sixth hypothesis shows the difference in the academic performance of senior secondary school students taught citizenship using CAI and those taught using conventional teaching method. The statistical analysis as shown in table 19 shown that there was no significant difference in the academic performance of the student under both CAI and those under conventional teaching method. Inferring from table 19 that revealed calculated p-values (2tailed) of .098 > 0.05 alpha level. Looking at the mean score of the two groups, students under CAI mean scores is almost the same (Approximately 9/14) with means score of those under conventional teaching methods (Approximately 8/14). The mean scores of the two group shown that CAI to some extent is effective because it maintained the same score with conventional teaching method.

Inferring from sample topics and their revealed significant difference, it can be concluded that irrespective of the nature of the topic selected from civic education curriculum, CAI can be used to improve student academic performance better than what they do learn when conventional teaching method is used, even in some topic (1 out of four topics) that CAI seen not to be very effective, students still maintained the same score with scores of the conventional teaching methods. According to Adedamola (2015), using ICT in teaching and learning does means that students’ performance can be at the same level nor do their performance in all topics can be the same but it is worthy of note that ICT; depends on how it’s being packaged has greater potentiality of improving students’ academic performance than conventional teaching method does.

The study further examines the academic performance of students from each of Senatorial zones taught civic education using CAI and it was found that there was no
significant difference. The average of three zones academic performance stood at 60%.
This shows that there was commonality in the environment and conditions in which the students were subjected to.
CHAPTER FIVE
SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

The study was based on impact of computer assisted instruction on academic performance of senior secondary school student in Kaduna State. Chapter one deals with the background to study. The chapter stated the problem of the study, objectives of the study, research questions and the null hypotheses. The chapter also feature basic assumptions, significance of the study and scope of the study.

Chapter two titled the review of related literature was on conceptual clarifications of the key variables in the study, featured theoretical framework and review all the related literature to the study. Chapter three discussed the methodology adopted to carry out the research work. The chapter was arranged in sequential order ranging from research design, population of the study, sample and sampling techniques, instrumentation, procedure for data collection and procedure for data analysis.

Chapter four presented analysis and discussion of results. In this chapter, the formulated research questions were answered, the formulated hypotheses were tested. The chapter also discussed major finding of the study. Chapter five summarized the research work. In the chapter, conclusion was drawn, recommendations and suggestion for further study was made.

5.2 Conclusion

Based on the findings of the study the following conclusions were established:

Computer Assisted Instruction (CAI) impacted students’ academic performance positively when used in teaching civic education at Senior Secondary school level by improving students’ academic performance above average.
CAI positive impact of improving students’ academic performance in civic education among Secondary school students in Kaduna State is irrespective of topics selected from civic education curriculum contents even in few topics (1 out of 4 topics) that CAI seen not been very effective, students still maintained same scores with conventional teaching method. CAI positive impact of improving students’ academic performance in civic education among Secondary school students in Kaduna State is irrespective of school location whether in the rural areas or urban areas.

5.3 Recommendations

Based on the outcome of the study, the following recommendations were advanced for the improvement of academic performance of students in Civic Education;

1. Civic Education teachers should embrace Computer Assisted instruction in teaching Civic Education in Senior Secondary School as it’s capable of improving students’ academic performance in civic education irrespective of topics and the school location.

2. Government should provide facilities in various school both in rural and urban area that supported Computer Assisted Instruction. These facilities range from infrastructural facilities (Digital Centre, Computer Laboratory rooms) equipment (projector, computers) and consumable materials (software, Computer Assisted Instruction Software, White board and so forth).

3. Use of Computer for Instruction should be incorporated into Teacher Education Curriculum in order for potential teachers to acquire necessary skills needed to impact knowledge via Computer Assisted Instruction.
4. Computer Assisted Instruction facilities should be provided by government and none-governmental organization, the school administration should ensure the proper maintenance and encourage their teachers to make use of the facilities in order to improve the students’ academic performance.

5. In-service training should be made compulsory for all teachers after some years in service so as to keep abreast with innovative techniques in teaching and learning process via computer assisted instruction.

6. There should be employment of specialists that will handle School Digital Centre, this person(s) will also be responsible for maintaining ICT related facilities in possession of the school. The specialist will also help teachers in packaging their instructional content to comply with computer assisted instruction.

5.4 Contributions to Knowledge

The study was able to clarify the disturbing connotation regarding reason while civic education teachers are not using Computer assisted instruction in order to improve academic performance of the students. Among the reasons often suggested by authors is whether CAI is not effective in teaching civic education. The findings of this study established that CAI is very effective in improving students’ academic performance therefore other reasons for none utilization CAI can be researched into.

Furthermore, the designed Computer Aided instruction could be adapted by civic education teachers while teaching the similar topic covered in this study. The instrument will also serve as template for designing Computer Assisted Instruction Using PowerPoint.
5.5 **Suggestions for further studies**

The study was restricted to Senior Secondary schools; the same study could be carried out at Junior secondary school level to know whether there will be level disparity in students’ academic performance when CAI is use to teach civic education. Furthermore, the study only examines some selected topics in civic education curriculum, other topic may be used to get better understanding of effectiveness of CAI in all the topics that made up civic education curriculum. The study can also be carried out in other state of the nation to validate reliability of the findings of this study.
REFERENCES


Akintunde, S. A. (2009). *State of ICTs in Tertiary Institutions in Nigeria: Window on the Universities.* Retrieved on 20th March 2013 from akins@unijos.edu.ng or sakinton@gmail.com


United States Legal Unit, (n.d). *Computer Education Law and Legal definition definition.uslegal.com>uslegal.legal definition Home>B*


**CANDIDATES' WEAKNESSES**

Candidates' weaknesses as reflected in their work included:

1. **Violation of Rubrics** Many candidates failed to adhere to the rubrics of the paper and therefore answered less than the required number of questions.

2. **Illegible Handwriting** The handwriting of many candidates were not legible and therefore unreadable.

3. **Poor Expression/Grammatical Tenses** Many candidates had poor mastery of English Language. This made it nearly impossible for the candidates to clearly explain their points in order to score high marks.

4. **Improper Numbering of Questions Answered** Some candidates did not number their answers and some wrote wrong numbers against different answers.

5. **Cramming of Answers on the Same Page** Some candidates crammed answers of many questions on the same page.

6. **Lack of Proper Understanding of the Subject** Many candidates did not properly understand the subject matter.

7. **Lack of Understanding of the Demands of the Questions** Many candidates did not understand the demands of the questions, e.g. most of them resorted to mere mentioning of points instead of giving detailed explanation.

8. **Lack of Communication/Presentation Skills** Many candidates were unable to clearly explain the identified points; a good number of them cannot communicate their thoughts properly even though they had the idea.

**SUGGESTED REMEDIES TO OVERCOME CANDIDATES' WEAKNESSES**

Candidates should be urged to strictly adhere to instructions/rubrics of the subject as failure to abide by the demands of the rubrics may affect their performances.

Teachers should be mandated to regularly check and mark students' notes. This way, teachers can ensure that spellings are correct and those with illegible handwriting can improve.

Schools should prepare their students for external examinations by teaching them to answer only one question on a page and to number their answers correctly.

Qualified teachers should be employed by schools and relevant textbooks procured.

Concerted efforts should be made by candidates to cover every aspect of the Syllabus before the examination. Teachers should also pay more attention to the teaching of all topics in the Syllabus.

Candidates should, in addition to reading their textbooks, listen to news and read newspapers as well as magazines to widen their knowledge of the subject.

Candidates should explain their points to earn full marks. Candidates should therefore be advised to read questions carefully, interpret them correctly and give detailed answers.

Candidates should improve their ability to communicate in order to be able to clearly and precisely explain points.

9. Candidates should be advised to study their recommended textbooks adequately in order to give concise and comprehensive answers to questions.
APPENDIX B
REQUEST LETTER

Curr & Instruction. Section.,
Dept. of Educ. Foundations &
Curriculum, Faculty of
Education, Ahmadu Bello
University, Zaria.

REQUEST TO ANSWER RESEARCH QUESTIONS

Dear Respondent,

This research instrument is designed to assess the IMPACT OF COMPUTER-
ASSISED INSTRUCTION ON STUDENTS’ PERFORMANCE IN CIVIC
EDUCATION IN SENIOR SECONDARY SCHOOLS IN KADUNA STATE,
NIGERIA. You are please, required to respond to the questions by ticking (√) the most
appropriate to you. Kindly answer the questions objectively so as to enhance the quality
of the research. I sincerely thank you for your assistance.

Yours Faithfully,

GARBA, Jummai Andil
P14EDFC9001
APPENDIX C

Lesson Units

The selected topics from SS II Civic Education curriculum for this research include the following:

1. Citizenship Education
2. Democracy and National Development
3. Dangers of Political Apathy
4. Human Rights
5. Drugs and Drug Abuse
6. Responsible Parenthood
7. Traffic Regulations
8. Relationships
APPENDIX D

LESSON PLAN FOR CONTROL GROUP

WEEK ONE

Class - SS II

Average age of Students - 15 years

Sex - Boys/Girls

Duration - 40 minutes

Subject - Civic Education

Topic - Citizenship education


Instructional Materials - Pictures or photographs of citizens at functions such as Election, environmental sanitation. Posters showing government activities such as road construction, housing estate and so forth.

Instructional Method - Lecture method

Previous Knowledge - The students are aware of the importance of citizenship education in the society.

Behavioural Objectives - At the end of classroom discussion, students should be able to:

i. define and explain the meaning of citizenship education.

ii. identify and describe the duties of the citizens to their communities.

iii. mention and describe the obligation of citizens in their community.

Presentation - The lesson is presented in the following steps:

Step I - The teacher explains the meaning of citizenship education to the students as that aspect of education which enables people to make their own decisions and to take responsibility for their own lives.

Step II - The teacher explains the duties of a citizen to his or her community to the students. For example being obedient to rules and regulations of their country, respect the right of others, vote wisely and choose
candidates who can serve the people in the government and in the community.

**Step III**
- The teacher explains by identifying and describing the obligation of a citizen to their community. Involve in environmental sanitation, promotion of peace and order and so forth.

**Students’ Activity**
- The teacher asks the students to ask questions on areas of doubt or difficulty.

**Summary**
- The teacher concludes by explaining more on the duties and obligation of citizens to their communities.

**Evaluation**
- Teacher asked the students to explain what citizenship education is all about. Identify and describe the duties and obligation of citizens to their communities.

**Assignment**
- The students are to explain their duties and obligation as citizens of a country.
### WEEK TWO

<table>
<thead>
<tr>
<th>Class</th>
<th>SS II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average age of Students</td>
<td>15 years</td>
</tr>
<tr>
<td>Sex</td>
<td>Boys/Girls</td>
</tr>
<tr>
<td>Duration</td>
<td>40 minutes</td>
</tr>
<tr>
<td>Subject</td>
<td>Civic Education</td>
</tr>
<tr>
<td>Topic</td>
<td>Democracy and National Development</td>
</tr>
<tr>
<td>Sub-topic</td>
<td>Capitalist democracy</td>
</tr>
</tbody>
</table>

**Reference Book**


**Instructional Materials**

- Pictures or photographs of members in senate and House of Representative, posters of labour leaders protesting unemployment and also Civic Education textbook and so forth.

**Instructional Method**

- Lecture Method

**Previous Knowledge**

- The students have been taught the importance of citizenship.

**Behavioural Objectives**

- At the end of classroom discussion, students should be able to:
  
  i. define and explain capitalist democracy and its characteristics.
  
  ii. describe how political parties compete for power through elections.
  
  iii. explain how employment can alleviate poverty.
  
  iv. describe the factors which promote guaranteed employment

**Presentation**

- The lesson is presented in the following steps:

**Step I**

- The teacher explains the meaning of capitalist democracy and its characteristics as a political economic and social system and ideology based on a tripartite arrangement of a market-based economy. It is characterised of polity which stipulates a number of parliamentary parties and practiced in a federal (federalism) system of government.
<table>
<thead>
<tr>
<th>Step II</th>
<th>- The teacher leads the students to explain how competition for power among political parties is carried out.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step III</td>
<td>- The teacher explains to the students the importance of employment in alleviating poverty. Once people are gainfully employed, they will be able to provide for themselves and assist others and this will reduce the level of poverty in the society.</td>
</tr>
<tr>
<td>Step IV</td>
<td>- The teacher explains the importance of responsible governance and describe the factors which promote guaranteed employment.</td>
</tr>
<tr>
<td>Students’ Activity</td>
<td>- The teacher asks the students to ask question on areas of difficulty on how employment can alleviate poverty.</td>
</tr>
<tr>
<td>Summary</td>
<td>- The teacher concludes the lesson with more explanation on how political parties compete for power through elections by selling off their ideas through manifestoes and campaigns.</td>
</tr>
<tr>
<td>Evaluation</td>
<td>- The teacher asks the students to define and explain capitalist democracy and its characteristics, describe how political parties compete for power through elections and explain how employment can alleviate poverty in the society.</td>
</tr>
<tr>
<td>Assignment</td>
<td>- The students are to write an essay on the activities of their representatives in the senate and houses of assembly.</td>
</tr>
</tbody>
</table>
### WEEK THREE

<table>
<thead>
<tr>
<th>Class</th>
<th>SS II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average age of Students</td>
<td>15 years</td>
</tr>
<tr>
<td>Sex</td>
<td>Boys/Girls</td>
</tr>
<tr>
<td>Duration</td>
<td>40 minutes</td>
</tr>
<tr>
<td>Subject</td>
<td>Civic Education</td>
</tr>
<tr>
<td>Topic</td>
<td>Dangers of Political Apathy</td>
</tr>
</tbody>
</table>

#### Reference Book

#### Instructional Materials
- Pictures or photographs of citizens during political activities and civic responsibilities.

#### Instructional Method
- Lecture method

#### Previous Knowledge
- The students have been taught capitalist democracy and its characteristics.

#### Behavioural Objectives
- At the end of classroom discussion, students should be able to:
  
  i. define and explain political apathy.
  
  ii. describe the factors that cause political apathy.
  
  iii. explain the dangers of political apathy and ways of fighting political apathy.

#### Presentation
- The lesson is presented in the following steps:

**Step I**
- The teacher defines and explain political apathy as the difference on the part of citizens of any country as regards their attitude towards political activities, for instance, elections, public opinions, civic responsibilities, and so forth.

**Step II**
- The teacher leads the students to describe the factors that cause political apathy. Such as laziness, fear of making decision, inadequate education, nostalgia, complacency, propaganda device, religious belief, cultural norms, lack of political socialization, and poor political culture.

**Step III**
- The teacher explains to the students the dangers of political apathy and ways of fighting political apathy.
<table>
<thead>
<tr>
<th>Students’ Activity</th>
<th>- The teacher asks the students to ask questions on areas of doubt on the dangers of political apathy and ways of fighting political apathy.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary</td>
<td>- The teacher concludes the lesson with more explanation on the ways of fighting political apathy.</td>
</tr>
<tr>
<td>Evaluation</td>
<td>- The teacher evaluates the lesson by asking the students to define and explain political apathy, explain the dangers of political apathy.</td>
</tr>
<tr>
<td>Assignment</td>
<td>- The students are to explain why leaders fail to protect the interest of their followers.</td>
</tr>
</tbody>
</table>
### WEEK FOUR

<table>
<thead>
<tr>
<th>Class</th>
<th>SS II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average age of Students</td>
<td>15 years</td>
</tr>
<tr>
<td>Sex</td>
<td>Boys/Girls</td>
</tr>
<tr>
<td>Duration</td>
<td>40 minutes</td>
</tr>
<tr>
<td>Subject</td>
<td>Civic Education</td>
</tr>
<tr>
<td>Topic</td>
<td>Human Rights</td>
</tr>
</tbody>
</table>

**Reference Book**

**Instructional Materials**
- Pictures depicting human rights activities, charts showing the characteristics of human rights.

**Instructional Method**
- Lecture method.

**Previous Knowledge**
- The students have been taught the meaning of political apathy.

**Behavioural Objectives**
- At the end of classroom discussion, students should be able to:
  
  i. say the meaning of human rights.
  
  ii. list and discuss the characteristics of human rights.
  
  iii. classify and differentiate between the categories of human rights.

**Presentation**
- The lesson is presented in the following steps:

  **Step I**
  - The teacher explains the meaning of human rights. Freedom to enjoy what a state provides for her citizens by reason of being a human being. Not being discriminated against for whatsoever reason.

  **Step II**
  - The teacher guides the students to list and explain the characteristics of human rights. For example, universality of human rights; inalienability of human rights and so forth.

  **Step III**
  - The teacher leads the student to categorise and differentiate between the categories of human rights, civic and political rights, economic and social rights.

**Students’ Activity**
- The teacher asks the students to ask question on areas of doubt on the characteristics of human rights.
<table>
<thead>
<tr>
<th>Summary</th>
<th>- The teacher concludes by explaining more on the different categories of human rights.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation</td>
<td>- The teacher asks the students to explain the meaning of human rights. List characteristics of human rights and categorise human rights.</td>
</tr>
<tr>
<td>Assignment</td>
<td>- The students are to categorise human rights.</td>
</tr>
</tbody>
</table>
WEEK FIVE

Class - SS II
Average age of Students - 15 years
Sex - Boys/Girls
Period - 4th
Duration - 40 minutes
Subject - Civic Education
Topic - Drugs and drug abuse
Instructional Materials - Civic Education text book, samples from drug law enforcement agencies, photographs and pictures of victims of drug abuse.
Instructional Method - Lecture Method.
Previous Knowledge - The students have been taught the meaning of human rights, emergency periods and the limitations of human rights due to some happenings in the society.
Behavioural Objectives - At the end of classroom discussion, students should be able to:
   i. define drug and drug abuses.
   ii. Identify types of drugs and how they can be abused.
   iii. List and explain the cause of drug abuse among the youths.
Presentation - The lesson is presented in the following steps:
Step I - The teacher explains the meaning of drug and drug abuse. Taking of drugs for positive effects on the prescription of a medical personnel and when taken in excess leads to negative effects.
Step II - The teacher asks the student to identify types of drugs and how they can be abused. Pain killers, sleeping pills, cocaine, marijuana, heroin, methamphetamine and so forth.
Step III - The teacher explains the cause of drug abuse among the youths. They include peer group pressure,
low self-esteem, inadequate coping skills and curiosity. Some people take drugs in order to escape physical and emotional discomfort helps to curb feelings of depression or deal with stress.

<table>
<thead>
<tr>
<th>Students’ Activity</th>
<th>- The teacher asks the students to ask questions on areas of difficulty on the causes of drug abuse among the youths.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary</td>
<td>- The teacher concludes by explaining more on the causes of drug abuse.</td>
</tr>
<tr>
<td>Evaluation</td>
<td>- The teacher asks the students to define drug and drug abuse and how they can be abused and also explains the causes of drug abuse.</td>
</tr>
<tr>
<td>Assignment</td>
<td>- The students should identify different drug samples commonly abused.</td>
</tr>
</tbody>
</table>
WEEK SIX

Class - SS II
Average age of Students - 15 years
Sex - Boys/Girls
Duration - 40 minutes
Subject - Civic Education
Topic - Drugs and drug abuse
Sub-topic - Symptoms of drug
Instructional Materials - Photographs and pictures of symptoms of drug abuse.
Instructional Method - Lecture method.
Previous Knowledge - The students have been taught the meaning of drugs and drug abuse.
Behavioural Objectives - At the end of classroom discussion, students should be able to:

i. Describe the symptoms of drug.

ii. Demonstrate some behaviours of an addict.

iii. Explain ways of preventing drug abuse.

Presentation - The lesson is presented in the following steps:

Step I - The teacher describes the symptoms of drug to include violence, depression, allergy, psychology change among others.

Step II - The teacher leads the student to demonstrate some behaviours of an addict.

Step III - The teacher explains ways of preventing drug abuse. Which are: advocacy and reorientation, education, counselling approach, enactment and implementation of drug laws, equipping of drug law enforcement agencies and agents, monitoring of internet content, and parents and guardians should clean out their medicine cabinet.
Students’ Activity - The teacher asks the students to ask question on areas of doubt on some behaviours of an addict and how to prevent drug abuse.

Summary - The teacher concludes by explaining more on the symptoms of drug and how to prevent drug abuse.

Evaluation - The teacher evaluates the lesson by asking the students to explain some of the symptoms of drug.

Assignment - The students should write an essay on symptoms and some behaviours of drug addicts.
WEEK SEVEN

Class - SS II
Average age of Students - 15 years
Sex - Boys/Girls
Duration - 40 minutes
Subject - Civic Education
Topic - Responsible Parenthood

Instructional Materials - Pictures and photographs showing caring parents.
Instructional Method - Lecture method
Previous Knowledge - The students have been taught about drugs and drug abuse.

Behavioural Objectives - At the end of classroom discussion, students should be able to:

i. Explain the meaning of responsible parenthood.

ii. State and discuss the roles of responsible parents.

iii. Explain the importance of responsible parenthood in national development.

Presentation - The lesson is presented in the following steps:

Step I - The teacher explains the meaning of responsible parenthood as the bestowed responsibilities of parents (father and (or) mother) to their offspring.

Step II - The teacher state and discuss the roles of responsible parents to include: providing for the household, caring, education, good home training, building positive concept in the children, teach them proper value, and create right environment.

Step III - The teacher leads the students to explain the importance of responsible parenthood in national development.

Students’ Activity - The teacher asks the students to ask question on areas of doubt on the roles of responsible parents.

Summary - The teacher concludes the lesson by explaining more on the roles of responsible parents.
<table>
<thead>
<tr>
<th><strong>Evaluation</strong></th>
<th>The teacher evaluates the lesson by asking the students to list and explain the importance of responsible parenthood in national development.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assignment</strong></td>
<td>The students should enumerate the roles of responsible parents apart from the ones listed above.</td>
</tr>
</tbody>
</table>
### WEEK EIGHT

<table>
<thead>
<tr>
<th>Class</th>
<th>SS II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average age of Students</td>
<td>15 years</td>
</tr>
<tr>
<td>Sex</td>
<td>Boys/Girls</td>
</tr>
<tr>
<td>Duration</td>
<td>40 minutes</td>
</tr>
<tr>
<td>Subject</td>
<td>Civic Education</td>
</tr>
<tr>
<td>Topic</td>
<td>Traffic Regulations</td>
</tr>
</tbody>
</table>

**Reference Book**


**Instructional Materials**

- Pictures and photographs showing traffic lights with traffic regulations officers.

**Instructional Method**

- Lecture method

**Previous Knowledge**

- The students have learnt on the responsible parenthood.

**Behavioural Objectives**

- At the end of classroom discussion, students should be able to:
  
i. Explain the meaning of traffic regulations.
  
ii. State and discuss the roles of individuals in maintaining traffic regulation.
  
iii. Explain the roles of government in maintaining traffic regulations.

**Presentation**

The lesson is presented in the following steps:

**Step I**

- The teacher explains the meaning of traffic regulations to the students. Traffic regulations are the official traffic rules made by the government and enforced by the road safety agency of Nigeria called Federal Road Safety Commission of Nigeria (FRSCN).

**Step II**

- The teacher state and discuss the roles of individuals in maintaining traffic regulation to include: engaging in defensive driving, study the traffic offences and signs, do the work of driver in the event of road traffic crash among others.

**Step III**

- The teacher leads the students to explain the roles of government in maintaining traffic regulations.
<table>
<thead>
<tr>
<th><strong>Students’ Activity</strong></th>
<th>- The teacher asks the students to ask questions on areas of difficulty on the roles of individuals in maintaining traffic regulation.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Summary</strong></td>
<td>- The teacher concludes the lesson by explaining more on the roles of government in maintaining traffic regulations.</td>
</tr>
<tr>
<td><strong>Evaluation</strong></td>
<td>- The teacher evaluates the lesson by asking the students to define traffic regulations and explain the roles of government in maintaining traffic regulations.</td>
</tr>
<tr>
<td><strong>Assignment</strong></td>
<td>- The students should list at least 15 traffic regulations known to them.</td>
</tr>
</tbody>
</table>
WEEK NINE

Class - SS II

Average age of Students - 15 years

Sex - Boys/Girls

Duration - 40 minutes

Subject - Civic Education

Topic - Relationships

Sub-topic - Interpersonal Relationship


Instructional Materials - Civic Education text book, pictures showing people interacting, Illustrating diagrams.

Instructional Method - Lecture method.

Previous Knowledge - The students have been taught what traffic regulations means, the different types of traffic regulations and the roles of individuals and government agencies in maintaining traffic regulations.

Behavioural Objectives - At the end of classroom discussion, students should be able to:

   i. Explain the meaning of interpersonal relationship.

   ii. Enumerate and explain types of interpersonal relationships.

   iii. State the basic skills that promote interpersonal relations.

Presentation - The lesson is presented in the following steps:

Step I - The teacher asks the students to explain the meaning of interpersonal relationship. It is the interaction between individuals and another including their rights and duties or obligation in the neighbourhood either as individuals or government.

Step II - The teacher explains the types of interpersonal relationships after listing them such as relationship between man and woman, relationship between individuals and government, among children and parents and peers.
Step III - The teacher guides the students to state the skills that promote interpersonal relations such as Honesty, tolerance, and kindness and so forth.

Students’ Activity - The teacher asks the students to ask question on areas of doubt or difficulty on interpersonal relationship.

Summary - The teacher explains more on the skills that promote interpersonal relations.

Evaluation - The teacher asks the students to explain the meaning of interpersonal relationship, enumerate and explain the types of interpersonal relations and state some skills that promote interpersonal relations.

Assignment - The students are to draw pictures showing people interacting.
WEEK TEN

Class - SS II

Average age of Students - 15 years

Sex - Boys/Girls

Duration - 40 minutes

Subject - Civic Education

Topic - Relationships

Sub-topic - Inter-Communal Relationship


Instructional Method - Lecture method

Previous Knowledge - The students have been taught the meaning of interpersonal relationships and the skills that promote interpersonal relationships.

Behavioural Objectives - At the end of classroom discussion, students should be able to:

i. Explain the meaning of inter-communal relationship.

ii. State the importance of inter-communal relationships.

iii. Enumerate and explain the skills needed for resolving inter-communal conflicts.

Presentation - The lesson is presented in the following steps:

Step I - The teacher explains the meaning of inter-communal relationship. It deals with the mutual existence or participation of a member of a community. When members of a community live in peace.

Step II - The teacher leads the student to state the importance of inter-communal relationships. For instance, it promotes development, enhances security and business.

Step III - The teacher enumerates and explains the skills for resolving inter-communal conflicts, to include Dialogue,
problem solving, mediation. Consequences of inter community conflicts, interruption of socio economic activities. Diseases and poor environmental.

**Students’ Activity**  
- The teacher asks the students to ask question on areas of importance of inter-communal relationships.

**Summary**  
- The teacher concludes the lesson by explaining more on the consequences of inter community conflicts.

**Evaluation**  
- The teacher asks the students to explain the meaning of inter-communal relationships, state the importance of inter-personal relationships, enumerate and explain the consequences of inter community conflicts.

**Assignment**  
- The students are to list and explain the consequences of inter community conflicts.
APPENDIX E

LESSON PLAN FOR EXPERIMENTAL GROUP

WEEK ONE

Class - SS II

Average age of Students - 15 years

Sex - Boys/Girls

Duration - 40 minutes

Subject - Civic Education

Topic - Citizenship education


Instructional Materials - Computer package, CD-ROM, Server, projector and Scalar, and Audio-visual resources.

Instructional Method - Computer-assisted Instruction

Previous Knowledge - The students are aware of the importance of citizenship education in the society.

Behavioural Objectives - At the end of classroom discussion, students should be able to:

i. Define and explain the meaning of citizenship education.

ii. Identify and describe the duties of the citizens to their communities.

iii. Mention and describe the obligation of citizens in their community.

Presentation - The lesson is presented in the following steps:

Step I - The teacher explains the meaning of citizenship education with the aid of projected instructional package as that aspect of education which enables people to make their own decisions and to take responsibility for their own lives.

Step II - The teacher illustrates the duties of a citizen to his or her community to the students using computer and projector. For examples being obedient to rules and regulations of their country, respect the right of others, vote wisely and choose candidates who can serve the people in the government and in the community.
Step III - The teacher identifies and shows the obligation of a citizen to their community through the projected images. Involve in environmental sanitation, promotion of peace and order and so forth.

Students’ Activity - The teacher guides the students to discuss the duties of the citizens to their communities using the aid of computer to display some citizens activity in their community.

Summary - The teacher concludes by explaining more on the duties and obligation of citizens to their communities.

Evaluation - Teacher asked the students to explain what citizenship education is all about. Identify and describe the duties and obligation of citizens to their communities.

Assignment - The students are to explain their duties and obligation as citizens of a country.
WEEK TWO

Class - SS II
Average age of Students - 15 years
Sex - Boys/Girls
Duration - 40 minutes
Subject - Civic Education
Topic - Democracy and National Development
Sub-topic - Capitalist democracy

Instructional Materials - A projected pictures or photographs of members in Senate and House of Representative, labour leaders protesting unemployment.

Instructional Method - Computer-assisted Instruction

Previous Knowledge - The students have been taught the importance of citizenship.

Behavioural Objectives - At the end of classroom discussion, students should be able to:
   i. Define and explain capitalist democracy and its characteristics.
   ii. Describe how political parties compete for power through elections.
   iii. Explain how employment can alleviate poverty.
   iv. Describe the factors which promote guaranteed employment

Presentation - The lesson is presented in the following steps:

Step I - The teacher explains the meaning of capitalist democracy and its characteristics through the use of computer and projector as a political economic and social system and ideology based on a tripartite arrangement of a market-based economy. It is characterised of polity which stipulates a number of parliamentary parties and practiced in a federal (federalism) system of government.
<table>
<thead>
<tr>
<th>Step II</th>
<th>- The teacher leads the students to explain how competition for power among political parties is carried out.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step III</td>
<td>- The teacher shows the importance of employment in alleviating poverty using a computer. Once people are gainfully employed, they will be able to provide for themselves and assist others and this will reduce the level of poverty in the society.</td>
</tr>
<tr>
<td>Step IV</td>
<td>- The teacher displays on the projector the importance of responsible governance and describe the factors which promote guaranteed employment.</td>
</tr>
<tr>
<td>Students’ Activity</td>
<td>- The teacher guides the students to explain how employment can alleviate poverty using the aid of computer to illustrate this by displaying some pictures.</td>
</tr>
<tr>
<td>Summary</td>
<td>- The teacher concludes the lesson with more explanation on how political parties compete for power through elections by selling off their ideas through manifestoes and campaigns.</td>
</tr>
<tr>
<td>Evaluation</td>
<td>- The teacher asks the students to define and explain capitalist democracy and its characteristics, describe how political parties compete for power through elections and explain how employment can alleviate poverty in the society.</td>
</tr>
<tr>
<td>Assignment</td>
<td>- The students are to write an essay on the activities of their representatives in the senate and houses of assembly.</td>
</tr>
</tbody>
</table>
WEEK THREE

Class - SS II
Average age of Students - 15 years
Sex - Boys/Girls
Duration - 40 minutes
Subject - Civic Education
Topic - Dangers of Political Apathy
Instructional Materials - A projected pictures or photographs of citizens during political activities and civic responsibilities.
Previous Knowledge - The students have been taught capitalist democracy and its characteristics.
Instructional Method - Computer-assisted Instruction
Behavioural Objectives - At the end of classroom discussion, students should be able to:

i. Define and explain political apathy.

ii. Describe the factors that cause political apathy.

iii. Explain the dangers of political apathy and ways of fighting political apathy.

Presentation - The lesson is presented in the following steps:

Step I - The teacher displays some pictures on the projected instructional package to explain political apathy as the difference on the part of citizens of any country as regards their attitude towards political activities, for instance, elections, public opinions, civic responsibilities, and so forth.

Step II - The teacher highlighted the factors that cause political apathy using computer package. Such as laziness, fear of making decision, inadequate education, nostalgia, complacency, propaganda device, religious belief, cultural norms, lack of political socialization, and poor political culture.

Step III - The teacher uses computer and projector to explain to the students the dangers of political apathy and ways of fighting political apathy.
<table>
<thead>
<tr>
<th>Students’ Activity</th>
<th>- The teacher guides the students to explain the dangers of political apathy and ways of fighting political apathy with the aid of computer to display different pictures of cases of political apathy.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary</td>
<td>- The teacher concludes the lesson with more explanation on the ways of fighting political apathy.</td>
</tr>
<tr>
<td>Evaluation</td>
<td>- The teacher evaluates the lesson by asking the students to define and explain political apathy, explain the dangers of political apathy.</td>
</tr>
<tr>
<td>Assignment</td>
<td>- The students are to explain why leaders fail to protect the interest of their followers.</td>
</tr>
</tbody>
</table>
WEEK FOUR

Class - SS II
Average age of Students - 15 years
Sex - Boys/Girls
Duration - 40 minutes
Subject - Civic Education
Topic - Human Rights

Instructional Materials - A projected video of human rights activities with different diagrams showing characteristics of human rights.

Instructional Method - Computer-assisted Instruction

Previous Knowledge - The students have been taught the meaning of political apathy.

Behavioural Objectives - At the end of classroom discussion, students should be able to:

i. Say the meaning of human rights.

ii. List and discuss the characteristics of human rights.

iii. Classify and differentiate between the categories of human rights.

Presentation - The lesson is presented in the following steps:

Step I - The teacher illustrates and explains the meaning of human rights through the use of computer programme (PowerPoint). Freedom to enjoy what a state provides for her citizens by reason of being a human being. Not being discriminated against for whatsoever reason.

Step II - The teacher displays the list of characteristics of human rights on the computer. For example universality of human rights; inalienability of human rights and so forth.

Step III - The teacher categorised and differentiate between the categories of human rights, civic and political rights, economic and social rights through a projected information.
<table>
<thead>
<tr>
<th><strong>Students’ Activity</strong></th>
<th>- The teacher guides the students to discuss the characteristics of human rights.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Summary</strong></td>
<td>- The teacher concludes by explaining more on the different categories of human rights.</td>
</tr>
<tr>
<td><strong>Evaluation</strong></td>
<td>- The teacher asks the students to explain the meaning of human rights. List characteristics of human rights and categorise human rights.</td>
</tr>
<tr>
<td><strong>Assignment</strong></td>
<td>- The students are to categorise human rights.</td>
</tr>
</tbody>
</table>
# WEEK FIVE

<table>
<thead>
<tr>
<th>Class</th>
<th>SS II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average age of Students</td>
<td>15 years</td>
</tr>
<tr>
<td>Sex</td>
<td>Boys/Girls</td>
</tr>
<tr>
<td>Duration</td>
<td>40 minutes</td>
</tr>
<tr>
<td>Subject</td>
<td>Civic Education</td>
</tr>
<tr>
<td>Topic</td>
<td>Drugs and drug abuse</td>
</tr>
</tbody>
</table>

**Reference Book**

**Instructional Materials**
- A projected video, photographs and pictures of victims of drug abuse.

**Instructional Method**
- Computer-assisted Instruction

**Previous Knowledge**
- The students have been taught the meaning of human rights, emergency periods and the limitations of human rights due to some happenings in the society.

**Behavioural Objectives**
- At the end of classroom discussion, students should be able to:
  i. Define drug and drug abuses.
  ii. Identify types of drugs and how they can be abused.
  iii. List and explain the cause of drug abuse among the youths.

**Presentation**
- The lesson is presented in the following steps:

**Step I**
- The teacher displays and explain the meaning of drug and drug abuse with the aid of projected instructional package. Taking of drugs for positive effects on the prescription of a medical personnel and when taken in excess leads to negative effects.

**Step II**
- The teacher shows the different types of drugs and how they can be abused. Pain killers, sleeping pills, cocaine, marijuana, heroin, methamphetamine and so forth.

**Step III**
- The teacher explains the cause of drug abuse among the youths through a projected video clips. They include peer group pressure, low self-esteem, inadequate coping skills and curiosity. Some people take drugs in
other to escape physical and emotional discomfort helps to curb feelings of depression or deal with stress.

<table>
<thead>
<tr>
<th>Students’ Activity</th>
<th>- The teacher guides the students to debate on the types of drugs and how they can be abused by displaying some cases of drug abuse using computer.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary</td>
<td>- The teacher concludes by explaining more on the causes of drug abuse.</td>
</tr>
<tr>
<td>Evaluation</td>
<td>- The teacher asks the students to define drug and drug abuse and how they can be abused and also explains the causes of drug abuse.</td>
</tr>
<tr>
<td>Assignment</td>
<td>- The students should identify different drug samples commonly abused.</td>
</tr>
</tbody>
</table>
WEEK SIX

Class - SS II

Average age of Students - 15 years

Sex - Boys/Girls

Duration - 40 minutes

Subject - Civic Education

Topic - Drugs and drug abuse

Sub-topic - Symptoms of drug


Instructional Materials - A projected photographs and pictures of symptoms of drug abuse.

Instructional Method - Computer-assisted Instruction

Previous Knowledge - The students have been taught the meaning of drugs and drug abuse.

Behavioural Objectives - At the end of classroom discussion, students should be able to:

i. Describe the symptoms of drug.

ii. Demonstrate some behaviours of an addict.

iii. Explain ways of preventing drug abuse.

Presentation - The lesson is presented in the following steps:

Step I - Through the aid of computer and projector, the teacher illustrates the symptoms of drug to include violence, depression, allergy, psychology change among others.

Step II - The teacher through a projected video shows the students some behaviours of an addict.

Step III - The teacher displays on the projector, ways of preventing drug abuse. Which are: advocacy and reorientation, education, counselling approach, enactment and implementation of drug laws, equipping of drug law enforcement agencies and agents, monitoring of internet content, and parents and guardians should clean out their medicine cabinet.
<table>
<thead>
<tr>
<th><strong>Students’ Activity</strong></th>
<th>- The teacher guides the students to display some behaviours of an addict through the computer.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Summary</strong></td>
<td>- The teacher concludes by explaining more on the symptoms of drug and how to prevent drug abuse.</td>
</tr>
<tr>
<td><strong>Evaluation</strong></td>
<td>- The teacher evaluates the lesson by asking the students to explain some of the symptoms of drug.</td>
</tr>
<tr>
<td><strong>Assignment</strong></td>
<td>- The students should write an essay on symptoms and some behaviours of drug addicts.</td>
</tr>
</tbody>
</table>
WEEK SEVEN

Class - SS II
Average age of Students - 15 years
Sex - Boys/Girls
Duration - 40 minutes
Subject - Civic Education
Topic - Responsible Parenthood
Instructional Materials - A projected video, pictures and photographs of caring parents.
Instructional Method - Computer-assisted Instruction
Previous Knowledge - The students have been taught about drugs and drug abuse.
Behavioural Objectives - At the end of classroom discussion, students should be able to:
   i. Explain the meaning of responsible parenthood.
   ii. State and discuss the roles of responsible parents.
   iii. Explain the importance of responsible parenthood in national development.
Presentation - The lesson is presented in the following steps:
Step I - The teacher explains using aid of computer the meaning of responsible parenthood as the bestowed responsibilities of parents (father and (or) mother) to their offspring.
Step II - The teacher displays with the aid projector the roles of responsible parents to include: providing for the household, caring, education, good home training, building positive concept in the children, teach them proper value, and create right environment.
Step III - The teacher shows on the projector the importance of responsible parenthood in national development.
Students’ Activity - The teacher guides the students to discuss the roles of responsible parents.
Summary  
- The teacher concludes the lesson by explaining more on the roles of responsible parents.

Evaluation  
- The teacher evaluates the lesson by asking the students to list and explain the importance of responsible parenthood in national development.

Assignment  
- The students should enumerate the roles of responsible parents apart from the ones listed above.
WEEK EIGHT

<table>
<thead>
<tr>
<th>Class</th>
<th>SS II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average age of Students</td>
<td>15 years</td>
</tr>
<tr>
<td>Sex</td>
<td>Boys/Girls</td>
</tr>
<tr>
<td>Duration</td>
<td>40 minutes</td>
</tr>
<tr>
<td>Subject</td>
<td>Civic Education</td>
</tr>
<tr>
<td>Topic</td>
<td>Traffic Regulations</td>
</tr>
<tr>
<td>Instructional Materials</td>
<td>A projected pictures and photographs traffic lights with traffic regulations officers.</td>
</tr>
<tr>
<td>Instructional Method</td>
<td>Computer-assisted Instruction</td>
</tr>
<tr>
<td>Previous Knowledge</td>
<td>The students have learnt on the responsible parenthood.</td>
</tr>
<tr>
<td>Behavioural Objectives</td>
<td>At the end of classroom discussion, students should be able to:</td>
</tr>
<tr>
<td></td>
<td>i. Explain the meaning of traffic regulations.</td>
</tr>
<tr>
<td></td>
<td>ii. State and discuss the roles of individuals in maintaining traffic regulation.</td>
</tr>
<tr>
<td></td>
<td>iii. Explain the roles of government in maintaining traffic regulations.</td>
</tr>
<tr>
<td>Presentation</td>
<td>The lesson is presented in the following steps:</td>
</tr>
<tr>
<td>Step I</td>
<td>The teacher displays and explain the meaning of traffic regulations with the aid of projected instructional package. Traffic regulations are the official traffic rules made by the government and enforced by the road safety agency of Nigeria called Federal Road Safety Commission of Nigeria (FRSCN).</td>
</tr>
<tr>
<td>Step II</td>
<td>The teacher shows on the computer screen the roles of individuals in maintaining traffic regulation to include: engaging in defensive driving, study the traffic offences and signs, do the work of driver in the event of road traffic crash among others.</td>
</tr>
<tr>
<td>Step III</td>
<td>The teacher leads the students to explain the roles of government in maintaining traffic regulations.</td>
</tr>
</tbody>
</table>

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Students’ Activity  - The teacher guides the students to discuss the roles of individuals in maintaining traffic regulation.

Summary  - The teacher concludes the lesson by explaining more on the roles of government in maintaining traffic regulations.

Evaluation  - The teacher evaluates the lesson by asking the students to define traffic regulations and explain the roles of government in maintaining traffic regulations.

Assignment  - The students should list at least 15 traffic regulations known to them.
WEEK NINE

<table>
<thead>
<tr>
<th>Class</th>
<th>SS II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average age of Students</td>
<td>15 years</td>
</tr>
<tr>
<td>Sex</td>
<td>Boys/Girls</td>
</tr>
<tr>
<td>Duration</td>
<td>40 minutes</td>
</tr>
<tr>
<td>Subject</td>
<td>Civic Education</td>
</tr>
<tr>
<td>Topic</td>
<td>Relationships</td>
</tr>
<tr>
<td>Sub-topic</td>
<td>Interpersonal Relationship</td>
</tr>
<tr>
<td>Instructional Materials</td>
<td>A projected pictures of people interacting.</td>
</tr>
<tr>
<td>Instructional Method</td>
<td>Computer-assisted Instruction.</td>
</tr>
<tr>
<td>Previous Knowledge</td>
<td>The students have been taught what traffic regulations means, the different types of traffic regulations and the roles of individuals and government agencies in maintaining traffic regulations.</td>
</tr>
<tr>
<td>Behavioural Objectives</td>
<td>At the end of classroom discussion, students should be able to:</td>
</tr>
<tr>
<td></td>
<td>i. Explain the meaning of interpersonal relationship.</td>
</tr>
<tr>
<td></td>
<td>ii. Enumerate and explain types of interpersonal relationships.</td>
</tr>
<tr>
<td></td>
<td>iii. State the basic skills that promote interpersonal relations.</td>
</tr>
<tr>
<td>Presentation</td>
<td>The lesson is presented in the following steps:</td>
</tr>
<tr>
<td>Step I</td>
<td>The teacher displays a picture with the aid of computer screen and explain the meaning of interpersonal relationship. It is the interaction between individuals and another including their rights and duties or obligation in the neighbourhood either as individuals or government.</td>
</tr>
<tr>
<td>Step II</td>
<td>The teacher shows the types of interpersonal relationships after listing them such as relationship between man and woman, relationship between individuals and government, among children and parents and peers.</td>
</tr>
<tr>
<td>Step III</td>
<td>- The teacher guides the students to click on the skills that promote interpersonal relations such as Honesty, tolerance, and kindness and so forth.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Students’ Activity</td>
<td>- The teacher guides the students to discuss the basic skills that promote interpersonal relations.</td>
</tr>
<tr>
<td>Summary</td>
<td>- The teacher explains more on the skills that promote interpersonal relations.</td>
</tr>
<tr>
<td>Evaluation</td>
<td>- The teacher asks the students to explain the meaning of interpersonal relationship, enumerate and explain the types of interpersonal relations and state some skills that promote interpersonal relations.</td>
</tr>
<tr>
<td>Assignment</td>
<td>- The students are to draw pictures showing people interacting.</td>
</tr>
</tbody>
</table>
WEEK TEN

Class - SS II
Average age of Students - 15 years
Sex - Boys/Girls
Duration - 40 minutes
Subject - Civic Education
Topic - Relationships
Sub-topic - Inter-Communal Relationship

Instructional Materials - A projected pictures of inter-communal relationship.
Instructional Method - Computer-assisted Instruction
Previous Knowledge - The students have been taught the meaning of interpersonal relationships and the skills that promote interpersonal relationships.

Behavioural Objectives - At the end of classroom discussion, students should be able to:

i. Explain the meaning of inter-communal relationship.

ii. State the importance of inter-communal relationships.

iii. Enumerate and explain the skills needed for resolving inter-communal conflicts.

Presentation - The lesson is presented in the following steps:

Step I - The teacher displays explains the meaning of inter-communal relationship on the computer screen. It deals with the mutual existence or participation of a member of a community. When members of a community live in peace.

Step II - The teacher guides the student to click and display the importance of inter-communal relationships. For instance, it promotes development, enhances security and business.
Step III - The teacher clicks and display on the computer screen the skills for resolving inter-communal conflicts, to include Dialogue, problem solving, mediation. Consequences of inter community conflicts, interruption of socio economic activities. Diseases and poor environmental.

Students’ Activity - The teacher guides the students to discuss the skills needed for resolving inter-communal conflicts.

Summary - The teacher concludes the lesson by explaining more on the consequences of inter community conflicts.

Evaluation - The teacher asks the students to explain the meaning of inter-communal relationships, state the importance of inter-personal relationships, enumerate and explain the consequences of inter community conflicts.

Assignment - The students are to list and explain the consequences of inter community conflicts.
APPENDIX F
TRAINING MANUAL

Contents:
1. The Purpose of the Study
2. The Role of Individual Assistants
3. Role of Research Assistant on Pre-test and Post-test
4. Research Assistant Roles in controlling external noise

The Purpose of the Study:

The study is an experimental research which focused on establishing whether Computer Assisted Instruction (CAI) is effective in improving academic performance of senior secondary school students in civic education in Kaduna State. The study was motivated by the WAEC chief examiner report that indicated that students exhibited some weaknesses in answering the WAEC paper 2 of May/June 2014 which was as a result in inappropriate pedagogy commonly used in implanting the civic education curriculum.

You are therefore recruited to participate in the process of carrying out the study in various Senior Secondary selected in Kaduna State. Ten weeks is scheduled for this exercise and as a research assistant you have you own personal and collaborative roles to play for the study to record desired success.

The Role of Individual Assistants

All the research Assistant except the computer experts are expected to performance the following roles:

1. Support the Researcher in setting up the teaching and learning environment for both experimental and control group

2. Support the researcher in getting students ready for instruction
3. Ensure that there is alternative power-supply in case of interruption

4. Distribution and retrieve of Pre-test and Post-test Instrument to the students

**Role of Research Assistant on Pre-test and Post-test**

1. support the researcher in monitoring the conduct of the test to avoid malpractice among students

2. Ensure that all students keep to the starting and stopping time for the conduct of the test

3. Attend to the students that seeks for teacher’s attention during the test

4. Ensure that all students write their names in attendance list issues by the researcher.

**Research Assistant Roles in Controlling External noise**

1. The research assistants are responsible for controlling any distracting situation/event as the teaching in going on. This may include students’ rooming about, noise from close by classes etc.
APPENDIX G

TREATMENT PACKAGE FOR EXPERIMENTAL GROUP

Table of Contents

• Citizenship Education
• Democracy and National Development
• Traffic Regulations
• Responsible Parenthood
• Relationship
• Drug and Drug Abuse
• Human Right
Citizenship Education

Look at the people in this image...
Is there any difference between the people? If any what are the differences:

Yes, there are differences:

1. Skin Colours  
2. Dresses  
3. Locations  
4. Hair Styles  
6. Languages  
8. Nose Shapes
What is Citizenship Education?
Citizenship Education is a type of education that instills in the people of a particular country the values, attitudes and knowledge needed to be an effective citizen.

Citizen of all countries are expected carry out their duty and enjoy fundamental rights stipulated in the country’s constitution. It only through this country can experience development.
Citizenship Education

Duties of good Citizens to their Country

* Payment of Tax
* Obeying rules and Regulation
* Loyal to our Country
* Voting during election

Obligations of good Citizens to their Country

* Sanitation
* Stand Attention why reciting National Anthem
* Promotion of peace and order
Citizenship Education
Evaluation

1. Who is a Citizen
2. What is citizenship Education
3. What will be the result of not obeying constituted authority from the video of Traffic Regulation you watch?

Summary

Every person on planet earth belong to a particular country of the word. The person own allegiance to his/her country. Is expected to enjoy fundamental rights of the citizens in that country so also he is expected to carry out his duties and obligation without compelling to do so. Country can only develop when the citizen carry out their duties effective.
Democracy and National Development
What is Democracy & Capitalist Democracy

Democracy is a system of government where people rule through their representative and there is higher degree of respect for fundamental human right.

Capitalist Democracy: Capitalist democracy is a type of political economy and social system where the means of production are owned by private organization and regulated by government via government policies.
Characteristics of Capitalist Democracy

* Independent of Central Bank
* Operating on the Platform of Federalism
* Constitutional rigidity
* Multi-party system
* Existence of interest group/Labour Union
Democracy and National Development
Alleviation of Abject poverty through Employment

Employment can be seen as a medium through which an individual gains sources of livelihood. When an individual is gainfully employed, he will be able to provide his personal and family need at the same time affect the life of people around him positively. Both government and private individual are responsible for generation of employment for unemployed. A wise say stated thus that “an idle hand is a workshop of devil. In Nigeria, individual are free to create legal business because we are operating missed economy."
Democracy and National Development
Democracy and National Development
In summary, every country is governed by a particular system of government and operating a particular economic system. The most advocated system of government is “democracy” which is government of people, by the people and for the people. This system of government respect in highest order fundamental human right. In most of democratic society, their economic system has always been capitalism where means of production is largely control by the private organization and government plays roles of maintaining laws and order governing their operation as private organization. This does not mean that government does not participate in business they also provide services that are so vital to the life of people such electricity, water, communication among others. That is why Nigeria economy is best described as mixed economy because both government and private individual/organization owns the means of production.

**Evaluation:** Find out five government police meant for regulating private organization providing service to Nigerian
### Political Apathy

#### What is Political Apathy

Political apathy can be defined as none participation of citizens in political activities. Political activities are: Voting during election, contesting for political office, expressing public opinion, belong to political parties, carry our other related civic responsibility.

#### Causes of Political Apathy

Courses of none participation in political activities include: Laziness, fear of making decision, inadequate education, nostalgia, complacency, propaganda device, religious belief, cultural norms, lack of political socialization, and poor political culture.
Political Apathy

Implication of Political Apathy

(A) When people refuse to participate in political activities, there will be emergency of bad governance,

(b) The government in power will lack public supports

(c) Government will implement policy that is not favourable to masses

(D) There will be high level of human right violation

Prevention of Danger of Political Apathy

Danger of political apathy can be prevented when all citizen develop good political culture, in other word, when citizen actively participate in political activities of their country. Criticises when necessary any policies of government that are not favourable to the masses. Remove nonperforming government their through their powerful weapon of Voting during electing
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Summary
Political Apathy is dangerous to any country aspiring for good governance because it's through being actively participated in political activities such as voting during election or contesting for political office that a bad leader can be voted out of power. The legitimacy of government is determined by the support government able to derived from masses.

Evaluation
1. Can lack of education being a barrier in participating in political activities, if yes/no, how?
2. In your own word, define political apathy
Fundamental Human Rights

What is Fundamental Human Rights?

Fundamental human rights are what every human being ought to enjoy by the virtue of being human irrespective of gender, age, socio-economic status or colour.

These rights are stated in every country constitutions and the punishment for violating them. Specifically, human right can be seen as freedom and entitlement that all citizen of particular country enjoy by the virtue of being a member of that country.
Fundamental Human Rights

Summary
Fundamental human rights are inalienable freedoms and entitlements that individual enjoys by the virtue of being a human. These rights under normal circumstances is to be enjoy from birth to death.

Though, there are limitations to human right such as: when an individual is under bankruptcy, being a prisoner, Psychologically disorderliness, under age etc.

Evaluation: Discuss why democracy is a best form of government ever
What is Drug:
Drugs are chemical substance use in Diagnosis, treatment, Cure or prevention of diseases or symptoms of diseases in man and anima.
A drug is meant for a particular Purpose, when used for different purpose or taken over dose of that drug is called Drug abuse.
Drug abuse means taken drug without medical Justification or Taken illicitly drugs
Drugs and Drug Abuse

Cannabis

Cocaine

Heroin

Ecstasy
Symptoms of Drug Abuse

Violence: Drug abuse can cause somebody to have violent behaviour intended to hurt or kill somebody. Drugs like cocaine's, caffeine's, nicotine's etc.

Depression: It is a state of feeling sad and anxious sometimes having physical symptoms of being unable to sleep. Drugs like alcohol, diazepam, barbiturates etc.
Drugs and Drug Abuse

Summary
Drug, when properly used according to specialist prescription, it restores human and even animal body system into normalcy but when being abused either by self-medication, taken of over dosage, or taken for no any other reason than pleasure, it not only capable of disorganize human body system but can lead to abnormal behavior. Therefore, as a good citizen your are expected to seek for specialized attention whenever you observed abnormal state of health.

Evaluation
1. What is difference between drug and drug abuse
What is Traffic Regulations?

Traffic regulations are the official traffic rules made by the government and enforced by the road safety agency of Nigeria called Federal Road Safety Commission of Nigeria (FRSCN).

To avoid accidents on our public road, all the road users (Driver, Pedestrian, passengers) has law guiding the use of road.

It is necessary to understand the road sign, traffic light, number of passengers per vehicle. It is only through this our road can be saved for all road users.
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Traffic Regulations
Government Roles in Traffic Regulation

- Enactment of Traffic Regulations laws
- Making the road safe for motorist, motorcyclist, passengers and animal by constructing new roads, pathways/pedestrian ways and rehabilitating bad roads.
- Regular payment of Traffic Regulation Agency workers
- Providing towing for evacuating breakdown vehicle from road
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<th>Summary</th>
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<td>Traffic Regulations are not punishment for mankind, they meant to minimized if not to eradicate accidents on our public roads. The regulation are enforce government agency. The road sign, traffic light, number of passenger pay vehicle, requirement to drive on public road, the plate number, etc are some of the regulations FRSCN being assigned to watch over.</td>
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What is ResponsibleParenthood?
Parenthood is a stage in which an individual becomes father or mother of a child or children. This stage is naturally assigned mandated responsibility from the parent to the children. Responsible parenthood therefore means degree at which parent are able to carry out their bestowed responsibilities of bringing up their children in the manner in which they will live a better life on earth, be useful to people around and their country in general.
As a father you have you naturally mandated responsible toward your children so also do mothers have.
What is Responsible Parenthood?

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Roles of Responsible Parents

- Provide Shelter
- Providing for the household,
- Caring,
- Education,
- Good Home Training,
- Building Positive concept in the children,
- Teach them proper value,
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Responsible Parenthood

Importance of responsible parenthood in National development

- Responsible citizens
- Reduction in crime rate
- Harmonious Co-existence
- Discipline Society
- Religious and ethnic Tolerance

In Summary, the parent that shows high level of care for their children will taken care by those children in future time. The students will not be burden to the society but being a burden lighter for the society.

Evaluation: Write what you like about your parent and what change do you expected from their behaviours
Importance of responsible parenthood in National development

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Evaluation: Write what you like about your parent and what change do you expected from their behaviours
Summary
Responsible parenthood is all about being a responsible father and mother who brought up their children in the way that the children are useful to themselves and the society at large.

Evaluation
1. How does child up bringing affect the general society
2. Can too much of children make one to be irresponsible parent, if yes, how?
Concept of Interpersonal Relationship

Human being are created to interact with each other. No man can survive in isolation. Relationship connote how we interact with people around us and the type of interaction. This interaction could family, friendship, romantic, work- life, leadership interactions.

Interpersonal Relationship can therefore be defined as interaction between two of more independent individuals with a particular objective.

Types of Interpersonal Relationship

1. Friendship  
2. Family  
3. Kingship  
4. Community based Relationship  
5. love
6. Formalized intimate relationship  
7. non-formalize Intimate Relationship
8. Religious based relationship

Factors that Promote Interpersonal Relationship

1. Honesty  
2. Tolerance  
3. Caring  
4. Kindness
5. Patience
Summary

As human being, our survival largely depends on day to day interaction with people around us. Living in peace and harmony with people require around us require each party in the relationship to be patience, tolerant, caring, kind and to love everybody according to one self.

Evaluation:
1. Define interpersonal Relationship
2. List five factor that promote good interpersonal relationship
Relationship
APPENDIX H
CIVIC EDUCATION PERFORMANCE TEST (CEPT)
FOR SENIOR SECONDARY II STUDENTS

Gender: M [ ] F [ ] Urban [ ] Rural [ ] Time: 35 Minutes

Instruction: Please tick (√) the correct answer from option A-D

1. One of the responsibilities of a good citizen is to
A. Possess an international passport.
B. Enjoy all amenities provided by government.
C. Serve the country when required.
D. Develop his potentialities to the fullest.

2. The societal value which members are expected to uphold in order to ensure development is
A. Title.
B. Integrity.
C. Apathy.
D. Compromise.

3. Citizenship education influences an individual to be
A. Patriotic.
B. Educated.
C. Complacent.
D. Competent.

4. Which of the following is not an example of orderliness?
A. Listening skill.
B. Driving skill.
C. Decorum.
D. Deviance.

5. The most important contribution of responsible parenthood to national development is that it
A. Increases youthful population.
B. Foster national integration.
C. Augments the nation workforce.
D. Breeds dependable citizenry.

6. One of the reasons leaders fail to protect the interest of their followers is
A. Selfishness.
B. Inadequate finance.
C. Ignorance.
D. Rigid policies.
7. Children that are not cared for are mostly prone to
   A. Criminal attitudes.
   B. Terminal diseases.
   C. Examination failure.
   D. Forced migration

8. Which of the following statement is not correct?
   A. Valid driver’s license must be obtained before attempting to drive.
   B. Flowing garment can be worn on a motorcycle or bicycle.
   C. Headlights should be used during unfavourable weather.
   D. Drivers must not engage in distractive activities while driving.

9. The general attitude of government and society towards cultism is that of
   A. Affection.
   B. Sympathy.
   C. Abhorrence.
   D. Support.

10. Youth empowerment promotes
    A. Self-reliance.
    B. Youthful exuberance.
    C. Pursuit of higher education.
    D. Foreign scholarship.

11. Which of the following is not a form of political participation?
    A. Taking part in voters’ registration exercise.
    B. Voting during elections.
    C. Joining political party.
    D. Ballot box stuffing during elections.

12. Drug abuse can be prevented by
    A. Fighting drug addicts.
    B. Poverty reduction.
    C. Reducing drugs in circulation.
    D. Legal sanction.

13. Which of the following can not be easily abused?
    A. Cosmetics.
    B. Stimulant.
    C. Tobacco.
    D. Narcotics.

14. The effect of human trafficking on the victims is
    A. Illiteracy.
    B. Affluence.
    C. Exposure.
15. Citizen’s compliance with tenets of the Nigerian National Pledge will enable the country to
A. Receive reciprocal assistance.
B. Witness value clarification.
C. Get international aid.
D. Experience development.

16. Civil society groups perform the following roles during general elections except
A. Educating the voters.
B. Serving as watchdog.
C. Counting votes.
D. Stimulating participation.

17. The most important place for building good values is the
A. Social welfare centre.
B. Workplace.
C. Family.
D. Media houses.

18. Which of the following is a consequence of drug abuse?
A. Depression.
B. Victimization.
C. Inefficiency.
D. Cowardice.

19. Which of the following is not an example of civil society groups?
A. United Action for Democracy.
C. Transaction Monitoring Group.
D. Amnesty International.

20. Which of the following is not a means of reducing the incidence of HIV/AIDS in our society?
A. Education and enlightenment programmes.
B. The use of specially designed cutlery by victims.
C. Avoiding pre-marital and extra-marital sex.
D. Upholding the value of chastity.

21. The roles of responsible parents include the following except
A. Providing for the household.
B. Disagreement with one another.
C. Caring.
D. Good home training.
22. Which of the following is the major government agency for enforcing the traffic rules?
A. The Vehicle Inspection Officers.
B. The Nigerian Army.
D. The Nigeria Police Force.

23. One of the major complaints against public service is
A. Inefficiency.
B. Understaffing.
C. Victimization.
D. Discrimination.

24. A major factor responsible for human trafficking is
A. Hunger.
B. Illiteracy.
C. Greed.
D. Joblessness.

25. Drug law enforcement agencies in Nigeria are not empowered to
A. Execute drug suspects.
B. Arrest drug barons.
C. Prosecute drug traffickers.
D. Rehabilitate drug addicts.

26. Democracy thrives most where there is
A. Non partisan judiciary.
B. Freedom of speech and association.
C. Absence of universal suffrage.
D. One-party system.

27. The process of enabling someone to perform an action which adds value to his/her life is known as
A. Employment.
B. Recruitment.
C. Socialization.
D. Empowerment.

28. Which of the following is not a way of improving public service?
A. Politicization.
B. Refresher courses.
D. Reformation.
29. The following are the skills that promote interpersonal relationship except
A. Meanness.
B. Honesty.
C. Tolerance.
D. Caring

30. Lack of interest in politics by citizens in the country is referred to as political
A. Ignorance.
B. Apathy.
C. Participation.
D. Socialization.

31. Which of the following instruments is not used by a civil society group?
A. Propaganda.
B. Boycott.
C. Protest.
D. Violence.

32. The Traffic in Persons Prohibition and Administration Act was passed in Nigeria in
B. October 2002.
C. August 2003.

33. A formal discussion between two groups, communities or countries when they are trying to solve a disagreement is
A. Tolerance.
B. Dialogue.
C. Patience.
D. Communication.

34. The importance of inter-communal relationship includes the following except
A. Unity in diversity.
B. Peaceful co-existence.
C. Dispute.
D. Community development.

35. Cultism can be discouraged through
A. Mentoring of cultists by the rich.
B. Provision of jobs for cultists.
C. Sensitization on the dangers of cultism.
D. Establishment of cultists support groups.
36. Which of the following does not affect interpersonal relationship?
A. Communication.
B. Withdrawal.
C. Compatibility.
D. Forgiveness.

37. The following cadre of students are the main target for campus cult membership except
A. Students from wealthy homes.
B. Students from influential parents.
C. Bold and morally sound students.
D. Wayward and fun-loving students.

38. The National Agency for Food and Drug Administration and Control (NAFDAC) was established in
B. 1996.
C. 1999.

39. National Agency for Prohibition of Traffic in Persons (NAPTIP) is an initiative of
A. Federal Government of Nigeria.
B. United States Agency for International Development.
C. Woman Trafficking and Child Labour Eradication Foundation.
D. United Nations Office on Drugs and Crime.

40. World AIDS day is observed on
A. 20th May.
B. 30th July.
C. 27th August.
D. 1st December.

41. An enabling environment created to help an individual have effective control of his/her situation is known as
A. Reinforcement.
B. Empowerment.
C. Endowment.
D. Enhancement.

42. In order to avoid undue interference in the process of governance, there should be
A. Clear cut separation of governmental powers.
B. Proper fusion of governmental powers and functions.
C. More roles for traditional rulers in the governmental process.
D. Additional responsibility for local government council.
43. **Red-tapism is one of the shortcomings of**
   A. Private enterprise.
   B. Public service.
   C. Non-governmental organization.
   D. Pressure groups.

44. **An ideology that aims at promoting national consciousness and identity is**
   A. Nationalism.
   B. Socialization.
   C. Civic culture.
   D. Progressivism.

45. **Human rights are described as inviolable mainly because they are**
   A. Authoritative declaration.
   B. Enforceable everywhere.
   C. Not to be unnecessarily taken away.
   D. Legal declaration instruments.

46. **Law and order can best be maintained in Nigeria through the**
   A. Prohibition of public protest.
   B. Enforcement of rules and regulations.
   C. Use of divide and rule policy.
   D. Promotion of indigenization policy.

47. **A responsible parent is someone who**
   A. Cares and provides for the children.
   B. Indulges the children because of love.
   C. Works in order to receive salary.
   D. Employs house-helps to take care of the children.

48. **A major way of promoting responsible parenthood is through**
   A. Sex education.
   B. Sound education.
   C. Population control measures.
   D. Tax reduction measures.

49. **Which of the following is not included in the stages of interpersonal relationships?**
   A. Rejuvenation.
   B. Deterioration.
   C. Termination.
   D. Continuation.

50. **An individual who finds it difficult to control in-take of drug is known as drug**
   A. Baron.
   B. Trafficker.
C. Mogul.
D. Addict.
APPENDIX I
ANSWER TO CIVIC EDUCATION PERFORMANCE TEST (CEPT)

1 C 11 D 21 A 31 D 41 C
2 B 12 D 22 C 32 C 42 A
3 A 13 A 23 A 33 B 43 B
4 D 14 C 24 D 34 C 44 A
5 D 15 D 25 A 35 C 45 C
6 A 16 C 26 A 36 D 46 B
7 A 17 C 27 D 37 C 47 A
8 B 18 A 28 A 38 D 48 B
9 A 19 B 29 A 39 A 49 B
10 A 20 B 30 B 40 D 50 D
## APPENDIX J

### CATEGORIZATION OF THE TEST QUESTION ON THE BASIS OF SPECIFICATION

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ADMINISTERED AND VALIDLY RETRIEVED INSTRUMENT

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Ground Total 560
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APPENDIX M
OUTPUT SPSS ANALYSIS OF THE STUDENTS PERFORMANCE

Group Statistics

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Independent Samples Test

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<th>Mean Difference</th>
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|----------------|------------------------|----------------------------|------|--------|------|----------------|-------------------|----------------------------------------|
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Multiple Comparisons

Dependent Variable: VAR00004

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