IMPACT OF INFORMATION AND COMMUNICATION TECHNOLOGY ON ACADEMIC PERFORMANCE OF SOCIAL STUDIES STUDENTS IN FEDERAL COLLEGES OF EDUCATION IN NORTH-WEST GEO-POLITICAL ZONE, NIGERIA

BY

Kennedy SHUAIBU
Ph.D/EDUC/21797/2012-2013

DEPARTMENT OF ARTS AND SOCIAL SCIENCE EDUCATION,
FACULTY OF EDUCATION,
AHMADU BELLO UNIVERSITY,
(ABU) ZARIA

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**A THESIS SUBMITTED TO THE POSTGRADUATE SCHOOL,
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**DEPARTMENT OF ARTS AND SOCIAL SCIENCE EDUCATION,
FACULTY OF EDUCATION,
AHMADU BELLO UNIVERSITY,
ZARIA-NIGERIA**

SEPTEMBER, 2016

DECLARATION

I declare that the thesis entitled IMPACT OF INFORMATION AND COMMUNICATION TECHNOLOGY ON THE ACADEMIC PERFORMANCE OF SOCIAL STUDIES STUDENTS IN FEDERAL COLLEGES OF EDUCATION IN THE NORTH-WEST GEO-POLITICAL ZONE, NIGERIA" has been written by me in the social studies section, Department of Arts and Social Science Education, faculty of Education under the supervision of Prof. M. C. Ubah, Dr.. Maman Musa and Dr. Mohammed Sadiq.

The information derived from series of literature has been duly acknowledged in the text and a list of references provided. The study was not previously presented for the award of another degree or diploma in any University.

_____ _____

Shuaibu Kennedy Date

CERTIFICATION

This thesis entitled IMPACT OF INFORMATION AND COMMUNICATION TECHNOLOGY ON THE ACADEMIC PERFORMANCE OF SOCIAL STUDIES STUDENTS IN FEDERAL COLLEGES OF EDUCATION IN NORTH-WEST GEO-POLITICAL ZONE, NIGERIA by KENNEDY SHUAIBU meets the requirement governing the award of the degree of doctor of philosophy in social studies of Ahmadu Bello University; and is approved for its contribution to knowledge and literary presentation.

_____ _____

Prof. M.C. Ubah *Date*
Chairman Supervisory Committee

_____ _____

Dr. M. Musa *Date*
Member Supervisor Committee

_____ _____

Dr. S. Mohammed *Date*
Member Supervisory Committee

_____ _____

Dr. Abdullahi Dalhatu *Date*
Head of Department of Arts and Social Science

_____ _____

Prof. Kabir Bala *Date*
Dean, School of Postgraduate Studies.

DEDICATION

I dedicated this piece of work to my late younger sister, Josephine Kaka Shaibu.

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ABSTRACT

The issue of declining academic performance of students in the Nigerian Education system, in recent times, has generated much interest and debates among stakeholders in the education sector and the need for innovation in instructional delivery motivated the idea for this study. The study, therefore, is concerned with investigating the impact of information and communication technology on the academic performance of students of Social Studies in Federal Colleges of Education in North-West Geo-political Zone of Nigeria. Based on the objective of the study, five research questions and five hypotheses were formulated to guide the study. A sample of four hundred and four students was drawn through purposive sampling from three colleges of Education in the North-West Geo-political Zone of Nigeria. The quasi- experimental research design, using pre-test, post test experimental group was used in carrying out the study. The result of the study revealed that students performances was better where ICT multi-media apparatus were used for the treatment group against control group that did not use ICT. The results of the two groups were compared and confirmed that the treatment group performed better than the control group. All the hypotheses were rejected. The study found that Students in the experimental group performed better than those in the control group. This signify that the students that were exposed to ICT instructional technique performed significantly better than the students that not exposed to it, the female students were better in the use of ICT interactive package than the ICT guided package, while the male students were better in the use of ICT guided package than their female counterpart. Thus there was significant interactive effect on gender and method, the post-test score of the students was significantly better than the pre-test scores of the ICT interactive package. It therefore means that the ICT interactive package is better in the teaching of Social Studies towards the enhancement of student's academic performance, the ICT use of interactive package enhances the student's academic performance than the ICT guided package. Students who were taught using the ICT interactive packages had better understanding of the concepts better than those that were taught using the ICT guided packages, it was therefore recommended that, The use of ICT instructional technique should be adopted by Social Studies teachers as child centered technique capable of enhancing pupil's participation in learning and improving performance, the use of ICT instructional techniques has proved not to be gender sensitive, as such Social Studies teachers should be encouraged to use in teaching both the male and female students, government should encourage and put in incentive to attract state, local, international bodies and non-governmental organizations (NGOs) to invest on ICT related projects towards enhancing the availability of ICT equipment and facilities to all Colleges of Education in Nigeria, only qualified and competent Social Studies Education teachers should be employed to teach in our Colleges of Educations, students should be encouraged to explore varieties of ICT materials so as to enjoy the spice of variety through independent learning.

TABLE OF CONTENTS

ABBREVIATIONS

AISI Africa Information Society Institute

C.D: Compact Disc.

CAL Computer Assisted Learning

CAI Computer Aided Instruction

CD ROM: Compact disc Read Only Memory.

CMI Computer Managed Instruction

FCOE Federal College of Education

DVD: Digital Versatile Disc or Digital Video Disc.

E-mail: Electronic mail

FCOE Federal College of Education

ICT Information and Communication Technology

MIS Management Information System

NBTC National Board for Technical Education

NCCE National Commission for Colleges of Education

NERDC National Education Research and Development Council

NNTEP Northern Nigeria Teacher Education Project

NUMIS Nigeria University Management Information System

RINA Regional Information Network for Africa

UNESCO United Nations Educational Scientific and Cultural Organization

USAID United States Agency for International Development

WWW: World Wide Web

LIST OF TABLES

LIST OF FIGURES

CHAPTER ONE

INTRODUCTION

1.1. Background to the Study

Social Studies deal with man's interactions with his environment. Ajiboye, Adu and Amosu (2005) define Social Studies as an attempt to foster in young learners a better understanding of man's interactions with his physical and social environment. In the same vein, Lawal and Oyeleye (2003) describe Social Studies as a discipline which attempts to modify the learner's behaviour in the direction of acceptable values and attitudes through a process of studying the relationships of human beings with their environment. From the foregoing, Social Studies can be defined as the study of man's, how he influences and is influenced by his environment.

The general purpose of Social Studies is to help learners develop the ability to adapt the ever changing environment in which they lives through the acquisition of relevant knowledge, values and practical skills (Fadeiye, 2005). With this in mind, Social Studies was designed and introduced into the national curriculum of tertiary education in Nigeria. This is expected to make good citizens and patriots out of the youths in Nigeria. Oluwagbohunmi (2012) asserts that the objectives of social Studies is that it does not only aim at cognitive development of learners but also at developing core values and attitudes that will make them grow into useful, responsible, disciplined, patriotic citizens and future leaders.

Incidentally, Social Studies has been implemented in schools for many years now without adequate success in terms of inculcating the values of good citizenship among our youths (Fadeiye,2005). The youths are rich in knowledge of Social Studies concepts and facts but deficient in social values, attitudes, and behaviours that characterize socially responsible citizens (Kazi, 2000). It is assumed that this deficiency arises from

the way Social Studies is taught and learnt in the classroom. Some Nigeria Social Studies educators have blamed teachers using lecture methods in teaching a subject that requires interactive e techniques in a conducive social environment (Okam, 2012 & Seweje, 2010).

Okam (2010) attributes poor performance of learners of Social Studies to inappropriate teaching techniques and methods used by teachers in teaching. Similarly, Seweje (2010) confirms that the methods adopted by teachers in most cases include the talk and chalk method (Lecture) with very little concern for practical activities. The author explain further that a teacher is expected to be a facilitator whose main function is to help learners to be become active participants in their learning and thereby make meaningful connection between prior knowledge, new knowledge and the process involved in learning. Educational researchers have attempted to probe into the causative factors of poor performance of students in Social Studies. While some researchers have reported that hard curriculum contents are a causative factor, others blame the deficiencies on teacher's factors. For example, Osalusi (2010) reported that if the students are given the opportunity to be listened to and guided in a non-threatening atmosphere, they would perform tremendously in terms of problem-solving and decision making. The absence of student-centred techniques to teaching according to Osalusi results to student's poor performance in Social Studies.

Zimmerman (2010) reported that poor quality of instructional techniques was responsible for the poor performance of students. A good number of these findings are teacher related and this cast some doubts on the effectiveness of Social Studies teachers especially in the area of instructional techniques. In recent times, there has been intense advocacy both nationally and internationally for the application of information technology (ICT) in teaching and learning process. Udo (2010) observes that the

application of ICT in the school subject is to make the learners learn better and teachers to learn well. It is not a hindrance to teachers-student relationship. It rather ensures transactional instructional communication where the teacher manages the human materials, time and space to make sure that instructional events such as game attention, simulation recall present stimulus thinking elicit performance provide feedback generalizing experience, assess performance occur leading to change in behaviour of students. it has been noted that information technology ICT is an effective medium in contributing towards education in general and Social Studies in particular Onyeka, Okonkwo & Iwuna, (2012). The inherent cross-curricular nature of information and communication technology makes it ideal medium that can be used not only during information technology lessons but also in other subjects. Information and Communication technology can be an excellent medium for training young people (students) in learning about and appreciating the cultural heritage in its diversity.

Computers and other internet facilities are now in place in many colleges of Education nationwide. It is envisaged that educators will use or see ICT as a major teaching and learning device across all educational institutions. With its power of interactivity, multimedia and communication, the computer proves an excellent tool for Social Studies teaching and learning. The idea is that students will be active participant rather than spectators in teaching and learning process. Information communication technology according to Unaga [2016] encompasses computer and telecommunication used .it concerned with the technology used in handing, acquiring, processing, storing and disseminating information. This information communication technology is any technology used in producing, organizing and passing information through. Obashoro (2007) identified ICT infrastructure to include multi-media CD-ROM,MP3 player, website, discussion boards, email, computer –aided assessment, learning management

soft ware, blogs and so on. In the same vein, Folorunso, Longe and Ijere (2003) identified ICT infrastructure to include internet, world wild web (www), Electronic data interchange (EDI) Local Area Network (LAN), Wild Area Network (WAN), protocols, content management and Meta data standards (MDS).

The concept performance means a thing that someone successful in especially using ones effort and skill performs. Performance in the context of this study refers to both cognitive and psychomotor attainment of students which can be measured in terms of passes in Social Studies examination that are administered by the teacher or examination bodies. Several studies have shown (Adua-Ogiegbaen and Iyamu (2005), Arinze, Okonkwo and Iwunor (2012) that performance in Social Studies has continued to be poor.

One other variable that is of interest to this study is gender. The concept gender is considered as a social construction of behaviours towards male and female in different ways. Alokan (2010) posit that we socially construct our behaviours so that male-female difference are either created or exaggerate. Various studies have documented differences in academic performs between male and female, and numerous another have offered theoretical explanation. The finding that female have in various academic subject (Demie, 2001 Duckworth and Sehgman , 2006, Steinmayr and Spinath 2008) the debate on who performs higher (males or females) has been a subject of academic discovers for a long time. Literature on gender difference in academic performs is extensive. There is however, research evidence (Klein, 2004, Davis, 2007) that in proved instructional techniques can close the gender gap in academic performance in Social Studies. Thus, this study on the impact of Information and Communication Technology (ICT) may enhance academic performance of male and female students in Social Studies.

1.2. Statement of Problem.

Poor academic performance in Social Studies has persisted despite its importance to the students and the overall educational development of the country. Given the value placed on the subject (Social Studies) at the tertiary education curriculum, the need to teach it effectively through effective techniques like ICT is indisputable. Over the years, experiences and available records have indicated that many social studies teachers find it difficult to teach the subject because they believe it is entirely a subject with new methods, strategies, approach and techniques. Whether poor academic performance or ineffective teaching of Social Studies is due to lack of proper application of the integrated techniques by teachers is yet to be ascertained. Experiences through teaching of the cause at various level of education over the years have shown that out of many challenges in the teaching and learning of Social Studies, poor instructional techniques play a major role. Despite concerted efforts made by researchers and government to remedy the situation, there seems to be no evidence that performance has improved. Consequently, over the years, educational psychologist and theorist have frown at instructional techniques that are teacher cantered, a situation bereft of active participation, social interaction and high performance of students. Among the educational psychologist and theorist that hold this view are John Piaget (cognitive development) and Lev Vygotsky (social development).

There is, however, an inadequate documented record in research conducted in Nigeria on the Impact of Information and Communication Technology on academic performance of Social Studies students in Colleges of Education under study. The problem of this study, therefore, is; to find out the Impact of Information and Communication Technology on academic performance of Social Studies students in colleges of Education.

1.3. Objectives of the Study

The study determined the Impact of Information Communication Technology on academic performance of Social Studies students in Federal Colleges of Education in North-West Geo-Political zone, of Nigeria. Specifically, the sub-objectives include;

1. To determine the mean performance score of students of Social Studies experimental group and the control group..
2. To determine the mean performance scores of male and female students taught Social Studies with the ICT interactive and the Guided package.
3. To find out the mean performance of the pre-test and post-test of the students taught Social Studies using ICT computer interactive package.
4. To determine the mean performance of students of Social Studies taught using the ICT Guided package and those taught using the interactive packages.

1.4. Research Questions

The study will attempt to find answers to the following research questions.

1. What is the performance score of students of Social Studies exposed to ICT experimental group and those in the control group?
2. What is the performance score of male and female students taught Social Studies with the ICT interactive and the Guided package?
3. What is the performance of the pre-test and post test of students of Social Studies exposed to the ICT interactive packages?
4. What is the performance of students of Social Studies taught using the ICT Guided package and those taught using the interactive packages?

1.5. Research Null Hypotheses

Based on the focus of the problems identified and the research questions raised, the following hypotheses are postulated to guide the researcher in the study;

1. There is no significant difference between students exposed to ICT and those taught not using ICT instructional strategies.
2. There is no significant difference between the mean performance score of male and female students taught Social Studies with ICT and those taught not using ICT.
3. There is no significant difference in the pre-test and post-test mean performance of students exposed to ICT interactive packages.
4. There is no significant difference between the mean performance of students of Social Studies taught using the ICT Guided package and those taught using the interactive packages.

1.6. **Significance of the Study**

This study has both theoretical and practical significance to education, teachers, pupils, professional bodies, the researchers and the society. The theoretical bases of this study were Piaget theory of cognitive development (1954) and marshal Mac Luhan media theory in 1964. The significance of Jean Piaget's theory of cognitive development is that it recognized the role of children active involvement in learning activities through a spontaneous interaction with their environment rather than passively waiting for the teacher to present to them ready-made knowledge. This has assisted study in organizing various activities where pupil engaged them self in role and dramatization. The novel situation and interesting activities that were created in the process of this study help pupils to be motivated for greater mental activities.

Marshal Mac Luhan of 1964 theory stated that the technology especially the media decisively shape how the individual think, feel, and act on how society organise

themselves and operate. The medium determined the content of communication. The medium has the power to manipulate our perception of the physical and social environments.

Practically, the study will popularize the use of multimedia instructional techniques and maximize its use by social studies teachers in Nigeria. Social Studies teachers will be exposed to the instructional techniques through conferences, seminars and workshops to be organized by professional association such as Social Studies association of Nigeria (SOSAN). The technique will be of benefit to Social Studies teachers as it will serve as a road map in the choice of more efficient instructional techniques. The lecturers of the colleges of Education will greatly benefit from this venture as it will greatly reduce the burden of having to give the students all the information and knowledge alone. These instructional strategies suggest that teachers should serve as guide and collaborator of learning instead of been the encyclopaedia of knowledge to students.

It equally serve as a useful documents or benefits to the National commission for colleges of education, the body responsible for setting up of minimum standard for Colleges of Education in Nigeria. The findings of this study will guide them in the making of new policies that will help to strengthen instructional delivery and enhance student's performance.

Furthermore, the students who are the consumers of the programme in the Colleges of Education are no doubt the greatest beneficiary of this study and its findings. The findings of the study will help to refine this programme and re-position it for greater efficiency thereby producing students that will be the toast of the society. The acquisition of proper academic performance is a requisite condition for the development of individuals and the society.

This study provides valid research – based data that will hopefully bring about improvement and innovation into the programme. This study will determine if the Social Studies curriculum is adequately implemented using appropriate techniques and methods to achieve the desired objectives under the existing situation in Nigeria. This study will reveal the benefits of using ICT over the conventional methods and thereby stand the advantage of providing the students the required impetus to learning.

The entire societies stand to benefit from the findings of the study. This study will generate orientation and re-orientation in the learners through the knowledge and skills acquired to apply aptly their high cognitive, psycho-motor and affective skills to novel situations, thus re-invigorating the students' performance. The development of any society is anchored on the production of good citizens through the inculcation of positive values, attitudes and skills provided by Social Studies education. Lastly, the study provides a frame work or spill-over effects to other Colleges of Education and University in Nigeria for similar research efforts in future.

1.7. Scope of the Study

The concern of this study investigated the Impact of information and communication technology on the academic performance of NCE students in Social Studies in the Federal Colleges of Education in the North-West Geo-Political Zone, Nigeria. The North- West Geo-Political Zones of Nigeria have the following Federal colleges of Education; Federal College of Education Kano, FCE Zaria FCE (Tec) Gusau, FCE (Tec) Bichi, FCE Katsina and FCE Zaria. The study covers only the conventional Federal Colleges of education that offer Social Studies programme in North-western Nigeria. There are three conventional Federal Colleges of Education that offers Social Studies, i.e, FCE Kano, FCE Zaria, FCE Katsina. Two topics in Social Studies were treated during the course of study, they includes, Corruption and Leadership. The students of these colleges of Education understudy were the target of the study.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

The focus of this study was to investigate the impact of the information communication technology on the academic performance of students in the Nigerian certificate in education (NCE) Social Studies curriculum in the Federal Colleges of Education in North-West Geo-Political Zone, Nigeria. Therefore this chapter is presented under the following sub-headings:

- Theoretical Frame work
- Social Studies in Nigeria
- The Concept of Social Studies
- Objectives of Social Studies in Nigeria
- The Nature and Content of Social Studies in Nigeria
- The Content OF NCE Social Studies in Nigeria
- Conventional Methods of Teaching social studies
- The concept of information, communication and technology (ICTs).
- Information Communication Technology at school:
- Use of ICT in Education in Nigeria.
- Trends in Information Communication Technology
- ICT Guided Packages
- ICT Interactive Package
- ICT Audio Packages
- ICT Audio-Visual Packages
- Use of ICT in Education in Nige
- ICT and the academic performance

- Determinants of Students' Academic Performance
- Effects of ICT on Teaching and Learning process
- ICT enhancing motivation and learning
- ICT enhancing the quality and accessibility of education
- ICT and Social Studies Education Programme
- Curriculum Implication of ICT on Social Studies Education Programme
- Implementation of Social Studies Using Information and Communication Technology
- Relevance of Information and Cc unication Technology to Social Studies Curriculum
- Constraints or Challenges to the Application of ICT in Social Studies Education.
- Review of Related Empirical Studies
- Summary.

2.2 Theoretical Frame work

The theoretical frame work that forms the basis of this study is the Piaget theory of cognitive development (1896-1980). The theory suggests that the use information and communication technology is vitally related to cognitive development as it helps students construct knowledge and make sense in their own world. The theorist also promoted the use of ICT instructional techniques that focused on student's active learners in their environment and included activities that are learners directed, and learner centred. The Piaget theory of cognitive development is a constructivist theory which portrayed learners as active and motivated learners through numerous interactions with their physical and social environment construct an increasing complex understanding of the world around them. A central component of Piaget theory of learning is that it emphasizes the participation of the learner. It emphasizes that knowledge is not merely

transmitted verbally but must be constructed and reconstructed by the learner. Piaget asserted that for a child to know and construct knowledge of the world the child must act on objects and it is in this action that provides knowledge of those objects (Sigiel, 1977). Piaget thus opined further that the mind organizes reality and acts upon it as such the learner must be active and not a vessel to be filled with facts. The theorist proposed that cognitive development of the learner proceed through four stages:

1. The sensorimotor stage- when cognitive functioning is based primarily on behaviour and perception.
2. The preocupational stage- when symbolic thought and language become prevalent, but reasoning is ‘’illogical’’ by adult standard.
3. The concrete operations stage- when logical reasoning capabilities emerge but are limited to concrete objects and events.
4. The formal operation stage- when thinking about abstract, hypothetical and contrary-to fact ideas become possible.

The use of ICT promotes the use of critical thinking and thus found its objectives in the principle of Piaget theory of cognitive development and as such it is relevant to this study Social Studies Curriculum emphasizes a learner-centred philosophy both espoused active discovery learning environment in schools. Piaget theory suggests that intelligence grows through the twin process of assimilation and accommodation. Therefore, experiences should be planned to allow learners opportunities for assimilation and accommodation. These are provided in Social Studies information and communication technology instructional technique classroom as pupils are allowed to explore, to manipulate, to experiment, to question and to search out answers through the computer aided packages and the computer interactive packages of information and communication technology. Expounding on Jean Piaget theory, Urevbu (1990) opines

that through novel situation and interesting activities learners are motivated for greater mental activities.

This study equally accommodated another theory which is Technological determinist theory: the theory was formulated by marshal mac luhan in 1964. The basic premise of the technological theory of marshal mac luhan is that the media are extensions of the human body. This theory holds that, the media not only alter their environment, but the very message they convey to the learners. The theory stated that the technology especially the media decisively shape how the individual think, feel, and act on how society organise themselves and operate. The medium determined the content of communication. The medium has the power to manipulate our perception of the physical and social environments. Mac Luhan sees every medium as the extension of human faculty with the media of communication, exaggerating the particular sense, whatever predominate the media will influence the human beings by affecting the way they perceive their environment. Relatively, the media has brought about new perpetual habit in teaching and learning and their technologies created a new environment, therefore revolutionizing social studies curriculum implementation and the performances of the learners. The application of information and communication technology in the implementation of social studies has a unique potential for inculcating the right type of skills, attitudes and values in the learner through a unified and integrated interdisciplinary studies of man with particular reference to his social environment and as a result The desire for the introduction of Social Studies into the curriculum of schools to enhance the academic performance of the learners in Social Studies by the government towards the achievement of individual and National goals.

It is on the basis of this that Kissock, (1981) defined Social Studies as a "programme of study which the society uses to instil in the learner, the knowledge, skills,

attitudes and values it considers important concerning the relationship human beings have with each other, their world and themselves". Therefore, this study is in no doubt billed to present one of such efforts toward making education a social, functional and responsive to the challenge and propagation of self-reliance, national unity, ethnic tolerance, and enhanced citizenship education, skill acquisition for independence, job creation, inquiry orientated, national consciousness and social reconstruction. In the light of this challenge and the dynamism of the society, Social Studies programmes are continuously modified in the light of new social needs of the individual and the society. Therefore this study is set to ascertain whether or not Social Studies curriculum through the application of information and communication technology at the colleges of education in Nigeria is adequately implemented to transmit the objectives and enhance the performance of NCE Social Studies students in Federal Colleges of Education in Nigeria.

2.3 Social Studies in Nigeria

Though, Social Studies education is not a new subject or programme of study in the Nigerian school curriculum. Nigerian scholars and writers are of contrary and divergent views as to when Social Studies made its head-way into Nigeria and its schools. Obilo, (1982) and Ezegbe, (1987) are of the opinion that Social Studies emerged in Nigerian schools in the early 1960's, Osakwe and Itadjere assumed it to be in the "mid 1960's, Adedoyin, (1982) put it that Social Studies was introduced in Nigeria in the colonial era with the establishment of schools. Thus she observed, "Social Studies was entrenched in the then religious curriculum of our schools. Osabe, (1987) assumed it to be at the late 60's. Mezieobi, (1990 and 1992) refutes these claims of Social Studies with colonial origin and its 1960s emergence of Social Studies. To him Social Studies has been in existence right from the inception of Nigeria in the Pre-colonial times with goals,

content methodology and Evaluative process that was in consonance with the needs, values and aspiration of the then Nigerians and Nigeria. Mezieobi in his opinion observes that what is new is the concept "Social Studies" which was really borrowed or imported and which has become a discrete subject in Nigerian schools. This he cap it that even today in Nigeria, the Social Studies content is 'Nigeria- specific' as it was in the old as it focuses largely on the Nigerian life style and environment. Thus he outlined the following as the basic rudiments of traditional or indigenous Social Studies education.

i. The learning of the people's local and family history, myths, oral literature, proverbs and riddles, and the geography of the community and the adjoining neighbourhood as the basic learning experiences of traditional Social Studies education.

ii. Respects to elders, honesty and truthfulness, fear of the gods/goddesses, learning of family gods, goddesses and people's gods.

iii. Character, values and virtues development and inculcation which traditional religion encouraged and promoted.

iv. Instruction on loyalty to the community, recognition of one's rights, obedience to elders, recognition of seniority, hospitality to people, cooperation in common test, respect for others.

Social Studies in the contemporary Nigeria context, according to Tikuma, (2009), posit that it surfaced in 1958 in western region when the subject was introduced into schools through a joint educational programme between the region and the University of Ohio (USA) "the Ohio project" as it was tagged only affected the western region. In 1963 a pilot project was conducted at Aiyetoro comprehensive school. This venture led to a comprehensive development of the first Nigerian Social Studies curriculum at the said school. Tikuma, (2009) noted that subsequent upon the introduction in the western

region was a series of curriculum innovation conferences that was held locally and internationally. This among others includes the conference of African educators held in Mombasa (Kenya) in 1968. This conference was organized under the auspices of the education development centre (EDC) and the centre for curriculum renewal and education/development overseas (CREDO). This conference drew eleven participants from African countries including Nigeria. From this conference emerged African Social Studies Programme (ASSP) and later the Nigerian Social Studies Programme (NSSP).

Subsequent on the Mombasa conference in 1968, Nigeria accelerated her march towards entrenching Social Studies in her education system. Thus, in January 1969 participants were drawn from all over Nigeria to Ibadan for a seminar in Social Studies except the eastern part of the country which was then a threat of war. Social Studies association of Nigeria (SOSAN) was formed at this seminar and the objective of the association includes the dissemination, promotion, development and adoption of Social Studies in Nigerian schools.

Equally in 1969, a national curriculum conference was held in Lagos where large participants were drawn from all the nooks and crannies of the Nigerian society viz-a-viz, doctors, traders, farmers, teachers, business-men etc., to discuss issues of ideology, purpose and objectives of Nigerian education. There SOSAN presented a report on the need for the introduction of Social Studies. The resolution and recommendation of the conference touched on the teaching of culture and Social Studies in the Nigerian Educational system i.e Social Studies should be taught in all teacher training colleges and in the lower classes of the secondary school and primary schools. Thus, the deliberation and recommendation of the conference and seminars forms the pivot of the Federal Government National Policy on Education in 1977. Thus, Ismail, (1987) in his

statement rose that Social Studies was introduced on a national basis at the 1969 national curriculum conference.

2.4 The Concept of Social Studies

The social studies concept is engrossed with numerous definitions by various scholars and authorities. A search through text books and literature confound the students with numerous definitions of the concepts of Social Studies. This is evident in the multilateral opinions or views held by people on the subject. Thus, Barr in Ikwumelu, (1993) posits that the field of Social Studies is so cut up in ambiguity, inconsistency and contradiction that it represents a complex schizophrenic bastard child. As if that is not enough, Mezieobi, (1993) put up this opinion that Social Studies concept is as troublesome as there are many people attempting to define it. The definition of this concept is problematic due to its lack of concept specificity. He engrossed his view to lack of an agreed format among scholars to a universal definition of Social Studies.

Social Studies has been seen as an extended civic, simplified form of social sciences, as citizenship education, applied social sciences as well as a supplement or complement of the traditional subjects that constitutes the humanities and the social sciences subjects, (Mezieobi, (1992). The vagueness of Social Studies does not end with the scholars and teachers, parents, educational administrators alone, even government seems to be more confused about the subject, methodology and its importance.

However, a cursory look and consideration at some definition by scholars will help drive home this point. The committee on primary school Social Studies programme defines the subject as “those common learning of man’s interaction with his social and physical environments (Okonkwo in Ololobou, 2004). Jiboku in Ikwumelu, (1993) also describe Social Studies “as that aspect of learning which deals with how to get on (get along) with one’s environment, physical as well as human and how to

develop those skills, knowledge, values and attitudes that characterizes a responsive and responsible citizen in a free society. Orakwe, (1991) noted that Social Studies is the study of man in his unending interactions with his environments as the attempts to make them a better place.

Similarly, an often quoted definition of Social Studies by Kissok cited in Okojie, (2007:) address Social Studies as "a programme of study which a society uses to instil in student's the knowledge, skills, attitudes and actions it consider important concerning the relationship human being have with each other, their world and themselves. While the various definition of Social Studies presented above may be mutually exclusive, a close examination would reveal that their discrepancies are a little more than using different words to describe the same things. Above all, the various ideas, generalizations or features that are common among this definition include the following:

i. Man and his environment constitute the major focus of Social Studies.
ii. There is inter-relationship between man and his environments
iii. Social Studies aim at solving man's problems, i.e social, economic, political etc.
iv. Social Studies provide the learners with citizenship, humanities, intellectual and value education.

These common features, rather than breeding conflicts and controversies that go with the definition, should form the basis for Social Studies discussions and practices in Nigeria.

2.5 Objectives of Social Studies in Nigeria

The reasons for teaching Social Studies and what we teach is a fulcrum to which the success of the entire programme is built upon. Social Studies was introduced into Nigerian schools system as a remedy to existing social problems prevalent in the society. It aims at studying social actions, relationship, addressing social needs and problems.

The objectives of social studies vary from one country to another; this is dependent on the situation and conditions of the country adopting it. Thus, they are varieties of objectives of Social Studies as they are varieties of social needs and problems; (Tikuma, 2009). Argungu, (2009) posits that, Social Studies as stated earlier was introduced into Nigerian schools as a core and compulsory subject at primary and junior secondary schools as a catalyst to the achievement of the four national educational aims and objectives. Obameata, Agu and Laosebikan, (1981), Argungu, 2009, explained that the objectives of Social Studies in Nigeria naturally reflect the national objectives of education as a whole. This is basically on the premise that Social Studies, is a subject that draws its concepts from all the basic subjects at the primary and secondary levels of education such as History, Government, Economics, Religions among others, Based on this, the objectives of Social Studies tend to reflect the objectives of these subjects. Secondly, the subject is designed to offer specific solutions to societal issues or offer remedy to national problems. Thus, its objectives must be relatively interwoven with national goals of education if it is to answer this call.

The national goals of education as presented by the national policy on education (1998) states the following:

a. The inculcation of national consciousness and national unity
b. The inculcation of the right types of values and attitudes for the survival of the individual and the Nigerian society.
c. The training of the mind in the understanding of the world around
d. The acquisition of the appropriate skills and the development of mental, physical and social abilities and competencies as equipment for the individual to live in and contribute to the development of his society.

It is based on these goals that the objectives of Social Studies were designed. According to Ololobou, (2004:4) typical Social Studies proramme must encompass four cardinal objectives, Viz: the environment, the various skills, values and skills and emerging issues. Equally in his work, Ololobou (1999), observed that Social Studies in Nigeria seeks to re-establish the pre-colonial African educational values, which includes honesty, hard-work, mutual cooperation and conformity to traditional social order.

Corbin. (NERC, 1983) delineated the Social Studies education objective in two levels, i.e the junior and senior levels. He maintained that at "junior level the emphasis should be on encouraging the development of social responsibility towards other children, adults and the world about them". While "at the senior level children should be encouraged to develop values attitude, skill and understanding necessary to live in society". Ikwumelu (2001) categorized the objectives into the following.

a. Citizenship education: Preparing the students for social responsibility
b. Humanistic education: Helping the student to comprehend his life.
c. Intellectual Education: Introducing the students to the mode of thinking and enquiry of the social sciences.
d. Value Decision: Inculcating in the individual some expected. Attitudes, values and feelings.

Bye and large, the opinions of Social Studies scholars are not different from the objectives of Social Studies in Nigeria. Thus; Dubey 1980, Aina et al 1982, Corbin NERC (1983), Ikwumelu (2001) are of the same view that is based on the rationale for the introduction of Social Studies in Nigeria. The objectives of the Social Studies programme may be broadly outlined as follows.

a. To create an increasing awareness and understanding of our evolving physical and social environment.

b. To develop a capacity to learn and to acquire certain skills including not only those of listening, speaking, reading and writing, and of calculation but also those of hands and head.

c. Ensure the acquisitions of the body of relevant knowledge and information, which is an essential prerequisite to personal development as well as to a positive contribution to the betterment of mankind.

d. To develop a sympathetic appreciation of the diversity and interdependence of all members of the local community, and the wider national and international communities.

e. Develop in the students, positive spirit of togetherness, comradeship and cooperation towards healthy nation

f. Promotion of understanding of social problems of their locality

g. Promotion of the ability to think reflectively

h. Creation of awareness that discipline is essential for an orderly society.

i. Demonstration of flexibility and willingness to accept necessary changes within a system.

j. The promotion of effective and active citizenship.

Consequent upon these objectives, new objectives can always be conceived and developed in relation to the dynamics and on the move nature of the society to ensure the purposive nature of Social Studies as a problem- solving programme. Thus, Maduewesi (2003: piii) refers to this point in his foreword to the national curriculum for primary school Social Studies. This he stated as follows.

> *"The curricular prescriptions presented in this document represent the minimum content of what should be taught in all Nigerian schools. This notwithstanding, teachers in the different states and local government area are free to draw upon their immediate environment for additional materials*".

It is the desire to achieve the objectives of Social Studies through the various level of our educational system as prescribed by the National policy on education that justifies the objectives of Social Studies at the primary, the junior secondary and the NCE level. Thus, this study of the application of information and communication technology on the academic performance of NCE students of Social Studies in federal colleges of education in North-Western Nigeria is nursed and carried out by the researcher. The NCE Social Studies objectives as prescribed by the National Commission for Colleges of Education (NCCE 2013). This programme is designed with the objectives of producing teachers who are both professionally committed and academically competent in the Social Studies philosophy, contents and methodology (NCCE 2013). The objectives of NCE Social Studies in federal colleges of education in Nigeria include:

1. To produce professionally and academically competent NCE Social Studies teachers for the basic 1-9 schools.
2. To prepare teachers who will inculcate in their pupils rational adjustment to their physical and social environment through acquisition of knowledge, attitudes, values, appreciation and skills necessary for developing social and civic responsibilities.
3. To produce students who are capable of benefiting from further education in Social Studies and other related areas.

2.6 The Nature and Content of Social Studies in Nigeria

The institutionalization of Social Studies as part of our educational pursuit in Africa, according to Balyejusa (1981:10), has to be seen as an African ideas and creation of the concerted educators, philosophers and educator such as Kwame Nkuruma, Tafawa Belewa, Julius K. Nyerere, Jomo Kenyata, Leopoid Senghor and a host of many others.

These pioneer African scholars and nationalists who were educated under the or during the colonial rule observe and saw the negative consequences of the colonial education as an instrument of European imperialism. They brought it to become heroes and reformers. Their recommendation, policies and charters became the pillar upon which the present-day educational policies take roots. And this helps to form the real core on which social studies stand. The idea of Balyejisa is not to forestall the idea of indigenous Social Studies before the colonial instruction. Thus Onabamiro (1983:287) and Ikwumelu (2001:19) observed that indigenous Social Studies is as old as man. And they bare their mind with the traditional Social Studies education as,

> *"That process by which children born into a society is made to understand the environment into which they have been born, to learn the things that members of the society should do to enhance the welfare and progress of the society and to learn why they should avoid doing things that might be injurious to the well-being of the society".*

Indigenous Social Studies is thus child society centred. This therefore buttresses the assertion of Fafunwa, (2004) "that African education (including indigenous Social Studies) emphasized "social responsibility, job orientation, political participation, spiritual and moral values", this therefore portrays that the indigenous Social Studies is both situational and temporal, that is, it is flexible, changing from place to place and from time to time, therefore the need for information and communication technology in instructional delivery. Nevertheless, it follows the spiral format, extending from known to unknown and from simple to complex.

Social Studies as earlier stated is a corrective study. Balyejusa (1981) argues that it is corrective because it aims at upsetting the colonial educational activities and the conventional instructional strategies for contemporary techniques of instructional delivery. Its purpose is to remedy the educational ills and practices of the society. It

seeks to replace irrelevant learning experiences with relevant ones. Since the product of any colonial educational system was not meant to serve the interests of his fellow indigenes. Therefore Social Studies is meant to correct all ills Vis-a-vis, educational, social and technological ills that were inherent in the colonial system of education and the Nigerian society.

Social Studies is a subject that emphasizes on objectives before any content can be of significance to the learner. This, Balyejusa (1981), Ikwumelu (2001) and Mezieobi (2008) bare their mind to. They agreed that the teacher has to understand why he is doing what he is doing before any meaningful learning can take place. In Social Studies, a teacher must know what he is supposed to accomplish for the benefit of the child and society. Social Studies is equally a study that emphasizes the importance of man. It places man in a control position and his activities are studied in relation to his various environments which could be physical, social or psychological, and the goals/objectives of Social Studies is to produce responsible and participative citizens with analytic, relative skills and attitudes to make their environments yield all that make the society for good successful living (Mezieobi 2008). The essence is to make the society a worthy human habitation with fewer problems.

The evaluative criteria of Social Studies focus principally on the affective domain-values and attitudes. Fubara (2008) posits that the evaluation of the learners performance in the other educational domains such as the cognitive and psychomotor domain have meanings and significance only within the context of the affective domain.

Akande (1987) affirms that the nature of teaching in Social Studies refers to a predominantly student controlled or directed interactive learning oriented activities inside and outside formal classroom situation in which the learner actively participates and makes a conscious and deliberate act to induce and acquire significant learning under

the teacher serving as a learning collaborator, a director, a guide, a catalyst and a helper. The teacher in Social Studies teaching is not a task master or an autocrat dishing out encyclopaedic knowledge. Learning is accomplished through active students/ teacher's interaction in ensuring that learning takes place.

2.7 The Contents of NCE Social Studies in Nigeria

Ayinde, (2006) sees content as the data or information presented in relation to a topic. He adds that, it is the subject matter used to create awareness in individuals in order to enable them achieves stated objectives. Ker (1968), defines "content" as the total body of knowledge''. It is a collection of knowledge, facts, concepts, principles, ideas, skill, information and generalization. The contents of any subject comprise the specific topics to be learnt, based on their merit and relevance to the particular society. A consideration of the relevance of curriculum contents to be learnt by students; it can be stated as facts, concepts and generalizations, several sources of content areas exist for use in Social Studies. However, contents in Social Studies like other subjects must be based on their relevance to the needs and aspirations of a particular society.

Supporting the content areas of Social Studies Okam (2002) argues that the Social Studies educator must accept and propagate the view that modern trends in the context of the subject must be developed to solve the problems of the traditional subjects in the approach of curriculum development. This implies that content in Social Studies should reflect the changing needs and aspirations of the society which the Social Studies educator must be aware of.

Emeruwa (1981) & Gbamanja (2002), subscribed for the selection of cultural contents which should embrace the needs and aspirations of the society as well as the dynamic nature of the society. The task of developing the Social Studies content i.e (the Social Studies curriculum) for the Nigerian certificate in education (NCE) is an exclusive

reserve of the national commission for colleges of education (NCCE) which was borne by Decree No3 of the Babangida Regime in 1989. The mandate of the NCCE included the setting of minimum standard, provision of guide lines and accreditation for all teacher education programme conducted by National Commission for Colleges of Education (NCCE 2013). The contents of Social Studies is derived from the social sciences subjects like History, Sociology, Political Science, Geography, Philosophy, Psychology, Economics, Anthropology, thus, Okam (1998) posits that concepts from the social science disciplines and other subject areas constitute the curricular bed-rock of the subject. They affirmed that these disciplines largely provide the subject matter for dealing with the central issues in citizenship education and which Social Studies, as a discipline cannot afford to relegate to the background if it is committed to the dispensation and propagation of the tenets of this new curriculum area.

Cobin (1983) specifies that the various subject areas that make up the contents of Social Studies develop the following area of learner ability. This includes the cognitive, the affective, and the psychomotor domain. The cognitive laying emphasis on information, concepts, and generalization, the affective emphasizes on the development of positive attitudes, values, morals and beliefs while the psychomotor domain lays credence to the development of skills, vis-a-viz the (Physical, intellectual, personal and social development.

Thus the integration of these subject areas afore- mentioned is simply an amalgamation of all relevant concept and generalization in the Social Studies and aimed at studying man within the context of the society he lives. Dubey and barthes, (1980) simply put that integrated Social Studies is the totality of life experience. It focuses on the development of appropriate knowledge values, attitudes, skills and abilities. Obebe, (1981) was quick to add that, Social Studies does not only study man in his physical and

social environment, but helps the individual to examine, clarify and isolate the need, assets and problems of the society. This can be attained through the inculcation of the desired knowledge, skills and values which are the basis of the Social Studies contents. Thus an outline of the curriculum contents of NCE Social Studies program (single major) as issued by the NCCE (2013), Shall be provided in the Appendix.

2.8 Conventional methods of teaching Social Studies.

Conventional methods of teaching Social Studies is referred to the traditional methods of teaching, and also known as back-to-basics, refers to long-established customs found in schools that society has traditionally deemed appropriate in instructional presentation to learners. Conventional methods are associated with much stronger elements of coercion than seems acceptable now in most cultures and as a result the conventional or traditional method of teaching is basically employed in the transmission of knowledge to learners.

James (2009), posits that in the conventional methods of teaching Social Studies, it is basically the transmission of contents to the learners. In this situation the teacher directly gives information to the students. Hence, the students are passive learners who are not actively involved in the teaching process as the teacher dominate the teaching-learning activities by literarily transmitting what he believes could enhance the inculcation of knowledge pattern in line with the curriculum of the school. The conventional methods of teaching Social Studies involve the use of lecture methods, demonstration, and role play, questioning, discussion methods among others and the teaching has emphasized content. The conventional process of teaching has revolved around teachers planning and leading students through a series of instructional sequences to achieve a desired learning outcome. Typically these forms of teaching have revolved around the planned transmission of a body of knowledge followed by some forms of

interaction with the content as a means to consolidate the knowledge acquisition. For many years course have been written around textbooks. Teachers have taught through lectures and presentations interspersed with tutorials and learning activities designed to consolidate and rehearse the content. The teacher renders his students passive listeners while he does the "talking and chalking' therefore the students could not develop critical thinking and appreciation of the learning content. Abdusallam (2013) observed that it has sometimes included the use of corporal punishment to maintain classroom discipline or punish errors; inculcating the dominant religion and language; separating students according to gender, race, and social class.

In terms of curriculum there was and still is a high level of attention paid to time-honoured academic knowledge. In the conventional methods the teachers shouldered too much of responsibilities for teaching in the classroom to make sure everything they thought were understood by the students. In the words of Suleiman, (2010) the conventional methods of teaching explore few sources of information and as a result have little to contribute to the improvement of enduring quality of teaching-learning in schools. He equally noted the following as the bane of conventional teaching methods in instructional management, it engenders a lot of burden on the teachers, and it limits the quality of data presentation in instructional delivery. In the same way, Haruna, (2008) put that the conventional methods of teaching diminishes the capacity of students to enhance self –expression and participatory Learning in class room interactions, thus it lacks the capacity to promotes and encourages critical thinking among learners. In the same vein, the researcher equally believe that conventional methods of teaching limits the capacity of Students to explore their potentials since independent and individualized learning among students is not greatly enhanced as a result of the excesses of the teacher in instructional management. In the conventional methods, students are afraid to ask their

teachers questions. Thus students get bored of the same way of teaching method done by the teacher which is on the chalkboard and listening to the teacher talk while they sit down in class and heat up their chairs. Succinctly, Shaibu, (2011) contribution is that student's questions were not borne out of curiosity or imagination or critical thinking. Rather they were mainly responses to lecturer's regular questions as "do you understand" "Is it clear?" Students mainly ask question as "what did you say is the meaning of…?" or "how do you arrive at the answer to this question?" or "could you repeat what you have said last". Obviously students are supposed to be exposed to learning and questioning that should enhance reflective thinking, curiosity or active mind that is capable of finding solution to problems.

The conventional methods rely mainly on textbooks rather than on hands-on materials approach. In traditional method, presentation of materials starts with the parts, then moves on to the whole as opposed to the modern approach where presentation of materials starts with the whole, then moves to the parts. The conventional methods emphasizes on basic skills while modern method emphasizes on big ideas. With the conventional method of teaching, assessment is seen as a separate activity and occurs through testing while with modern method of teaching, assessment is seen as an activity integrated with teaching and learning, and occurs through portfolios and observation Brooks and Brooks, (2009). Therefore this study is based on a firm belief on the need to move from a "push educator" to a "pull educator". The first one fills the heads of their students with content without causing any activity or desire in them in order to deepen the knowledge and the potential of the resources around them. The second one awakes in students the motivation to learn and will help them in the sought for meaningful information that generates knowledge which will enable students to achieve greater performances in learning activities, thus, the need for this study

2.9 The concept of Information, Communication and Technology (ICTs)

Wikipedia, 2008, refers to information communication technology as an interdisciplinary science primarily concerned with the collection, classification, manipulation, storage, retrieval and dissemination of information. This development has its origin in the common stock of human knowledge. Although records have it that information analysis has been carried out by scholars at least as early as the time of Abyssinian empire with the emergence of ‘’cultural depositories’’ which is presently known as libraries and archives. The advent of information communication technology especially in the modern form has brought effective and efficient information generation, utilization and dissemination, storage and retrieval. In the words of Ogwuezzy, (2010) information communication technologies include among others “television broadcasting, video cassette recorders, computers, satellite communication, telephony, short message service (SMS) teleconferencing and audio conferencing’’. This, in order words, means that ICT encompasses “those technologies that enable the handling of information and facilitate different forms of communication among human actors, between human beings and electronic systems and among electronic systems.

It is an instructional technology which is used to enhance teaching and learning in the school. It is the application of organised or scientific knowledge to practical tasks of teaching and learning in schools. Olaniyi, (2006) that instructional technologies incorporate the tools and making present support to reinforce teaching and learning. Teaching in this respect involves broad based technology including its methods, management and its application that support the creation, storage, manipulation and communication of information in schools. This tools includes, (1) the computer i.e keyboard, (ii) Audio-visual (television), telephone, Radio-cassettes, video games (iii)

internet, printed materials i.e pictorial charts (iv) interactive board. All this materials play vital and central roles in facilitating effective teaching and learning in schools.

Therefore, Ajayi, (2008) posited that ICT is an indispensible part of educational administration as its application makes institutions more efficient and productive, there by engendering a variety of tools to enhance and facilitate teachers pedagogical activities. For instance, e-learning is becoming one of the most common means of using ICT to provide education to students both on and off the campus by means of teaching on-line offered via web-based systems. Although ICT resources have been looked upon as tools for the up-liftment of the standard of education in any nation, the level of compliance in implementing the ICT resources in the instructional development process leaves much to be desired in our educational practices in consonance with the demand of the national policy on Education.

Recent development in ICT has obviously influenced our educational procedure for improved quality education offered students. Umoren, (2006) and Nzewi (2009) posit that, ICT materials in schools serve dual purpose and more efficient classroom instruction. It is in this and the pursuance of the need to access international best practices that the federal government reviewed the National policy on Education, (FRN,2008) to accommodate the introduction of ICTs into the school system in keeping with the dynamics of social change and its demand on education. The basic aim of Nigerian colleges of Education is to prepare teachers to teach at the Primary and Secondary level of Education and provide man power need of the nation. This feat can effectively be attained when ICT is fully integrated into the instructional process in the teacher education system (colleges of education) for productivity. Productive instructional delivery enhances learner's creative and intellectual development through the use of ICT resources, for instance the use of multimedia images, graphics, audio text

and motion pictures for quality learning towards the achievement of individual and national goals.

2.10 Trends in Information and Communication Technology (ICT)

Information and communication technology can be defined as all forms of technology applied to processing, storing and transmitting information in electronic form. The national policy of information technology (2001) sees ICT as the bedrock for national survival and development in a rapidly changing global environment and defines it in two ways, in the first definition the term ICT means computer auxiliary equipment, software and hardware similar procedures, service (including support services) and related resources. In the second definition, the term ICT includes any equipment of interconnected system or sub-system of equipment that is used in the automatic acquisition, storage, transmission or reception of data or information.

Adamu (2009) stated that the use of information technology evolved gradually from the use of visual aids dates back to ancient time of introduction of mechanical gadgets like projector, radio, films, television computer, teaching machine, satellite, internet and e-mail. Adamu (2009) observed that the year 1450 AD marked a significant turning point in the revolution of information technology. John Guttenbergy invented a printing press which revolutionized the communication process; the invention gave rise to the age of books with production of the Holy Bible in 1456. These increased awareness to recorded information in Nigeria. Some of the early missionaries fostered the development of IT during the colonial era; they encouraged the use of visual aids materials such as slides, charts, maps, firms, models and mock –ups. Adamu further stated that in 1943, the first radio receiving stations began in Lagos; this increased the pace of information dissemination in the country particularly in the area of educational broadcasts.

Adamu (2009) stated that in 1947, an instructional materials production centre was opened in Lagos. Nigeria started focusing attention on the new age in late 1994, the first attempt of introducing the internet to Nigeria was made through UNESCO

sponsored Regional information Network of Africa (RINA) project. An electronic network workshop was held at the Obafemi Awolowo University (OAU) Ile-Ife, this gave birth to the Nigeria internet Gray (NIG) as non-governmental organization to carry out the campaign for connection to the internet using 64 k6ps dedicated circuit was announced in February 1998 by the ISP Nigeria on line. Another ISP micro computer system emerged in March 1998, this time using 128 KB dedicated satellite based circuit. It was observed that conscious of information age, Nigeria quickly became a member of African Information Society Institute (AISI) formed in 1996 essentially to bring African ICT age.

Today, communication technology has brought about the evolution of information technology which is rapidly growing and seriously affecting every aspect of human endeavours, be it educational, economic, political, social and religious. Kozma (2005) stated that individual consumers many use the telephone to increase business or household efficiency or to enrich their social networks and reduce isolation. Lemke (2008) opined that the development and the influence of ICT in education should be expected since educational sector normally set the pace for any form of invocation and change. The ICT revolution is particularly more visible in the university system; this is because National University Commission (NCC) as a matter of deliberate policy initiated the move to get Nigerian university to embrace ICT through its Nigeria University Management Information System (NUMIS) project.

The opportunity to set ling to the formation super highway, thereby enjoying what may be referred to as academic cyber freedom which poses new challenges to the

long views by conservative teacher education theorists teaching and learning. Information technology also known as (ICT) is playing a crucial role in contemporary society. It has transformed the world into a global economy which is increasingly dependent on the creative management and distribution of information. Globalization of world economies has greatly enhanced the values of information to business organization and has offered new business opportunities. Today, ICT provided the communication and analytical power that organizations need for conducting trade and managing business at global level with much ease. UNESCO defines ICT as "scientific technological and engineering disciplines and the management techniques used in information handling and processing information, their interaction with men and machine and associated social, economic and cultural matter". Librarian's glossary defines ICT as, "a development of information sources handled by computers and communication be electronic channels, database can thus be accessed, telephone links and computer output can be transmitted in an electronic format directly to remote receiver", while glossary of Academic San Diego State University (2007) stated that, "*Information Technology (ICT) includes matters concerned with the furtherance of Computer Science and Technology, design, development, installation and implementation of information system and applications"*

Today, we are all in agreement that the world is increasingly becoming dependent upon technology as evidenced by the big role it is playing. All developing nations can derive tremendous achievement from this technology for updating the knowledge of its researchers and scientists. ICT is used in instruction delivery through the following aids.

2.10.1 ICT Aided Instruction

The use of computer has facilitated implementation of Social studies curriculum through the application of computer aided instruction (CAI), programmed instruction and teaching machines (P I), computer assisted testing (CAT) and the computer managed instruction (CMI or CML) etc. In the words of Mezieobi (2008), Patrick suppers of Standford University, U.S.A initiated the application of computer technology in schools and invented the term 'Computer –Assisted Instruction. He (Suppes) first developed computer programmes in the year 1969 and is, therefore, credited as the founding father of Computer – Aided Instruction (CAI).

Mbakwem (2001) defined CAI as the use of "computer… to assist in instructional activities". This erroneously gives the impression that computer helps or supports instruction. CAI is not instruction – assistance oriented. It is a mode of instruction and this accounts for the definition of CAI by Okpara (1997 p. 118) as "the use of computer as a medium (or mode) of instruction". To further emphasize the medium of instruction quality or characteristics of C.A.I, Ughamadu (1998 p 84) referred to CAI as "an instructional design whereby computer systems deliver instruction directly to learners by allowing them to interact/relate with designed lessons that have been programmed into the system". In order to stress the interactional or relational aspect of CAI, Eleoba (2004) sees CAI as instructional "situations where students and computer interact and instructions taken". The use of computers in the developed world is a pervasive educational culture. This new technology – CAI – has permeated social studies classrooms as computer programmes in social studies are available from several sources in the United States of America, and basically in Social Studies workshop or laboratory in Nigerian colleges of Education and Universities. With regard to the contributions of computer – assisted instruction (CAI) in social studies in the technologically functioning parts of the world, Jarolimek (1986) grouped them into four, there include,

i. The computer is used to obtain or collect data (data bases) or to retrieve information that is already stored in the computer which is relevant to social studies.

ii. Computer is used to practice and apply social studies skills i.e problem – solving and thinking skills. Programmes which entail computer practice and application of social studies skills are known as drill and practices.

iii. Computer is used for tutorial assistance.

iv. Computer is used for specialized instructions that entail, simulations, data analysis information interpretation for problem resolution.

Considering the fact that what goes on in teaching – learning process in social studies classroom is instructional delivery, we refer to CAI in the context of Social Studies as functional instructional computers in social studies class in which there is a learning interaction between the instructional computers and the students in favour of the learners. In Computer – Assisted Instruction, the learner is not just a passive recipient of information, knowledge or learning experience from the computer, the computer in the interacting session with the learner presents what material or learning experience is to be learned and perhaps the accompanying questions while the learner in his active involvement does 'something in order for the process to proceed" Jarolimek, (1986, p.96). What does the social studies learner or student do? He or she studies the computer presented instructional information and questions, answers the questions and if need be further asks questions where and when in doubt. The student's responses are accepted by the computer, analysed or interpreted, appropriate feedback is given to the student in response or performance and the records of the student's performance are stored for

evaluation purposes and can be retrieved as at when needed. CAI can be used for large group of social studies students or for individualized instruction.

i. It encourages active participation of the learners and their thinking in the computer – learner interaction via the learner's inevitable responses.

ii. Mbakwem, (2001) pointed that computer assisted instruction is pensive to and accommodates learner's differences i.e "each student works at the programmed materials at this own pace, and his ability level".

iii. There is appropriate feedback which may not only point to a student's deficiencies, or low achievement but also makes the student look out for performance remedy.

iv. CAI suits both large group instruction as well as individualized instruction. A confirmation of high scholastics achievement via the feedback may serve to reinforce the achiever or motivate him.

v. It stores records of performance of the students which can be retrieved at will and for assessment/ evaluative purpose.

vi. Human frailties such as subjectivity and impartiality which may possibly be exhibited by a teacher is not present in computers that are objective and impartial.

vii. Computer presents visual information which tremendously assists the learner in remembering and information recall.

viii. It commands interactive capacities with the learners which other instructional media i.e. a recording, films, film – strip do not enjoy.

ix. Computer has learner diagnostic capacities. This diagnostic characteristic of computers makes it possible for "the computer… to diagnose an individual learner's knowledge of the subject or skill, to call up a programme appropriate for

the learner, and to adjust the complexity of the presentation accordingly, Jarolimek, (1986).

Programmed instruction, also known as programmed learning, or a planned sequence of learning experiences, is a teaching machine piloted or directed instructional device in which education oriented and specially prepared programmed materials in social studies, or other subjects, are broken down into small segments, small bits, or small learning 'frames' usually arranged in sequential order, in an ascending order of knowledge or skills' or values' complexity or difficulty and presented to the learners / students by a teaching machine.

The students on paper or on machines, where they are available, respond to each of the frames. Immediate feedback to the response is given. Wrong response entails explanation as to why it is so by showing the right answer while correct responses attract the provided reinforcement. The next item is then moved on to and "the stimulus – response reinforcement cycle is repeated until the series of several frames present a complete programme" Mbakwe& Chauhan (2001).

On the aspect of Programmed Instruction as of ICTs in the implementation of Social Studies curriculum,

It is expedient at this juncture to explore some reasons for the introduction of programmed learning in the teaching of Social Studies. They include

i. To encourage individualized instruction hence the sequential order in which learning experiences are organized.
ii. It may have been a response to contain the explosive student enrolment trends and perhaps the dearth of teacher in the classroom.

iii. It may have resulted as an innovation propelled by the desire of industries for new products and the search for new markets- educational institutions being a market focus.

iv. To demonstrate and emphasize the indispensability of sequential order of presentation of knowledge, content and skills for improved learning.

From the proponents of programmed instruction, the following advantages to Social Studies curriculum and implementation are discernable.

i. It encourages sequential presentation of content to learners;

ii. With programmed learning, learners can learn at their own pace and also can work individually;

iii. Immediate feedback to the responses is rewarded. This reinforcement practice motivates both the achievers and slow learners.

iv. Teaching machine does not punish students as some teachers do at times.

v. The bias, attitude, values or personality of the teacher has no place in programmed instruction.

vi. The introduction of teaching machines for programmed learning arouses the interest of students particularly if the machines are strange to the students or are not part and parcel of their regular instructional delivery system.

vii. Educational programme will recognizes individual differences and can, therefore, be written for a variety of students.

viii. In the absence of qualified teachers, teaching machines appear to solve the problems of teacher shortage.

ix. Programmed instruction and machines allow teacher's ample time for other school and instructional activity related duties.

x. Storage is provided much easier by machines than any other teaching materials.

xi. Attention of the learner is focused on the programme, such that classroom disruptive problems are minimized.

xii. Learners creative thinking is fanned by programmed instruction that of necessity must elicit responses from the students in the teaching – learning setting. Furthermore, the exposure of students to programmed instruction may lead the creative ones into developing programmed instructional materials that are relevant to social studies.

2.10.2. ICT Interactive Package

ICT interactive package is a novel education pattern that serves to solve the contradiction between the large amount of social demands and the lack of educational resources. The interactive packages provide a student centred learning environment and delivers knowledge on demand with up to minute information. This is in line with the philosophy and goals of education in Nigeria (2004) thus stated "educational activities shall be centred on the learner for maximum self development and self-fulfilments". These packages include the use of Mobile smart phones, flannel interactive boards, the use of internet among others.

(a) Mobile Phones in the Teaching and Learning of Social Studies

Mobile phone learning is a recent phenomenon, recent in the sense that it was non-existent until 1988. With the advent of mobile phone, several researches have been conducted and some are currently on going to explore the potential of mobile phone in the implementation of curriculum, school learning and the possibility of employing same in the Social Studies classroom in view of teachers' adherence to the age long traditional system of teaching and learning. For instance, the study of, Bhana and Urmetzer (2005) on ''Harnessing mobile technology for classroom learning'' described a component of a prototype classroom soft ware named ''QUEST''. The component suggested how mobile

technology could be harnessed for learning by developing less expensive network infrastructures. The information gathering task that were presented to the learners included taking notes, taking pictures, interviews and survey using their mobile phones. The information obtained on each of the task were down loaded to a desktop (Personal Computer) and the finding was that mobile phones had media gathering, data dispensing capacities that could be harnessed for improvement in School learning.

The introduction of (3G networks) - the mobile version of broad band according to NESTA, (2005) has made it possible to browse the web or hold a video-conference from a mobile phone. The potentiality offered by these developments is huge, particularly in Education as opined by (NESTA, 2005). The review further applaud the potential of mobile phones technology it observed that the I- mode will enable users to send E-mails, surf the internet, check the news and play game while on the move.

The concise way with which information or messages are condensed and sent using the short memory service (SMS) facility of the phone could equally improve user's skills for organisation of ideas and learning of summary in inquiry and inference in Social Studies Education. It could be a potential way for which research could be directed to know whether there could be a relationship between SMS or texting and the skills of summary in value judgement.

Through mobile phones students could be encouraged to separate facts from fictions as a way of improving reasoning and skill development. For instance, a group of students could go outdoors with a picture phone and take images of a scene or their physical and social environment or conduct an interview on critical issues and then send them back to the classroom with a media ''board''. The classroom group would decide what was happening and then compare their ideas with the facts when the other children or group returned to school. This could improve reasoning and verbal fluency as it adds

meaning to learning. It puts children right at the centre of learning added to the fact that it could generate and sustain interest and attention.

Mobile phone with all these features could be a device that could more rapidly revolutionize teaching and learning and as noted by the Director of NESTA & Owen, 2005, mobile phone which can be inform of camera, a cine camera, a television, a computer and a calculator as well as something you use for talking to other people in your pocket all the time means that you are armed with a very powerful tool.

Among the device for mobile learning revolution, mobile phones incorporate features such as mobile E-mail, short messages services (SMS), photographing and Videotaping, internet browsing, portability and pocket ability that could facilitate school learning in areas such as inquiries and cognitive development of users.

(b) Interactive Board and the Teaching/Learning of Social Studies

An interactive white board is a touch-sensitive screen that works in conjunction with a computer and a projector. It is an effective way to interact with digital content and multimedia in a multi-person learning environment, such that is found in Social Studies classes. Learning activities with an interactive white board may include, but are not limited to the following: Manipulating text and images, making notes in digital ink, saving notes for latter review by using e-mail, the web or print, viewing website as a group, demonstrating or using software at the front of the room without being tied to a computer. Creating digital lesson activities with templates, images and multi-media, using presentation tools that are included with the white boarding software helps to enhance learning materials and showcasing student presentation in social Studies programme.

Interactive whiteboards affects learning in several ways, it help to raise the level of students engagement in the social studies classroom, it motivates students and

promote enthusiasm for learning, it support many different learning styles, they are used in a variety of learning environments including those catering to students with hearing and visual impairments. Research also indicates that note taking on interactive whiteboard can play a key role in the students review process leading to higher levels of attendance.

The functionality of the interactive white board and its accompanying software allows for the development of Social Studies classroom activities that are engaging, for whole class teaching brings the entire class together, focuses their attention and provides structured, teacher focused group interaction.

The constructivist relies on the learners to select and transform information, build hypotheses in other to make decisions and ultimately construct meaning. Learners actively engage in learning process through reading, writing and discussion, analysis, syntheses and evaluation rather than passively absorbing instruction, as done in the conventional model of instruction.

In addition to the positive impacts observed in students learning, researches equally shows that designing Social Studies lesson around interactive white boards help educators streamline their presentation and be more efficient in their information and communication technology (ICT) integration and increase their productivity overall. The Social Studies teachers can use digital resources while maintaining dynamic interaction with the entire class, providing computer-based learning without isolating students and encourage a higher level of students' interaction in both teacher-directed and group-based exchanges.

One of the biggest challenges of integrating ICT into learning environments is maintaining dynamic interaction with students as they focus on their individual computer screens. The interactive white boards promote interaction among students, the learning

materials and the teachers and help to enrich ICT by providing a large work space for hands-on work with multi-media resources.

(c) Internet and learning of Social Studies

The internet is a global system of interconnected computer networks that use the standard internet protocol suit (TCP/IP) to link several billion devices worldwide. It is a network of networks that consists of millions of private, public, academic, business, and government networks, of local to global scope that are linked by a broad array of wireless, and optical networking technologies. The internet carries an extensive range of information resources and services, such as the inter-linked hypertext documents and application of the world-wide-web (www), the infrastructure to support e-mail, and peer-to-peer network for file sharing and telephony.

The internet, which is today the most sophisticated and modern way of interactive net-working, has offered global access to all kinds of information generation and sharing across the world, thus reducing the world to a global village. Through the internet, one can record, access, search and retrieve information anywhere in the world in minutes, Urhegbu,(2000). The internet plays a major role in the teaching, research and learning process in Social Studies.

The web enables individuals and organization to publish ideas and information in Social Studies programme to a potentially large audience on-line at greatly reduced expenses and time delay. In this perspective, Students can go on net to look for materials of choices for research purposes; the teacher can equally load his lesson on net and instruct students to access it. Students equally load back on net any difficulties they have inform of questions for teachers to make clarifications in form of explanation and load it back on net. Test items and examination questions can equally be loaded on net for students to attend to. Students respond to the test items or examination and load their

responses back on net. Responses of students are marked and results are posted on the internet and students check their results on the net. Example of this can be in the case of WAEC and Jamb whose result are always posted on the net for students consumption.

Flurck (2009) identified five basic modes of using information and communication technology resources in the teaching and learning process.

a. Support mode; to increase accuracy and enhance presentation of work through a word processing packages; (b) e-mail (c) computer aided drafting and design; (d) desktop publishing.
b. Exploration and control mode: Students can explore, examine, experiment with and build situation software packages
c. Tutorial mode: Information is presented at an appropriate level and pace for the users, giving the students the opportunity to receive feedback on progress.

There are available packages for drill and tutorial in technically science, objective testing etc.

a. Resource mode; the technology is used to access information and other resources, whether online through internet or offline using CD-ROM and other software's. It promotes testing and research skills.
b. Link mode; the technology is used for communication between individual such as electronic mail (e-mail) and desktop, video or audio conferencing.

Nitbi (1998) also presented list of activities and learning options that enhance and argument against traditional options of Social Studies teaching the use of computer to include;

a. Platform for quick exchange of ideas, learning materials and teaching strategies among Social Studies teachers and students.

b. Enhancement of explanatory learning through the hosting of websites. Concretisation of social studies concepts through the relaying of events and processes by video otherwise not easily accessible locally.

c. Substance and updating of knowledge.

d. Discussion and seminars can be held across continental boundaries to the benefit of all.

e. Quick access to current references and standards.

f. Access to international aids or assistance.

g. Distance learning in social studies can be easily implemented with the internet.

A consideration of the above reviews that teaching and learning through ICT will assist and support many educational functions. This will increase the productivity of teaching force and free teachers of simply presenting information for student consumption.

(d) ICT Audio Packages and Audio Visual Packages

Providing rich ICT interactive multimedia is a key feature of providing interactive and memorable teaching and learning occasion in and out of Social studies classroom. It enables students to access resources that support learning wherever they are; without the need to attend a specific location at a defined time. The use of audio and video also makes it possible to present knowledge in different ways and enables different forms of interaction with learners. Utilizing audio and video to support learning is now more accessible than ever, especially for learners' of Social Studies. Staff and students of Social studies can interact with high-speed and reliable Internet access both at home and in the school (Oliver et al. 2012).

Audio and video materials can be used to enhance learning resources by showing real life scenarios, explaining concepts, observing social groups, and acting as triggers

for discussion. They are also able to bring experts and viewpoints to the student learning experience and are excellent at bringing subjects ‘to life’ to engage discussion and inspire learning.

(e) ICT Audio Media Packages.

The use of audio is well established in education and has been used for decades. From the humble audio cassettes of the 1970s, to accompanying nearly all video recordings, audio has a long history as a teaching and learning aid. Audio as a format has great breadth and depth which means there is great potential for its use in education. Audio...demonstrated a capacity to facilitate authentic engagement, allowing students to connect in various ways to the outside world, both as listeners and publishers. The ease and speed with which digital audio can be deployed was used to support timely interventions and in some cases promoted information currency and responsiveness." Beyond podcasting: creative approaches to designing educational audio in Learning Technology.

The diversity of activity that takes advantage of audio hasn't changed much in many years. However in recent years there has been new exploration into 'digital' uses for audio, which were anticipating taking advantage of the potential that is unique to digital audio. The majority of uses for digital audio, to date, have been replicating traditional activities (e.g. recordings of lectures), yet this digital medium has the potential to offer much more. As use of digital learning technologies continues to grow around infrastructure (e.g. the virtual learning environment) and as teaching and learning pedagogy evolves within 'uniquely' digital contexts, we have begun to see new methods for using digital audio recordings within teaching and learning. The widespread popularity of audio is due, in the main, to its ubiquity in our culture and ease of use both

from a listener's perspective and more recently in the creation of audio. The tools have gotten easier to use and better documentation has lowered the entry barrier. Furthermore, affordable recording devices are readily available, particularly with most mobile phones now able to record audio to an acceptable standard, giving the majority of people the means to create and use audio.

Audio materials are those materials that rely solely on the sense of hearing for teaching and learning. By audio media is meant the various means of recoding and transmitting the human voice and other voice for instructional purposes. The audio materials and equipment commonly used for classroom instruction are; the phonograph or tape player, the open-reel tape recorder, the cassette tape recorder, and radio. Audio media can be used as follows: Teaching of listening skills: Audio recording can be used in training children to acquire listening skills. By playing to them several times, recordings of songs, fairy tales, folk tales that are interesting, children can become interested and eager to learn. With time they can be asked to sing with the tape or recall the stories. This training can be carried over unto listening to radio broadcast. Audio media are very useful for developing creative expression and role play in Social Studies activities. As support to visual materials; Silent films, slides and filmstrips and print materials are enhanced when they are accompanied by audio recording. Swark (2011). Audio media can be used in all phases of instruction from introduction to evaluation of a lesson. According to Natoli (2011); perhaps the most rapidly growing general use of audio media today is in the area of self spaced instruction and in mastery learning. Pre-recorded audio materials are available in a wide variety of subjects. In Music, various applications can be found. In nursery and primary classes, tapes records can be used to present rhymes, drama, storytelling, songs, etc. In social studies and some other subjects, voices or resources persons

expects, politicians, authors, businessmen, artisans, traditional rulers, historical figures, etc) sounds from the environment can be brought into the classroom. There are ‘’talking books’’ for blind and virtually impaired students. Information from field trips to places like museum and interview with resource persons can be recorded on tape and played and reviewed in class. Audio media can be used for evaluation of student’s performance and achievements. Audio tapes can also be used for micro teaching, although video recording may be preferable.

Audio media for open and distance education; radio and audio tapes have been used to broadcast programme that aim to teach directly and indirectly. They also have been used for both formal and non-formal learning, whether in the classroom, factories, community centre or at home. Eze (2010) give five main roles of the radio in distance education as, news and information, motivation and mobilization, tutorial support, resource material and direct teaching. Audio ICT packages can be used in the teaching of Social Studies in the following ways; Have them recorded by those of your target audience, Keep tapes 5 minutes or less in length, limit objectives, focus on behaviors, make interactive, Use a dialogue or question/answer format with visuals as a supplement, Start and finish with key points

The use of audio packages enhances the teaching and learning of social studies in the following ways. Dike (2013), highlighted the following, it is widely available for purchase and use, it is beneficial for visually impaired and low literate; it hold attention more than print, repeatable for reinforcement; can share with family, Inexpensive to make; portable to carry about, Individualized for specific teaching, Use alone or with other modalities, Serves as short introduction or refresher for previous instructions, equipment is inexpensive and easy to operate, Decrease consultation time / phone calls Consultation tape improved understanding of condition/treatment and satisfaction.

Audio is a flexible medium which means that there are many applications within an educational context. The examples of audio uses below show that audio can be used either directly for teaching, e.g. an activity is formed around an audio resource, or as incidental activity where audio plays a minor role:

- Providing student feedback using a voice recording that is sent to the learner either to supplement written feedback or as a replacement. An example is the Sounds Good: Quicker, better assessment using audio feedback'.
- Student generated recordings which may be used as part of a learner activity or to record evidence.
- Interviews with subject matter experts which can be listened to and used as primary sources of information or smaller and incidental uses. The Centre for the Study of Social and Global Justice at the University of Nottingham has made a selection of their recordings publicly available.
- Public lectures are enjoyed live and face to face. The recordings can be repurposed for teaching material and used for different contexts and subjects. The University of Oxford has been making many of their lectures publicly available.
- Live online discussions can be conducted via audio tools and platforms between two or more people and this facility is frequently used for distance learning.
- Audio source materials from the past and present which can be used as part of a teaching activity. Oral history materials for example may be used by students to get a rich description of a past event.

As a demonstration of the ability for audio to play a significant role in education, Diana Laurillard lays out a scenario around live online discussion centred on audio as a vehicle for activity: In order for students to benefit significantly from the provision and creation of audio resources, they should be at the heart of the pedagogical design. An

example of a common audio tool ‘feature’ that supports a pedagogical use, is timeline based comments. Many online audio players allow comments to be tagged along the timeline so that the listener can skip to parts that the lecturer suggests. This commentator could be the teacher or fellow group members.

Tony,(1986) an expert in distance education, provides examples of contextual uses for audio such as ‘to bring students primary audio resource material, recordings of naturally occurring events, e.g. political speeches, to present, analyse or critique complex arguments. Once you have chosen a teaching and learning context you can combine it with any one or more of the following pedagogical applications:

- To define teaching activity (typically task driven)
- To support learning through acquisition “what learners are doing when they are listening to a lecture or podcast”, Laurillard (2012).
- As a basis for an argument
- To support learning through discussion – which are recorded for evidence
- To support assessment through media enhanced feedback
- Audio submitted student evidence - e.g. proof of collaboration
- To summarise previous teaching
- To enable students through repetition and practice to master certain skills or techniques
- To make recordings of naturally occurring events, e.g. political speeches
- To represent concepts and ideas
- To update the course when the knowledge base changes
- To facilitate discussion for distance learners, and collaborative learning

Having audio available to your students can support their learning in the following ways. It: provides diverse teaching techniques for learning, gives the teacher a

voice – this can reduce the feeling of isolation for cloud based students, but also helps located students feel connected, can be used to simplify and explain complex problems, can allow students to access the learning materials as often as required, allows students to learn at their own pace, with instant playback, rewind and pause, reduces frequently asked questions from students, it can be re-used.

Types of Audio-Visual Materials

There are different ways of classifying audio-visual materials. As listed by (Fayemi, 2010) together with the necessary related equipment for putting them to work in the classroom, audio-visual materials include the following: Realia in social and physical environment These materials, situations, and the people have to be visited, studied, observed, reacted to and worked with, right in their natural environment. The study of realia may then demand field trips, demonstration, experiments and other direct experiences as processes for getting the meaning. They may come into the class in display cases or attached on bulletin boards. Dramatic performances (portrayal of people, events, and procedures) dolls and puppets are produced for use as dramatic models. Models, Mock-ups Globes, and Relief Maps. These can be purchased or produced by the teachers and students jointly. Exhibits and dioramas made up of models can be borrowed, purchased or constructed. Television programmes: This requires television receivers and antenna systems. They can be produced jointly by students and teacher as learning experiences. Motion pictures: Projection equipment for accommodation both optical and/or magnetic sound tracks and projection screens are required. Still pictures projection materials include transparencies and micro-projector materials (microscopic slides and microscopic slides and microscopic objects). Study prints and pictorial illustrations Radio and Audio programmes, as found in tapes or disk recordings and radio broadcasts.

Graphic materials such as maps, graphs, cartoons, diagrams and charts. According to (Aina and Olutade,2006), the chief visual tools which can be used by the teacher may be classified as follows:

Pictorial and Graphic Aids Chalkboard Textbooks illustrations Charts Pictures (a) Drawing (b) Reproductions (c) Photographic Maps of various types Diagrams. Picture language (Isotype, etc)

Optical Aids Episcope Diacopes (a) Standard Lantern (b) Sub-standard slide projector (c) Strip projector (d) Micro-slide projector 16mm Cinematograph

(a) Silent

(b) Sound Specimens (a) Actual objects

(c) Facsimiles or reproductions

Models (a) Reduced (b) Enlarged (c) Sectional (d) Working, included real objects e.g. school visits The direct experience The contrived experience or "Mock-up" Dike (2013) grouped audio-visual materials into: Audio resources such as records, tapes and cassettes, and radio broadcasts. Visual resources including models, real objects, three dimensional displays, the chalkboard, bulletin board, adhesives, graphs, diagram's, charts, maps, cartons, posters and pictures and projected forms like transparencies, slides, filmstrips and films. Audio-visual combinations e.g. sound film and filmstrips, slides-tape decks, television programmes, videotapes and dramatization. Others, such as educational programmes/games, programmed instructions, demonstration and field trips. From the above we can see that A/V resources are divided into audio visual and a combination of audio and visual resources and others which are class with audio-visual resources which can either be in a projected or non-projected forms. Audiovisual materials are instructional materials that present information to students in ways that do not involve the use of paper and pencil. Audiovisual materials are useful in instruction

because they take learning away from a textbook-only approach. Audiovisuals have been known to increase retention of information and actively engages the learner by combining what we hear with what we see. Many students find their classes more enjoyable when the teachers use photographs, films and music to bring the content to life. Teachers often preview audiovisual materials at home before using them in class.

(f) ICT Audio-Visual Packages

Webster's Encyclopaedia Unabridged Dictionary of the English language defines Audio-Visual Aids as "training or educational, materials directed at both the senses of hearing and the sense of sight, films, recordings, photographs, etc used in classroom instructions, library collections or the likes". The term has also been defined by (Dike, 2009) as; those materials which do not depend solely upon reading to convey meaning. They may present information through the sense of hearing as in audio resources, sight, as in visual resources or through a combination of senses. Indeed, the variety of such resources is a striking characteristic. According to (Anzaku, 2011) "the term audio-visual material as commonly used to refer to those instructional materials that may be used to convey meaning without complete dependence upon verbal symbols or language". Thus according to the above definition, a text book or a reference material does not fall within this grouping of instructional materials but an illustration in a book does. Some audio-visual components are in the nature of process and experience, for example, dramatizing an event or a procedure or making drama. Some of the audio-visual materials like the motion pictures require the use of equipment to release their latent value. Some do not need equipment at all like an exhibit or a study print. This term designates in common usage both material things as well as processes such as field trips. Anzaku further stated that audio-visual materials include materials and equipment alike, that materials are considered to be system, or body of content of potential value when put to work, while

equipment or instructions, often referred to as hardware, components, are the means of presenting such content. The importance of audio-visual materials in the teaching and learning processes cannot be over emphasized. Below are some of the roles of audio-visual materials. Basing learning in sense experience, Extending experience ,Encouraging participation, Stimulating interest ,Individualizes instructions, Serves as a source of information, Making leaning permanent,

2.11 Use of ICT in Education in Nigeria

Educational technology can be viewed differently in relation to media and multi-media appliances that can be used in the delivery of classroom instruction for the purpose of enhancing students performance and achieving Educational goals. However, a narrow explanation on the subject would be confined to educational technology to computers, computer peripherals, audio materials, audio-visual materials, interactive boards, internet facilities and related software's that are used for teaching and learning in and out of classroom. On the other hand for technologists, educational technology is any hardware that is used in the classroom (Chai & Cuckle, 2010).

Formal education is the major part of the education system, which is delivered through the school system of primary education to higher education. Even, pre-primary education is regular in most of the countries. The education involves mainly teaching and learning where knowledge is shared and generated. Ultimately to achieve the purpose of education in the modern world with high technology, ICT is widely used throughout the sector.

The uses of ICT in education are described with the functions; ICT as object by referring learning about ICT; ICT as an 'assisting tool' while making assignments, collecting data and documentation, communicating and conducting research; ICT as a medium for teaching and learning; and ICT as a tool for organization and management in

schools (Cuban, 2009; Davis, 2009; Dexter, 2006; Divaharan & Ping, 2010). These four dimensions are foremost in the educational system. In many countries evidence has clearly demonstrated that ICT can improve the quality of education (Lever-Duffy &,2006). ICT in education can be viewed from its practice in diverse countries, whereas few countries are observed. In general, it can be stated that a large percentage of educational institutes in the Netherlands have access to and make use of ICT with 97 percent of all institutes facilitate a Learning Management System, an electronic learning environment including an electronic portfolio system (Brummelhuis & Wijngaards, 2010). The ICT facilities and internet broaden the capacity of ICT use in every institution. In Netherland it is found that, of studied schools, 0 95 percent provide access to the Internet: some 83 percent of broadband and some 72 percent via Hotspot Wi-Fi network facilities (Brummelhuis & Wijngaards, 2010). In Turkey, a school in Ankara has one computer laboratory with 21 computers, 15 classrooms have a computer, and there are 350 Classmate PCs donated by Intel. The lab has broadband Internet and a wireless hub (Light, 2009).

Uses of ICT in pedagogical activities are widespread in the education system and particularly in the teaching of Social Studies towards enhancing the academic performance of learners. Teachers use computer software to make lesson plans, PowerPoint presentations, and use smart boards for interactive lessons. Distant education consumes best use of ICT, and e-learning is also accelerating in an efficient way. E-Learning covers a continuum of educational applications with Word, Excel, Access and PowerPoint as the main gadgets on one end with no or little impact on teaching, learning and administrative practices on the other end. Apart from audiovisual technology used in the classrooms for teaching and learning process, phone technologies, email, electronic discussion and online classrooms are also used (Stuart, 2009).

Despite considerable progress in basic and higher education in terms of improved access especially in the last few years; deprivations in the use of ICT persist when compared with global standards (Taiwo, 2006). There is no doubt that the increasing growth of ICTS in the likes of computers is glaring in Schools located in urban centres like Lagos, Kano, Abuja, Porthacourt, Kaduna, Enugu, just to mention but a few and the availability of internet or cyber cafes in institutions of higher learning. In spite of the relatively poor global standing the development and growth of ICT usage in education in Nigeria is encouraging. The Federal Ministry of Education (FRN, 2008) report, only 0.2% of the population used the internet and the penetration rate of computer was only 1.2%. Today about, (15 %) of Nigerian have access to the internet and penetration rate has risen to over 6%. As a result of the increasing popularity of computer courses, enrolment has been on the increase as computer schools and training centre continue to grow. By about 2004, there are about 1300 and private educational institutions offering ICT related diploma programme in the country. Data from the National university commission (NUC) show that the number of graduates in ICT for 2003-2003 was approximately 31,000. Computer engineering and computer science have emerged among the top five courses of choice for candidates applying for university admission.

According to UNESCO (2010), the term ICT is plural, referring to a great many technologies and it is an all encompassing term that includes the full gamut of electronic tools by means of which we gather, record and store information, and by means of which we exchange and distribute information to others. ICT are composite of many different tools that enable the capturing, interpreting, storing and transmitting information in a fast and easy way. It can equally refer to as multi-media. In the following figure (UNESCO, 2010), we can observe several options which allow us to better understand the society where we live:

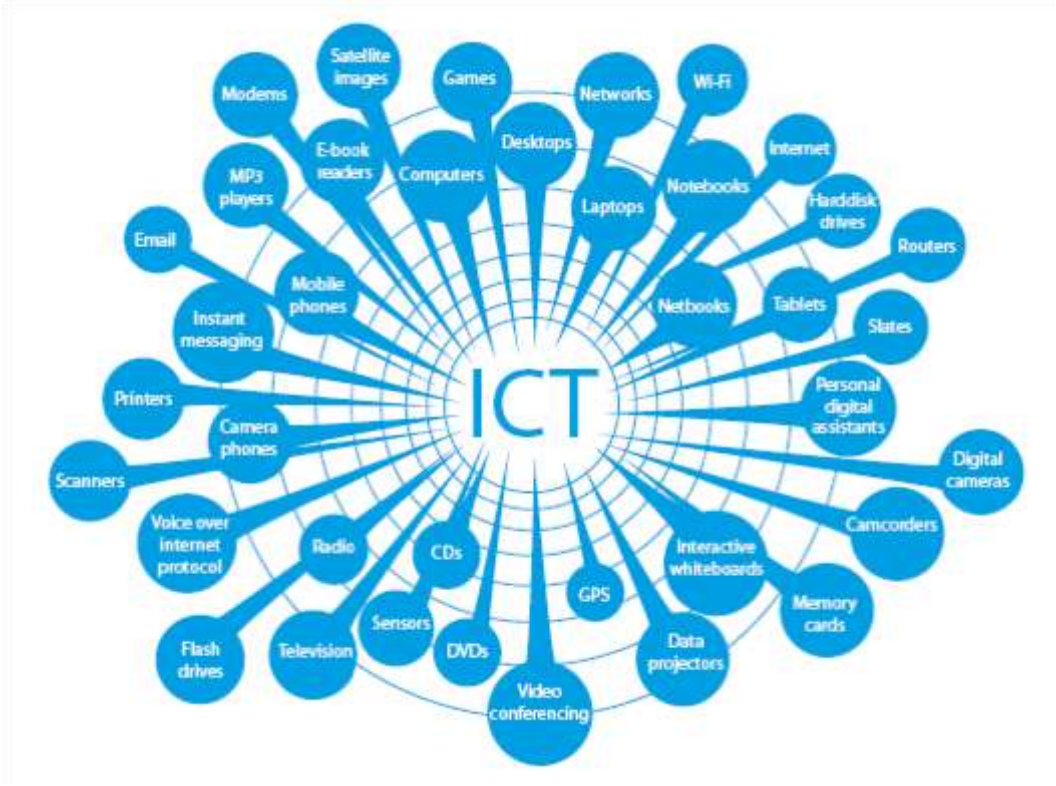

Figure 1. ICT. Font: UNESCO (2010)

This large number of tools makes our life easier and they are very helpful in organizing the big amount of information that we receive each day. We know that we do not use all of them every day but also we know that students are in continuous contact with them and we cannot ignore it. For this reason, the changing role of teachers is an essential issue in the dissemination of valid information that will positively influence the academic performance of learners in the institutions of higher learning. Therefore this study requires the need to move from a "push educator" to a "pull educator". The concept of push educator emphasizes that the teacher fills the heads of their students with content without causing any activity or desire in them in order to deepen the knowledge and the potential of the resources around them. While the pull educator stipulate that the teachers awakes in students the motivation to learn and will help them in the sought of

meaningful information that generates knowledge. A good starting point, according to Anderson and Weert (2009), is to join with fellow enthusiasts at the school, to meet together informally to talk about ICT issues and share knowledge. This process where two or more teaching colleagues work together to discuss problems, share experiences and provide support for one another with a view to improving their teaching is often called peer coaching. According to Graham (2006), a good use of online learning stimulates active learning in the classroom, which motivates students to continue learning activities beyond the lecture hall or classroom. Such online learning, then, in combination with sound face-to-face teaching (blended learning) is a powerful approach to learning. Both students and their teachers can take advantage of these ways of learning and communication to improve the teaching-learning transactions in Social Studies in schools.

2.12 ICT and Academic Performance

Performance is the accomplishment of a given task measured against preset known standards of accuracy, completeness, cost and speed. In a contrast, performance is deemed to be the fulfillment of an obligation, in a manner that releases the performer from all the liabilities under the contract. Academic performance is a word used to indicate how well students are doing in their studies and classes, it generally refer to how a student is accomplishing his or her tasks and studies (Anon, 2012).

Based on the extensive usage of ICTs in education , the need appears to unravel the myth that surrounds the use of information and communication technology (ICT) as an aid to teaching and learning of Social Studies, and the impact it has on students' academic performance towards the achievement of individual and Educational goals. ICTs are said to help expand access to education, strengthen the relevance of education to the increasingly digital workplace, and raise educational quality. However, the

experience of introducing different ICTs in Social studies classroom and other educational settings all over the world over the past several decades suggests that the full realization of the potential educational benefits of ICT cannot be over emphasized in the achievement of Educational goals. Valasidou and Bousiou,(2005) are of the view that the direct link between ICT use and students' academic performance has been the focus of extensive literature during the last two decades. They highlighted that ICT helps students to their learning by improving the communication between them and the instructors.

The analysis of the effects of the methodological and technological innovations on the students' attitude towards the learning process and on students' performance seems to be evolving towards a consensus, according to which an appropriate use of digital technologies in education can have significant positive effects both on students' attitude and their achievement. Thus, research has shown that the appropriate use of ICTs can catalyze the paradigmatic shift in both content and pedagogy that is at the heart of education reform in the 21st century. Kulik's (2006) offers that, meta-analysis study revealed that, on average, students who used ICT-based instruction scored higher than students without computers. The students also learned more in less time and liked their classes more when ICT-based instruction was included. Woessman (2005) equally used international data from the Programme for International Student Assessment (PISA), they showed that while the bivariate correlation between the availability of ICT and students' performance is strongly and significantly positive, the correlation becomes small and insignificant when other student environment characteristics are taken into consideration. Attwell and Battle (1999) also examined the relationship between having a home computer and school performance, their findings suggest that students who have access to a computer at home for educational purposes, have improved scores in reading

and math, therefore social Studies cannot be seen in isolation to this findings. Becker (2007) in a related development found that ICT increases student engagement, which leads to an increased amount of time students spend working outside class. Coates et al. (2008) showed that students in on-campus courses usually score better than their online counterparts, but this difference is not significant here. ICTs especially computers and Internet technologies enable new ways of teaching and learning rather than simply allow teachers and students to do what they have done before in a better way.

ICT helps in providing a catalyst for rethinking teaching practice (Flecknoe,2006); developing the kind of graduates and citizens required in an information society; improving educational outcomes (especially pass rates) and enhancing and improving the quality of teaching and learning (Wagner, 2005). ICT can help deepen students' content knowledge, engage them in constructing their own knowledge, and support the development of complex thinking skills (Webb & Cox, 2004, Kozma, 2005; Kulik, 2006). Studies have identified a variety of constructivist learning strategies (e.g., students work in collaborative groups or create products that represent what they are learning that can change the way students interact with the content (Windschitl, 2009).Girasoli and Hannafin (2008) urge the use of asynchronous CMC tools to promote student self-efficacy and hence academic performance. Fister et al (2008) also depict the power of tablet PCs to improve Social Studies and related instructions. ICTs have the potential for increasing access to and improving the relevance and quality of education. The use of ICT in educational settings, by itself acts as a catalyst for change in this domain. Students using ICTs for learning purposes become immersed in the process of learning and as more and more students use computers as information sources and cognitive tools. Reeves and Jonassen, (2006), observed that the

influence of the technology on supporting how students learn will continue to increase and thereby enhance student's ability in learning.

2.13 Effects of ICT on Teaching and Learning process

Yusuf, (2005) observes that the field of education has been infiltrated by ICTs, which have undoubtedly affected teaching, learning and research in and outside classroom environment. He posits that ICTs have the potential to accelerate, enrich, and deepen skills, to motivate and engage students, to help relate school experience to work practices, create economic viability for tomorrow's workers, as well as strengthening teaching and helping schools change. Equally, (Davis and Tearle, 2009; Lemke and Coughlin, (2008) observed that in a rapidly changing world, basic education is essential for an individual be able to access and apply information. Such ability must find include ICTs in the global village.

Conventional teaching has emphasized content in efforts to provide learning experience to learners. For many years the teachings of Social Studies course in the colleges of Education have been carried out around textbooks and handouts. Teachers have taught through handouts, lectures and presentations interspersed with tutorials and learning activities designed to consolidate and rehearse the content. Contemporary settings are now favoring curricula that promote competency and performance through the use of ICTs. Curricula are starting to emphasize capabilities and to be concerned more with how the information will be used than with what the information is. Contemporary ICTs are able to provide strong support for all these requirements and there are now many outstanding examples of world class settings for competency and performance-based curricula that make sound use of the affordances of these technologies (Oliver, 2014).

The integration of information and communication technologies can help revitalize teachers and students of Social Studies both in teaching and learning performances to greater advantage. This can help to improve and develop the quality of education by providing curricular support in difficult subject areas specifically in Social Studies. To achieve these objectives, Social Studies teachers need to be involved in collaborative projects and development of intervention change strategies, which would include teaching partnerships with ICT as a tool. According to Zhao and Cziko (2011), three (3) conditions are necessary for teachers to introduce ICT into their classrooms: teachers should believe in the effectiveness of multi-media technology in the teaching-learning interactions, teachers should believe that the use of technology will not cause any disturbances in the classroom during teaching and learning interactions, and finally teachers should believe that they have control over multi-media technology in pedagogical applications. However, research studies show that most teachers do not make use of the potential of ICT to contribute to the quality of learning environments, although they value this potential quite significantly (Smeets, 2009). Harris (2006) conducted case studies in three primary and three secondary schools, which focused on innovative pedagogical practices involving ICT. Harris (2006) concludes that the benefits of ICT will be gained "…when confident teachers are willing to explore new opportunities for changing their classroom practices by using ICT. As a consequence, the use of ICT will not only enhance learning environments and academic performances but also prepare next generation for future lives and careers (Wheeler, 2001). Changed pool of teachers will change responsibilities and skill sets for future teaching involving high levels of ICT and the need for more facilitative than didactic teaching roles (Littlejohn etal.2006).

According to Cabero (2007), "the flexible time-space accounted for by the integration of ICT into teaching and learning processes contributes to increase the interaction and reception of information towards the enhancement of student's performance. Such possibilities suggest changes in the communication models and the teaching and learning methods used by teachers, giving way to new scenarios which favor both individual and collaborative learning". The use of ICT in educational settings, by itself acts as a catalyst for change in this domain. ICTs by their very nature are tools that encourage and support independent learning and enhanced performance. Students using ICTs for learning purposes become immersed in the process of learning and as more and more students use computers and multi-media appliances as information sources and cognitive tools (Reeves & Jonassen, 2010), the influence of the technology on supporting how students learn will continue to increase and enhance the academic performance of Social Studies learners. In the past, the conventional process of teaching has revolved around teachers planning and leading students through a series of instructional sequences to achieve a desired learning outcome. Typically these forms of teaching have revolved around the planned transmission of a body of knowledge followed by some forms of interaction with the content as a means to consolidate the knowledge acquisition. Contemporary learning theory is based on the notion that learning is an active process of constructing knowledge rather than acquiring knowledge and that instruction is the process by which this knowledge construction is supported rather than a process of knowledge transmission (Duffy & Cunningham, 2006). In this domain learning is viewed as the construction of meaning rather than as the memorization of facts (Lebow 2010, Jonassen & Reeves, 2006). Learning approaches using contemporary ICTs provide many opportunities for constructivist learning through their provision and support for resource-based, student centered settings and by enabling

learning to be related to context and to practice (Berge, 2008; Barron, 2010). As mentioned previously, any use of ICT in learning settings can act to support various aspects of knowledge construction and as more and more students employ ICTs in their learning processes, the more pronounced the impact of this will become. Teachers generate meaningful and engaging learning experiences for their students, strategically using ICT to enhance learning. Students enjoy learning, and the independent enquiry which innovative and appropriate use of ICT can foster. They begin to acquire the important 21st century skills which they will need in their academic performance and the socio-economic base of the society.

2.14 Integration of ICT in Teaching and Learning

- Technology Literacy. Basic digital literacy skills to use technology, ability to select and use appropriate software available including internet in computer laboratories or with limited classroom facilities to complement standard curriculum objectives, assessment approaches, lesson plans and didactic teaching methods, able to use ICT to manage classroom data and support their own professional development.
- Knowledge Deepening. Ability to manage information, structure problem tasks, integrate open-ended software tools and subject specific applications with student centered teaching methods and collaborative methods and collaborative projects in support of students deep understanding of key concepts and their application to solve complex world real problems, use network resources to help students collaborate, access information, communicate with experts to analyze and solve their selected problems and use ICT to create and monitor individual group plans.
- Knowledge creation. Design ICT-based learning resources and environments use ICT to support the development of knowledge creation and critical thinking skills

of students, support students' continuous reflective learning, and create knowledge communities for students and colleagues.

- Impact in classroom. Opportunities to deploy innovative teaching methodologies and to deploy more interesting material that create an interest in the students, enable better management of classroom and students thereby improving the productivity of the tutor as well as the taught, enables the teacher to concentrate on other tasks such as research and consultancy, enables optimum utilization and sharing of resources among institutions thereby reducing the cost of implementing ICT solution and to find appropriate online resources that can be used offline or converted to a paper based resource. Ex-NRICH website offers enrichment materials for mathematics to pupils of all ages.

(a) Steps Taken to Integrate ICT in the teaching and learning process.

- Eleventh Five- Year Plan (2007-2012) importance of ICT in education has been emphasized.
- "National Curriculum Framework"(2005) emphasized the judicious use of technology to increase the reach of educational program , facilitate management of the system as well as address specific learning needs and requirements.
- Government of India has set up a national task force on information technology and software development to universalize computer literacy.
- Intel Teach to future program is a world wide effort to integrate technology in classroom.

(b) Organizing Activities for Learners through ICT

Through ICT students can experience various stages of learning, such as critical thinking, problem solving, guided instruction, extra connect, cooperative learning and group monitoring.

- Simulations-provide excellent opportunities for teachers to create settings where students are led through critical thinking stages.
- Guided instructions-allows students to submit pieces of a project step by step, allowing for a rich feedback interaction between students and instructor. A problem like Textra connect or lotus notes allow draft essays to be submitted and returned.
- Cooperative learning-websites provide ready sites for discussions, cooperative groups are designed and assigned to do the activities by monitoring these groups, and the instructor can introduce timely prompts to redirect the conservation, posing problems that challenge the quo.
- Acceleration-children can be accelerated within their own class working independently, often with some additional support.
- Extension-moving outside the syllabus normally not covered in the curriculum.
- Enrichment-extending students understanding and applying them to other situations and problems to develop higher level problem solving and communication skills.

2.15 ICT and motivation of learning

ICTs can enhance the quality of education in several ways, by increasing learner motivation and engagement, by facilitating the acquisition of basic skills by learners, and by enhancing teacher training and performance in instructional management. ICTs are also transformational tools which, when used appropriately, can promote the shift to a learner centered environment. ICTs, especially computers and Internet technologies, enable new ways of teaching and learning rather than simply allow teachers and students to do what they have done before in a better way. ICT has an impact not only on what students should learn, but it also plays a major role on how the students should learn.

Along with a shift of curricula from “content-centered” to “competence-based”, the mode of curricula delivery has now shifted from “teacher centered” forms of delivery to “student-centered” forms of delivery. ICT provides- Motivation to Learn. ICTs 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 to listen and become more involved in the lessons being delivered. Some of the parents of the respondents opined that their children were feeling more motivated than before in such type of teaching in the classroom rather than the stereotype one – two hours lecture. They were of the view that this type of learning process is much more effective than the monotonous monologue classroom situation where the teacher just lectures from a raised platform and the students just listen to the teacher.

ICT changes the characteristics of problems and learning tasks, and hence play an important task as mediator of cognitive development, enhancing the acquisition of generic cognitive competencies as essential for life in our knowledge society. Students using ICTs for learning purposes become immersed in the process of learning and as more and more students use computers and multi-media apparatus as information sources and cognitive tools, there is an increased chance for enhanced academic performance hence, Reeves and Jonassen, (2006), posits that, the influence of the technology on supporting how students learn will continue to increase. Learning approaches using contemporary ICTs provide many opportunities for constructivist learning through their provision and support for resource-based, student centered settings and by enabling learning to be related to context and to practice (Berge, 2008; Barron, 2010). The teachers could make their lecture more attractive and lively by using multi-media and on

the other hand the students were able to capture the lessons taught to them easily. As they found the class very interesting, the teachings also retained in their mind for a longer span which supported them during the time of examination. More so than any other type of ICT, networked computers with Internet connectivity can increase learner motivation as it combines the media richness and interactivity of other ICTs with the opportunity to connect with real people and to participate in real world events. ICT-enhanced learning is student-directed and diagnostic. Unlike static, text- or print-based educational technologies, ICT-enhanced learning recognizes that there are many different learning pathways and many different articulations of knowledge. ICTs allow learners to explore and discover rather than merely listen and remember. The World Wide Web (WWW) also provides a virtual international gallery for students' work (Loveless, 2009). ICT can engage and inspire students, and this has been cited as a factor influencing ready adaptors of ICT (Long, 2011).

2.16 ICT Enhancing the Quality and Accessibility of Education

ICT increases the flexibility of delivery of education so that learners can access knowledge anytime and from anywhere. It influences the way students are taught and how they learn as now the processes are learner driven and not by teachers. This in turn would better prepare the learners for lifelong learning as well as to improve the quality of learning. In concert with geographical flexibility, technology-facilitated educational programs also remove many of the temporal constraints that face learners with special needs (Moore & Kearsley, 2011). Students are starting to appreciate the capability to undertake education anywhere, anytime and anyplace.

One of the most vital contributions of ICT in the field of education is- Easy Access to Learning. With the help of ICT, students can now browse through e-books, sample examination papers, previous year papers etc. and can also have an easy access to

resource persons, mentors, experts, researchers, professionals, and peers-all over the world. This flexibility has heightened the availability of just-in-time learning and provided learning opportunities for many more learners who previously were constrained by other commitments (Young, 2012). Wider availability of best practices and best course material in education, which can be shared by means of ICT, can foster better teaching. ICT also allows the academic institutions to reach disadvantaged groups and new international educational markets. As well as learning at anytime, teachers are also finding the capabilities of teaching at any time to be opportunistic and able to be used to advantage. Mobile technologies and seamless communications technologies support 24x7 teaching and learning. Choosing how much time will be used within the 24x7 envelope and what periods of time are challenges that will face the educators of the future (Young, 2012). Thus, ICT enabled education will ultimately lead to the democratization of education. Especially in developing countries like India, effective use of ICT for the purpose of education has the potential to bridge the digital divide.

India has a billion-plus population and a high proportion of the young and hence it has a large formal education system. The demand for education in developing countries like India has skyrocketed as education is still regarded as an important bridge of social, economic and political mobility (Zhao, 2011). There exist infrastructure, socio-economic, linguistic and physical barriers in India for people who wish to access education Bhattacharya and Sharma, 2007). This includes infrastructure, teacher and the processes quality. There exist drawbacks in general education in India as well as all over the world like lack of learning materials, teachers, remoteness of education facilities, high dropout rate etc (UNESCO,2010). Innovative use of Information and Communication Technology can potentially solve this problem. Internet usage in home and work place has grown exponentially (McGorry, 2006). ICT has the potential to

remove the barriers that are causing the problems of low rate of education in any country. It can be used as a tool to overcome the issues of cost, less number of teachers, and poor quality of education as well as to overcome time and distance barriers (McGorry, 2006).

People have to access knowledge via ICT to keep pace with the latest developments (Plomp, Pelgrum & Law, 2007). ICT can be used to remove communication barriers such as that of space and time (Lim and Chai, 2006). ICTs also allow for the creation of digital resources like digital libraries where the students, teachers and professionals can access research material and course material from any place at any time (Bhattacharya and Sharma, 2007; Cholin, 2005). Such facilities allow the networking of academics and researchers and hence sharing of scholarly material. This avoids duplication of work (Cholin, 2005). ICT is capable of eliminating time barriers in education for learners as well as teacher. It eliminates geographical barriers as learners can log on from any place (Sanyal, 2011; Mooij, 2007; Cross and Adam, 2007; UNESCO, 2006; Bhattacharya and Sharma, 2007). ICT provides new educational approaches (Sanyal, 2011). It can provide speedy dissemination of education to target disadvantaged groups (UNESCO, 2006; Chandra and Patkar, 2007).ICT enhances the international dimension of educational services (UNESCO, 2006). It can also be used for non-formal education like health campaigns and literacy campaigns (UNESCO, 2010). Use of ICT in education develops higher order skills such as collaborating across time and place and solving complex real world problems (Bottino, 2006; Bhattacharya and Sharma, 2007; Mason, 2010; Lim and Hang, 2006). It improves the perception and understanding of the world of the student. Thus, ICT can be used to prepare the workforce for the information society and the new global economy (Kozma, 2005). Plomp et al (2007) state that the experience of many teachers, who are early innovators,

is that the use of ICT is motivating for the students as well as for the teachers themselves. Sharma (2007), maintained that the use of ICT has the potentials to improve students' performance, teaching and administration, and to enhance the development of relevant skills in the disadvantaged communities. It also improves the quality of education by facilitating learning by doing, real time conversation, delayed time conversation, directed instruction, self-learning, problem solving, information seeking and analysis, and critical thinking, as well as the ability to communicate, collaborate and learn (Yuen et al, 2003). A great deal of research has proven the benefits to the quality of education (Al-Ansari 2006).He state that the literature contains many unsubstantiated claims about the revolutionary potential of ICTs to improve the quality of education. They also note that some claims are now deferred to a near future when hardware will be presumably more affordable and software will become, at last, an effective learning tool. It has been argued earlier that ICT is a mediator of learning. As a component of the learning environment, it is difficult to measure and directly demonstrate the effects of ICT in learning. It is possible to suggest possible influence by connecting ICT as a mediator with well researched theories of learning and strategies for providing learning opportunities.

Oyeniyi (2007) stated that ICT materials in the likes of internet is a collection of computer networks that operate in common standards to enable the computers and programmes that they run to communicate directly. The internet is beginning to play in important role in education. The internet provides an invaluable and rich source of information to students. Some of the benefits of using internet for education as identified by Oyeniyi (2007) include the following:

- Provision of in-depth content for learning in most subject areas.

- It allows the user to engage in inquiry by exploring nearly unlimited resources available on the internet.
- Textbooks are often out-dated, but most websites resources are often current and updated frequently.
- Instruction is less teacher centred as students curiously drives their learning.
- It allows students to learn at their own pace and time as the internet can be accessed anytime of the day.

It is important for students in Nigeria to take advantage of these and to prepare for a globally competitive society. Teachers must provide opportunities for students to use ICT while working together to access information, applying information in problem solving and sharing their solutions. The Committee on

Development in the science of learning completed research work and stated

> *that: (CDS 2000) "several groups have received thee literature on ICT and learning and concluded that it has great potential to enhance students achievement and teacher learning, but only if it is used appropriately"*

Succinctly, information and communication technology serves the following purpose in the teaching –learning process.

(a) Provision of Tools to Increase Students Productivity

In the past, students have spent a lot of time doing repetition of low level tasks, particularly involving writing, drawing and computation. While it may be necessary for students to develop these skills at some time; on most occasions, they are pre-requisites to some high level task. Unnecessary repetition of low-level task is inefficient, non-motivational and may obscure the real purpose of the learning activity. Many computer applications provide the tools to support students in quickly completing these lower-level tasks so that they can focus on the main purpose of the activity. Word processors,

graphics, packages, database spread sheet and other software support the performance of students.

(b) Engagement of Students through Motivation and Challenges

Information and Communication Technology helps to motivate learners and pose challenges that will make them to be inquisitive, and develop positive mind towards learning. Reginald (2006) stated that the interactive and multi-media nature of modern computer systems has provided the opportunity for software developers to create increasingly more stimulating features. Many studies have found that students like to use computers and are likely to develop more positive attitude towards their learning when they use computers. In a related development, Cradler and Birdgforth (2008) stated that "Computer systems do provide the opportunity to create a wide range of interesting learning experiences. This is likely to help maintain student's interest".

(c) Investigating Reality and Building Knowledge

Information Communication Technology (ICT) allows students to investigate thoroughly the real world. Reginald (2006) said that students can *more* readily access information sources outside the classroom and can use tools to analyse and interpret such information. Information may be accessed through online system or through data logging systems. Reil (1998) stated that technologies allow students to receive feedback, refine their understanding, build new knowledge and transfer from school to non-school settings.

(d) Active Learning and Authentic Assessment

In many classroom situations, it is difficult to allow students to be sufficiently active as participants. Typically, students ore often passive; spending a lot of time listening or reading. It is well-known that students are more likely to be interested and attentive and will achieve a wider range of learning outcomes if they can be active. Riel

(1998) in his own contribution concluded that computer software can be used to provide students with learning experiences when they are interacting with the computer system. Learning by doing committee on development in the science of learning (2000) in support, state that student's engagement with the curriculum will increase as they are afforded opportunities to create their own information and represent their own ideas.

(e) Increasing Learner Independence

Computer systems are increasingly being used to provide learning experiences when and where they are needed. This provides students with greater independence not only in terms of when and where they learn, but also what they teach. Cradler and Bridgforth (2008) stated that it is not necessary for all students to do the same thing at the same time. Teachers may provide students with access to software allowing students to select different learning experiences. The class does not have to be treated as a group. Individuals or groups of students may consider learning topics independently of the teacher.

(f) Collaborative and Cooperative Learning

Researchers have found that typically, the use of ICT leads to more cooperation among learners within and beyond schools and a more interactive relationship between students and teachers. Reginald (2006) defines collaborative as a philosophy of interaction and personal life style where individuals are responsible for their actions, including learning and respect the abilities and contributions of their peers. Cooperation is a nature of interaction designed to facilitate the accomplishment of a specific end product or goal through people working together in groups. National Foundation for the Improvement of Education (2001) in support said that the use of ICT to collaborative and cooperative learning is extrapolated to the support of a learning community.

(g) Tailoring Learning to the Learner

In most traditional learning situations, it is not possible to provide each student with an instructor and for that instructor to specially design learning experiences for that student. The programmability and interactions possible with computer systems provides the opportunity to develop software which stimulates the role of an instructor, intelligent tutoring software may use information about the student to recommend appropriate sequences or sections of a tutorial for the student. Simec,(2006) stated that many studies have found that using computer-based instruction can increase achievement scores by at least, one standard deviation, although this is neither uniform nor consistent across all areas of study. The idea is that software allows the student and/or teacher to tailor the learning experiences to suit the individual student needs. Sharma (2007) in agreement stated that: the use of online technologies is to provide more individualized programmers. He went further to buttress his claim by saying that computer software can also be used to support children who require individual learning programmes (e.g gifted, distance education or remedial studies).

This is agreed with the opinion of Peck (2006) in his study on computer and its impact on teaching and learning came out with the finding that computer technology will and is changing the traditional pattern of teaching and learning in our schools. He stressed that administrative and paper work which a teacher is usually engaged in will be drastically reduced to its barest minimum. Again, with proper application of computer technology, teachers role in the class will just be to assist the students solve the difficulty in interacting with computers.

(h) Provides Platform to Support Higher level Teaching

There is an increasing range of software tools which can be used to support the development of higher level thinking skills such as application, analysis and synthesis.

National foundation for the improvement of education (2001) stated that: computer can be used to analyse data, present data, link data, of information, present information different formats, stimulate environment and conditions, and support interactive communications.

This allows teachers to consider providing a range of activities to assist students to become critical thinkers, designers and problem solvers. Committee on development in the science of learning (2000) stated that: computer system provide a wider range of motivating situations to develop deep knowledge. The research review literature on influence of ICT on Social Studies Education Programme.

ICT presents an entirely new learning environment for students, thus requiring a different skill set to be successful. Critical thinking, research, and evaluation skills are growing in importance as students have increasing volumes of information from a variety of sources to sort through (New Media Consortium, 2007).ICT is changing processes of teaching and learning by adding elements of vitality to learning environments including virtual environments for the purpose. ICT is a potentially powerful tool for offering educational opportunities. It is difficult and maybe even impossible to imagine future learning environments that are not supported, in one way or another, by Information and Communication Technologies (ICT). When looking at the current widespread diffusion and use of ICT in modern societies, especially by the young the so-called digital generation then it should be clear that ICT will affect the complete learning process today and in the future. Authenticity is an important issue which should be addressed in the design and development of learning environments (Collins, 2009). Learning environments need to reflect the potential uses of knowledge that pupils are expected to master, in order to prevent the acquired knowledge from becoming inert (Bransford, Sherwood 2009. In addition, teachers should stimulate pupils to engage in

active knowledge construction. This calls for open-ended learning environments instead of learning environments which focus on a mere transmission of facts (Collins, 2009). ICT may contribute to creating powerful learning environments in numerous ways.

ICT provides opportunities to access an abundance of information using multiple information resources and viewing information from multiple perspectives, thus fostering the authenticity of learning environments. ICT may also make complex processes easier to understand through simulations that, again, contribute to authentic learning environments. Thus, ICT may function as a facilitator of active learning and higher-order thinking (Alexander, 2009; Jonassen, 2009). The use of ICT may foster co-operative learning and reflection about the content (Susman, 2008). Furthermore, ICT may serve as a tool to curriculum differentiation, providing opportunities for adapting the learning content and tasks to the needs and capabilities of each individual pupil and by providing tailored feedback (Mooij, 2007; Smeets & Mooij, 2005). As Stoddart and Niederhauser (2009) point out, ICT may fit into a spectrum of instructional approaches, varying from traditional to innovative. Another aspect which may of course influence the use of ICT is access to technology. This refers not only to the number of computers, but also to the placement of the equipment, e.g. in the classroom or in a computer room. Kennewell et al. (2011) feel it is essential that computers be placed in the classroom, in order to maximize the opportunities for curriculum activity. ICT environment improves the experience of the students and teachers and to use intensively the learning time for better results. The ICT environment has been developed by using different software and also the extended experience in developing web based and multimedia materials. ICTs have an important role to play in changing and modernizing educational systems and ways of learning.

2.17 ICT and Social Studies Education Programme

Social studies is been described as the study of man and his interaction with his environment (physical and social). It deals with man as a social being and the way he organizes his society, which is comprised of the social cultural, economic political historical and geographical aspects of the society. In relation to the environment, the Nigerian Education Research Centre (1977) was more specific by stating that social studies focus on "man's problem of survival, how in turn the environments influence man". Accordingly, therefore, social habits, attitudes as well as acquire useful manipulative skill of problem solution in the society.

Kissock (1981) conceptualized social studies as a Programme of study which the society uses to instil in students the knowledge, skills, attitudes and actions it considers important concerning the relationships human begins have with each other, their world and themselves. Above all it the wholesome study of man in his society. In a related development, Akinlaye (1996) stated that the score of social studies is the acquisition of appropriate knowledge and problem in the environment which the learner would encounter from time to time and in daily community life. In the same vein, ITC has a lot of influences on the teaching of social studies.

Omamurhomu (2007) opined that the world is becoming increasingly complex and interdependent. There is the need as to why social studies through its structure of being an interdisciplinary subject should provide a unifying knowledge from the various disciplines with the overall objective to creating awareness and understanding of the evolving social and physical environment. In doing so social studies seeks to develop positive attitude and desire for the individual to make positive contribution to the maintenance of sustainable environment that increase the quality of life. According to Ismaila (1987) there are two major types of teaching machine used in the teaching of

social studies. These include simple teaching machine and complex teaching machine. Ismaila further explained that the complex machine is the computer which can present multiple choice questions in a window, with various keys to press to indicate the correct answers. The use of computer in teaching social studies makes the users proceed at their own pace and also have an opportunity to review their work and equally help to relieve teachers of some of the time consuming aspects of drilling students allowing them to give more attention to individuals with specific problem or concentrate on some of instruction.

Vockell and Duusen (2010) opined that in the 20th century, new information technology has the potential to influence the lives of ordinary citizen's much as it has influenced business, education and government. They further stressed that ICT entered our homes and our daily lives and have changed the range of activities we pursue, the various ways such activities are performed, our relationship; with other people and our personal and economic welfare. Woesman and Haythorne (2005) stated that:

> *The growing availability of mobile telephones, personal computers and interest as well as the expansion in the range of services they offer, could lead to changes in the lives of the average citizens as profound as those have affected organizations and economic life. They concluded that those technologies are being used in a wide variety of ways to make every activity more efficient and more convenient.*

According to Marshall and Taylor (2006), information and communication technology has the potential to provide job opportunities for our teaming youths. In a related finding, Oyedele (2010) in assessing the influence of computer technology to education in general, social studies education in particular sated that teachers of social studies of our schools are trained with the responsibility for helping to meet the needs brought about by technological change and progress and the changing of work in our future society. Therefore, this change will internally affect the curriculum and course

content of social studies. Nwakolo and Aliunnat (2006) stated that information technology embraces all modern system of processing information and communication in data, text, image and voices.

In supporting the above opinions, Okafor (2010) observed that using technology effectively in the classroom is a means of transforming the classroom to be student centred with teachers as coaches and guides. This concurred with Adamu (2009) who observed that it is now realized that information tools have some advantages as compared to conventional mode of information sharing and delivery. He further stressed that with the aid of technology, teachers can take social studies beyond traditional classroom limits, crating virtual environment to experiment explore and more so, now that technology can be used to solve many challenges, task and other classroom activities.

The researcher observed that ICT is an important tool for teaching and learning social studies, it provides facility for computer assisted instruction which enhance individualistic direct guide in problem solving and practical. Computer managed instruction (CMI) which enhance efficiency and accuracy provides knowledge that is relevant to societal needs, facilitate teaching and learning and enable teachers to cope with overcrowded class.

Tancook (2008) also support the view that the integration of internet technology in the social studies curriculum will enhance teaching and learning. Findings of a research project reported by Oyebola (2007) in which twenty five, nine and ten years old in fourth grade children in an elementary school in the United State of American, were asked to obtain information from the internet through web quest as part of their social studies class activities showed that the use of the internet enabled these students to acquire better knowledge of the content covered.

Oyebola (2007) identified some benefits students can derive from using ICT for teaching and learning.

- Reading a variety of materials is very important in social studies. The internet contains a rich source of information that the social studies student will find very useful. According to Tancook (2008). The internet allows these students to see places they had never seen or heard. The images from these sites provided information students could not have gained any other way.
- Students who took part in web-quest to acquired improved computer skills in word-processing and use of the internet web quest are based on the inquiry method, which is a teaching-learning technique. It involves conducting quests and searches into problems. When using inquiry methods, the teacher involves the students to collect, assimilate and investigate information. The information is used to answer questions and discuss issues and events. Inquiry method is one of the methods recommended for teaching and learning in social studies. The inquiry method allows students to play an active role in class activities. Unlike the traditional lecture method which is more teacher-centred.

Research has shown that most teachers of social studies in Nigeria make use of only the lecture method. Thus, the use of web quest for teaching and learning in social studies helps to reduce the usual emphasis on the lecture method. In another development, Ajayi and Fadekemi (2007) stated that the society is getting more complex and there is need for accurate information on students, personnel and facilities, pilling-up of administrative matters, wastage of spaces, lack of feasible budget estimates amongst other to enhance effective teaching and learning. In the same vein, Adebayo (2007) stressed the need for management information system (MIS) in decision making as it provides information that is needed for better decision making on the issues affecting the

organization, education and the society regarding human and material resources. According to Ajayi and fadekemi (2007), the objectives of MIS project in Nigerian educational institutions are:

(a) To standardize the system of obtaining reports and statistical information from the various educational institution on students, staff, financial matters and library.

(b) To record such information on diskettes or tapes at the educational institutions and sent to NUC, NCCE and NBTE for budgeting information storage, analysis and retrieval purpose.

(c) To ensure that such information are accurate and timely.

(d) To organize information for planning, budgeting and decision-making.

(e) To help the educational institutions put in place effective management system and improve utilization of resources.

Social studies education is important in manpower training and development. The basics and rudiments of human rights, fair play, justice and honesty are learnt in social studies, therefore social studies education programme cannot afford to bypass the modern wave of information and communication technology. Based on the objectives of MIS, it is expected that the MIS will assist educational institutions in decision-making on various issues in their operations. To this end, efforts are made by the educational institutions in the areas of the acquisition and use of computers in information processing, computer literacy, establishment of computer services units among others.

Gupta and Anasari (2007) in agreement with Ajayi and fadekemi (2007) stated that the society expects to manipulate the information it has for its own benefit to increase understanding and discover new relationships. Through the use of computer, the society expects to be able to distribute information quickly, efficiently and cheaply to ensure effective management and control of crimes. Gupta and Anasari (2007) went

further by saying that information technologies have enabled researchers to access a wider source of information. Social studies students through the internet and other related technologies, such as electronic mail, can carry out collaborative projects between geographically distant groups. On the contrary, Anderson (2007) states that in the Republic, Plato warned against the pernicious effects for consuming the mass media of the day (drama and poetry) because viewers and readers might have difficulty distinguishing fact from fiction and might emulate the worst, rather than the best behaviours of the tragic heroes. Such ancient concerns are a strange per-echo of concerned social science research findings and argument. For instance, that television and computer games promote violence or other negative behaviour.

Television programming is always available; it does not require coordination with others and is packaged to be consumed in small chunks, meaning that matching TV can be a less deliberate act than alternative behaviour simply because it requires no explicit actions. Television and computers are easy way to kill time and therefore, people perhaps use it more than they want. This type of non-deliberate choice about time can have large personal and social consequences (Pelgrum and law, 2013) stated that the growth of ICT has expended options from using the internet primarily for social purpose to more individualistic, recreation and information uses. They further stressed that the growth in the number of people online also means that if people use it socially, they have more options to connect to others whom they care about (expressing or reinforcing strong ties) than they had several years ago. Salomon (2009) further opined that internet can promote civic education and can equally promote ties between teacher and students of social studies class. Thus, the potential for social adaptation of the (internet) ICT has increased enormously.

ICT as a means of teaching and learning of social studies education is an indispensable tool. It allows the teacher to attend to an increasing students enrolment in the class, national values and cultural heritage can be programmed through computer software, and it promotes skills development, enhance efficiency and promote competency in teaching and learning of social, political, economic and cultural values if properly put into use.

2.18 Curriculum Implications, of ICT on Social Studies Education Programme

Curriculum is concerned with what is learned and taught and how this learning and teaching occurs. What is learnt and taught includes objectives, content, method and learning outcome (the knowledge, skills, and altitudes that students intended to demonstrate). The existence of ICT into the society has brought a lot of changes in every stores of human endeavour, especially in education sector and specifically in social studies education programme. In effect, these changes demand the need to tailor social studies programme towards information and communication innovations so that both students and teachers of social studies education programme will take initiative redesigning curriculum and making changes to meet the changing needs of ICT. In recognition of the prominent role of information and technology in advancing knowledge and skills necessary for functioning in the modern worlds, there is an urgent need to integrate information and communication technology (ICT) into Social Studies and education in Nigeria. Oyebola (2007) asserted that the National Policy on Education stated that government shall provide necessary infrastructure and training for integration of ICT in the school system in recognition if the role of ICT in advancing knowledge and skills in the modern world.

Adamu (2009) observed that the curriculum also has a place in the relationship dimension of the environment in that the students and teacher (s) are focused on certain

processes and content in the curriculum and have a relationship with that curriculum and the methodologies that are associated with the curriculum. It is in this line that Oyebola (2007) opined that Social Studies Education is duty bound to help students acquire and develop the needed skills and attitudes for integration by aligning curriculum with need skills. Oyebola further stressed that it is important for students in Nigeria to take advantage of ICT and prepare for a globally competitive society and teaches must provide opportunities for students to use ICT while working together to access information, applying information in problem solving and sharing their solutions. Tancook (2008) also supported the view that the integration of ICT in the social studies curriculum will enhance teaching and learning in this subject. He further called for the redesigning of social studies education curriculum in order to make graduates of social studies possess the right skills for effective functioning in the society.

Cradler and Bridgforth (2008) argued that there is a two-way relationship between IT and the curriculum, where ICT may be used to assist in conveying the curriculum, but at the same time, may change the content of the curriculum. John (2005) suggested that social studies curriculum should be redesigned to incorporate ICT with the following objectives:

- To acquaint students of the importance and relevance of data and information.
- To technically prepare students for the global trends on information technology.
- To fully inform students on the evaluation of various data processing techniques and their appropriate areas of application in the social life.
- To manage data, information and their security and enlighten students in programming fundamentals.
- To make students understand the fundamental knowledge of digital computer and concept of processing modes.

At the core of social studies is the acquisition of appropriate knowledge and problem solving skills for the solution of basic life issues in the society and in the environment which the learner would encounter from time in life as the world is becoming increasingly complex and interdependent. This is why social studies through its structure of being an interdisciplinary subject is capable of unifying knowledge from various discipline with the overall objective of creating awareness and understanding of the evolving social and physical environment. In view of the central role of social studies, the National Social Studies Curriculum when reviewed should include the use of ICT among the prescribed teacher/student activities at all levels of education.

Anderson (2007) in agreement with the on-going discussion stated that students need sustained access to appropriate computer system. This will require a class to have access to number of work stations and a quantity of high quality software which is flexible enough to allow them to test out their ideas.

2.19 Implementation of Social Studies Curriculum Using ICT.

Implementation is a concept which is generally utilized in the educative process even though the concept does not apply with equal facility to all teaching subjects in the school curricula in the same way. Therefore, any meaningful conceptualization of implementation should take cognisance of the nature of the subject to be taught and learned, the appropriate methods and techniques of teaching the subject very effectively and the objectives which the subject to be taught intends to achieve. To this effect, in articulating what 'implementation' means in the context of Social Studies, there is the need to look at the nature of Social Studies, its teaching methods and techniques as well as the objectives of Social Studies education in Nigeria. By its nature, Social Studies "is society relative and sensitive and its objectives of developing productive citizenry endowed with positive skills and effective behaviours entail a large measure of the

employment of activity-oriented methods and techniques in teaching the subject" (Mezieobi, et al. 2008). Thus, the nature, methods and techniques as well as objectives of Social Studies combine to impact or influence what teaching and learning means in the subject.

Implementation in the context of Social Studies is learner-centred. This according to Mezieobi et al. (2008) entails active participation of the learner in Social Studies classroom. It is a problem-solving goaded subject in Nigeria and, therefore emphasized the use of activity-oriented methods and techniques in the form of information and communication technology apparatus (Multi-media) to achieve its objectives. The production of a functional and productive citizenry which is a major focus of Social Studies entails that Social Studies as a subject concern itself with inculcating creative, reflective, analytic and decision-making skills and competences in the learners. Based on the foregoing goals-objectives of Social Studies education, the implementation of Social Studies cannot and does not imply sheer passing on of, or imparting of, desirable knowledge to a passive learner who must on demand recall the rote memory acquired and stored knowledge. This popular conception of teaching does not suit what teaching means in Social Studies.

Effective implementation in Social Studies more than any other subject emphasized higher level knowledge and affective development of skills. In this connection, therefore, teaching in Social Studies refers to a predominantly student controlled or directed interactive learning achievement oriented activities inside and outside the formal classroom situation in which the learner actively participates and makes a conscious and deliberate efforts to induce and acquire significant learning under the teacher serving as a learning collaborator, director, guide, a catalyst and a helper (Mezieobi, et al. 2008). Thus, the teacher in Social Studies teaching-learning setting is

not a task master or an autocrat dishing out encyclopaedic knowledge but facilitating and enhancing acquisition of knowledge.

Akande (1987) confirms the fact that the meaning of implementation cannot be divorced from the nature of a subject when he notes that "the nature of implementation varies… with the area or subject of study". To him, meaningful Social Studies implementation is student activity goaded such that the students is given a wide democratic latitude to learn by doing it himself through his activities participatory commitment and display of his intellectual integrity and capacity for independent judgment.

Accordingly, for any activities to qualify as Social Studies teaching activities or to merit the description of the very act of teaching in Social Studies the following criteria must be met and these include:

1. The activities must be learning-achievement oriented.
2. The activities must suit the maturity level and capabilities of the learners.
3. The activities must elicit the active participation of the learner before and during the actual teaching.
4. The inside and outside the Social Studies classroom environment must be reasonably democratised and stimulating to elicit the willing and active participation and involvement of the learners.
5. The learning activities must reflect largely the real social world of the learners.
6. The interactive teaching situation should not only elicit the creative capabilities of the learners, the learners should perceive themselves as the dominant persons involved in the teaching- learning process while the teachers perceive themselves as guides, helpers and stimulators of learning.

7. The activities must be affective learning goaded as well as involving the development of higher level skills.
8. The teacher should be both professionally trained and competent in teaching Social Studies in and outside the formal classroom. The teacher must expose the learners to a variety of activities by using a wide variety of appropriate teaching methods and techniques, multiple instructional materials and resources and appropriate evaluation methods germane to effective Social Studies instructional evaluation. The teacher should know the kind of skills achievable through a given learning activity or experiences, what learning activities can best lead to the acquisition of which skills, what methods and techniques can best be used and in which ways the desired learning can be brought about (Mezieobi, et al. 2008).

At the implementation stage of an instructional system, the sub-systems that are basically involved are instructional mode, instructional materials and evaluation sub-system. The instructional mode refers to the methods and media of instruction combined for the purpose of accomplishing stated behavioural objectives, methods here refer to teaching strategies and it concerns the way in which contents is presented in the instructional environment. This according to Wittich and Sculler, (1973) includes the nature, scope and sequence of events that provides the educational experience.

Strategies take into accounts the objectives which have been designed in relation to the entry behaviour of the learners. Some common methods that are dominant in the implementation of Social Studies concepts are lecture, discussion, demonstration, field trips and information and communication technology gadgets. Teachers have these methods at their disposal. It is their primary concern to select the appropriate methods that would make the teaching and learning effective. An effective teaching/learning situation is one in which knowledge is transferred with ease, ideas put successfully, and

learners put at more comfortable ends by having the learning becoming permanent in them. For these to take place, implementation has to be carried out by an appropriate teaching methods and techniques and good instructional materials. But the secondary role assigned to them (instructional methods) has greatly hampered the adequate and correct awareness of the roles of materials in education (Akambi, 1982).

The instructional materials are equally referred to as audio-visual aids, instructional aids, resources, and are interchangeably used in the implementation process. Akinmoyewa (1996) refer it to any form of information carrier that can be used to promote and facilitate teaching/learning. He posits that, it has three properties which includes; the fixative, manipulative and distributes properties. The fixative property is the ability to arrest or capture, preserve and reconstitutes an object, event or concept during instruction. In this situation once a medium is made, the information has been stored and can be retrieved for use as at when required. It can equally be manipulated by making it work faster or slower. It can be reversed to meet exigency conditions depending on the type of materials, learners and teachers experience. It equally has the potentials to present same information in varied locations and times.

The evaluation sub-system of the implementation

The mode and focus of evaluation determines to a reasonable extent the specific objectives teachers pursue in classrooms, and the methods of teaching he adopts in instructional delivery. Where evaluation is based on only results of achievement test, teachers and students lay emphasis only on the testable contents of the curriculum. Since attitudes and values and social skills are not tested for, in external examinations, teachers ignore instructional objectives that aim at inculcating such in student's i.e, the affective domain of educational objectives (Nwuagwu, 2001).

Many scholars on Social Studies education such as Clerk (1973), Jarolimek (1977), Kenworthy (1981), Uchegbu (1990), Ikwumelu (1993), osakwe and itadjere 1993 and Okam 1994, have stressed the necessity for the use of adequate methods and devices such as checklists anecdotal records, rating scales, self-report inventories, observation, conferences, dairies and logs, Social distance scales and projective devices in the evaluation of the affective traits and actually use these methods. It is very unfortunate that many teachers at our various educational levels do not know these methods and cannot therefore employ them in their evaluation. Joof and Okam (1992), Obameata (1993), in research findings on the in ability of Social Studies education to achieve its foremost goals, demonstrated that Social Studies lesson tended to emphasize the acquisition of knowledge and information and that ‘’the subject was not achieving its main objectives which include the acquisition of certain skills and values and desirable attitudes’’. This attributes are easily achievable through the implementation of Social Studies concepts using the Information and Communication Technology (ICT).

Traditionally learning was hard, based on deficit model of student, and process of transfer, and reception was individualized and facilitated by division of content into small units and a linear process, but introduction of ICT has changed the traditional concept. There is a radical move and optimism the world over to automate curriculum implementation and learning so as to de-emphasize the age long classroom orthodoxy. Wagner (2005), put, mobile revolution is finally here wherever one looks, the evidence of mobile penetration and adoption is irrefutable. ICT defines learning as neutral, social, active, linear or non-linear, integrative, and contextualized, based on ability and strength of students. Use of ICT in teaching-learning environment can bring a rapid change in society.

This innovation or technological development is varied and has had a spill over effect on the schools with special emphasis on the teaching – learning process that is continuously yawning for improved performance. Perhaps, it is one particular innovation that might likely facilitate effective teaching and learning of Social Studies because of the exploration of new technologies that can bring knowledge in the real life-experiences within Nigeria culture to their door steps. Akintola & Aremun (2008) observed that instructional technology incorporate the tools and making present support to reinforce teaching and learning. Teaching in this respect involves broad based technology including its methods, management and its application that support the creation, storage, manipulation and communication of information in schools. This tools includes, (1) the computer, internet, the use of smart phones, servers, interactive boards, printed materials i.e pictorial charts. All this materials play vital and central roles in facilitating effective implementation and learning of Social Studies in schools. It has the potential to transform the nature of education i.e., where and how learning takes place and role of learners and teacher in the process of learning. It is essential that teachers must have basic ICT skills and competencies. It is for the teacher to determine how ICT can best be used in the context of culture, needs and economic conditions. Good teaching is not simply adding technology to the existing teaching and content domain rather it should cause the representation of new concepts and requires developing sensitivity to the dynamic, transactional relationship between the three components of knowledge: Content, Technology and Pedagogy. The application of information communication technology is represented in the format below.

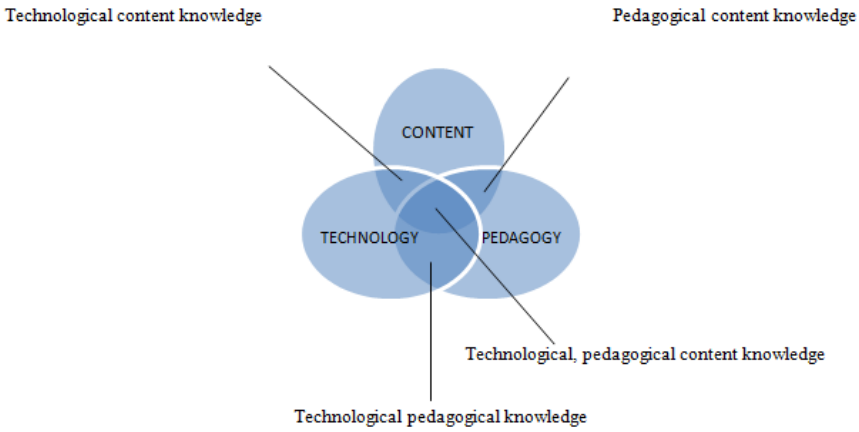

Fig.2: ICT Class Room Application

2.20 Basing learning in sense experience

Stressing the importance of audio-visual materials, (Ngozi, Samuel, and Isaac, 2012) unanimously agreed that audio-visual materials are very important and useful in education because, the normal learner in so far as the functions of his preceptor mechanisms are concerned, gains understanding in terms of multiple impression recorded through the eye, ear, touch and other series. This is to say that audio-visual materials are the equipment through which that function can occur, that is does not occur in isolation, rather through a balance pattern from any preceptor mechanism that are stimulated by external occurrences. (Eze,2013) also states that the human being learns more easily and faster by audio-visual processes than by verbal explanations alone. His ability to arrive at abstract concept through perceptual experience is however a phenomenon not clearly explained and perhaps not explicable. Furthermore, (Oketunji, 2000) stressed that audio-visual materials when effectively used have these advantages. They lessen major weakness of verbalism, humanize and vitalize subject matter, provide interesting approach to new topics and give initial correct impressions, economic time in learning, supply concrete materials needed, stimulate the initiative of the pupils. Swank,(2011) stressing the effectiveness of visual materials in leaning, estimated that

about 40% of our concepts are based upon visual experience, 25% upon auditory, 17% on tactile, 15% upon miscellaneous organic sensation and 3% upon taste smell. With the above assertion, it becomes clearer why audio-visual materials are important in the teaching and learning processes. This is because; they bring the different senses contributions together to get 100% clarity.

(a) Extending Experience

Gopal (2010) stressed that audio-visual materials help the teacher to overcome physical difficulties of presenting subject matter. That is to say, with audio-visual materials, the barrier of communication and distance is broken. The culture and climatic conditions of other countries can be brought into the classroom with the aid of slides, films, filmstrips and projectors. This is important because, according to Dike (2013) "once the phenomenon is visualized, the picture and knowledge becomes very clear and permanent". Agreeing to this assertion, a 20th century Chinese philosopher stated that "one picture is worth a thousand words".

(b) Encouraging Participation

(Natoli, 2011) once again added that "audio-visual materials are rich opportunities for students to develop communication skill while actively engaged in solving meaningful problems". In other words, students certainly like it more and learn better if they are engaged in important and appealing activities. For example, involving students in bulletin board display will enhance their choice of colour and aid their understanding of the concept in question or when they join the teacher in dramatization of an event or a process

(c) Stimulating Interest

According to (Katherine. 2009) "learning takes place effectively when the teacher sets out to provide learning situation in which a child will learn because of his natural

reactions of the provided materials". During the process of learning, the teacher has to provide the learning situation to satisfy the natural reaction of the learner and this is through the use of instructional aids. The attention of the learner is caught and his interest is also won and he is ready to learn. Fawcett Hills (1994) also contributing on the role of audio-visual materials in stimulating interest stated that "A friendly, accepting group climate is important in any learning situations, especially those materials that require students to reveal their ignorance and confront their fellow students". When there is a climate of acceptance for learning, then learning is stimulated.

(d) **Individualize Instruction**

Lestage (1959) stressed that audio-visual materials provide a means of individualizing instruction. This he said is possible through programmed learning and tapes which enable the learner to learn at his pace and also to work on his own. Moreover, according to Dike (2009) the machine frees the teacher to work with individual students, since he or she is not now required to carry out routine drills. Production of resources by students is another way of individualizing instruction.

(e) Serves as a source of information

According to Peterson (), "the child is to think, but he must have the information to think". This audio-visual resources serves, because, the information can be gotten from the good use of perceptual instructional materials especially those provided from our locality. When they are used in the class their familiarity gives a back-ground for understanding the information. (Mcnaught.2007) also observed that audio-visual materials are very useful teaching and instructional as well as promotional aids. He further stressed that where consistency of presentation is desirable, audio-visual materials are useful. They provide experiences not easily secured in other ways and hence contribute to the depth and variety of learning.

(f) Making learning permanent

Audio-visual resources can play a major role of making learning permanent, (Gopal 2010) stressed that "audio-visual methods do seem to facilitate the acquisition, the retention and the recall of lessons learned, because, they seem to evoke the maximum response of the whole organism to the situations in which learning is done. And perceptual materials readily associate themselves with the unique experiential background of each individual. (Natoli, (2011) stressed that audio-visual materials are important in the teaching and learning processes because "Having seen something, most people remember, for whatever that thing was, it conjures up an image at a mere mention and can be talked about freely. Dike (2009) also explained that students forget because of lack of interest and opportunities to use the knowledge they have gained later on. Audio-visual resources can therefore contribute to the clarity of information presented by allowing students to visualize what is learned. Thus the saying: What I hear, I forget, what I see, I remember, what I do, I know.

2.21 Relevance of Information and Communication Technology to Social Studies Curriculum

Using technology in the teaching and learning of Social Studies in particular and education in general can be interesting, challenging, expensive and frustrating. A common argument often made is, whether it is worth advocating for. Mc Neil and Nelson, (2009); Kulik and Kulik, (2010); observed that most of the technology-based research on student achievement scores that has been conducted generally reported a moderate, positive effect on student achievement and substantial reduction in instructional time over traditional methods of instruction. Succinctly, some of the benefits of using technology are as follows.

(a) It provides access to huge sources of information

According to Kwache (2007), ICT facilities allow students and teacher to control, manipulate and contribute information to learning and teaching environment as books, journals are made available through the internet. Teachers and students alike who have access to ICT stand a better chance of getting very fast information as the web can offer a wider body of knowledge than what the teacher and textbooks can provide. Students would access the internet to gather information or interact with experts or other students on a subject matter. These tend to broaden and deepen students understanding.

(b) It improves the quality of teaching-learning:

The use of new multi-media internet based technologies will improve the quality of teaching-learning related activities. Johnson (2007) posited that the multimedia system is the ability of the computer to combine sound, images, graphics, video and texts in single presentation. He asserted that this system creates room for creativeness and in genius of educators to derive new approaches to teaching and learning.

(c) It reduces the burden of the teachers:

With ICT, lecturers' role in the classroom has shifted from being the sole giver of information to being a facilitator of learning and manager of instructional resources. ICT has replaced the traditional 'chalk and talk' methods of computer-enhanced teaching where teachers prepare and preview the sources of information, introduce the lesson, give out the guide questions and monitor the learning process. Aduwa-ogiegbaen and Iyamu (2005) submitted that today computers perform a host of functions in teaching and learning as many nations are adding computer literacy, reading and writing literacy as skills students will need for success in the technology driven world.

(d) It improves the quality of data:

ICT can improve the quality of data available to both the lecturers and the students. Information gained from the internet can be more up to date and data obtained from loggers can include more frequent and more accurate findings.

(e) It enhances Multisensory Delivery:

One of the benefits of multimedia instruction is that it provides information through multiple sensory channels allowing students with various learning styles and differences to assimilate and apply knowledge. Holzeberg,(1944), wholesomely asserts that, research in learning styles indicates that some students learn better through specific modalities such as audio, visual, kinaesthetic.

(f) It has the capacity to enhance self –expression and participatory Learning by Students.

New technologies provide stimulating environments that encourage student's active participation in the learning process. For example, instead of reading about characters in a book, students can listen to their speeches, witness their contributions or activities, and analyse documents and situations related to their activities through multi-media, history there-fore becomes more meaningful and more relevant.

(g) It promotes and encourages critical thinking:

Both the structure and the use of technology can promote high level thinking skills (Vockell and Deusen, 2010). The use of technology such as hypermedia and telecommunications also impacts the thinking skills. For example, one of the most highly rated incentives for using telecommunications with students includes increasing student's inquiry and analytical skills (Honey and Henrique, 2011).

(h) It encourages cooperative learning.

Introducing technology into learning environment has been shown to make learning more student-centred, to encourage cooperative learning, and to increased teacher/student interaction'' (Interactive educational systems design, 1994). Research supports the use of group interactions to increase instructional effectiveness and efficiency, as well as positive social interactions (Johnson, Johnson, and Stanne, 2006).

(i) It enhances communication skills.

Communication skills can be enhanced by using technology in small group and by integrating telecommunications into the curriculum. Literature reviews indicate that networks can affect learning indirectly by providing unique opportunities for students to practice, demonstrate and critique communication skills (Cohen and riel, 1989; wright, 1991).

(j) It boosts the capacity of Students with disabilities to explore their potentials. Technology also enables students with disabilities to communicate with others and to express them in writing. Technology such as voice recognition, text-to-speech synthesis, and adaptive hardware and software are providing means for all students to reach their potentials. '' more and more success stories are pouring in about how technology, combined with effective, can help students with disabilities overcome barriers to success.

(k) Education across cultural and international boundaries is easily assessed.

Technologies and telecommunications make it possible to access knowledge beyond classroom ''walls'' and create a synergy between students and teachers in national and international exchanges. (salomon, 2009) observed that ''indeed, never before could teams of students, thousands of miles apart, engage in dialogue through which they jointly construct a model of their respective economics, cultural surrounding, or ecologies and then collaboratively tests its implications''

(l) Independent and Individualized learning among students will be greatly enhanced.

Student's abilities and capacities are different; consequently, they learn and develop in different ways at varying rates. It amounts to colossal deceit if educators think that all students can learn the same materials using the same amount of time. (Peck and Darricott, 2006) posits that technology offers students diversity and self-paced learning, allowing them to progress at an appropriate rate in a non-threatening environment

(m) It motivates Students to learn. Motivating students is a constant challenge in Education. Technology can inspire students and teachers by making learning exciting and relevant.

2.22 Constraints or Challenges to the Application of ICT in Social Studies Education

Despite the enormous benefit inherent in the utilization of ICT in the teaching and learning process, it appears that there are several impediments to the successful use of ICT in the colleges of education. A painstaking evaluation of the state of ICT utilization in the Nigerian schools reveals that there is a slow pace of development. This can be attributed to a number of factors; prominent among these are the following.

(i) **Low Level of Literacy among Teachers**. Nigerian teachers, social studies teachers inclusive are largely computer illiterate as one recent study report by Mezieobi (2008) revealed that no fewer than 3% of all teachers in the nation use computers. So, many teachers do not know how to make use of computers in the classroom, let alone adding computer activities to their curriculum or lesson plan. There has been a consistent efforts in many countries to promote an ICT teachers-learners empowerment culture.(Simpson et.al 2008) the sole aim of such venture is to extend and make available to all teachers and learners the riches of the world

intellectual cultural and scientific heritage. A serious challenge as observed by Adeniran (2010) is that, the fruit of ICT revolution are so far only been enjoyed by a small elite group. This confirms the truism that the majority of our teachers have little or no exposure to ICT facilities even though this is noised much over the media. In Nigeria, studies have shown that many Social Studies teachers are far from been literate in information and communication technology not to talk of enjoying the benefits offered by this modern technology. Habour and peters (2007) and Akudolu (2009) equally observed the level of illiteracy of social Studies teachers in computer education. It is obvious that such teachers will find it extremely difficult to deliver the appropriate education and training demanded by the information age of the 21_{st} century for their students.

(ii) **Lack of Basic Infrastructure.** To use information and communication technology tools in the implementation of social studies curriculum, certain basic facilities must be put in place. As mentioned earlier that most of our teachers lacks the basic ideas and knowledge for the application of ICT in the implementation of social studies. Such facilities could be grossly lacking as their availability would be un- necessary. According to the communiqué issued at the end of a conference organized by the national information technology development agency (NITDA) in 2002, as reported in the Guardian newspaper of Tuesday October, 29_{th} 2002, it was noted that access to internet and other IT relevant tools of learning are very limited in Nigerian Schools. Well over 90% of schools/colleges and Universities in Nigeria are without ICT tools including the internet. Besides it is not possible for teachers to provide these ICT- related facilities through improvisation in the same way as they provide some of the traditional instructional materials. This is because most ICT facilities require

hand on-experience rather than mere observation. Importantly, the high cost factor has practically made accessibility to ICT facilities in and out of schools environment an exclusive preserve of few privileged individuals.

(iii) **Poor Quality of Telecommunication Connections**. One enormous challenge of effective utilization of ICT resources to Social Studies education is the low level of communication connection. The telecommunication facilities in Nigeria is yet to be developed fully and this has inhibited the desired motivation needed by Social Studies to tap fully in to the demeanour of benefits offered by ICT in the implementation and learning of Social Studies Education in our institutions of learning. This in-effectiveness is as a result of what Bayero (2007), Kwache (2007) and awe (2009) referred to as epileptic and inconsistent electric power supply, non-digitalization of telephone lines in most towns and quality of service (QOS). In the words of Awe (2009) he observed that, 'While IT has grown, it has not been marched by quality service. That, it is not enough to have cheap lines and low band width. That efficiency and accessibility of telecom services should be paramount. Most operators have a lot of work to do in QoS especially in the area of congestion and support. He expressed that the national communication commission has to weird the big stick by sanctioning poor performance''.

(iv) **Low Level of Funding**. The issue of funding has been a perennial problem in the Nigerian educational system. In the Nigerian education context with crowded classrooms and financial anaemia for the provision of required curriculum resources such as well structured textbook with individualized instructional slant, attempts at effective utilization of ICT materials and individualized instruction may not yield desired dividends. According to Okebukola (2005), under Funding is a major problem of education in many developing countries including Nigeria.

The overall education system is under-funded, the available funds are used to solve more urgent and important needs by the institutions (Debesaki, 2005) .Low level of funding has resulted in the low level of provision of internet facilities and other ICT infrastructures such as computer hardware and software among others. The cost of ICT equipment is a problem to be considered. Initial acquisition cost of computers, its accessories, software and maintenance cost will definitely determine the application of this valuable technology in the implementation of curriculum in our colleges of Education. Other sources of cost in the use of this technology such as the air condition to keep computers in dust-free environment under ambient temperature is worthy of consideration. The current level of funding of Education in Nigeria with decreasing budgetary allocation to the Education sector as evidenced by statistics which shows that in 1999, 11.2% of the federal budget was devoted to education, in 2001 it was 5.6%, in 2002 it came down to 5.2% and 2003, it further declined to 1.8% which are really a far cry from the education funding bench mark espoused by the United Nations Educational, scientific and cultural organisation.

(v) **Lack of ICT Technicians and Personnel.** Lack of skilled manpower to manage available systems and inadequate training facilities for ICT education in the tertiary institution may be a factor to contend with in the implementation of ICT for teaching-learning process at the colleges of education in Nigeria. According to Nwite (2007), the absence of trained teachers in computer science to teach students practical aspect of computer skills and non-availability of computer and allied tools in schools all put together militate against effective utilization of ICT in the teaching-learning process. Kwache (2007),Ajayi and Ekundayo (2009) equally submitted that most schools in the country lack computer literate

teachers. Consequently, many nations have started to poach on the ICT skill resources of other less conscious and ill- prepared ones such as the developing nations like Nigeria. As of today, Nigeria will need to educate and produce about one million cutting-edge computer scientist and engineers annually and perhaps five million computer literate ICT users to compete with the rest of the world. This is to ensure that the gap between the supply and demand of ICT human resource skills for education industry is bridged.

(vi) **Epileptic Power Supply.** In the Nigerian society where power supply (electricity) is a luxury, the grave erratic power supply amounts to no power supply at all, and where gas (diesel' is relatively unaffordable, the use of computers in schools will simply be a mirage. The use of ICT in tertiary institutions demands that certain facilities must be put in place, among which is power supply. Power supply all over the country seems epileptic. However, proper and efficient functioning of ICT depends on steady power supply. There have been cases whereby expensive household worth millions of Naira has been damaged by upsurge in power supply after a long period of power outage. Aduwa-ogiegbaen and Iyamu (2005) argued that when electricity supply is not stable and constant, it is difficult to keep high-tech equipment such as computers functioning.

(vii) **Resistance to Change**. There has not been much evidence to show that lecturers are reluctant to change as far as utilization of ICT is concerned. However, Ajayi and Ekundayo (2009) found out that reluctance to change by some lecturers hinder effective utilization of ICT in the colleges of Education in Nigeria. Most lecturers are glued to the traditional 'chalk and talk' methods of disseminating knowledge to the students.

(viii) **Cost of Equipments.** The use of instructional media or information technology appliances such as micro computers, over-head projector and interactive boards, etc in social studies classrooms is very cost intensive particularly in situation such as Nigeria's where there is gross underfunding of education, Teaching machines are expensive. This may constitute a problem to its acquisition and usage. The cost of procuring the internet facilities and other allied tools is enormous for a developing country like Nigeria; with a battered economy and seriously devalued currency. Apart from the basic computer themselves, other costs associated with the systems such as printers, monitors, paper modems and the likes are beyond the reach of most institutions mainly because of the dwindling revenue allocation. Dabesaki (2005) argued that the over-dependence of Educational institutions on government for everything has limited institutions ability to collaborate with the private sector or seek alternative funding sources for ICT educational initiatives.

(ix) The planning of a suitable programme of instruction for individual learner and its actual implementation are time and energy gulping; and Marshal (2006) noted that individualized instruction is not very applicable to most affective attitude such as cooperation among students is hampered by individualized instruction as the fastest and slowest learners are widely spaced out, thereby hampering group dynamics in the teaching-learning process.

(x) Computer robs the teaching – learning process of the affective, emotional characteristics associated with conventional interaction. One cannot teach social studies very effectively without distilling values component of what is taught. Values cannot be taught with machines. Most questions do not have simple clear answers and therefore, cannot be programmed. The guidance function of the

human teacher is completely lost with the electronic machine acting as the teacher. Computers dehumanize instruction and kill the creativity of learners. And as well programmed instruction has no place for teacher – student relationship. In this way protagonists of the use of computers in the social studies classroom may argue that it has taken the place of the teacher as a substitute. But Kennewell, (2011) affirmed that this is not so as "the computer cannot replace the uncanny ability and wit of a teacher who adds amusing and appropriate historical anecdotes (and gossip) at just the right moment of a lecture or discussion, nor can it communicate heartfelt feelings about people, places and events".

(xi) The use of computers in the social studies classroom takes a lot of time. While (Kennewell, and Bhana, 2011) succinctly made this point when he observed that teachers who use it and other technology in the classroom "spend a lot of time at it, in both preparation and class time". Additionally, computer programming of courseware design takes time.

(xii) The teaching of social studies in Nigeria as at today is not characterized by the use of computers that are generally not available except in a negligible few elitist schools in the urban areas. Even if Faculties of Education in Nigeria Universities and Departments of Social Studies in Colleges of Education have begun to include the study of computers in the classroom in their teacher preparation programme (this is doubtful though), it hasn't started to positively affect the teaching of social studies and this is likely to be the situation in our context for quite a long time.

(xiii) Nigerian teachers who lacks job satisfaction as a result of inadequate remuneration and lack of teaching facilities, coupled with excess workload, are the least prepared to take some time out to learn how to use computer. Government

sponsored or conducted in – service training in this regard – using computers effectively in the classroom is the least thing to contemplate in improving social studies instruction.

(xiv) In the Nigeria society where there is no reading culture and print information has no value to students, and where there are no standard libraries, overflowing with current reading materials, and the use of computers and other ICT materials in social studies classes is most likely to replace the book.

(xv) It makes learners slaves to automated teaching. This is because it lacks the change of pace which is very inevitable for learning. When the interest which accompanied the novelty of the machine wanes, the students become bored with this kind of learning.

2.23 Empirical Studies

During the course of this research, the researcher reviewed journals, magazines, textbooks and related research work on information and communication technology. Information and Communication Technology has received a major focus in terms of research work in recent years by researchers. In their contributions, Ajayi and Fadekemi (2007) conducted a research titled ‘’the use of management Information System (MIS) in decision making in the South-West Nigerian Universities’’. They adopted the descriptive survey design and, the population of the study 3,68o with the sample size of 386. questionnaires was used for data collection, simple percentage was used to analyze the data, that management information system helps to standardize the system of obtaining reports and statistical information from the various universities on students, staff, financial matters and library, the MIS was not adequately used for administrative decision on short-term planning.

Although the research work is not on social studies education, still it has relevance with the current work because both the current work and the previous work emphasized on the role of Information and Communication Technology in enhancing learning and teaching. The previous research reviewed the role of ICT in creating egalitarian society and respect for the dignity of labour. Despite the above relationship, the researcher to some extent overlooked the following, the researcher did not mention the population of the study, the sample population used 600 academic and non academic staff, and how the sample population was selected was not clearly stated. Despite few oversights, the work facilitated the present research work. It provides the bases for the foundation of the work and contributions in literature review.

Tancook (2008) conducted a research on "reading and Writing Technology, a healthy mix in the social studies curriculum." The researcher determined the impact of ICT on reading and writing of social studies students in United States of American. The researcher conducted his work on Fourth Grade in an elementary school. The population of the study was 100 pupils, sample of the study was 28 pupils, survey research design was used for the study, the simple random sampling technique was used in selecting the sample, and questionnaire was used in collecting data. The following findings were obtained, that the reading of variety of materials are made possible, those students acquired improved computer skills in word processing and the use of the internet, those web quests are based on the inquiry method, which is a teaching and learning technique and the following were observed from the work, the objective of the study was not stated, method of data analysis was not mentioned, despite the weakness observed, the research is still related to the present project work because he discussed the influence of computer in teaching social studies education programme. The contrasting areas both work lies in the design, the population of study and the status of respondents.

Osakinle, (2010) wrote on the imperative of information and communication technology (ICT) in teaching-learning process in Nigerian Tertiary institutions. He had four research objectives, research questions and hypotheses. It was a survey research that had a population of 10,860 that is comprised of students and lecturers of some selected tertiary institutions. t-test statistics was used in the analysis of data at 0.05 level of significance. The study findings are the followings; it provides access to huge source of knowledge, it improves the quality of teaching-learning, it reduces the burden of teachers and it challenges students to learn independently among others. Though the research work is survey in nature compared to the present work which is quasi-experimental, it provide a strong base to the successful completion of this work as it was carried out in the tertiary institutions as done in this study

Similarly, Connel (2009) conducted a research in Indiana schools. He uses students of grade 7, which are equivalent to JSS ii in Nigerian schools. His experimental work covers only Junior High schools in Indiana district, United State of America. The experiment was to find out the effects of e-learning on the students cognitive and affective domain as regards to behavioural changes in the learning of social studies. Statistical data from 20 studies comprising 4,400 students showed that e-learning instruction in general produced positive outcome on students performance at different schools experimented. The result showed that differences exist in the scores. There is a wider gap between those taught through e-learning and those taught without e-learning. Those that learnt through e-learning scored80% and above against those taught with other method that scored 60% and below. There wasn't big difference in the scores of male and female students as regards to their academic performance.

Smith and Martins (2010) in their book "Miracle or Menace: Teaching lower High school students through internet". The study involve 527students both male and

female 263 constituted the experimental group, while 264 made the control group.84% of the experimental group and only 45% of the control group showed a spirited level of learning. The experimental group learnt interactively at their own pace. This has lead to a more meaningful learning among learners because high level of performance was achieved. The researchers discovered that the female students performed better than the boys.

Ezekoka and Okoli (2012), experimented the use of internet in teaching and learning social studies concepts among the JSS students in St.Paul International School Owerri, Imo state. The researchers had experimental and control group of 50 students and exposed them to same topic to learn by using e-learning method and conventional method of teaching under the topic "Our duties to the Nation". At the end of every lesson they administered post test, graded the students and recorded the marks. Test and re-test reliability was used to establish the authenticity of the result obtained. Those who were taught with e-learning method had a mean score of 17.84; while those who were not taught with e-learning method had 13.28.The mean score difference between the two treatment groups was 4.56.This shows that those taught with e-learning performed better than those taught without e-learning instructional strategy. This work is quite similar to the present work in trying to work with one of the ICT interactive package, i.e the internet. Both works tend to examine how the use of this ICT package affects the academic performance of the students in Social Studies. Where there exist differences in both works is that the present study made use of many ICT tools like the CAL, CAI, Internet facilities and interactive board.

Cirfat (MSTAN) (2011) wrote on the status of information, communication technology (ICT) in colleges of education, the work accesses the adequacy, relevance and utilization pattern of available ICT facilities in the two colleges of education in

plateau state. The population of the study was 43, the entire population was used as sample of the study. The study was a descriptive survey which dwells on the opinion of the respondents for the study. It was discovered that very few ICT facilities were available and that not many science teachers had ever used such facilities, only two departments, physics and computer had most use of the ICT facilities. Even though most science teachers agreed that the use of ICT facilities will bring better science teaching and learning. With the level discovered, the researcher suggested that government should put emphasizes on ICT facilities, exempting ICT facilities from tax and training of science teachers on ICT usage. This work by Cirfat is quite relevant to the present study though it is survey in nature and was carried out in science department of two colleges of Education, the present study draws a lot of inspiration because of its rich literatures

Summary

The study is to investigate the Impact of the information communication technology on the academic performance of students in the Nigerian certificate in education (NCE) Social Studies curriculum in the Federal Colleges of Education in North-western Nigeria. This chapter is therefore presented under the following sub-headings: Theoretical Frame work, Social Studies in Nigeria, The Concept of Social Studies, Objectives of Social Studies in Nigeria, The Content of NCE Social Studies in Nigeria, The concept of information, communication and technology (ICTs), Information Communication Technology at school, Trends in Information and Communication Technology (ICT), USE of ICT in Education in Nigeria, enhancing the quality and accessibility of education, ICT and Social Studies Education Programme, ICT enhancing the academic performance, ICT enhancing learning Environment, ICT enhancing learning motivation, Curriculum Implication of ICT on Social Studies Education Programme, Implementation of Social Studies, Implementation of Social

Studies Using Information and Communication Technology, The Place of Mobile Phones in the Teaching and Learning of Social Studies, The Place Of 'Interactive Board'' In the Teaching and Learning of Social Studies, The Internet and the Implementation of Social Studies, Constraints or Challenges to the Application of ICT in Social Studies Education, Several empirical studies in the use of ICT highlighted above indicated more profitable than the traditional/conventional methods teachings for instance. Ganguli (1992) investigated the effect of using e-learning as a teaching technique in social studies instruction on student's performance. The result indicates that the experimental group which was taught with e-learning method significantly showed a high level of understanding, whereas the control group failed to show a similar result.

In literature reviewed, it was the emergence of information and communication technology to the educational sector has facilitated easy access to information, enhance documentation, makes work neat and promote the transformation of the whole world into a global village with global economy, facilitating teaching and learning through the creation of global communication super high way the internet. It was equally reviewed that social studies has the capacities and potentials of solving the problems of inequality, injustice, disparity and discrimination as concepts of freedom and human right liberation are taught in social studies. Also, it was reviewed that ICT is rapidly solving communication problems in education sector and blurring the contour of the old bringing forth the new much faster way of access and managing of information.

On the implication of ICT to social studies curriculum, related literature reviewed indicates that with the introduction and communication technology to educational sector, there is an urgent need for curriculum of many education disciplines to be reviewed. Tancook (2008) stated that the integration of ICT on Social Studies curriculum will enhance teaching and learning in the subject and further called for the redesigning of

Social Studies education curriculum in order to make graduate of social studies possess the right skills for effective functioning in the society; hence there is need to research into the influence of ICT on social studies with the view to identify the relationship between the knowledge of ICT and social studies curriculum implementation in Colleges of Education among others.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Introduction

This chapter discuses the procedures that was used in conducting the research, the issues treated fall under the following sub-sections:

- Research design,
- Population of the study
- Sample and sampling techniques
- Instrumentation
- Pilot study
- Validity of the Instrument
- Reliability of the Instrument
- Procedure for data collection
- Procedure for data analysis.

3.2 Research Design

The Quasi-experimental research design was adopted for this study. This design was adopted for this study because according to Scott (2012) it helps to maximize both the internal and external validity of a research activity. The Quasi-experimental research design for this study was anon-randomized pre-test and post-test experimental group design. This was necessitated by the use of intact classes as group in the schools selected.

The Non-Equivalent research design that will be used is as follows.

The research design that will be use is as follows.

$G_{1:}$ R→O1------→ X1--------→O2

$G_{2:}$ R→O1----------→O2

Where;

G_1= control group

G_2= experimental group

01=Pre-test

O2=post-test.

X= treatment.

3.3 Population of the Study

The target population of this study was of a total of one thousand three hundred and twenty-two (1322) in number. It is comprised of NCE II students OF Social studies in Federal Colleges of Education in the North-western Nigeria. The population of the study in all the Federal Colleges of Education in North-West Geo-Political Zone of Nigeria that have been accredited to run NCE Social Studies programme in North-Western Nigeria. They consisted of six hundred and sixteen (616) male and six hundred and eighteen (706) female students. the three schools and NCE students were selected for this study to ensure uniformity in the choice of topic selected and the use of a common scheme of work for the study.

The population is represented in the Table 3.1

Table 3.1: Distribution of the Population of the Study of Male and Female Students

	F.C.E. IN NORTH WEST NIGERIA	F	M	TOTAL
1	FCE Zaria	209	364	573
2	FCE Kano	285	169	454
3	FCE Katsina	122	173	295
Total		**616**	**706**	**1322**

Source: NCCE (2014)

3.4 Sample Size and Sampling Technique

Purposive sampling technique was adopted for this study, only the colleges of Education that were accredited to offer Social Studies out of the colleges of education in the North-western zone was used for the study. They include Federal college of Education Zaria, Federal college of Education Kano and Federal college of Education Katsina. Intact classes for NCE ii of the sampled colleges of Education will be used for the study. The three colleges of education were assigned to pre-test and post-test respectively. 404 students comprised of 202 males and 202 female students of Social Studies participated for the study. This is because according to Ezejelue and Ogwo (1999) in Toluhi (2001) the most common sample size is 25% rule which states that the researcher should obtain 1/4 of the population he studies in his sample. Simple random sample technique was used to pick the required number of subjects involving the use of table of randomization (table of random numbers) for example by picking number that appear in the table of random to set total number of 404 for pre-test group and 404 or post-test group. The first 404 subjects made up the pre-test group consisted of 202 males and 202 females were exposed to post-test. That was to ensure adequate representation of the population and enable gender related analysis of results.

Table 3.2 **Distribution of the Sampled of the male and Female students**

	Sample Schools	**F**	**M**	**TOTAL**
1	FCE, Zaria.	53	53	106
2	FCE, Kano.	59	59	118
3	FCE, Katsina.	55	55	110
Total		**202**	**202**	**404**

3.5. Instrumentation.

Two instruments adopted from Orji (2003) were used for the study. The instruments were Social Studies Ability Test (SSAT) and the Social Studies Performance Test (SSPT). The SSAT is a 45- item multiple choice instrument. It is a revised version of an earlier instrument developed by Orji (2003) and adopted by this researcher to suit the present study. The instrument measures the two groups (pre-test and post-test group) which were randomly assigned into experimental and control groups. The students respond by attending the lessons and to the test items. Non-intact classes were used for the study, meaning that the students were randomized. Pre-test was administered on all the students under study. Post-test was equally administered on them after they have been exposed to treatment. In other to avoid possible sensitization on the parts of students, Oche, (2008) posits that the teachers concealed the pre-test result from the students and reshuffle the test items before the administration of post-test on the students. But the teachers were closely monitored and supervised by the researcher as well as the trained research assistants. The students were all pre-tested and post-tested. The students were given a placebo treatment in the form of exposure to the use of ICT in the implementation of some Social Studies contents after they were pre-tested. Lesson notes were made uniform to ensure that the chosen topics for both pre-test and post-test are the same.

3.5.1 Validity and Reliability of the Instrument

In order to make sure that the final copy of the test items is valid after adopting the instrument for the study, the researcher requested the assistance of experts, lecturers, and statisticians in the assessment, verification and authentication of the test items. The face and content validity in terms of scope and coverage, content relevance, ambiguity and vagueness of expression were subjected to expert scrutiny. Corrections and

suggestions made by the experts were used to restructure the instruments as recommended by Nworgu, (1991),Heulley, (1993). This was employed to ensure the effectiveness of the instruments in line with the purpose of the study.

3.5.2 Reliability of Instrument

The validated test instruments were thus pilot tested on twenty students of Social Studies. Twenty students were pre-tested and post-tested. The entire test items administered for the pilot study were personally retrieved by the researcher. The colleges used for the pilot test include Federal College of Education, Okene and Kogi state College of Education, Ankpa, Kogi state; the colleges were not among the schools that were used for the final study. To ascertain the reliability of the instruments, the scores generated from the pilot study were statistically analyzed for the purpose of checking the reliability index and the internal consistency of the instruments as opined by Bowling, (2009). The Kuder-Richard Coefficient (K-$R_{(20)}$) statistical option was used to determine the internal consistency of the instrument (SSAT). Consequently, reliability co-efficient of alpha level of .941 and standard alpha level of 0.940 were obtained. Items with Difficulty (ID) between 0.30 to 0.77 and discrimination index (DI) between 0.3-1S were used by the researcher. The distracters were also reviewed in the psychometric indices. An option that did not attract any patronage, that is having distracting power of 0 were reviewed. The reliability of Social Studies performance test was obtained using the cronbach Alfa at 0.072. These reliability co-efficient for SSAT and SSPT were considered adequate for the internal consistencies of the instruments. This is a confirmation of test of reliability advanced by Spiegel and Stevens (1999). According to them an instrument is considered reliable if it lies between 0 and 1, and that the closer the calculated reliability coefficient is to zero, the less reliable is the instrument, and the closer the calculated reliability co-efficient is to 1, the more reliable is the instrument.

This therefore confirms the reliability of the instrument used to collect the data as fit for the main work.

3.6 Data Collection Procedure

The data for the study was collected through the administration of test instruments with the aid of three Research Assistants. Official permission was obtained from the Head of Department of Social Studies and the Provosts of the sampled institutions. The Research Assistants were trained on the mode of operations of data administration and collection by the researcher. The study was carried out for the period of two months (8 weeks). A total hour of two hours (2hrs) per lecture, i.e, six hours (6hrs) per topic for a week was strictly adhered to. Two (2) topics were covered during the study; they are the concept of leadership and the concept of corruption. The ICT materials used for the study were supplied by the respective schools. Before the commencement of the study proper, pre-test was administered on the students using the Social Studies ability test. The test score was obtained and kept. On the completion of the experiment, the teacher administered the post-test, i.e Social Studies performance test on the students. The Research Assistants helped to administer the instrument by direct delivery technique and collect back the administered instruments from the respondents.

Control of Extraneous Variable

The following were adopted to control some of the extraneous variables in the study.

(i) **Experimental Bias:** Lesson plans for experimental and control groups were prepared by the researcher and handed over to the teachers to reduce teachers' effect on the lesson preparation.

(ii) **Hawthorne Effect:** Care was taken to ensure that students were taught by their own teachers whom there were familiar with and were not told that it is an experiment. This enabled the researcher to reduce the influence on student's

performance as a result of consciousness of the fact that they were involved in an experiment.

(iii) Subject Interaction: subjects in the experimental and control groups belonged to different schools not close to each other. This was to ensure that there was no interaction of subjects across experimental and control groups.

(iv) Effect of Pre-Test on Post-test: the period between pre-test and post-test was eight weeks. This was assumed to be enough time to prevent the pre-test from affecting the result of post-test since pre-test and post-test were the same items but different in arrangement.

(v) Variability of instructional situation: Homogeneity of instruction across groups was ensured as follows.

(a) The researcher trained all research assistants on the instructional process involved.

(b) The research assistants were directed to strictly follow the detailed lesson plan.

(c) The experimental group were taught the same topics with the regular periods allotted to Social Studies on the school time table.

(d) Teachers used in both the control and experimental groups were qualified teachers with M.ed Social Studies and a minimum of 5 years teaching experience.

(vi) Training of teachers: Teachers that administered the experimental treatment to the pupils were trained to enable them acquire the necessary competencies needed to effect the implementation of uniform experimental conditions.

(vii) Instructional Situation Variables: Instructional situation was the same for all the groups, since intact classes from NCE II were used and lesson notes bearing the same contents were also used.

(viii) Instrumental Variables: The variables that may have been introduced as a result of misinterpretation of the instruments for data collection by the subjects were removed by trial testing the instruments before actual experimentations. Any ambiguities discovered were removed. The instruments used were also subjected to validity tests by experts in the field.

(ix) Instructional materials: the instructional packages used during the study were supplied by the respective school. Such materials which include, the interactive board, audio and visual materials, slides and the over head projector among others.

3.7 Procedure for Statistical Analysis

The statistical tools that were used for the collection of data were descriptive and inferential statistical techniques. The descriptive statistics entails the use of frequencies and percentage, mean and standard deviation. The inferential statistics were used in the testing of Null hypotheses, hypotheses one (1) was analysed through paired t-test hypotheses two (2) was analysed through the independent t-test, hypotheses three (3) was analysed using Anova, hypothesis four was analysed using ANCOVA while hypothesis five was analysed using the independent t-test respectively. The analysis of data was done through the use of a statistical package for social sciences (SPSS) version 20 at the alpha of 0.05 level of significance.

CHAPTER FOUR

PRESENTATION OF RESULTS

4.1. Introduction

The chapter is organized in line with the research questions and objectives of the study. This chapter discusses the analysis and interpretation of the data collected through test scores. In the course of the analyses of the data, tables of frequencies and percentages were used. The demographic characteristics of the students are presented in tables of frequencies and percentages. Two sets of performance data were collected in the experiment. The first set of score (pre-test) was collected before the experiment and the other score (post-test) was collected after the experiment with the multi-media method. The scores of the test of ability (pre-test) and performance test scores (post-test) of the students who are the respondents to this study on several questions and testing of research hypotheses form the basis of the analysis in this chapter. Section one (1) is analysis of the personal data, section two (2) is on the answering of research questions, section three (3) is on the testing of research hypotheses, section four (4) is on the discussion of findings while section five (5) is the summary of its major findings.

4.2 Analysis and Interpretation of Data.

***Table 4.1*: Distribution of Respondents by Group**

Groups	**Frequency**
Experimental	202
Control	202

Details of Table 4.1 revealed that 202 of the sampled students were in the treatment group while the same 202 sampled students of Social Studies were in the control group. There was no drop in the population of the student during the treatment.

***Table 4.2*: Distribution of Respondents by Gender**

Gender	Frequency	Percentage
Male	202	50%
Female	202	50%
Total	**404**	**100%**

Details of Table 4.2 revealed that 202 of the sampled respondent's representing50 % are males while the remaining 202 representing 50% are females. The balance in the sex distribution of the respondents is to ward of gender bias or variations in the result of the study.

Table 4.3: Distribution of respondents by school

Schools	Frequency	Percentage
Kano	106	29.3%
Zaria	188	40.9%
Katsina	**110**	**29.8 %**
Total-3	**404**	**100%**

Details of Table 4.3 revealed the schools that were used in the study. FCE Kano has the respondents of 106 representing 29.3%, FCE zaria has 188 respondents which is been represented 40.9%, while FCE Katsina has 110 respondents and is been represented with 29.8% respectively.

4.3. Answering of Research Questions

Research Question One: What is the performance of students of Social Studies exposed to ICT experimental group and those in the control group in the Federal Colleges of Education in Nigeria?

Table 4.4: Performance of Students in the ICT experimental group and those in the control group In Federal Colleges Of Education in North-West of Nigeria.

	GROUPS	N	Mean	Std. Deviation	Std. Error Mean
SCORES	Experimental	202	52.59	6.805	.479
	Control	202	48.28	4.333	.305

Table 4.4 reveals that the experimental mean score of the subjects is 52.59 with the standard deviation of 6.805 and the control group has the mean score of 48.28 with the standard deviation of 4.333 respectively. This shows that the experimental group mean score is higher than the control group mean score. Therefore, the use of ICT has significant advantage or impact on the students of social studies than the conventional methods in federal colleges of education in the North-West Geo-Political Zone, Nigeria.

Research question two: What is the academic performance of the male and female students of social studies taught the ICT interactive package and ICT guided package in the Federal Colleges of Education in Nigeria?

Table 4.5: Academic Performance Of The Male and the Female Students Taught Social Studies Using ICT interactive package and ICT guided package.

Descriptive Statistics on the difference between male and female students exposed to ICT interactive and guided packages

Gender	Groups	Mean	Std. Deviation	N
Male	Guided	52.3861	5.69556	101
	Interactive	56.1386	6.00172	101
	Total	54.2624	6.13168	202
Female	Guided	49.7921	4.24103	101
	Interactive	58.1584	5.52944	101
	Total	53.9752	6.46109	202
Total	Guided	51.0891	5.17476	202
	Interactive	57.1485	5.84439	202
	Total	54.1188	6.29236	404

a. R Squared = .267 (Adjusted R Squared = .261)

The descriptive statistics showed that for guided ICT the scores recorded 52 and 49 for male and female respectively. The interactive ICT technique recorded 56 and 58 for male and females respectively. This implied that the females are inclined to the interactive ICT package while the male students are inclined to the guided packages.

Research question three: what is the mean performance of the students of Social Studies that were pre-tested and post-tested in ICT interactive packages in the federal colleges of education?

Table 4.6: Mean performance of students of Social Studies exposed to pre-test and post-test in ICT interactive package.

Tests	Mean	Std. Deviation	N
pre-test	48.8366	5.01146	202
post-test	54.8960	5.15363	202
Total	51.8663	5.91572	404

Table 4.6 reveals that the mean score and the standard deviation of the two groups that were pre-tested and post-tested in ICT interactive package. The group that was pre-tested has the mean performance score of 48.8366 with the standard deviation of 5.01146 while the post-test mean performance score is 54.8960 with the standard deviation of 5.1563.

Research Question Four: What is the academic performance of students in Social Studies taught using the ICT guided package and those taught using the ICT Interactive package in the Federal Colleges of Education in North-West geo-political zone of Nigeria?

Table 4.8: Performance of NCE students in Social Studies taught using the ICT guided package and those taught using ICT interactive package.

Group Statistics

	Groups	**N**	**Mean**	**Std. Deviation**	**Std. Error Mean**
Scores	Guided	202	51.0891	5.17476	.36409
	Interactive	202	57.1485	5.84439	.41121

Table 4.8 reveals that the mean score of the students taught using the ICT guided packages is 51.0891 with the standard deviation of 5.17476 and the mean score of the students of Social Studies taught using the ICT Interactive package is 57.1485 with the standard deviation of 5.84439 respectively. This shows that the mean score of those taught using the ICT guided package is lower than the score mean score of those taught Social Studies using the ICT interactive Packages. Therefore, the use of ICT Interactive packages has significant advantage over the students of social studies taught using the ICT Guided packages in federal colleges of education in North-West Geo-Political Zone, Nigeria.

4.4. Test of Null Hypotheses

1. **Hypothesis one: There is no significant difference between the mean performance score of the control group and the experimental group of students taught Social Studies with ICT and those taught not using ICT.**

Table 8: Independent t-test was used to determine the mean performance score of control and experimental groups of students taught Social Studies using ICT and those that were not exposed to ICT.

GROUP	N	MEAN scores	STD.DEV	Std.err	Df	T calculated	P (sig)
EXPERIMENTAL	202	52.59	5.01146	6.805	201	7.596	0.000
CONTROL	202	48.28	5.15363	4.333			

P. calculated< 0.05 t calculated > 1.96 at df 201

Result of the independent t-test showed that significant difference exist between the control group and the experimental group in their academic performance. This is because the p value of 0.001 is lower than the alpha level of 0.05 and the calculated t of 7.596 is higher than the t-critical value of 1.96. Their scores of 52.59 and48.28 by experimental group respectively is evident on the table. Therefore the null hypothesis which states that there is no significant difference in the mean performance of the control group and experimental group of students of social studies is hereby rejected.

Hypotheses two: Hypothesis Two: The null hypothesis which state that there is no significant difference between male and female exposed to guided and those exposed to interactive ICT instructional technique.

Table 9: Two ways ANOVA **statistics to test the interaction effect on methods and gender and the mean performance of students of social studies exposed to ICT.**

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Gender	8.327	1	8.327	.285	.594
Methods	3708.356	1	3708.356	126.759	.000
Gender * methods	537.515	1	537.515	18.373	.000
Error	11702.099	400	29.255		
Total	1199210.000	404			
Corrected Total	15956.297	403			

Result of the two ways Anova repeated test revealed that:

There is significant difference between male and female versus method, (the guided and interactive ICT instructional technique). The calculated p value for gender vs method is 0.000 which is less than the alpha value of 0.05 level of significance. The descriptive statistics showed that for guided ICT the scores recorded 52 and 49 for male and female respectively. The interactive ICT technique recorded 56 and 58 for male and females respectively. This implied that the females are inclined to the interactive ICT package while the male students are inclined to the guided packages. Therefore, The null hypothesis which state that there is no significant difference between male and female exposed to guided and those exposed to interactive ICT instructional technique is rejected.

HYPOTHESIS THREE: The null hypothesis states that there is no significant difference in the pre-test and post-test mean performance of students exposed to ICT interactive packages.

Table 10: Two ways Anova repeated test to test differences in pre-test and post-test performance of students of Social Studies exposed to ICT interactive package.

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	7416.713[a]	1	7416.713	287.055	.000
Intercept	2173614.436	1	2173614.436	84127.046	.000
Tests	7416.713	1	7416.713	287.055	.000
Error	20824.851	806	25.837		
Total	2201856.000	808			
Corrected Total	28241.564	807			

a. R Squared = .263 (Adjusted R Squared = .262)

Result of the two ways Anova repeated test revealed that Significant difference exists between the pre-test and post test score of students exposed to interactive ICT. His is because the p value of 0.00 is lower than the alpha level of 0.005. The t-cal value of 51.0891 is higher than the t- critical of 1.96 at the degree of freedom of 201. Their calculated score are 51.0891 and 57.1484 by pre-test and post respectively. Therefore the null hypothesis which state that there is no significant difference in the pre-test and post-test mean performance of students exposed to ICT interactive packages is rejected.

HYPOTHESIS FOUR: The null hypothesis state that there is no significant difference between the mean performance of students of Social Studies taught using the ICT Guided package and those taught using the interactive packages.

Table 11 : Independent t-test statistics to find significant difference in the mean score of students of social studies taught using the ICT guided and interactive packages.

Group	N	Mean	std.dev	std.err	Df	T Calculated	Sig (p)
Guided	202	51.0891	5.17476	.36409	**402**	1 1.032	.000
Interactive	202	57.1485	5.84439	.41121			

Calculated p < 0.05, calculated t> 1.96 at df 402

Result of the Independent t test statistics revealed significant difference between students of Social Studies taught using ICT Guided and Interactive Packages. Reasons being that the P calculated value of 0.001 is lower than the 0.05 alpha values, while the t calculated value of 11.032 is higher than the t critical value of 1.96. Their calculated mean academic performances are 5.17476 and 5.84439 by ICT guided and ICT interactive packages respectively. This implies that students exposed to ICT interactive Packages performed better than those exposed to ICT guided packages in the teaching of Social Studies. Hence the null hypothesis is consequently rejected.

4.5. Findings of the Study

The findings from the analysis of the data and test of the study's hypotheses are summarized below:

1. Students in the experimental group performed better than those in the control group. This signify that the students that were exposed to ICT instructional technique performed significantly better than the students that not exposed to it.
2. The female students were better in the use of ICT interactive package than the ICT guided package, while the male students were better in the use of ICT guided package than their female counterpart. Thus there was significant interactive effect on gender and method.
3. The post-test score of the students was significantly better than the pre-test scores of the ICT interactive package. It therefore means that the ICT interactive package is better in the teaching of Social Studies towards the enhancement of student's academic performance.
4. The ICT interactive package enhances the student's academic performance than the ICT guided package. Students who were taught using the ICT interactive

packages had better understanding of the concepts better than those that were taught using the ICT guided packages.

4.6. Discussion of Findings

The analysis of the data collected for this study provided some insight into the main objectives of the study, which was to determine the impact of information and communication technology (ICT) on the academic performance of students of Social Studies in the Federal Colleges of Education in north-western geo-political zone of Nigeria. The study is made up of a sample of 404 respondents two hundred and two (202) for ICT experimental studies and two hundred and two (202) for the control studies comprising of only students of social studies on various issues relating to their academic performance and gender related issues in the three (3) Federal Colleges of Education whose responses in scores were analyzed in three (3) sections of this chapter; this section discusses the findings as they conform or disagree with opinions of some authors as earlier cited in the literature review.

Basically, four research objectives, questions and null hypothesis were postulated for this studies, the discussion of finding in relation to this study goes thus;

Research question one states that: What is the performance of students of Social Studies exposed to ICT experimental group and those in the control group in the Federal Colleges of Education in Nigeria? Hypothesis one which states that here is no significant difference in the performance of students of social studies that has been exposed to ICT experimental group and those in the control group in colleges of education in Nigeria. The independent t-test statistics on the experimental and control group in academic performance of students as shown on table 4.4 revealed significant difference in the mean performance score of those in the experimental group and those in the control group of the students of social studies. The mean performance score of students in the

experimental group is 52.59 with standard deviation of 5.01146 while the control group mean performance score is 48.28 and standard deviation of 5.15363 respectively. This shows that after the treatment the students performed significantly better than when they were not taught with ICT. This difference in the mean of experimental group and the control group score of the students is in contrast to hypothesis one which stated that there is no significant difference in the academic performance of students of Social studies taught with ICT and those that were not. According to the paired t-test statistics significant difference exist between the experimental group and the control group. The p-cal is .001 which is lower than 0.05, the t-cal is greater than the t critical of 1.96. This shows that there is significant difference. Therefore the null hypothesis which states that there is no significant difference in the academic performance of students of social studies in the experimental group and the control group is hereby rejected.

This difference in the academic performance of students can be attributed to the use of multi-media apparatus such as MS Power Point, Digital Projector, Laptop, Internet, Flannel Board, in the teaching of social studies education. Akintola & Aremun (2008) observed that instructional technology incorporate the tools and making present support to reinforce teaching and learning. Teaching in this respect involves broad based technology including its methods, management and its application that support the creation, storage, manipulation and communication of information in schools. These tools include the computer, internet, the use of smart phones, servers, interactive boards, printed materials i.e pictorial charts. All this materials play vital and central roles in facilitating effective implementation and learning of Social Studies education in schools. It is on the basis of this that Kulik's (2006) offers that, meta-analysis study revealed that, on average, students who used ICT-based instruction scored higher than students without computers. This finding equally corroborates the findings of Presseley and Wharton-mc

Donald (1999) that teaching with self regulated strategies improves learner's performance and meta-cognitive awareness of their own learning. It was observed at the introduction of information and communication technology in the implementation of Social Studies, that the process aroused the interest of students in the classroom. ICT packages which contents includes the likes of animations, graphic, clip arts and sound helped to broaden the perspective of students as well. The finding is in consonance with the study embarked by Salau (2010) on the effect of electronic learning on the academic achievement of senior secondary schools in Kaduna state. The interpretation to the findings above impinged on the effectiveness of multi-media instruction in teaching and learning process in our institutions of learning. Therefore he maintained and concluded that teaching and learning when effectively planned can change and sharpen the behaviour of individuals, that student can learn where their interest can be obtained by distracting their attention intentionally.

It on this premise that Purushothaman (2007) submit that the use of multi-media as instructional strategy in modern teaching helps the learner to learn the subject matter itself along with the acquisition of more skills such as keen observation, creative thinking, inference drawing, decision making and generalization. It was observed that in the treatment procedures where multi-media apparatus are used in the teaching and learning, the teaching-learning interactions was interesting and participatory which is a confirmation of the submission of Okam (2002) who maintained that students desire for success is closely linked with their interest, targets, attitude and aptitude. Student's active involvement in the learning process gingered even the lower performing students (male and female) with resultant improvement in their performance. This proved that the method of learning enables the students to have control of their own learning there by exerting most advantage of this process to enhance their academic performance. This

method provides interactive learning as well as opportunities for each learner to proceed at their own pace, and gives the students the opportunity to receive feedback on progress especially with the use of CAI and the interactive engagement.

The second Null hypothesis stated that there is no significant difference in the academic performance of male and female students who are taught Social Studies and the methods used in Federal Colleges of Education in North-West Geo-Political Zone, Nigeria. The two ways ANOVA statistics on the interaction of gender and methods on the academic performance of male and female students revealed significant difference in the scores of the male and female students of social studies in the ICT interactive and ICT guided packages used. Result of the two ways Anova revealed significant difference between male and female versus method, (the guided and interactive ICT instructional technique). The calculated p value for gender vs method is 0.000 which is less than the alpha value of 0.05 level of significance. The descriptive statistics showed that for guided ICT the scores recorded 52 and 49 for male and female respectively. The interactive ICT technique recorded 56 and 58 for male and females respectively. This implied that the females are inclined to the interactive ICT package while the male students are inclined to the guided packages. Therefore, The null hypothesis which state that there is no significant difference between male and female exposed to guided and those exposed to interactive ICT instructional technique is rejected. This finding agrees with Adeosun (2008) that was an interactive effect of method and gender on the mean interest score of students when they were taught Social Studies using a 3 multi-media instructional package and conventional methods. Similarly, this finding is in agreement with Adeyemi and Ajibade (2011) who similarly found that there was an interactive effect of treatment and gender on student's achievement when taught Social Studies using simulation games and brainstorming and a conventional methods. The study of

Achor, Imoke and Ajai (2010) is another study this study is in agreement with. They earlier found an interactive effect of method and gender when students were taught mathematics using ICT instructional techniques and traditional methods. This finding is in contrast to the opinion of Hynes (1994) who pointed out that, women argued that they have been robbed of technical initiative, imagination, invention and access to ICT. This contention is clearly expressed by Utulu (2007) who submits that very small women have the possibility of using new information technologies. She pointed out that information technology is not gender neutral. Equally, Shiaka (2005) in his study on attitude of students towards learning found that, anxiety level of males to learning was marginally lower than that of their female counterpart in academic performance. He posited that the male students scored higher than the female in confidence learning scale supporting evidence that male tend to be more confidence than female. This confirmation is equally supported by Clark and Gorski (2002) who also found that the female do not perform well in most subjects because of their low level of confidence and not their ability. On the contrary, Smith and Martins (2010) found in their study that, female students outperformed their male counterpart in using Multi-media in the learning process.

This finding bear relevance to what Holland asserts that, people in the same profession are likely to have similarities and similar history of personality development. Similarly the finding of this study laid credence to the work of Yoloye, (2004), Nwagwu, (2005), Obeka, (2006) and Usman, (2010) whose findings shows that students, when given equal opportunity will perform well in education irrespective of sex.

The third hypothesis states that, there is no significant difference in the academic performance of students in the ICT interactive package exposed to pre-test and post-test. The repeated two ways ANOVA statistics revealed that Significant difference exists

between the pre-test and post test score of students exposed to interactive ICT. His is because the p value of 0.00 is lower than the alpha level of 0.005. The t-cal value of 51.0891 is higher than the t- critical of 1.96 at the degree of freedom of 201. Their calculated score are 51.0891 and 57.1484 by pre-test and post respectively. Therefore the null hypothesis which state that there is no significant difference in the pre-test and post-test mean performance of students exposed to ICT interactive packages is rejected. This difference in the academic performance of students can be attributed to the use of multi-media apparatus such as MS Power Point, Digital Projector, Laptop, Internet, Flannel Board, in the teaching of social studies education. Akintola & Aremun (2008) observed that instructional technology incorporate the tools and making present support to reinforce teaching and learning. Teaching in this respect involves broad based technology including its methods, management and its application that support the creation, storage, manipulation and communication of information in schools. These tools include the computer, internet, the use of smart phones, servers, interactive boards, printed materials i.e pictorial charts. All this materials play vital and central roles in facilitating effective implementation and learning of Social Studies education in schools. It is on the basis of this that Kulik's (2006) offers that, meta-analysis study revealed that, on average, students who used ICT-based instruction scored higher than students without computers. This finding equally corroborates the findings of Presseley and Wharton-mc Donald (1999) that teaching with self regulated strategies improves learner's performance and meta-cognitive awareness of their own learning.

The forth Null hypothesis stated that there is no significant difference in the academic performance of students who are taught Social Studies using ICT Guided packages and those taught using the ICT Interactive Packages in Federal Colleges of Education in North-West Geo-Political Zone, Nigeria. The independent t-test statistics on the academic performance of students taught Social Studies using ICT guided

packages and students taught Social Studies using ICT Interactive packages revealed significant difference in the mean scores of the students of social studies who are taught using the ICT guided package and those taught using the ICT interactive package. Result of the Independent t-test statistics revealed that there is no significant difference between Social Studies students taught using ICT guided package and those taught using the ICT interactive package. Result of the Independent t test statistics revealed significant difference between students of Social Studies taught using ICT Guided and Interactive Packages. Reasons being that the P calculated value of 0.000 is lower than the 0.05 alpha values, while the t calculated value of 11.032 is higher than the t critical value of 1.96. Their calculated mean academic performances are 5.17476 and 5.84439 by ICT guided and ICT interactive packages respectively. This implies that students exposed to ICT interactive Packages performed better than those exposed to ICT guided packages in the teaching of Social Studies. Hence the null hypothesis is consequently rejected. This is in recognition of the fact that the ICT interactive packages made possible the use of on-line materials which constitute great potential resources for the teaching and learning of Social Studies. Students interact with learning materials either within the classroom wall or outside the classroom wall. Gerry (1989) establishes that the interactive packages entails an electronic environment that is available to and easily accessible by each learner and it is structured to provide immediate, individualized on-line access to full range of information, soft-ware, guidance advice and assistance, data, images, tools and assessment and monitoring systems to permit learning experiences with minimal support and intervention by others. Learning activities in these perspectives can be attained through the use of on-line internet service where students use their phone or personal computer to access information, this observation is supported by Robinson (2005), Bisht, Mishra &Yadav (2005) with similar opinion and posited that the interactive packages has emerged as the most powerful vehicles for providing access to unlimited information.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes the study on the Impact of information communication technology on the academic performance of students of Social Studies in Federal Colleges of Education in Nigeria. Among others it included the conclusion and offers of recommendations based on the outcome of the data collected and statistically analyzed for the study. The study provided suggestions for further studies on the subject. The chapter is organized under the following sub-headings:

- Summary
- Conclusion
- Recommendations
- Contributions to Knowledge
- Suggestion for further studies

5.2 Summary

The declining academic performance of students of Social Studies in most of institutions of higher learning in recent time necessitated the desire for this present study "impact of Information and Communication Technology on the academic performance of Social Studies students in Colleges of Education in North-West Geo-political Zone of Nigeria. The work accommodate four research objectives, research question and four hypotheses which sought to determine the academic performance of students taught Social Studies using ICT as against those thought without using the ICT. The study review relevant literature which direct bearing on the concept of Social Studies and that of Information and Communication Technology.

The study was a quasi experimental study of pre-test and post-test research design. 404 students were involved in the study. Three statistical tools were used in the study, the paired t-test, the independent t-test, ANOVA repeated measure statistics. The study was carried out on the initial ability scores (pre-test) of the students and their performance score (post-test) after they were exposed to treatment using ICT in instructional processes thereby guaranteeing the use of pre-test and post-test. The study found the following:

Significant improvement has been found in the academic performance of the students of social studies taught with Information and communication technology in Federal Colleges of Education North-West geo-political zone of Nigeria. Student's active involvement in the learning process was gingered even as the lower performing students record improvement in their performance, there is no significant difference in the academic performance of male and female students taught using ICT in Federal Colleges of Education in North-West geo-political zone of Nigeria, therefore the use of ICT for the teaching of Social Studies is not gender bias, it is good for all students irrespective of sex, in North-West geo-political zone of Nigeria.

5.3 Conclusions

In line with the findings of this study, it is concluded that the use of ICT enhances student's performance in Social Studies. It is equally concluded that that the use of ICT materials in the teaching and learning of Social Studies has significant advantage for both the students and teachers irrespective of sex, age and location and should be given considerable priority by the teacher and the government. In view of this, it can be said that the ICT instructional technique is a frame work for out-come based education which is a thrust towards greater leaner centred pedagogy. ICT instructional technique should at

the very last be considered a useful addition to the variety of existing Social Studies teaching techniques that attempt to involve learners in their own learning.

5.4 Recommendations

The following recommendations are made on the basis of the outcome of this study. Based on this investigation, it is considered very important to make the following recommendations:

- The use of ICT instructional technique should be adopted by Social Studies teachers as child centered technique capable of enhancing pupil's participation in learning and improving performance.
- The use of ICT instructional techniques has proved not to be gender sensitive, as such Social Studies teachers should be encouraged to use in teaching both the male and female students.
- Government should encourage and put in incentive to attract state, local, international bodies and non-governmental organizations (NGOs) to invest on ICT related projects towards enhancing the availability of ICT equipment and facilities to all Colleges of Education in Nigeria.
- Only qualified and competent Social Studies Education teachers should be employed to teach in our Colleges of Educations.
- Students should be encouraged to explore varieties of ICT materials so as to enjoy the spice of variety through independent learning.

4.5 Contributions to Knowledge

The study has provided empirical basis for maximizing classroom teaching and learning of Social Studies. This is evident in the fact the group taught using ICT instructional technique performed significantly higher than the group that was not exposed to ICT instructional techniques. The findings of this study have provided support for the

theoretical assumption that ICT instructional strategies enhance pupil's academic performance in Social Studies. Most significantly, the study has shown that the;

- That the use of ICT enhances collaboration among students, this will enable them to work in group, share ideas without the teacher. Therefore individual students are responsible for their actions, including learning and respect the abilities and contribution of their peer.
- Students find competence in analyses of situation, application of facts and making of generalization and inference through effective usage of ICT instructional technique.
- Teacher should always assume the role of a guide and moderator of learning to students by allowing them to do much of the learning task.
- If equal responsibilities are accorded the males and females in both instructional and learning task, ICT is capable of narrowing gender gap as both are found to be of equal capacity in educational accomplishment.
- Learning should be more of learner centred so as to allow for active participation by all students.

5.6 Suggestions for further studies

The researcher hereby suggests that similar studies be carried out in other colleges of education in Nigeria so that compare can be made, adequate and proper use of ICT can be used in the teaching and learning of Social Studies at all levels of our Education for the realization of Social studies objectives.

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APPENDIX A

REQUEST FOR VALIDATION OF TEST INSTRUMENTS APPENDIXES

Department of Arts and Social Sciences
Faculty of Education
Ahmadu Bello university, Zaria.
20_{th} APPRIL 2015.

SIR/MADAM,

I am a PhD student of the department of arts and social science education, social studies section of the Ahmadu Bello University Zaria. I am currently undertaking a research study on the impact of information and communication technology on the academic performance of social studies students in federal colleges of education in North-west Geo-political zone of Nigeria.

The purpose of this study is to empirically determine the impact of information and communication technology on the academic performance of social studies students in federal colleges of education in North-West Geo-Political zone, of Nigeria. Specifically, the sub-objectives include;

1. To determine the mean performance score of students of Social Studies experimental group and the control group..
2. To determine the mean performance scores of male and female students taught Social Studies with the ICT interactive and the Guided package.
3. To find out the mean performance of the pre-test and post-test of the students taught Social Studies using ICT computer interactive package.
4. To determine the mean performance of students of Social Studies taught using the ICT Guided package and those taught using the interactive packages.

Research Questions

The study will attempt to find answers to the following research questions.

1. What is the performance score of students of Social Studies exposed to ICT experimental group and those in the control group?
2. What is the performance score of male and female students taught Social Studies with the ICT interactive and the Guided package?
3. What is the performance of the pre-test and post test of students of Social Studies exposed to the ICT interactive packages?
4. What is the performance of students of Social Studies taught using the ICT Guided package and those taught using the interactive packages?

Research Null Hypotheses

Based on the focus of the problems identified and the research questions raised, the following hypotheses are postulated to guide the researcher in the study;

1. There is no significant difference between students exposed to ICT and those taught not using ICT instructional strategies.
2. There is no significant difference between the mean performance score of male and female students taught Social Studies with ICT and those taught not using ICT.
3. There is no significant difference in the pre-test and post-test mean performance of students exposed to ICT interactive packages.
4. There is no significant difference between the mean performance of students of Social Studies taught using the ICT Guided package and those taught using the interactive packages.

I humbly request you sir/ madam, to effect face and content validation of the attached 25-item test tagged Social Studies ability and Social Studies Performance test containing multiple choice items of Social Studies for NCE II students by checking the following:

1. Ambiguity of terms, if any

2. Difficulty level;

3. The construct being measured;

4. Appropriateness of scale of measurement and

5. Any other observation (s)

The attached table of specification is to assist you further in effecting the validation of the instruments. Your earliest action on this humble request shall be appreciated, please.

Yours faithfully,

Shauibu kennedy
PhD/EDUC/21393/2012- 13

APPENDIX B

LETTER OF INTRODUCTION TO SCHOOLS

APPENDIX C

LESSON PLAN SAMPLE FOR CONTROL GROUP

Subject: Social Studies Education

Topic: Concept of Leadership

Duration/Time: 2 hr

Class: NCE 11

Sex: Mixed

Instructional Material: A LAPTOP FOR CAI

Behavioural Objective: By the end of the lesson the students should be able to:

1. Define leader and leadership
2. Identify/appreciate the duties of a leader
3. Write the duties of a leader

Previous Knowledge: The students have already learnt educational institutions

Introduction: The teacher introduces the lesson by reviewing the previous lesson

Presentation: Step (i) The teacher present the lesson by guiding the students to identify the meaning of a leader and leadership

Step (ii) Teacher guides the student to identify and appreciate the duties/functions of a leader

Step (iii) Teacher displays the pictures a former head of state, politicians in a parliament and Emir and explain their role as leaders

Step (iv) Teacher allows the students to ask question and (or) contribute to the lesson

Evaluation: Teacher evaluates the lesson by asking the students to answer these questions

- Explain briefly the two types of leadership in Nigeria
- Mention three functions of our leaders
- Why is it important to go to polls and elect our leaders?
- Give two names of leaders in your state

	- Mention two names of former constitutional leaders in Nigeria - List two names of former unconstitutional leaders in Nigeria
Conclusion	- Teacher concludes the lesson by given a reading assignment to the students: To read consequences of bad leadership

LESSON PLAN FOR CONTROL GROUP

Subject: Social Studies Education

Topic: Concept of Leadership

Duration/Time: 2hrs

Class: NCE 11

Sex: Mixed

Instructional Material: NON

Behavioural Objective: By the end of the lesson the students should be able to:

1. Define leader and leadership
2. Identify/appreciate the duties of a leader
3. Write the dates of a leader

Previous Knowledge: The students have already learnt educational institutions

Introduction: The teacher introduces the lesson by reviewing the previous lesson

Presentation:

(i) The teacher present the lesson by guiding the students to identify the meaning of a leader and leadership

(ii) Teacher guides the student to identify and appreciate the duties/functions of a leader

(iii) Teacher displays the pictures a former head of state, politicians in a parliament and Emir and explain their role as leaders

(iv) Teacher allows the students to ask question and (or) contribute to the lesson

Evaluation: Teacher evaluates the lesson by asking the students to answer these questions

- Explain briefly the two types of leadership in Nigeria
- Mention three functions of our leaders
- Why is it important to go to polls and elect our leaders?
- Give two names of leaders in your state

	- Mention two names of former constitutional leaders in Nigeria - List two names of former unconstitutional leaders in Nigeria
Conclusion	- Teacher concludes the lesson by given a reading assignment to the students: To read consequences of bad leadership

LESSON PLAN FOR CONTROL GROUP

Subject: Social Studies

Theme: Corruption

Topic: Effects of Corruption

Duration/Time: 2 hrs

Class: NCE II

Sex: Mixed

Instructional Material: NON

Behavioural Objective: By the end of the lesson the students should be able to:

1. Explain the meaning of corruption.
2. Identify/appreciate the effect of corruption in our society
3. Write the meaning of corruption and list the effect of corruption.

Previous Knowledge: The students have already learnt about the effect of poverty in our society.

Introduction: Teacher introduces the lesson by reviewing the previous lesson; what are the cases of poverty?

Presentation:

Step (i) The teacher present the lesson by explaining the meaning of corruption with relevant examples.

Step (ii) Teacher guides the students to identify the forms and effects of corruption in our society.

Step (iii) Teacher allows the student to ask questions and (or) contribute to the progress of the lesson.

Step (iv) teacher paste the pictures of handcuffed and accused person led by police to the court for trial.

Evaluation: Teacher evaluates the lesson by asking the students to answer the following questions

(1) Define corruption

(2) List any five forms corruption.

(3) What are the effects/consequences of bribery and corruption in our society

(4) Mention any two steps to eradicate corruption.

Conclusion	- Teacher concludes the lesson by given a reading assignment to the students: what steps can we take to check corruption in our society.

LESSON PLAN FOR CONTROL GROUP

Subject: Social Studies Education

Topic: Effects of Corruption in our society

Duration/Time: 2hrs

Class: NCE II

Sex: Mixed

Instructional Material: NON

Behavioural Objective: By the end of the lesson the students should be able to:

1. Explain the meaning of corruption.

Identify/appreciate the effect of corruption in our society

2. Write the meaning of corruption and list the effect of corruption.
3. Suggest ways of checkmating corruption.

Previous Knowledge: The students have already learnt about the effect of poverty in our society.

Introduction: Teacher introduces the lesson by reviewing the previous lesson; what are the cases of poverty?

Presentation:

Step (i) Teacher presents the lesson by explaining the meaning of corruption citing relevant examples.

Step (ii) Teacher guides the students to click their computer mouse cursor on Google internet browser and type corruption to access the website.

Step (iii) Teacher guides the students to identify the forms and effect of corruption in our society.

Step (iv) Teacher connects the students to converse on the topic with EFCC personnel through mobile phone there and then highlighting on some pressing issues one effects of corruption in our society.

Step (v) Teacher allow the students to ask questions in the class through the use of microphone and headphones. Through interactive session with teacher.

Evaluation:	Teacher evaluates the lesson by asking the students to answer the following questions (1) Describe what you understand by the word corruption. (2) What are the effects/consequences of bribery and complain our society. (3) What are the measures to eradicate corruption.
Conclusion	- Teacher concludes the lesson by giving students reading assignment: Write an essay on the effect of bribery and corruption in our society. Then guide the students to sign out from their computer.

LESSON PLAN SAMPLE FOR EXPERIMENTAL GROUP

Subject: Social Studies Education

Topic: Concept of Leadership

Duration/Time: 2 hr

Class: NCE 11

Sex: Mixed

Instructional Material: A LAPTOP (CAI)

Behavioural Objective: By the end of the lesson the students should be able to:

1. Define leader and leadership
2. Identify/appreciate the duties of a leader
3. Write the duties of a leader

Previous Knowledge: The students have already learnt educational institutions

Introduction: The teacher introduces the lesson by reviewing the previous lesson

Presentation: Step (i) The teacher present the lesson by guiding the students to identify the meaning of a leader and leadership

Step (ii) Teacher guides the student to identify and appreciate the duties/functions of a leader

Step (iii) Teacher displays the pictures a former head of state, politicians in a parliament and Emir and explain their role as leaders

Step (iv) Teacher allows the students to ask question and (or) contribute to the lesson

Evaluation: Teacher evaluates the lesson by asking the students to answer these questions

- Explain briefly the two types of leadership in Nigeria
- Mention three functions of our leaders
- Why is it important to go to polls and elect our leaders?
- Give two names of leaders in your state
- Mention two names of former constitutional

	leaders in Nigeria - List two names of former unconstitutional leaders in Nigeria
Conclusion	- Teacher concludes the lesson by given a reading assignment to the students: To read consequences of bad leadership

LESSON PLAN FOR EXPERIMENTAL GROUP

Subject: Social Studies Education

Topic: Concept of Leadership

Duration/Time: 2hrs

Class: NCE 11

Sex: Mixed

Instructional Material: A RADIO

Behavioural Objective: By the end of the lesson the students should be able to:

1. Define leader and leadership
2. Identify/appreciate the duties of a leader
3. Write the dates of a leader

Previous Knowledge: The students have already learnt educational institutions

Introduction: The teacher introduces the lesson by reviewing the previous lesson

Presentation:

(v) The teacher present the lesson by guiding the students to identify the meaning of a leader and leadership

(vi) Teacher guides the student to identify and appreciate the duties/functions of a leader

(vii) Teacher displays the pictures a former head of state, politicians in a parliament and Emir and explain their role as leaders

(viii) Teacher allows the students to ask question and (or) contribute to the lesson

Evaluation: Teacher evaluates the lesson by asking the students to answer these questions

- Explain briefly the two types of leadership in Nigeria
- Mention three functions of our leaders
- Why is it important to go to polls and elect our leaders?
- Give two names of leaders in your state
- Mention two names of former constitutional leaders

	in Nigeria - List two names of former unconstitutional leaders in Nigeria
Conclusion	- Teacher concludes the lesson by given a reading assignment to the students: To read consequences of bad leadership

LESSON PLAN FOR EXPERIMENTAL GROUP

Subject:	Social Studies
Theme:	Corruption
Topic:	Effects of Corruption
Duration/Time:	2 hrs
Class:	NCE II
Sex:	Mixed
Instructional Material:	ALAPTOP, PROJECTOR AND WHITE-BOARD
Behavioural Objective:	By the end of the lesson the students should be able to: 1. Explain the meaning of corruption. 2. Identify/appreciate the effect of corruption in our society 3. Write the meaning of corruption and list the effect of corruption.
Previous Knowledge:	The students have already learnt about the effect of poverty in our society.
Introduction:	Teacher introduces the lesson by reviewing the previous lesson; what are the cases of poverty?
Presentation:	Step (i) The teacher present the lesson by explaining the meaning of corruption with relevant examples. Step (ii) Teacher guides the students to identify the forms and effects of corruption in our society. Step (iii) Teacher allows the student to ask questions and (or) contribute to the progress of the lesson. Step (iv) teacher paste the pictures of handcuffed and accused person led by police to the court for trial.
Evaluation:	Teacher evaluates the lesson by asking the students to answer the following questions (1) Define corruption (2) List any five forms corruption. (3) What are the effects/consequences of bribery and corruption in our society (4) Mention any two steps to eradicate corruption.

Conclusion	- Teacher concludes the lesson by given a reading assignment to the students: what steps can we take to check corruption in our society.

LESSON PLAN FOR EXPERIMENTAL GROUP

Subject: Social Studies Education

Topic: Effects of Corruption in our society

Duration/Time: 2hrs

Class: NCE II

Sex: Mixed

Instructional Material: PHONE (Internet browsing)

Behavioural Objective: By the end of the lesson the students should be able to:

1. Explain the meaning of corruption.
2. Identify/appreciate the effect of corruption in our society
3. Write the meaning of corruption and list the effect of corruption.
4. Suggest ways of checkmating corruption.

Previous Knowledge: The students have already learnt about the effect of poverty in our society.

Introduction: Teacher introduces the lesson by reviewing the previous lesson; what are the cases of poverty?

Presentation:

Step (i) Teacher presents the lesson by explaining the meaning of corruption citing relevant examples.

Step (ii) Teacher guides the students to click their computer mouse cursor on Google internet browser and type corruption to access the website.

Step (iii) Teacher guides the students to identify the forms and effect of corruption in our society.

Step (iv) Teacher connects the students to converse on the topic with EFCC personnel through mobile phone there and then highlighting on some pressing issues one effects of corruption in our society.

Step (v) Teacher allow the students to ask questions in the class through the use of microphone and

	headphones. Through interactive session with teacher.
Evaluation:	Teacher evaluates the lesson by asking the students to answer the following questions (1) Describe what you understand by the word corruption. (2) What are the effects/consequences of bribery and complain our society. (3) What are the measures to eradicate corruption.
Conclusion	- Teacher concludes the lesson by giving students reading assignment: Write an essay on the effect of bribery and corruption in our society. Then guide the students to sign out from their computer.

APPENDIX D

TEST OF SOCIAL STUDIES ABILITY TEST (TOSSAT).

Instruction: Answer all Questions.

Gender:……..

Class: ……

INSTRUCTION: FILL IN THE BLANK SPACES AND TICK THE CORRECT OPTION.

Section A. Objectives.

1. ----------is any form of behaviour that deviates from ethics, morality, tradition, law and civic virtues by an individual.
2. Failure to do one assignment diligently is ----------.
3. ---------- causes corruption.
4. ---------- and ---------- are some of the common types of corruption in Nigeria.
5. Any preferential treatment or partiality shown in favour or disfavour of one person or group against the other amounts to ----------
6. A situation in which a person or group unlawfully obtains money or property is known as ----------
7. ---------- undermine democracy in Nigeria.
8. ---------- is the root cause of abject poverty and helplessness in Nigeria.
9. ---------- kills foreign investment. (a) Sincerity (b) rigidity of policies (c) corruption (d) poor implementation of policies.
10. ---------- promotes high crime wave and insecurity in Nigeria. (a) Corruption (b) unemployment (c) illiteracy (d) poor education.
11. The abuse of office in Nigeria is encouraged by ---------- practices. (a) Honesty (b) examination malpractice (c) corruption (d) electorates.
12. ---------- was established to fight corruption in Nigeria.
    (a) INEC (b) ICPC (c) NAFDAC (d) FRSC.
13. One of these will not promote good value system in the society.
    (a) poverty (b) hard working (c) honesty (d) diligence
14. Shame and regret are the consequences of ----------
    (a) cooperation (b) Good values (c) fraudulent practices (d) Commitment.

15. The giver and receiver of bribe are both---------- of the offence.
(a) Guilty (b) Not-guilty (c) right (d) wrong.
16. A leader is someone that ---------- his people.
(a) Guide and direct. (b) Guide and swindle. (c) Fight and Query (d) Control and fight.
17. Good leaders are interested in ---------- (a) their personal wellbeing (b) the wellbeing of their people (c) what they can get from their community (d)
18. ---------- should guide the leaders in the discharge of their duties.
(a) Personal interest (b) general interest (c) emotional interest (d) secret interest.
19. Leaders are elected through one of these. (a) quarrelling (b) voting (c) fighting (d) argument
20. Good leaders are supposed to change their policies at every confrontation (True, False).
21. Leaders take responsibilities of the actions and in-actions of the followers. (True, False).
22. Leaders who says one thing in the morning and change their mind the following day are good leaders. (True, False).
23. It is good for a leader to be extremely rigid. (True, False)
24. Leadership can be described as been one of the following except one of these. (a) Autocratic (b) democratic (c) sedimentary (d) lazier-faire.
25. The success of a leader is determined by his relationship by his followers. (True, False).
26. A corrupt leader has every moral courage to set zero corruption standards for the subjects. (True, False).
27. A leader chosen by majority of his people is referred to as Laizefairee, (True, False).
28. A leader that involves his people in the process of decision making is referred to as autocratic leader (True, False).
29. A leader is said to be corrupt if he/she cares for the welfare of the people, (True, False).
30. Those that criticise the government when it fails to deliver to the people the required services are the one destroying the country. (True, False).

Section B: Answer the Following Question.

1. Explain briefly the three types of leadership in Nigeria.
2. Discuss how one of these leaders came to power
   (a) Umar Musa Yar'Adua (b) General Yakubu Gowon.
3. Mention two functions of traditional leaders/rulers.
4. Why is it important to go to polls and elect our leaders?
5. Write down the following:

A Give any two names of traditional rulers in your state:

……

……

B. Mention any two names of former constitutional leader in Nigeria:

……

……

C. List any two names of former unconstitutional leaders in Nigeria:

……

……

D. Describe what you understand by the word corruption.

E. What are the effects/consequences of bribery and corruption in our society?

F. What are the measures to eradicate corruption?

APPENDIX E

SCORES OF SCHOOL A: SEX- Male=1, Female=2

Sex	pre-test	post-test
1.00	42.00	52.00
1.00	51.00	58.00
1.00	48.00	60.00
1.00	47.00	52.00
1.00	51.00	69.00
1.00	53.00	50.00
1.00	60.00	60.00
1.00	51.00	50.00
1.00	49.00	53.00
1.00	44.00	59.00
1.00	51.00	63.00
1.00	54.00	60.00
1.00	49.00	56.00
1.00	50.00	53.00
1.00	52.00	58.00
1.00	50.00	65.00
1.00	48.00	52.00
1.00	51.00	59.00
1.00	61.00	49.00
1.00	53.00	58.00
1.00	49.00	60.00
1.00	51.00	51.00
1.00	48.00	59.00
1.00	44.00	66.00
1.00	54.00	69.00
1.00	48.00	49.00
1.00	51.00	58.00
1.00	47.00	50.00
1.00	29.00	57.00
1.00	59.00	61.00
1.00	45.00	49.00

1.00	48.00	59.00
1.00	55.00	52.00
1.00	38.00	59.00
1.00	45.00	48.00
1.00	49.00	59.00
1.00	51.00	52.00
1.00	53.00	58.00
1.00	42.00	51.00
1.00	44.00	60.00
1.00	51.00	53.00
1.00	55.00	59.00
1.00	51.00	58.00
1.00	48.00	51.00
1.00	51.00	52.00
1.00	46.00	60.00
1.00	48.00	53.00
1.00	52.00	50.00
1.00	51.00	51.00
1.00	44.00	50.00
1.00	47.00	57.00
1.00	51.00	50.00
1.00	48.00	49.00
2.00	42.00	57.00
2.00	51.00	50.00
2.00	55.00	47.00
2.00	44.00	46.00
2.00	48.00	60.00
2.00	47.00	57.00
2.00	55.00	50.00
2.00	50.00	58.00
2.00	51.00	48.00
2.00	45.00	50.00
2.00	48.00	45.00
2.00	38.00	52.00

2.00	49.00	52.00
2.00	49.00	60.00
2.00	53.00	47.00
2.00	42.00	58.00
2.00	51.00	50.00
2.00	47.00	53.00
2.00	48.00	50.00
2.00	44.00	59.00
2.00	54.00	63.00
2.00	51.00	50.00
2.00	49.00	50.00
2.00	44.00	55.00
2.00	49.00	62.00
2.00	53.00	63.00
2.00	60.00	57.00
2.00	48.00	46.00
2.00	38.00	54.00
2.00	49.00	58.00
2.00	50.00	52.00
2.00	48.00	60.00
2.00	52.00	52.00
2.00	48.00	57.00
2.00	50.00	59.00
2.00	53.00	51.00
2.00	48.00	69.00
2.00	51.00	50.00
2.00	44.00	50.00
2.00	48.00	51.00
2.00	47.00	62.00
2.00	95.00	46.00
2.00	38.00	60.00
2.00	55.00	63.00
2.00	52.00	50.00
2.00	44.00	59.00

2.00	51.00	51.00
2.00	49.00	63.00
2.00	60.00	60.00
2.00	51.00	58.00
2.00	53.00	47.00
2.00	44.00	56.00
2.00	51.00	59.00

SCORES FOR SCHOOL B SEX- Male=1, Female=2

Sex	Pre-Test	Post-Test
1.00	48.00	51.00
1.00	52.00	60.00
1.00	51.00	61.00
1.00	44.00	58.00
1.00	60.00	62.00
1.00	47.00	64.00
1.00	54.00	65.00
1.00	42.00	54.00
1.00	48.00	50.00
1.00	51.00	50.00
1.00	60.00	58.00
1.00	53.00	59.00
1.00	49.00	60.00
1.00	44.00	58.00
1.00	49.00	55.00
1.00	51.00	52.00
1.00	48.00	60.00
1.00	50.00	58.00
1.00	44.00	60.00
1.00	54.00	53.00
1.00	58.00	59.00
1.00	47.00	50.00
1.00	53.00	49.00
1.00	61.00	60.00
1.00	52.00	52.00
1.00	44.00	56.00
1.00	53.00	50.00
1.00	47.00	57.00
1.00	50.00	63.00
1.00	59.00	57.00
1.00	45.00	50.00
1.00	50.00	60.00

1.00	48.00	42.00
1.00	51.00	50.00
1.00	43.00	53.00
1.00	53.00	57.00
1.00	49.00	58.00
1.00	51.00	50.00
1.00	47.00	51.00
1.00	53.00	60.00
1.00	49.00	61.00
1.00	50.00	58.00
1.00	52.00	51.00
1.00	48.00	54.00
1.00	51.00	50.00
1.00	49.00	52.00
1.00	54.00	64.00
1.00	51.00	60.00
1.00	47.00	55.00
1.00	48.00	50.00
1.00	45.00	57.00
1.00	52.00	50.00
1.00	41.00	50.00
1.00	46.00	56.00
1.00	51.00	61.00
1.00	43.00	49.00
1.00	42.00	52.00
1.00	40.00	50.00
1.00	51.00	60.00
1.00	52.00	52.00
1.00	49.00	55.00
1.00	53.00	56.00
1.00	45.00	57.00
1.00	51.00	54.00
1.00	48.00	58.00
1.00	52.00	48.00

1.00	44.00	49.00
1.00	46.00	52.00
1.00	49.00	59.00
1.00	52.00	58.00
1.00	53.00	59.00
1.00	50.00	59.00
1.00	51.00	52.00
1.00	47.00	58.00
1.00	51.00	51.00
1.00	49.00	69.00
1.00	53.00	54.00
1.00	48.00	58.00
1.00	51.00	50.00
1.00	47.00	57.00
1.00	51.00	58.00
1.00	52.00	56.00
1.00	49.00	49.00
1.00	41.00	59.00
1.00	51.00	57.00
1.00	49.00	56.00
1.00	48.00	59.00
1.00	50.00	48.00
1.00	43.00	52.00
1.00	44.00	58.00
1.00	51.00	52.00
1.00	45.00	53.00
1.00	46.00	59.00
1.00	51.00	56.00
2.00	49.00	59.00
2.00	51.00	54.00
2.00	49.00	58.00
2.00	50.00	59.00
2.00	51.00	52.00
2.00	48.00	49.00

2.00	44.00	58.00
2.00	52.00	53.00
2.00	47.00	50.00
2.00	45.00	52.00
2.00	48.00	57.00
2.00	51.00	64.00
2.00	60.00	58.00
2.00	52.00	59.00
2.00	53.00	53.00
2.00	47.00	47.00
2.00	42.00	59.00
2.00	51.00	53.00
2.00	56.00	47.00
2.00	44.00	59.00
2.00	53.00	61.00
2.00	49.00	49.00
2.00	46.00	60.00
2.00	51.00	54.00
2.00	44.00	51.00
2.00	48.00	57.00
2.00	47.00	50.00
2.00	52.00	51.00
2.00	45.00	53.00
2.00	53.00	54.00
2.00	51.00	46.00
2.00	47.00	56.00
2.00	45.00	56.00
2.00	53.00	51.00
2.00	46.00	51.00
2.00	51.00	54.00
2.00	55.00	49.00
2.00	48.00	58.00
2.00	61.00	61.00
2.00	58.00	52.00

2.00	49.00	69.00
2.00	51.00	62.00
2.00	43.00	57.00
2.00	42.00	57.00
2.00	50.00	48.00
2.00	45.00	48.00
2.00	43.00	59.00
2.00	52.00	49.00
2.00	46.00	47.00
2.00	44.00	58.00
2.00	51.00	51.00
2.00	49.00	47.00
2.00	61.00	56.00
2.00	43.00	54.00
2.00	48.00	63.00
2.00	50.00	48.00
2.00	61.00	53.00
2.00	55.00	55.00
2.00	48.00	67.00
2.00	49.00	61.00
2.00	51.00	53.00
2.00	47.00	53.00
2.00	42.00	52.00
2.00	41.00	51.00
2.00	50.00	47.00
2.00	43.00	45.00
2.00	46.00	56.00
2.00	44.00	48.00
2.00	51.00	51.00
2.00	47.00	51.00
2.00	49.00	58.00
2.00	52.00	51.00
2.00	48.00	53.00
2.00	46.00	56.00

2.00	43.00	51.00
2.00	45.00	49.00
2.00	49.00	48.00
2.00	50.00	49.00
2.00	45.00	51.00
2.00	46.00	57.00
2.00	53.00	52.00
2.00	49.00	56.00
2.00	51.00	51.00
2.00	47.00	56.00
2.00	53.00	53.00
2.00	49.00	49.00
2.00	46.00	56.00
2.00	52.00	49.00
2.00	46.00	53.00
2.00	49.00	57.00
2.00	52.00	56.00
2.00	51.00	57.00
2.00	50.00	49.00
2.00	46.00	58.00

SCORES FOR SCHOOL C SEX- Male=1, Female=2

Sex	pre-test	post-test
1.00	51.00	58.00
1.00	46.00	49.00
1.00	52.00	57.00
1.00	43.00	49.00
1.00	52.00	56.00
1.00	60.00	68.00
1.00	51.00	59.00
1.00	49.00	54.00
1.00	47.00	51.00
1.00	51.00	53.00
1.00	49.00	54.00
1.00	43.00	49.00
1.00	45.00	49.00
1.00	51.00	56.00
1.00	42.00	48.00
1.00	51.00	60.00
1.00	48.00	53.00
1.00	46.00	52.00
1.00	51.00	58.00
1.00	52.00	57.00
1.00	45.00	48.00
1.00	48.00	51.00
1.00	52.00	59.00
1.00	41.00	47.00
1.00	42.00	48.00
1.00	51.00	56.00
1.00	49.00	53.00
1.00	51.00	56.00
1.00	49.00	53.00
1.00	50.00	61.00
1.00	46.00	52.00
1.00	48.00	56.00

1.00	52.00	61.00
1.00	49.00	55.00
1.00	51.00	65.00
1.00	49.00	55.00
1.00	46.00	58.00
1.00	52.00	61.00
1.00	51.00	64.00
1.00	48.00	53.00
1.00	47.00	51.00
1.00	45.00	59.00
1.00	52.00	65.00
1.00	48.00	53.00
1.00	44.00	54.00
1.00	45.00	52.00
1.00	43.00	58.00
1.00	51.00	65.00
1.00	49.00	56.00
1.00	52.00	61.00
1.00	61.00	71.00
1.00	59.00	66.00
1.00	47.00	54.00
1.00	44.00	56.00
1.00	55.00	62.00
2.00	49.00	54.00
2.00	41.00	52.00
2.00	50.00	61.00
2.00	45.00	55.00
2.00	43.00	54.00
2.00	51.00	62.00
2.00	46.00	57.00
2.00	48.00	54.00
2.00	44.00	59.00
2.00	48.00	54.00
2.00	51.00	62.00

2.00	43.00	51.00
2.00	41.00	49.00
2.00	52.00	59.00
2.00	45.00	55.00
2.00	46.00	51.00
2.00	42.00	48.00
2.00	52.00	62.00
2.00	44.00	59.00
2.00	40.00	53.00
2.00	43.00	49.00
2.00	42.00	51.00
2.00	51.00	62.00
2.00	48.00	58.00
2.00	42.00	57.00
2.00	46.00	54.00
2.00	40.00	49.00
2.00	51.00	67.00
2.00	53.00	62.00
2.00	46.00	54.00
2.00	42.00	48.00
2.00	53.00	59.00
2.00	46.00	48.00
2.00	42.00	51.00
2.00	48.00	47.00
2.00	52.00	58.00
2.00	43.00	52.00
2.00	42.00	45.00
2.00	40.00	46.00
2.00	45.00	53.00
2.00	51.00	59.00
2.00	48.00	53.00
2.00	52.00	59.00
2.00	41.00	48.00
2.00	50.00	57.00

2.00	47.00	51.00
2.00	46.00	49.00
2.00	43.00	47.00
2.00	51.00	55.00
2.00	48.00	52.00
2.00	53.00	56.00
2.00	48.00	54.00
2.00	51.00	52.00
2.00	43.00	45.00
2.00	51.00	53.00

Scores for ICT guided package	scores for Ict Interactive Package
57.00	66.00
51.00	58.00
66.00	56.00
47.00	52.00
51.00	69.00
59.00	50.00
60.00	60.00
51.00	50.00
49.00	53.00
56.00	59.00
51.00	63.00
54.00	60.00
67.00	56.00
50.00	53.00
52.00	58.00
63.00	65.00
48.00	52.00
58.00	59.00
61.00	49.00
53.00	58.00
62.00	60.00
51.00	51.00
48.00	59.00
65.00	66.00
55.00	69.00
61.00	49.00
51.00	58.00
47.00	50.00
56.00	57.00
59.00	61.00
56.00	49.00
48.00	59.00
55.00	52.00

38.00	59.00
54.00	48.00
49.00	59.00
51.00	52.00
53.00	58.00
55.00	51.00
56.00	60.00
51.00	53.00
55.00	59.00
51.00	58.00
57.00	51.00
51.00	52.00
46.00	60.00
48.00	53.00
52.00	65.00
51.00	51.00
67.00	50.00
47.00	57.00
51.00	50.00
65.00	49.00
49.00	57.00
51.00	50.00
55.00	65.00
44.00	46.00
48.00	60.00
52.00	57.00
55.00	50.00
50.00	58.00
51.00	56.00
45.00	50.00
48.00	45.00
56.00	52.00
54.00	52.00

49.00	60.00
53.00	47.00
42.00	58.00
51.00	50.00
47.00	53.00
48.00	50.00
44.00	59.00
54.00	63.00
51.00	50.00
56.00	50.00
53.00	55.00
49.00	62.00
53.00	63.00
60.00	57.00
48.00	65.00
49.00	54.00
49.00	58.00
50.00	52.00
48.00	60.00
52.00	52.00
48.00	57.00
50.00	59.00
53.00	51.00
48.00	69.00
51.00	50.00
54.00	50.00
48.00	51.00
47.00	62.00
66.00	78.00
38.00	60.00
55.00	63.00
52.00	50.00
44.00	59.00

51.00	51.00
56.00	63.00
60.00	60.00
51.00	58.00
53.00	47.00
44.00	56.00
51.00	59.00
48.00	51.00
52.00	60.00
51.00	61.00
44.00	58.00
60.00	62.00
47.00	64.00
54.00	65.00
42.00	54.00
48.00	50.00
51.00	50.00
60.00	58.00
53.00	59.00
49.00	60.00
44.00	58.00
49.00	55.00
51.00	52.00
48.00	60.00
50.00	58.00
51.00	60.00
54.00	53.00
58.00	57.00
47.00	50.00
53.00	78.00
61.00	79.00
52.00	69.00
48.00	56.00

53.00	62.00
47.00	57.00
50.00	63.00
59.00	67.00
45.00	50.00
50.00	60.00
48.00	58.00
51.00	58.00
43.00	53.00
53.00	57.00
49.00	58.00
51.00	50.00
47.00	51.00
53.00	60.00
49.00	61.00
50.00	58.00
52.00	61.00
48.00	54.00
51.00	66.00
49.00	52.00
54.00	64.00
51.00	60.00
47.00	55.00
48.00	54.00
45.00	57.00
52.00	66.00
41.00	50.00
46.00	56.00
51.00	61.00
43.00	49.00
42.00	52.00
40.00	50.00
51.00	60.00

52.00	68.00
49.00	55.00
53.00	56.00
45.00	57.00
51.00	54.00
48.00	58.00
52.00	64.00
51.00	56.00
46.00	52.00
49.00	59.00
52.00	58.00
53.00	59.00
50.00	59.00
51.00	66.00
47.00	58.00
51.00	60.00
57.00	69.00
53.00	56.00
48.00	58.00
51.00	59.00
47.00	57.00
51.00	58.00
52.00	56.00
49.00	56.00
41.00	59.00
51.00	57.00
49.00	56.00
48.00	62.00
50.00	67.00
43.00	52.00
44.00	58.00
51.00	64.00
45.00	53.00

46.00	59.00
51.00	56.00
58.00	62.00
51.00	54.00

APPENDIX F

N.C.E SOCIAL STUDIES (SOS) MINIMUM STANDARD FOR COLLEGES OF EDUCATION

Single major

11.1 Philosophy

Social studies is a core subject form Basic 1-9 schools in Nigeria. The large numbers of these instructions coupled with their ever-increasing enrolments have necessitated the production of specially trained teachers who are equipped with the knowledge and special skills for implementing the social studies programme in these schools

The fundamental concern of social studies is with man and his complex relationships with the world around and beyond. It is in this context that the NCE social studies curriculum attempts to instil in the student; the basic knowledge, desirable values, and skills for investigating, analyzing and explaining these interrelationship

The social studies programme is therefore, designed with the objective of producing teachers who are both professionally committed and academically competent in its philosophy, content and methodology.

11.2 Objective

The programme is designed to achieve the following:

1. Produce professionally and academically competent NCE
   Social Studies teachers for the basic 1-9 schools.
2. prepare teachers who will inculcates in their pupils rational adjustment to their physical and social environment through acquisition of knowledge, attitudes, values appreciations and skills necessary for developing social and civic responsibilities
3. Produce students who are capable of benefiting from further

Education in social studies and other related areas:

11.3 Admission Requirements

i. General

a.) A senior Secondary School Certificate (SSS) of G.C.E. 'O'
level with passes in 5 subjects including English Language, which must be at credit level in the same sitting or at two sitting. Two of the credits must be relevant to the course the candidate wishes to offer. Credit in English and mathematics are required.

b.) A grade it teachers' certificate (TCII) with credit or merit in the subjects, two of which must be relevant to the course the candidate wishes to offer. Credit/merit I English Language and/or mathematics are required.

c.) For candidates wishing to offer courses in Vocational and technical education, the federal craft training certificate, RS or City and Guild intermediate certificate with credit/merit I at least four subjects, are acceptable qualifications.

d.) Successful candidates in the Pre-NCE final examinations
who also take and succeed in a selection examination organized by the accredited body such as JAMB.

e.) It should be noted that colleges should in addition to all of the
above, administer their own elimination tests and/or interviews. This is legitimate.

ii. Specific

a.) In addition to the General Admission Requirements for NCE programmes, candidate with SSC wishing to read Social Studies most have a credit pass in any two of the following subjects.

i) Social Studies
ii) History
iii) Geography
iv) Economics
v) Government
vi) Islamic Religious Knowledge
vii) Christian Religious Knowledge

Candidate with TC II must have a merit/credit pass I Social Studies.

11.4 FACILITIES

i.) Space and classrooms: At least three (3) large classrooms

ii.) Social Studies Workshop with a sitting capacity for at least 80 students.

iii.) Staff Office: Each Senior Staff should have a comfortable
furnished office to himself. There should be an office for support staff (typists Clerks) with relevant equipment e.g. typewriters, cyclostyling machine etc.

iv.) Books in the library: There must be enough books to cover
all the areas of the subject in the ratio of one students to ten books

v.) Equipment such as projectors, film strips; slides, video

machine; camera, Tv set, world Globe and materials such as atlases well maps, text books journals, painting materials, newsprints, newspapers and computer sets should be provided.

vi.) Special needs: Functional wealth stations in institutions where Geography is not offered.

PERSONNEL

i. Academic:
Eight lecturers or staff-Students ration of 1:25

ii. Qualifications:

a. Second class upper (2.1) degree; master or Ph.D in any of the social sciences and at least NCE (Social Studies) or PGDE

iii. Support Staff

a. A typist

b. Technical Staff (Workshop Assistant)

c. Department Secretary

d. Departmental messenger/Cleaner

e. Computer operators

Mode of Teaching

Various methodological approaches should be adopted in teaching NCE Social Studies, with special emphasis on inquiry and field trip

Graduation requirement

i.	Education Course	-	36
ii.	General studies course	-	19 credits
iii.	Teaching practice	-	6
iv.	Social Studies Course	-	36

v. Second teaching subject minimums of 36 credits

TEACHING PRACTICE

Every student is required to go on teaching practice and the credit earned recorded in EDC 324 Every student is required to write a project in either Social Studies Education or the other teaching subject and the credit recorded in EDUC 323.

SUBJECT COMBINATION

Social Studies as a single major subject could be combined with any one of the following subjects; history; Economics, Geography; political Science; Studies; Christian Religious Studies, Ecumenist, Hausa, Yoruba, Igbo and other Nigerian Languages, English, Special Education Cultural and Creative Arts, French and Arabic.

APPENDIX G

SOCIAL STUDIES CURRICULUM COURSE CONTENTS (SINGLE MAJOR)

COURSE CODE	COURSE TITLE	CREDITS	STATUS
	100 level (1st Semesters)		
SOS 111	Foundations of Social Studies	2	C
SOS 112	Origin and nature of man	1	E
SOS 113	Man and his social environment	2	C
SOS 114	Man and his physical environment	2	C
SOS 115	Man and his economic activities	1	E
	100 level (2nd Semester)		
SOS 121	Introduction to NERDC national curriculum for social studies	2	C
SOS 122	African community	1	E
SOS 123	Man and his government	2	C
SOS 124	Nigeria as a nation	2	C
SOS 125	Dynamics of group behaviour	1	E
SOS 126	Environment studies	1	E
SOS 127	Field trip	2	C
	200 level (1st Semester)		
SOS 211	Nigerian political life	2	C
SOS 212	Practical for NERDC national curriculum	2	C
SOS 213	Social Studies research methods and statistics	2	C
SOS 214	Social services in Nigeria	1	E
SOS 215	Social change in Nigeria	1	E
	200 level (2nd Semester)		
SOS 221	Issues and problems of national development and modernization	2	C
SOS 222	Contemporary public issues	2	C
SOS 223	Citizenship education	2	C
SOS 224	Law education	1	E
SOS 225	Transportation and communication	1	E
	300 level (1st Semester)		
SOS 321	Exultation and family life education	2	C
SOS 322	Nigeria external relations	2	C
SOS 323	Social institutions	1	E
SOS 324	Globalization	1	E
Summary			
Year of study	Compulsory	Elective	Total
Year one	14	5	19
Year two	12	4	16
Year three	13	2	15
Total	39	1	50

APPENDIX H

TABLE OF SPECIFICATION OF SOCIAL STUDIES PERFORMANCE TEST (SSPT) FOR NCE STUDENTS.

Test items	Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation
1	✓					
2						✓
3					✓	
4		✓				
5			✓			
6		✓				
7	✓					
8			✓			
9						✓
10				✓		
11		✓				
12						
13						
14	✓					
15						
16				✓		✓
17	✓					
18			✓			
19						
20				✓		
21					✓	
22						✓
23		✓				
24			✓			
25	✓					
26						
27			✓		✓	
28		✓				
29				✓		
30					✓	
31			✓			
32						✓
33	✓					
34						✓
35				✓		
36		✓				
37	✓					
38			✓			
39					✓	
40					✓	✓

TOTAL test items 40

APPENDIX I
SUMMARY OF THE PSYCHOMETRIC INDICES

			DISTRACTER POWER				REMARKS
S/NO	ITEM DIFFICULTY INDEX ID	DISCRIMINATION INDEX DI	A	B	C	D	
1	0.02	0.1	0.55	0.34	0.08	0.03	
2	0.71	0.7	0.71	0.03	0.24	0.03	Selected
3	0.71	0.1	0.26	0.03	0.71	0.00	
4	0.71	0.4	0.21	0.05	0.71	0.03	Selected
5	0.71	0.3	0.16	0.05	0.71	0.08	selected
6	0.89	0.3	0.03	0.03	0.05	0.89	Selected
7	0.66	0.7	0.13	0.18	0.03	0.66	Selected
8	0.63	0.4	0.63	0.11	0.13	0.13	Selected
9	0.50	0.4	0.13	0.13	0.24	0.50	Selected
10	0.61	0.6	0.08	0.61	0.12	0.20	selected
11	0.61	0.5	0.05	0.61	0.24	0.11	Selected
12	0.45	0.3	0.26	0.24	0.45	0.05	Selected
13	0.63	0.3	0.63	0.08	0.18	0.11	Selected
14	0.39	0.6	0.39	0.11	0.39	0.11	Selected
15	0.00	0.0	0.29	0.61	0.00	0.11	
16	0.42	0.7	0.11	0.42	0.61	0.32	Selected
17	0.74	0.3	0.3	0.74	0.05	0.18	Selected
18	0.45	0.3	0.18	0.45	0.24	0.13	Selected
19	0.87	0.1	0.13	0.00	0.87	0.00	
20	0.76	0.3	0.11	0.76	0.08	0.05	Selected
21	0.61	0.6	0.61	0.08	0.03	0.29	Selected
22	0.71	0.7	0.03	0.03	0.24	0.71	Selected
23	0.50	0.4	0.13	0.50	0.24	0.13	Selected
24	0.55	0.4	0.13	0.55	0.11	0.21	Selected
25	0.61	0.1	0.21	0.61	0.13	0.05	

APPENDIX J

```
GET
  FILE='C:\Users\MR KENNEDY\Documents\schools files.sav'.
DATASET NAME DataSet1 WINDOW=FRONT.
T-TEST PAIRS=pretest WITH posttest (PAIRED)
  /CRITERIA=CI(.9500)
  /MISSING=ANALYSIS.
```

T-Test

Notes

Output Created		20-JUN-2015 13:16:53
Comments		
Input	Data	C:\Users\MR KENNEDY\Documents\schools files.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	405
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on the cases with no missing or out-of-range data for any variable in the analysis.
Syntax		T-TEST PAIRS=pretest WITH posttest (PAIRED) /CRITERIA=CI(.9500) /MISSING=ANALYSIS.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.03

[DataSet1] C:\Users\MR KENNEDY\Documents\schools files.sav

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest	48.8366	404	5.01146	.24933
	post test	54.8960	404	5.15363	.25640

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	pretest & post test	404	.190	.000

Paired Samples Test

		Paired Differences					T	Df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	pretest - post test	-6.05941	6.47089	.32194	-6.69229	-5.42652	-18.822	403	.000

```
T-TEST GROUPS=sex(1 2)
  /MISSING=ANALYSIS
  /VARIABLES=posttest
  /CRITERIA=CI(.95).
```

T-Test

Notes

Output Created		20-JUN-2015 13:18:31
Comments		
Input	Data	C:\Users\MR KENNEDY\Documents\schools files.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	405
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on the cases with no missing or out-of-range data for any variable in the analysis.
Syntax		T-TEST GROUPS=sex(1 2) /MISSING=ANALYSIS /VARIABLES=posttest /CRITERIA=CI(.95).
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.03

[DataSet1] C:\Users\MR KENNEDY\Documents\schools files.sav

Group Statistics

	Sex	N	Mean	Std. Deviation	Std. Error Mean
post test	Male	202	55.6931	5.08190	.35756
	female	202	54.0990	5.11364	.35979

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
post test	Equal variances assumed	.023	.880	3.143	402	.002	1.59406	.50725	.59687	2.59125
	Equal variances not assumed			3.143	401.984	.002	1.59406	.50725	.59687	2.59125

ONEWAY posttest BY sch
/MISSING ANALYSIS
/POSTHOC=SCHEFFE ALPHA(0.05).

Oneway

Notes

Output Created		20-JUN-2015 13:19:35
Comments		
Input	Data	C:\Users\MR KENNEDY\Documents\schools files.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	405
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on cases with no missing data for any variable in the analysis.
Syntax		ONEWAY posttest BY sch /MISSING ANALYSIS /POSTHOC=SCHEFFE ALPHA(0.05).
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.03

```
GET
 FILE='C:\Users\MR KENNEDY\Documents\schools files.sav'.
DATASET NAME DataSet1 WINDOW=FRONT.
ONEWAY pretest BY sch
  /MISSING ANALYSIS.
```

Oneway

Notes

Output Created		11-JUL-2015 16:56:54
Comments		
Input	Data	C:\Users\MR KENNEDY\Documents\schools files.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	405
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on cases with no missing data for any variable in the analysis.
Syntax		ONEWAY pretest BY sch /MISSING ANALYSIS.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.03

[DataSet1] C:\Users\MR KENNEDY\Documents\schools files.sav

PRE-TEST

ANOVA

Pretest

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	189.924	2	94.962	3.834	.022
Within Groups	9931.294	401	24.766		
Total	10121.218	403			

[DataSet1] C:\Users\MR KENNEDY\Documents\schools files.sav

ANOVA

post test

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	22.188	2	11.094	.416	.660
Within Groups	10681.446	401	26.637		
Total	10703.634	403			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: post test
Scheffe

(I) schools	(J) schools	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Kano	Zaria	.52088	.62688	.708	-1.0193	2.0611
	Katsina	.11527	.70246	.987	-1.6106	1.8411
Zaria	Kano	-.52088	.62688	.708	-2.0611	1.0193
	Katsina	-.40561	.61955	.807	-1.9278	1.1166
Katsina	Kano	-.11527	.70246	.987	-1.8411	1.6106
	Zaria	.40561	.61955	.807	-1.1166	1.9278

Homogeneous Subsets

post test

Scheffe

Schools	N	Subset for alpha = 0.05
		1
Zaria	188	54.6489
Katsina	110	55.0545
Kano	106	55.1698
Sig.		.726

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 125.818.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

```
GET
  FILE='C:\Users\MR KENNEDY\Documents\schools files.sav'.
DATASET NAME DataSet1 WINDOW=FRONT.
COMPUTE Mean_Performance=(pretest+posttest)/2.
EXECUTE.
UNIANOVA Mean_Performance BY sch sex
  /METHOD=SSTYPE(3)
  /INTERCEPT=INCLUDE
  /POSTHOC=sch(SCHEFFE LSD)
  /EMMEANS=TABLES(OVERALL)
  /PRINT=DESCRIPTIVE
  /CRITERIA=ALPHA(.05)
  /DESIGN=sch sex sch*sex.
```

Univariate Analysis of Variance

Notes

Output Created		26-AUG-2015 15:03:08
Comments		
Input	Data	C:\Users\MR KENNEDY\Documents\schools files.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	405
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax		UNIANOVA Mean_Performance BY sch sex /METHOD=SSTYPE(3) /INTERCEPT=INCLUDE /POSTHOC=sch(SCHEFFE LSD) /EMMEANS=TABLES(OVERALL) /PRINT=DESCRIPTIVE /CRITERIA=ALPHA(.05) /DESIGN=sch sex sch*sex.
Resources	Processor Time	00:00:00.06
	Elapsed Time	00:00:00.06

[DataSet1] C:\Users\MR KENNEDY\Documents\schools files.sav

Between-Subjects Factors

		Value Label	N
Schools	1.00	Kano	106
	2.00	Zaria	188
	3.00	Katsina	110
Sex	1.00	Male	202
	2.00	Female	202

Descriptive Statistics

Dependent Variable: Mean_Performance

Schools	Sex	Mean	Std. Deviation	N
Kano	Male	52.4906	3.84869	53
	female	52.1321	4.41496	53
	Total	52.3113	4.12568	106
Zaria	Male	52.3617	3.44262	94
	female	51.4202	3.23315	94
	Total	51.8910	3.36386	188
Katsina	Male	52.5182	4.62578	55
	female	50.2727	4.19636	55
	Total	51.3955	4.53837	110
Total	Male	52.4381	3.88195	202
	female	51.2946	3.88435	202
	Total	51.8663	3.92036	404

Tests of Between-Subjects Effects

Dependent Variable: Mean_Performance

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	229.217[a]	5	45.843	3.059	.010
Intercept	1015376.356	1	1015376.356	67753.434	.000
Sch	45.493	2	22.747	1.518	.220
Sex	131.795	1	131.795	8.794	.003
sch * sex	51.642	2	25.821	1.723	.180
Error	5964.565	398	14.986		
Total	1093001.000	404			
Corrected Total	6193.782	403			

a. R Squared = .037 (Adjusted R Squared = .025)

Estimated Marginal Means

Grand Mean

Dependent Variable: Mean_Performance

Mean	Std. Error	95% Confidence Interval	
		Lower Bound	Upper Bound
51.866	.199	51.474	52.258

Post Hoc Tests

schools

Multiple Comparisons

Dependent Variable: Mean_Performance

	(I) schools	(J) schools	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Scheffe	Kano	Zaria	.4204	.47021	.671	-.7349	1.5757
		Katsina	.9159	.52690	.222	-.3787	2.2104
	Zaria	Kano	-.4204	.47021	.671	-1.5757	.7349
		Katsina	.4955	.46471	.567	-.6463	1.6373
	Katsina	Kano	-.9159	.52690	.222	-2.2104	.3787
		Zaria	-.4955	.46471	.567	-1.6373	.6463
LSD	Kano	Zaria	.4204	.47021	.372	-.5040	1.3448
		Katsina	.9159	.52690	.083	-.1200	1.9517
	Zaria	Kano	-.4204	.47021	.372	-1.3448	.5040
		Katsina	.4955	.46471	.287	-.4181	1.4091
	Katsina	Kano	-.9159	.52690	.083	-1.9517	.1200
		Zaria	-.4955	.46471	.287	-1.4091	.4181

Based on observed means.

The error term is Mean Square(Error) = 14.986.

Homogeneous Subsets

Mean_Performance

	Schools	N	Subset
			1
Scheffe[a,b,c]	Katsina	110	51.3955
	Zaria	188	51.8910
	Kano	106	52.3113
	Sig.		.173

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = 14.986.

a. Uses Harmonic Mean Sample Size = 125.818.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

c. Alpha = .05.

```
T-TEST GROUPS=Groups(1 2)
  /MISSING=ANALYSIS
  /VARIABLES=scores
  /CRITERIA=CI(.95).
```

T-Test

Notes

Output Created		23-AUG-2015 08:40:58
Comments		
Input	Data	C:\Users\MR KENNEDY\Documents\grouping.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	404
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on the cases with no missing or out-of-range data for any variable in the analysis.
Syntax		T-TEST GROUPS=Groups(1 2) /MISSING=ANALYSIS /VARIABLES=scores /CRITERIA=CI(.95).
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.02

[DataSet1] C:\Users\MR KENNEDY\Documents\grouping.sav

Group Statistics

	Groups	N	Mean	Std. Deviation	Std. Error Mean
Scores	Guided	202	51.0891	5.17476	.36409
	Interactive	202	57.1485	5.84439	.41121

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Scores	Equal variances assumed	4.917	.027	-11.032	402	.000	-6.05941	.54923	-7.13914	-4.97968
	Equal variances not assumed			-11.032	396.190	.000	-6.05941	.54923	-7.13918	-4.97963