IMPACT OF MULTIMEDIA RESOURCES ON PUPILS ACADEMIC PERFORMANCE AND RETENTION IN SOCIAL STUDIES IN GIWA EDUCATION ZONE, KADUNA STATE, NIGERIA

BY

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(NCE 2009, F.C.E Zaria, B. Ed. 2013 A.B.U Zaria)

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DEPARTMENT OF ARTS AND SOCIAL SCIENCE EDUCATION,

AHMADU BELLO UNIVERSITY,

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A THESIS SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES, IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER DEGREE IN SOCIAL STUDIES

DEPARTMENT OF ARTS AND SOCIAL SCIENCE EDUCATION,
AHMADU BELLO UNIVERSITY,
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FEBRUARY, 2020

DECLARATION

I SANI, Adama Shuaibu with registration number P15EDAS8057 declare that this dissertation titled "IMPACT OF MULTIMEDIA RESOURCES ON PUPILS ACADEMIC PERFORMANCE AND RETENTION IN SOCIAL STUDIES IN GIWA EDUCATION ZONE, KADUNA STATE, NIGERIA" has been carried out by me in the Department of Arts and Social Science Education. The information derived from the literature has been duly acknowledged and a list of references is provided. No part of this dissertation was previously presented for another degree or diploma at this or any other institution. I am liable for the error(s) found in the work.

....

SANI, Adama Shuaibu
P15EDAS8057 Date

CERTIFICATION

This dissertation titled "IMPACT OF MULTIMEDIA RESOURCES ON PUPILS ACADEMIC PERFORMANCE AND RETENTION IN SOCIAL STUDIES IN GIWA EDUCATION ZONE, KADUNA STATE, NIGERIA" by SANI, Adama Shuaibu meets the regulations governing the award of the Degree of Master in Social Studies Education of Ahmadu Bello University and is approved for its contribution to knowledge and literary presentation.

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Chairman Supervisory Committee

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Dr. Z. S. Gaya Date
Member Supervisory Committee

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Prof. S. Abdullahi Date
Dean, School of Post-Graduate Studies

DEDICATION

This entire work is dedicated to my Mum Hajiya Binta Shuaibu, my Husband Alh Abubakar Abdullahi Maihadishi and to my children.

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All praise and gratitude goes to my lord for granting me life and health to go through this programme successfully. I adore and beseech Him. My profound gratitude goes to my first and second supervisors; Prof. H. I Bayero and Dr. Z. S. Gaya respectively for their scholastic guidance, valuable suggestions, constant encouragement and overall supervision throughout the study that makes this a reality. My sincere thanks go to Dr. I. D Abubakar, Dr. Z. S. Gaya and Dr U. A. Ginga, Dr. M.A. Sarkin-Fada, Mallam Nasa'i Muhammad and Mallam Y.J Shinkafi who in spite of their tight schedules took time to go through the work. I will forever remain indebted. I also wish to thank the head of Department, Arts and Social Science Education in person of prof. Abdullahi Dalhatu, P.G coordinator, Arts and Social Science Education and other Staff of the Faculty.

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ABSTRACT

The study examined the impact of multimedia resources on pupils' retention and academic performance in social studies in Giwa Education Zone, Kaduna State Nigeria. The study was guided by three objectives, three research questions and three hypotheses. Quasi-experimental research design was used. The population of the study consisted of all primary school pupils in Giwa Education Zone, Kaduna state, numbering 106,861. The study used purposively sampling technique to choose the participating schools for the experiment. The study also used Social Studies Pupils Retention Test (SOSPRET) and Social Studies Pupils Academic Performance Test (SOSPAPT) as data collection instruments. The instruments were validated by supervisors and statisticians for content and construct validity. The study pilot tested the instruments and they were satisfied statistically as fit for the main work. Hence, their index power stood at 0.67 and 0.76. The independent sample t-test and one-way analysis of variance were used as data analysis instruments. It was found that significant difference existed in the mean retention level of male and female pupils taught social studies using multimedia resources when compared to traditional method in Giwa Education Zone, Kaduna state and that significant difference was found in the mean academic performance of male and female pupils taught social studies using multimedia resources than their counterparts taught using traditional method in Giwa Education Zone, Kaduna state. No significant difference was found in retention level of pupils taught social studies using multimedia resources and their counterparts taught using traditional method among primary schools in urban and rural primary schools in Giwa Education Zone, Kaduna state. The study made some recommendations among which are, there is need for Kaduna State Government to build and equip computer laboratories in each primary school in the state and the need to use Multimedia resources as it improves students' academic performance and retention of all sex. There should also be training of teachers in computer utilization in teaching both short-term and in-service training for teachers.

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ABBREVIATIONS

A.B.U –	Ahmadu Bello University
AV –	Audio Visual
AVA –	Audiovisual Aids
B. Ed –	Bachelor of Education
CD-ROM –	Compact Disc Read Only Memory
CESAC –	Comparative Education Study and Adaptation Centre
CLM –	Conventional Lecture Method
FRN –	Federal Republic of Nigeria
HTML –	Hyper Text Markup Language
ICT –	Information and Communication Technology
IMI –	Interactive Multimedia Instruction
IT –	Information Technology
JCC –	Joint Consultative Committee
LGEA –	Local Government Education Authority
MAT –	Multimedia-aided Teaching
NCE –	Nigeria Certificate in Education
NERC –	Nigeria Education Research Council
NERDC –	Nigeria Educational Research and Development Council
NTC –	National Technical Certificate
PC –	Personal Computer
PGDE –	Post Graduate Diploma in Education
SOSAN –	Social Studies Association of Nigeria
SOSAPT –	Social Studies People Academic Performance Test
SOSCEAN –	Social Studies and Civic Educators Association of Nigeria
SOSCOLM –	Social Studies Conventional Lecture Method
SOSPRET –	Social Studies People Retention Test
SSAT –	Social Studies Achievement Test
SUBEB –	State Universal Basic Education Board

CHAPTER ONE
INTRODUCTION

1.1 Background to the Study

The purpose of education is to develop knowledge, skills and character of students. Thus education is the process of learning and knowing, which is not restricted to schools or textbooks. Education is very important for an individual's life. According to Salihu (2015), education is a major aspect of development of any modern society. The importance of education is evident at every stage of education whether at primary, Junior Secondary, Senior Secondary and in Higher education. The quality of the education depends on the availability of resources in the school, and the performance of students depends greatly on the teachers' knowledge, skill and attitude. Schools that have qualified teachers, interactive teaching and learning materials, comfortable school compounds can provide qualitative and quantitative education for its learners (Salihu, Abdullahi, Alfa and Muhammed, 2015).The purpose of learning and teaching resources is to provide a source of learning experiences for students. Learning and teaching resources should be able to facilitate interaction among students and teachers during the learning/ teaching process, as well as to help students to learn, broaden students' learning experiences and meet different learning needs. If used effectively, learning and teaching resources can help students to construct knowledge for themselves and develop effective learning strategies, generic skills, values and attitudes, thus laying a solid foundation for life-long learning (Bryan and William 2016).

There are techniques that encourage the development of creativity, ability or provide experience not easily secured in any other way. These techniques are embedded in the use

of Information and Communication Technology (ICT). Application of Information and Communication Technology (ICT) in teaching and learning has been widespread and popular with students and teachers and it promotes learning and teaching skills. One of the interesting aspects of ICT application is Multimedia resources. By multimedia resources, educators usually refer to the using of multimedia and Information Communication Technology (ICT) equipments which offer an effective dialogue between the resource materials- indirectly with the instructor and the students in comparison with traditional methods of teaching which may lack such interactivity (Nusir, Alsmadi, Al-kabi, and Shardqah, 2011). Moreover, multimedia has the potential to create high quality learning environments especially for students, with the capability of creating a more pragmatic learning context through its different medias- texts, graphics, sound, animation among others. Multimedia resources have paramount importance in teaching (Altherr, Wagner, Eckert, & Jodl, 2014). With the help of multimedia, one can present different phenomena and processes vividly, simulate complex content, and present different levels of abstraction. This helps in meaningful and authentic learning. Multimedia resources are useful especially when students have low motivation and low prior knowledge (Singh, 2013).

This is an era of science and technology which are the backbone for the prosperity of a nation. Nigeria's education policies emphasized functional education for learners at all levels to trigger students' curiosity in scientific inquiry and understanding of scientific concepts and processes. The current teaching strategies have failed to enhance problem-solving skills, curiosity, and critical and logical thinking among pupils. There is a need to move from traditional approaches to more innovative information and communications technologies (ICTs) enriched approaches for meaningful learning. The fast-paced, diverse,

and technologically advanced world has posed challenges for both teachers and students. The use of ICTs in the teaching and learning process has become an important feature. Multimedia-aided teaching (MAT) is a means of instructional delivery usually used with the traditional method of teaching (Rolfe & Gray, 2011). It is a presentation consisting of words, sound, and pictures that is designed for meaningful learning (Mayer, 2015a; 2015b; 2015c).

One of the teaching technologies included in the teaching-learning process is a series of multimedia applications developed due to advances in information technologies and cognitive theories. Considering the technology available today, The rapid growth of the internet highlights the importance of web-based learning environments and paves the way for educators to more greatly benefit from multimedia applications. Yui, Liu &Wai (2012) emphasize some of the most significant features of web-based learning environments, including less need for a multitude of devices; accessibility by anyone, anywhere, and anytime; independence of time and space limitations; and worldwide support for communication and cooperation.

However, it is apparent that many of today's teachers of Social Studies at primary schools are caught in the midst of a change for which they may not have been professionally prepared. Many teachers were educated in the classrooms where the role of the student was to memorize information, conduct well-regulated experiments etc. and were then tested on their ability to repeat these tasks or remember specific facts. It is against this background that this study examines the impact of multimedia resources on pupils' retention and academic performance in Social Studies in Giwa Education Zone, Kaduna State, Nigeria as

a contribution towards the development of knowledge and literary presentation in the study area and beyond.

1.2 Statement of the Problem

Multimedia resources play an increasingly vital role in efforts to move Social Studies from the rote memorization of dates and information toward a more student-centred, hands-on, authentic learning experience. Despite movements within the discipline to promote students computer use to facilitate reflective inquiry, decision making, and problem-solving, Social Studies education, for the most part, continues to focus on traditional, teacher-directed, lecture-and textbook-based approaches and activities at primary schools in the study area. The research base on the effectiveness of technology as an instructional component for teaching Social Studies is quite limited. Nonetheless, data are indicating that when integrated effectively, multimedia technology can support Social Studies learning by promoting student-centred instruction, increasing learner motivation, and extending and deepening understandings of historic and civic concepts. Some studies have reported modest positive outcomes for several groups of students who used multimedia resources for the practice of Social Studies skills.

Many of the difficulties students face in content area learning stem from mismatches between the teachers' instructional approaches and students' strategies for cognitive intake and processing of the material presented. These mismatches, along with disparate levels of literacy development for students within the same grade level, combine to create formidable challenges for the teaching of subject areas where student interest is already low. Mounting evidence suggests that students generally find Social Studies so dull and

unimportant, that they have difficulty understanding their textbooks, and that overall, they remember very little of what they learned.

The problem of this study hinges on a determination of the extent to which multimedia resources are used to achieve instructional effectiveness for enhanced retention and academic performance among Social Studies pupils in Giwa Education Zone, Kaduna State-Nigeria when compared to the use of traditional methods in achieving the same design among pupils.

1.3 Objectives of the Study

The main objective of this study was to examine the impact of multimedia resources on pupils' retention and academic performance in Social Studies in Giwa Education Zone, Kaduna State, Nigeria. The study was guided by the following specific objectives which are to:

i. Determine the differences in retention level of pupils taught Social Studies using multimedia resources and their counterparts taught using traditional method among primary schools in Giwa Education Zone, Kaduna State;
ii. find out the differences in the academic performance between male and female taught Social Studies using multimedia resources are those taught using traditional method in primary schools in Giwa Education Zone, Kaduna State;
iii. Determine the retention level of pupils taught Social Studies using multimedia resources and those taught using traditional method in urban and rural primary schooling Giwa Education Zone, Kaduna State.

1.4 Research Questions

The study answered the following research questions:

i. Is there any difference in the mean retention level between male and female pupils taught Social Studies using multimedia resources and their counterparts taught using traditional method in primary schools in Giwa Education Zone, Kaduna State?

ii. To what extent is the mean academic performance between male and female taught Social Studies using multimedia resources and their counterparts taught using traditional method in primary schools in Giwa Education Zone, Kaduna State?

iii. What is the difference between the mean retention levels of pupils taught Social Studies using multimedia resources and their counterparts taught using traditional method in Rural and Urban primary schools in Giwa Education Zone, Kaduna State?

1.5 Null Hypotheses

The following null hypotheses were stated and was tested at $p \leq 0.05$ level of significance:

HO_1 there is no significant difference in the mean retention level between male and female pupils taught Social Studies using multimedia resources and their counterparts taught using traditional method in primary schools in Giwa Education Zone, Kaduna State.

HO_2 there is no significant difference in the mean academic performance between male and female pupils taught Social Studies using multimedia resources and their counterparts taught using traditional method in primary schools in Giwa Education Zone, Kaduna State.

HO_3 there is no significant difference between the mean retention levels of pupils taught Social Studies using multimedia resources and their counterparts taught using

traditional method in Rural and Urban primary schools in Giwa Education Zone, Kaduna State.

1.6 Significance of the Study

Research works are embarked upon to extend the frontier of knowledge. The present study was therefore carried out with this same objective, especially in the field of multimedia resources and its impact on pupils' retention and academic performance. It will, therefore, contribute to the extension of the frontier of knowledge in the following ways. First, the study revealed the predictive power of multimedia resources in the determination of the academic performance and retention of pupils in the study area and beyond. The findings are meant to provide an idea about the multimedia resources aspects and academic performance to provide key information to further research work in such areas. In the same way, the study provides knowledge and guidelines that may be of help to the policymaker. The research is therefore of importance for planners. This study will also provide input to the students, teachers and researchers in the areas of multimedia resources.

This research is significant in the sense that the impact of multimedia resources is emphasized in the research work. This study is also aimed at making the Social Studies teachers generally aware of the importance of the need of using multimedia resources in the teaching-learning process and to make them realize that students learn better when they come in contact with resources that appeal to multiple senses. The findings of the study among others are expected to ascertain the impact of multimedia resources on teaching Social Studies among primary school pupils in the study area.

The study would also explore how multimedia resources enhance active participation in the classroom and this could facilitate effective learning. Thus, learners could profit from instruction when they are involved.

This study was also aimed at making the social studies teachers at primary schools in the study area generally aware of the importance of the need of using multimedia aids in the teaching-learning process and to make them realize that pupils learn better when they come in contact with materials and resources that appeal to their many senses.

The study is expected to be useful to policymakers at various levels of decision-making processes especially in primary schools in the study area. This is because their decision affects teaching and learning. The study's literature revealed some of the hitches militating against multimedia resource use in primary schools. Besides, the authorities of Kaduna State Universal Basic Education Board (SUBEB) could also find the research useful as it will assist in the provision and use of multimedia resources especially for Social Studies teaching and learning.

Moreover, researchers in the field of multimedia resources in Social Studies, especially in primary schools, could find it rich in contents and facts which could also serve as reference sources. The study would also serve as a contribution to knowledge and literary presentations but most especially relevant to stakeholders in the teaching and learning in the education industry at large and Social Studies specifically.

1.7 Scope of the Study

The study examines the impact of multimedia resources on pupils' retention and academic performance in Social Studies in Giwa Education Zone, Kaduna State, Nigeria. The study will cover primary VI Pupils of Social Studies in Giwa Education Zone. The

concept of culture, its types and examples extracted from primary VI syllabus will be treated with the pupils. The pupils' retention and academic performances will be measured.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.01 Introduction

This chapter reviewed some important pieces of literature related to the current study entitled 'Impact of Multimedia Resources on Pupils Retention and Academic Performances in Social Studies in Giwa Education Zone, Kaduna State, Nigeria. The chapter discusses the following sub-headings:

- Introduction
- Theoretical Framework
- System Theory
- Innovation Dissemination Theory
- Conceptual Framework
- Concept of Education
- Concept of Teaching
- Concept of Learning
- Concept of Retention
- Concept of Academic Performance
- Concept of Multimedia Resources
- Concept of Social Studies
- Historical Development of Social Studies Education in Nigeria
- The Nature of Social Studies Education
- The Scope of Social Studies Education
- General aims and Goals of Social Studies education
- Objectives of Social Studies at Primary School
- Justification for the Introduction of Social Studies Education in Nigerian Schools
- Challenges of using Multimedia Resources in Teaching Social Studies
- Review of Related Empirical Studies
- Summary

2.02 Theoretical Framework

The purpose of theoretical frame work is to serve as a plank on which the study rests. It's a reference point on which the study must always conform. In the light of the foregoing, this study is based on two theories, namely system theory and innovation dissemination theory.

2.02.1 System Theory

At the organizational level, the study employed a systems theory, in which a nation's education system is understood as a complex organization composed of multiple, interconnected sub-systems (Chapman and Austin, 2013). Changes affecting any particular subsystem (in this case introduction and adoption of new technologies in teaching and learning) have implications which impact other subsystems (e.g. academic performance, retention, interest, motivation etc.), sometimes in unanticipated ways. The move to advanced technology use in the classroom has enormous implications on teacher training, the pedagogical strategies they use, how the curriculum is structured, and how schools utilize their budgets in Nigeria. Some of the implications that ripple through a system are subtle. For example, the move to greater instructional use of technology may create digital divides, i.e. unintentional disparities in learning among those with different levels of access to the technology that may, in turn, undercut a country's commitment to equity. Similarly, adopting technology-based delivery options may broaden access, but, simultaneously, may raise questions about who is controlling the instructional content (Salihu, Sinkalu and Abubakar, 2016).

A tenet of good national planning assert Salihu, Sinkalu and Abubakar (2016) is that planners need to anticipate and provide for the cross-impacts of the interventions they advocate especially at Lower, Middle and Upper Basic school levels and even Secondary

school level where there exist uniformity in government policies across Nigeria to a greater extent. Only as governments and education leaders understand the interwoven nature of the problems now facing schools in their adoption and use of technology in instruction and the interconnections among the intended solutions they seek to implement, can they offer effective leadership in charting a course that strengthens the quality and improves the relevance of education in their countries including Nigeria (Chapman and Austin, 2016)

2.02.2 Innovation Dissemination Theory

At the level of individual users, this study draws on the innovation dissemination theory, as formulated in the work of Fullan (2001). Fullan argues that adoption of an innovation (in this case, the adoption of technology in teaching and learning Social Studies) is shaped by the characteristics of the innovation and its implementation. Six characteristics help shape the extent to which new ideas are adopted: clarity, observation, complexity, comparative advantage, trial, and cost. Clarity concerns the extent that the innovation, in this case the technology being introduced into the classroom setting, is understandable to those being asked to implement it (or to support its implementation by others). Observation refers to the extent that would-be adopters can clearly see the key features of an innovation. Complexity refers to the extent that prospective adopters can quickly learn to use the technology. Comparative advantage concerns the extent that technology-based instruction offers clear advantages over alternative instructional strategies, either in terms of greater student achievement or in teachers ease of use. Trial refers to the extent that prospective adopters can try an innovation in small increments as opposed to making a major commitment. In Nigeria, most school heads reject innovations they lack technical knowledge and necessary infrastructure to support their utilization (Salihu, Sinkalu and Abubakar, 2016).

2.03 Conceptual Framework

Under conceptual framework attempt is made to define some basic concepts in related to the study. These include; concepts of education, teaching, learning, retention, academic performance, multimedia resources and Social Studies.

2.03.1 Concept of Education

The term ‘education’ is a very common and a popular word that is uttered by many of us but understood by a very few in its right perspective. It is in one way or the other appears to be as old as the human race, though with time, its meaning and objectives have inevitably undergone certain changes. In English, the term ‘Education’ has been derived from two Latin words Educare (Educere) and Educatum. ‘Educare’ means to train or mould. It again means to bring up or to lead out or to draw out, propulsion from inward to outward. The term ‘Educatum’ denotes the act of teaching. It throws light on the principles and practice of teaching. The term Educare or Educere mainly indicates the development of the latent faculties of the child. But the child does not know these possibilities. It is the educator or the teacher who can know these and take appropriate methods to develop those powers (Peters, 2012).

The term ‘education’ has been interpreted by different people in different ways. Some people refer to it as formal schooling or to lifelong learning. Some others refer to it as the acquisition of knowledge, skills and attitudes. Some say that education is nothing, but the training of people’s mind in a particular direction to bring about desired changes (Williams, 2014)

Etymologically speaking, the word education is derived from the Latin word ‘Educare’ meaning to raise and to bring up. According to a few others, the word education’ has originated from another Latin term ‘Educere’ which means to lead forth or’ to come out’.

These meanings indicate that education seeks to nourish the good qualities and draw out the best in every individual. Education seeks to develop the innate or the inner potentialities of humans. Some other educationists believe that the word ‘education’ has been derived from the Latin term ‘Educatum’, which means the act of teaching or training. The meanings of these root words lead us to believe that education aims to provide a nourishing environment that would facilitate or bring out and develop the potentialities in an individual.

Education is defined as the aggregate of all the processes by which a person develops abilities, attitudes and other forms of behaviour of practical values in the society in which s/he lives; the social process by which people are subjected to the influence of selected and controlled environment (especially that of the school), so that they may obtain social competence and optimum individual development. The concept of education has been used in a variety of contexts with different meanings. To give a precise definition of education, it defines certain concepts in science or other technical subjects, is difficult, as there is no one meaning of education held in common by people. Let us try to explore the different meanings and viewpoints on education. Understanding these conceptions would help you to analyze the kind of education that is in vogue now and to what extent it is justified.

Webster (2017) defines education as the process of educating or teaching (now that’s useful, isn’t it?) Educate is further defined as to develop the knowledge, skill, or character of. Thus, from these definitions, we might assume that the purpose of education is to develop the knowledge, skill, or character of students. Unfortunately, this definition offers little unless we further define words such as to develop, knowledge, and character.

2.03.2 Concept of Teaching

Teaching is a process of educating a person with theoretical concepts and is a kind of knowledge transfer between a teacher and a student. The role of the teacher is to act as a facilitator of learning by leading discussions, providing opportunities to ask open-ended questions, guiding the processes and tasks and enabling the active participation of learners and to engage with ideas. Teachers are occupied in schools with the main purpose of educating the children to grow as good citizens in the world. Children today are the future leaders of society. Therefore, teaching can be considered as an important concept (Hopkins, 2014).

Teaching is a simple word and we often use it in our everyday life but indoctrination seems to be a little difficult word. It is difficult in the sense that it arises the curiosity but still defining it is a little complicated. Teaching is used by many people but the word indoctrination is rarely used, but somehow most of us know that they both refer to something in relation to imparting information/instruction. To clear out the differences between the two we will first study the individual terms and then bring out the differences between the two. (Evans and Michaelis, 2014).

Teaching according to Essien and Olayiwola (2013) is the communication of ideas, skills or information from the teacher or source of information to the student or any receiver. The information that is taught can be of any type. For example, a student taking a chemistry class may be taught about chemicals and how they react on combining with each other. This is the information that is taught to the student. The information again that is included in the process of teaching can vary. It can be either all truth or some information can be subjected to falsehood. The students are supposed to critically examine the information and then

obtain the knowledge. Therefore, teaching is aimed to impart knowledge or skill. Teaching focuses on imparting information so that students learn the proper methodologies and then apply the methodologies to make their own opinions in many things. Students may also question the information and the teacher, in that case, needs to satisfy the query by supporting it with proper evidence. In some other cases, the student is free to make his own opinion after taking a lesson (Lips and Goldberg, 2011).

2.03.3 Concept of Learning

Learning is one of the most fundamental concepts in education. It is a basic and central component of the distinctive activities that constitute the subject matter of psychology. The human skills, appreciations and reasoning in all their great variety, as well as human hopes, aspirations, attitudes, and values, are generally recognized to depend for their development largely on the events called learning. Learning is at the heart of perception, thinking, imagination, reasoning, judgments, and attitudes personality traits, systems of value, and the development and organization of the activities that constitute the personality of the individual. One of the characteristics that all of these processes have in common is that the individual is behaving in the light of his own past experience. These activities thus qualify as mental activities, or activities of the mind because they represent instances in which past experiences are used in the individual's behavioural adjustments to the world.

There is no universally acceptable definition of learning. A huge body of literature on the subject matter of learning has been piled up by educationists' in their attempt to fathom out the characteristics and applications of learning. Hence, huge and diverse theories were developed with respect to learning. Learning cannot be directly observed but can manifest itself in the activities of the individual. Human beings, more than all other living organisms,

have the greater capacity to learn in all ways, and through language, we can learn things we have neither experienced nor observed. Then what is learning? Several and sometimes varying definitions have been given by different educationists on the meaning of learning. These definitions, however, seem to converge on certain trends which highlight the characteristics of learning. Myers, (2015) defined learning as a relatively permanent change in an organism's behaviour due to experience. Similarly, Mukherjee (2017) gave the meaning of learning as an inference from some performance of the organism resulting in an enduring change of behaviour. Learning is also defined as a relatively permanent change in behavioural potentiality that occurs as a result of reinforced practice.

Some other definitions include: - Learning is the process of the formation relatively permanent neural circuits through the simultaneous activity of the elements of the circuits-to-be; such activity is of the nature of change in cell structures through growth in such a manner as to facilitate the arousal of the entire circuit when a component element is aroused or activated (Bugelski, 2013). - Learning refers to the change in a subject's behaviour to a given situation brought about by his repeated experiences in that situation, provided that the behaviour change cannot be explained on the basis of native response tendencies, maturation or temporary states of the subject (e.g. fatigue, drugs, alcohol etc.). (Hilgard and Bower, 2011). It implies the addition of new knowledge. From the above definitions, there are key elements that elucidate the nature and characteristics of learning. These are: - Learning exhibits itself as a change in behaviour. - The inference is made about learning by comparing the subject's initial behaviour before he was placed in the 'Learning Situation' and what behaviour exhibited after the treatment. - The change may be an increased capability in performance, altered disposition in attitude, interest or value. - This

change must not be momentary; it must be relatively permanent. It should be retained over some period of time. - Lastly, the change must be distinguishable from the kind of change that is attributed to growth, such as a change in height or the development of muscles through exercise format.

2.03.4 Retention

Retention is the ability to possess, use or keep information and ability to reproduce past experiences or previously familiar materials. Retention according to Ngwoke and Eze (2010) is the process by which a child stores information in his memory for use at a later period. Retention occurs when facts or experiences are stored in long term memory. A student may be able to memorize facts in the short term, but may not retain those facts over the long term memory. Ngwoke and Eze (2010) believe that knowledge and skills are meant to be used not to be stored in the memory, much of the experiences one thinks are not retained were never stored in the long term memory system.

A lot of forgetting of school experiences according to (Ngwoke, 2010) is the direct result of poor learning environment conditions. Conditions that relate to poor retention include such factors like poor teaching methods, lack of relevant experiences, poor study habit, disruptive emotional state and poor health condition. This could lead to poor retention of knowledge in a subject like Social Studies.

2.03.5 Concept of Multimedia

Multimedia is an extremely popular word and is multi-meaning which may lead to confusion in its interpretation, more so because for different people multimedia has a different meaning and different interpretation. Multimedia is a word which nowadays is often used in different human activities. Mayer (2015) lists several different interpretations of the word

multimedia within different contexts: For some people, multimedia is a presentation of information by the computer of text, graphics, animation and sound. For others, multimedia means a live presentation in which a group of people sit in a room watching images on one or more screens and listening to music or an orator. Watching television, VCR or DVD can also be called a multimedia experience. The following example of multimedia is a PowerPoint in which a person presents slides off the computer onto a wider screen and talks about each slide. Even a technically simpler environment facilitates multimedia such as 'chalk and speech' where somebody writes or draws on a blackboard, verbally explaining the lesson. Finally, the most common basic type of multimedia is a textbook since it consists of printed text and illustrations.

Communication in one or more ways refers to audio and visual sense by which the information is acquired. 'Multimedia' is a clear based phenomenon which has its applicability and impact in business, education, entertainment and personal creativity. (Jerram and Gosney, 2016). Multimedia in librarianship is a term for a construction unit which contains two or more different media or different forms of the same media, where neither one can be credited with primary significance. It is usually used as an entity and is called a multi-purpose and multimedia construction." (Kovačec, 2013). This type of definition is based in the prefix multi i.e. several, which means multimedia as a component of two or more medium, where it is not important whether the components are of the same or different sensory compartment. The term "multimedia" has been used since the early 1960s to describe audiovisual aids (AVAs). The modern interpretation of the term includes a rich set of computer-based AVAs, such as scanners/digitizers, CD-ROM/DVD drives, and digital cameras, along with online resources such as the World Wide Web. These AVAs

require computers to coordinate their incorporation into teaching and learning activities, transforming AVAs into AV/IT systems.

Interpretation of multimedia in art is defined as An artistic form in which several different artistic expressions are fused and connected: visual, musical, theatrical and dance, where modern technical media are used: photograph, film, VCR, sound recording etc." (Kovačec, 2013). Multimedia in art represents a synthesis of expressions of various artistic fields. Multimedia "represents information to more than one medium…" (William, 2010). Similarly, Lockard and Abrams (2016) describe multimedia as: "Each system that unites two or more media into one product or presentation. The last two definitions open the possibility for a multi-meaning understanding of multimedia. Apart from the stated definitions of the wide field of human activities in which multimedia is used, the starting point in this study will be Information Technology (IT) definitions of multimedia, which are based on computerised, synthetic displays of audio and visual media: images, text, sound, video and animation, and thus will be explained after the individual determination of the words multi and media. Terminological definition of the word multimedia finds its roots in Latin origin and is composed of two words: multi and media. Multi is a prefix in a compound word multimedia and comes from the Latin word multus, which means many (Klaić, 2014). Multi is a "suffix in the compound word and means many, more", meaning "that which is composed of more or many things" (Anić, 2012).

Jerram and Gosney (2014) state that multimedia is often referred to as the enhanced possibilities of personal computers in processing not only text but all kinds of visual and audio information. Williams, Sawyer and Hutchinson define multimedia as presenting information on more than one medium, including text, graphics, animation, video, sound and

voice. (1995). Multimedia is a combination of sounds, graphics, animation and video. In the world of computers, multimedia is part of hypermedia, which connects the elements of multimedia with hypertext for creating links between information." (Štiglić, 2011). McFarlane (2012) also defines multimedia as a combination of high-resolution images, digital stereo sound, text, video and animation. Lavrič (2017) in his research on the use of multimedia computer programs points out the significance of multimedia in connecting and displaying: video, sound, text and animation with the help of computers.

In the English-Croatian and Croatian-English Computer Science dictionary, multimedia is used as software and as a computerised way of displaying information: 1. Program equipment which is constructed in such a way that it can simultaneously send various types of data (e.g. text, graphics, computer animation, television and sound) to different output devices (e.g. speakers, screens); 2. Computer type of displaying information by connecting audio and video components i.e. through the use of text, graphically displayed data, television, sound (voice), computer animation or digital film image; provides for versatile usage of computers. (Ki, 2017). In the English-Croatian Computer Science encyclopedia dictionary, multimedia is shown as Using computers for the display of text, graphics, video, animation and sound all of which are connected, i.e. integrated into a whole unit.

In a similar way, Collin (2015) explains interactive multimedia as the possibility of managing and allows you to freely navigate through a labyrinth of images, sounds and video. Clicking the mouse on the formerly defined area known as the hot spot displays the other directory in the program; the connected directory can be made up of images, sound directory, video or a window filled with new information. There are several ways of defining hot spots in multimedia titles. Sometimes the cursor changes into the form of a

hand when it is placed on a hot spot. Hot spots in the text are usually highlighted through the use of colour, underlining or capital letters. The common characteristics of the given definitions of multimedia in an IT context have their base in the structure of multimedia, as audio-visual components, program equipment and computer way of displaying information. Elements needed for multimedia research are monitor, hard disc, processor, memory, sound card, PC speaker, speakers, microphone and CD-ROM drive. There are several multimedia CD-ROMs.

Multimedia is defined as the combination of various digital media types such as text, images, sound and video, into an integrated multi-sensory interactive application or presentation to convey a message or information to an audience. In other words, multimedia means an individual or a small group using a computer to interact with information that is represented in several media, by repeatedly selecting what to see and hear next (Agnew, Kellerman and Meyer, 2015).

Reisman (2015) described multimedia as a ray of computer-driven interactive communication system, which creates, store, transmits and retrieve, textual, graphic and auditory networks of information. Multimedia could be interpreted as a combination of data carriers, for example, video, CD-ROM, floppy disks, Internet and software in which the possibility for an interactive approach is offered (Smeets, 1996; Jager and Lokman, 2013). Fetterman, (2016) also viewed multimedia as those resources used for instruction that include one or more media such as graphics, video, animation, image and sound in addition to textual information. He identified four important characteristics of multimedia as:

i. Multimedia systems are computer controlled
ii. Multimedia systems are integrated

iii. The information content must be represented digitally

iv. The interface to the final presentation of media.

The power of multimedia lies in the fact that it is multi-sensory, stimulating the many senses of the audience. It is also interactive, enabling the end-users of the application to control the content and flow of information. This has introduced important changes in the educational system and impact the way we communicate information to the learners (Neo and Neo, 2013).

Ogunbote and Adesoye (2006) expressed that multimedia technology adds a new dimension to learning experiences because concepts were easier to present and comprehend when the words are complemented with images and animations. Stating further that it has been established that learners retain more when a variety of senses are engaged in imparting knowledge; and the intensity of the experience aids retention and recall by engaging social, emotional and intellectual senses. Reinsman (2014) expressed that multimedia involves processing, storage, generation, manipulation and retention of multimedia system, and the resources could include text files, pictures, video, audio, databases, archives, library catalogues, course notes, relevant links to various websites and easy access to search engines available on the Internet (Shuell and Ferber, 2010).

Multimedia is, in essence, a presentation of information that incorporates multiple media such as text, audio, graphics, and animation. The representations can be redundant, incorporating the same content, or complementary, offering additional information. Multimedia need not be computerized, but computers offer some of the most seamless multimedia presentations. Moreover, digital multimedia, such as a simple CD-ROM, can offer teachers greater ease of presentation. The evolution of multimedia has made it very

possible for learners to become more involved in their work. With multimedia technologies, they can create multimedia applications as part of their project requirements. This would make them an active participant in their own learning process, instead of just being passive learners of the educational content. However, Babajide (2012) identified different types of multimedia communication, some of which include computer hardware, computer software, public address systems, slides, overhead projectors, opaque projectors, videos, cassettes, audiotapes, cassette recorders, flip, time sequence, stream charts, Diorama still motion pictures among others.

2.03.6 Concept of Academic Performance

Student academic performance is the outcome or result of a student's study at the end of a given period. In addition, it is said to be the achievements obtained by students in relation to ability or the level of understanding, representing the academic inputs in terms of skills, knowledge and technical know-how that have been assimilated (Datar, Sturm & Magnabosco, 2016; McCarthy, Lindgren, Mengeling, Tsulikian and Engvall, 2014). It is measured or shown in grade points and class of degree. Having said that, the educational process is complex; it makes sense to highlight that ascertaining or determining student academic performance is done through evaluation. Evaluation is often said by psychologists and test and measurement experts (e.g. Adewolu, 1998; Poplam, 2013) to be sensitive, significant and critical, and without it, academic performance would be unknown. The outcome of students‟ evaluation largely reveals "academic performance".

It is for this reason that the academic performance of students is greatly relied on as an indicator of academic achievement. In other words, it is believed that it shows how much in

terms of content (impacted knowledge) the students have learnt, retained, utilised and can apply in the present and in the future (Potokri 2011). In a nutshell, student academic performance, according to Cuttance (2014), is the learning outcomes of schooling in terms of the cognitive and affective outcomes that students acquire as a result of their schooling. In addition, a number of social outcomes are derived from schooling; these are socialization and social control functions. For the purpose of clarity, the broad set of outcomes from schooling is categorised into cognitive outcomes, affective outcomes and psychomotor outcomes.

However, Cuttance (2014) states that assessment of performance focuses on three types of analysis of students learning outcome data: the level of achievement of students in relation to externally established standards, the relative change over time in cohort difference in student achievement and the difference in achievement among groups of students, as well as, finally, the progress made over time by students attending school. In this case, concentration is on higher education with regard to data on the last two learning outcomes.

With regard to the effectiveness of educational institutions and students, the cognitive learning outcome is often used because it is centred on the core curriculum of literacy and numeracy. When taking a look at the academic performance of women students in higher education, it is of paramount importance to consider cognitive learning outcomes as a major yardstick because they involve curriculum-based knowledge and skills (Shield, 2013).

Academic success is, without doubt, the main focus of all educational activities and has received tremendous attention from educationists across the world. However, prediction or determination of academic performance is still not clear to many people. Once again, the assessment of academic performance is complex and by no means an easy task. There are several ways in which students' academic performance is assessed. They include

examinations, tests, continuous assessment tasks and projects. In Nigeria today, examinations are still the most popular model for assessing students (Gbenu, 2011; Levine & Wang, 2012). Examinations are an educational activity that has been well organised to evaluate, test, measure and consequently evaluate the cumulative knowledge of students in their academic endeavours (Sanni, 2017; Kelly, Kelly & Clanton, 2016). Academic performance in its true context should be seen as a process, not merely a once-off situation (Freize, Francis and Hanusa, 2015).

2.03.7 Concept of Social Studies Education

Social study is defined as the study of man in his entirety. It has also been defined as the study of man and his physical and social environment. It studies man as he relates to his physical and social environment and the outcome of such a relationship. According to Kadiri (2013) social studies is:

> *An integrated study of the social sciences and humanities to promote civic competence. Within the school programmes, social studies provide coordinate, systematic study drawing upon such disciplines as anthropology, economics, geography, history, law, political science, religion, etc. as well as appropriate content from the Humanities, mathematics and natural science. The purpose of social studies is to help young people the ability to make informed and reasoned decisions for the public good as citizens of a culturally diverse, democratic society in an interdependent world.*

According to Ololobou (2010), social studies is "the integrated study of man as he battles for survival in the environment both physical and social. It promotes awareness, appreciation, and understanding of the reciprocal relationship between man and the environment. The essence of studying social studies is to make out of learners, persons who are responsive and responsible citizens". According to Omooba, Obi and Olabode (2008), social studies "is a programme of study which a social studies teacher uses to instil in students the knowledge,

skills, attitudes and actions it considers important concerning the relationships human beings have with one another, their world and themselves". According to Mezieobi, Fubara and Mezieobi (2008), social studies may be simply defined as an "integrative field of study which probes man's symbiotic relationships with his environments endows man with the reflective or contemplative capacities, intellectual, affective, social and work skills, to enable him to understand his world and its problems, and to rationally solve or cope with them for effective living in the society."

According to Okonkwo (2000), social studies is "The study of man and his physical and social environments and of how man interacts with others". However, to Onipe, (2004), social studies is an integrated study that critically looks at the man and his complex relationships within his socio-physical environments.

According to Ogundare, (2000), 'Social study is a study of problems of survival in an environment and how to find solutions to them. It is a multi-disciplinary study of the topic, a problem, an issue, a concern or an aspiration'. Furthermore, according to Ololobou (2004), social studies is seen as An organized integrated study of man and his environment, both physical and social, emphasizing on cognition, functional skills, and desirable attitudes and actions for the purposes of producing an effective citizenry.

Similarly, Omooba, Obi and Olabode, (2008) indicated that social study is that aspect of learning which deals with how to get along with one's environment, physical as well as human, and to develop those skills, knowledge, attitudes and values that characterize responsible citizens in a free society. Going by the above definitions, it is apparent that social studies education is a discipline or subject that focuses on solving the problems of man in society.

2.04 Nature of Social Studies Programme

Discussion about the nature of social studies education usually raises two vital impressions (Kadiri, 2013). Firstly, social study is viewed as a simplified social science. Secondly many have the feeling that it is a combination of social science and humanities. Social study is far from these, it is part of today's thinking of evolving an integrated curriculum. This thinking is seriously reinforced by certain beliefs. Firstly, social, political, and economic problems are no respecters of geographical boundaries; secondly, at several times of our lives we make decisions not only for ourselves but for others; inadequate knowledge can impede sound, decision-making. Thirdly, the complexity of the world and rapid globalization, necessitate broad knowledge. Fourthly, democracy is gaining ground in Africa. Social studies education is necessary for the survival of democracy.

On the basis of the above and many others, social studies use concepts, facts and generalizations from the social sciences. Social studies tart where the social sciences end. Broad knowledge is needed for individuals to function well in a complex society. This holistic approach to curriculum organization in social studies makes it possible for vital issues such as population, environment, race, intolerance, drugs, family life, refugees, etc. to be accommodated.

The Nigerian society is rich in its diversity of people, cultures and traditional, physical environments and aspirations. One major task of social studies course is to attempt to understand this diversity, foster unity and promote desirable social attitudes such as self-discipline, social and moral responsibility. The relevance of social studies is primarily to help the individual to look into his society and to understand its problems for which he should help to provide solutions. Different societies have different problems; hence the

conception of social studies for any given society must take into account the peculiarities of each society. Thus although there are various concepts of social studies, the conception of the course in the Nigerian society must be very closely tied to the changing needs, problems and challenges of our society as they occur over time (Federal Republic of Nigeria [FRN] 2013).

Social study is an integrated study of man and the outcomes of his interactions with various environments. In other words, social study is different from the older and traditional school subjects, e.g. history, geography, economics, government, sociology, religious studies etc. its nature and content are based on its integrated concepts and methodology (FRN, 2013). The subject focuses on problems of man's survival in the process of his interactions with his environments.

In focusing on problems, it takes into consideration all conceivable factors and aspects of the problems are these historical, geographical, political, economic, sociological, religious, psychological, scientific and technological, etc. it thus employs the systems analytical approach to the identification and the study of problems of man in his multi-faceted environment. Social studies education utilizes a horizontal and spiral approach for the analysis of societal problems.

Although social studies aims at imparting knowledge and providing valuable information necessary for life, its basic function is to help pupils to inculcate desirable social habits, attitudes and values, as well as useful skills of listening, reading, writing, calculating and problem-solving and those of other intellectual and manipulative nature, so much needed for the survival of the individual in the society. As an integrated subject, therefore social studies education is not the study of traditional subjects with many overlapping areas. It is not just a

mere amalgamation of these traditional subjects, in fact, it is an integrated curriculum for wholesome education.

The nature of social studies refers to the essential features or characteristics which distinguish social studies from other subject areas. Some of the characteristics of social studies opined Ololobou (2010) include the following:

- It is a study of man as he interacts with the environment, Man is the central or core concern as he relates to the various aspects of the environment.
- It is integrated knowledge and information drawn from a wide variety of sources is used to study man comprehensively. Social studies, therefore, portrays the oneness and indivisibility of knowledge and the reality of man's interaction with the environment.
- Social study is value-based. All three domains of learning cognitive, psychomotor and affective are emphasized. However, the affective aspect of learning is given prime importance because social study is interested in modifying the behaviour of learners to get them integrated into their various cultural areas.
- Social study is a problem-oriented area of study. It is a response to the problems of society with a view to seeking rational solutions to the identified problems.
- An inquiry is the core of all teaching approaches in social studies. Learners are expected to go into the environment to investigate, collect, analyse data to make inferences and conclusions on social issues and phenomenon,
- Social study is citizenship education. It is a study that exposes learners to the basic tenets of citizenship which emphasizes rights and obligation, human dignity and

worth, dignity in labour, moral and spiritual principles in interpersonal relations to make them socially responsible citizens.

The National Council of the Social Studies (NCSS) noted that meaningful social studies programmes highlighted these features. Learners in social studies focus themselves on understanding the world they live in. They focus the problems around them; make inferences, conclusions and decisions based on observations made in the light of established societal values. Thus, social study is the great connections between school learning and living in the real world. Learners are prepared through social studies for active, meaningful and challenging citizenship in a democracy like Nigeria.

2.05 Scope of Social Studies Education Programme

Some people wrongly accused social studies education as being 'jack of all trades'. This is because of its wide coverage and interdisciplinary nature. Thus, they use to refer the subject as a forest-because to them it has no entry and exit. The professional teacher of social studies has to accept and propagate the view that modern curriculum trends in the context of his subject area have been developed to solve the problem created by the traditional subject approach which has bedevilled curriculum programmes in our schools. In this new dispensation, social study is aimed at incorporating interactively, knowledge and inspiration from many realms of learning. Indeed, any prospects for serious improvements in the pedagogy of modern social studies must be dictated by an understanding that knowledge from anyone discipline is too limited to enable an individual to fully understand the immense complexity of human behaviour and to make reflective decisions on personal and public issues (Banks and Clegg, 2017) cited in Okam and Nedoso (2003). According to Okam and Nedoso (2003:3):

> *It has become a willy-nilly affair that many related subjects such as history, geography, economics, sociology, political science, anthropology etc need to feature in the social studies content and or programmes because concepts from these disciplines constitute the curriculum bedrock of the subject area. These subjects largely constitute the content for dealing with the central issues which social studies, as a discipline, cannot afford to dispense with and survive as a subject worthy of pursuit. Some of these vital issues, according to the Nigerian National Policy on Education (1981), include the following: "a shared responsibility for the common good of society", "a cultivation of a sense of compassion for the less fortunate": "a cherishing of a sense of respect and tolerance for others"; "a cultivation of social attitudes and values such as co-operation, participation, honesty, interdependence, open-mindedness, integrity, trustworthiness, diligence and obedience"; "an acquisition of dispositions and or attitudes favourable to social, cultural, physical and economic development"; "rationality"; "interaction amongst peoples"; "loyalty and patriotism"; "freedom and authority"; "value inquiry"; "value-analysis" and "critical thinking".*

These, concepts and conceptual frameworks according to Okam and Nedoso (2003) which derive from a large variety of subject disciplines, including the social sciences, do not only constitute the centre-piece of social studies education but also represent important curricular artefacts necessary for an effective establishment of learning and behavioural objectives for students and learners in the subject area.

In the light, if the above, Okam and Nedoso (2003) stated that it is expected that these concepts and conceptual frameworks are to function as differentiated focal points in terms of which not only the language and most of the subject-matter or content of the social studies are formulated but also in respect of which young learners are assisted to develop needed fundamental knowledge and positive attitudes which they would use in buttressing their own rational behaviour, as effective citizens sooner or later within the Nigerian political framework.

Any prospects for improvement in the classroom image of the social studies curriculum demands that the professional teacher of the subject must subscribe and conform to the instruction demands and curricular underpinnings of the subject area. Thus, this professional

teacher must, of necessity, put up with the view that the language of his subject area underscores a mastery of the skills associated with the expanded meanings and knowledge of the interconnections and interrelationships deriving from the aforementioned concepts and conceptual frameworks and many others. Possession of a sound knowledge of networks of relationships and interrelationships arising from these structures and many others which emanate from the social science disciplines implies that meaningful propositions, generalizations and even theories can be formulated and understood in social studies (Okam and Nedoso, 2003).

Therefore, based on the above, Okam and Nedoso (2003) state that, because of its multi-disciplinary and interdisciplinary emphases, classroom work in the social studies must move towards a new synthesis in bringing the component parts of the curriculum into some coherent shape so that various kinds of disciplined thought and inquiry which bear upon the practical activity of education be brought to a new focus in order that new kinds of understandings be generated. The broad nature of social studies enables it to cover a wider ground. Social studies, as already pointed out, investigates the totality of man's activities, generating understanding, developing needed skills and encouraging desirable attitudes (Kadiri, 2013).

Investigating man's activities involves the study of man in various contexts. Akinlaye (2010) stated that social studies do not only investigate the partial or the temporal angles of man as geography and history do, respectively, but it studies man from both perspectives. This view agrees with modern thinking about the goals of education and specifically that of social studies education. Similarly, Hanna (2013) suggested that the scope of social studies must be broad, and rich in concepts, facts and generalizations from the social sciences so that it does

not only help to raise academically versatile individuals but also responsive and responsible citizens. Based on the above, Okonkwo (2004) identified many areas which she referred to as the scope of social studies education programme. These are discussed below:

Cultural Heritage

The cultural heritages of a people are embodied in stories about their values, hopes and dreams, fears and dilemmas. The major responsibility of the school is to transmit the cultural heritage to the next generation. This is accomplished by putting students in touch with history-the people, ideals, artifacts and dilemmas of the past that need to be brought forward as a part of the present and future.

Every human society (and groups within large modern societies) has particular patterns of behaviour that make up its culture. A culture consists of languages, tools, important documents, customs, social institutions, beliefs, rituals, games, attitudes, utensils, clothing, ornaments, works of art, religion, and more. Within social groups, individuals learn accepted means of meeting their needs and coping with problems of living. These ways of perceiving, thinking, and behaving are part of their heritage.

Global Perspective

Every society struggles with the on-going conflict between the desire for independence and the realities interdependence. The world is becoming more crowded, more interconnected, and more volatile. There is the desire for peace but the preparation for war continues. What happens in the most distant part of the world may quickly affect us. Students must, therefore, understand the worldwide dynamics of human,

technological, and ideological positions or practices as culture is shared across the world. Inter-dependence demands that our perspective be global.

Political/Economic Issues

One of the desired attributes of a citizen of any country is the ability to function effectively within its political and economic systems. This means the ability to make personal and social decisions, often with little time and incomplete information; citizens need to become aware of their political and economic opportunities and obligations.

To a large extent, citizens still see their civic roles as public and their economic roles as private. We see all "civic" citizens as unequal because of their different standards of living. Within a given country, the citizen must understand the relationship between civic and economic justice and power, and work for the public good as well as the private good.

Tradition and Change

People, events, tools, institutions, attitude, values, and ideas all change over time. History records the struggles of people and groups who favour change and those who oppose change. The rate of change is uneven among and within different culture and societies but change is continuous and the rate of change in today's world is accelerating.

As the rate of change accelerates, we must place greater importance, than in the past, on anticipating the future. Important as change is to our lives, we must recognize that human experience is continuous and interrelated. Continuity and traditions are facts of life and provide life and meanings, beauty, and truth. In some ways, "nothing new occurs

under the sun". All persons, events, actions and change are the outcome of things that have gone before. Students should learn how change and continuity constantly influence their lives.

Social History

The need for equity and justice, and the large reservoir of historical and contemporary evidence of neglect demands that we include women, minorities, and the so called ordinary people in our study of the human family. Human values come to life through the stories of people who played many roles in the dream of history. For example, children can learn about courage from stories and teachers can use songs and poetry of the done-trodden to teach about justice. Social history encourages the study of the past through primary sources and personal accounts.

Spatial Relationships

The study of areal distribution, the examination of particular places, and the delineation of regions help students understand how earth space is organized. People use similar earth space or areas in different ways. They link or interconnect the different areas with transportation and communication routes. They move themselves, messages, and goods and services over the routes. The discipline most involved with spatial relationships is geography.

Geography is concerned with understanding the location and spatial arrangement of places and landscapes on the earth. Consequently, geography links the social and natural sciences and provides the spatial perspective necessary for understanding culture and human behaviour.

Social Contracts

The fact that one is part of a society also requires that we enter into a social contract with our fellow citizens. This contract influences our public behaviour and defines our privileges and obligation as citizens. Social contracts are entered into not only by people as they approach the age of maturity, they are also a real and necessary part of the groups we call family, schools social clubs and other social organizations.

Technology

As humans modify nature for their purposes they engage in both sciences and engineering. Technology can also be understood as one of our "tools". We use these tools in utilitarian as well as aesthetic ways to bring comfort, meaning, enjoyment and damage to our lives. In many ways, we are extensions of our tools; we see, hear, travel, fight and stay alive because of tools (technology). Social studies education must help students understand the role of technology in their lives.

Peace/Interdependence

Today, one hears cries for peace in many languages and from many nations. The tree of peace has its roots in justice. If there are no roots, the tree dies. The two concepts of peace and justice are inseparable. Every society struggles with the conflicts between the desire for independence and the realities of interdependence. Modern economic systems are based on the principle of specialization because it is more efficient and productive than other ways of getting work done.

Specialization occurs when we produce a narrow range of goods and services than we consume. Individuals, businesses, regions or nations, can practice specialization. Specialization results from the division of labour, where productive tasks are divided among workers to take advantage of a workers skill at a specific production operation.

Citizenship

Citizenship in a democracy involves both obligations and privileges. Students need to understand how government and politics actually work. They need to understand the underlying purposes and values of government in a free society. In social studies classes, students should have opportunities to develop the abilities required to be effective citizens in a democratic society. Students heed opportunities to learn and practice their roles, rights and responsibilities as citizens of a democracy and members of the global community.

The above themes present perspectives that provide students with the temporal, spatial, and cultural criteria necessary for comprehension and rational action. Emphasis on specific themes may vary through the grade levels. However, it is necessary that each theme is accorded some attention at each grade level.

2.06 General Objectives of Social Studies Education

Social Studies is the study of society and it also study how man live in the society with a view to find solution to his problems and satisfied his needs. Therefore, social studies curriculum is aimed at producing students that can think rationality and act wisely so as to contribute their quota in the development of the society for which they live, thereby pave way to relating with other cultural group within and outside Nigeria effectively and

communicate with them very well. Obiadi (2015) outlined the following as the general aims and objectives of Social studies in Nigerian system of education: -

i. To give the pupils a good knowledge of their environment and the problem therein.
ii. To involve the pupils deeply in the life and problems of the community.
iii. To give the children a sound knowledge of foreign communities beyond their own environment.
iv. To develop an understanding of the relationship between Nigeria and rest of the world.
v. To build up patriotic and autonomous citizens.
vi. To promote the appreciation of our culture and our cultural heritage.
vii. To encourage the pupils to appreciate the culture of other lands.
viii. Socialize and humanize the individual child by helping him to acquire the right knowledge, habit and skills of self reliance.
ix. To inculcate the spirit of unity in diversity, interdependence and cooperation of all members of the local community as well as the national and international communities.
x. To help students to develop a good habit of independent studies which will form the foundation for continuing education in future?
xi. To develop positive attitude towards science and technology innovations as means of improving man's environment.
xii. To equip the students with basic skills and social habit which will help him to fit into the society (Obiadi 2015)

2.06.1 The Objectives of the Nigerian Primary School Social Studies

The National Policy on Education (FRN) (2013), provided the blue-print for the incorporation and eventual adoption of Social Studies as a core curriculum subject in primary and junior secondary schools in Nigeria. The idea behind this policy is hinged on the dire need to make education in Nigeria relevant to the needs and aspirations of the people. It states as follows: (i) the inculcation of national consciousness and unity; (ii) the inculcation of right type of values and attitude; (iii) the training of the mind in the understanding of the world around; and (iv) the acquisition of appropriate skills, abilities and competencies both mental and physical as equipment for the individual to the live in and contribute to the development of his or her society. Drawing from the above national objectives, Dubey (1980), cited by Kadiri (2013) enumerated, the following as the objectives to be achieved by the learners from primary school Social Studies:

(i) Children self-confidence and initiative based on an understanding of their accomplishment and potentialities and their own worth.

(ii) Their power of imagination and resourcefulness.

(iii) Their desire for knowledge and continue learning

(iv) Their appreciation of the dignity of man and liberty

(v) Their sense of composition for the less fortunate

(vi) Their sense of respect for and tolerance of the opinions of others even in disagreement

(vii) Their willingness to accept necessary changes within system of law and order deriving from the will of people.

(viii) Social attitude such as cooperation, participation etc.

(ix) A spirit of national consciousness and patriotism.

(x) Social awareness and critical judgment, (pp. 100 – 101)

2.07 The Relevance of Social Studies to Nigeria Primary School System

Nwanna, Nzewunwa and Okoh (2012) posited that the fact that Social Studies enjoys the status of a core subject, implies that it is perceived as a very important and worthy of being studied by all student Social Studies equip the pupils with good knowledge of the environment Physical, Social, Economic, Religious and Psychological, Cultural, Scientific and Technological. Good knowledge of these environments places the pupils at a vantage position and thus, provide him with veritable psychological and Social skills with which to prosecute the environment. The teaching of Social Studies in primary school will also inculcate in the pupils' citizenship training. Social Studies is laced with the study of the lives and achievement of great leaders heroes and heroines. Their past positive tract records act as a veritable template for the younger generation who are potential future leaders. Okam (2016) posited that: Social Studies constitute one of the curricular arrangement accepted for the purpose of many strong foundations for the purpose of producing effective citizens. The teaching of Social Studies in primary schools will acquaint the pupils with virtues of national consciousness. This can be achieved through the teaching of national Anthem, National flag, Nigeria Coat of Arm and other national symbols. Teaching Social Studies in primary school will also equip the pupils with knowledge of their environment and places farther afield, The teaching of topics like Nigeria as a nation, other people and culture impacts immeasurable knowledge in the pupils. Teaching pupils the rudiments of conservation of natural resources is the best option aimed at fine-tuning the minds of the learners towards conservation and wise use of natural resources. The teaching of Social

Studies involves the use of many resources. These resources may be manmade, natural, human and technological in nature, arrays of teaching recourses will place them in a good position to construct, manage and utilize these resources effectively and efficiently.

The pupils are taught positive social interaction in Social Studies classes irrespective of their divide, religions and tongues. This enables them to accommodate each other's differences early in life. Social Studies help pupils to have ample knowledge of the constitution, law and order, culture of his people and that of other lands, as well as the value of cooperation, comradeship, effective citizenship, national unity, and interdependence at the community, local, state, national and international levels. The teaching of Social Studies in primary schools offers the pupils the golden opportunity to be better informed about the various forms of government being practised in many parts of the globe. This places them at a vantage position to contribute meaningfully to democratic issues when they grow up.

Tapper (2016) in support of this view, pointed out that the school is a formal agent set up by the society to inculcate appropriate forms of political behaviours aims at the correction of their citizens. Teaching elements of physical environment helps to eradicate episodes of superstitious beliefs from the minds of the pupils. This thus places them on the right pedestal to explain natural phenomena like thunder and lightning, rather than thinking that they are manifestations of the spirits. Social studies teach the pupils rudiment of religion across all cultures of the world. This helps the pupils to imbibe the virtues of religious tolerance at a tender age. Marriage laws and customs and types are also taught in primary Social Studies. This teaching prepares the pupils effectively for future harmonious marriages devoid of crisis. Moreover, Social Studies teaching in primary school integrate the pupils effectively

for Social life. Teaching social skills and elements of morality inculcates the essence of good behaviours in pupils.

That aside, teaching the customs, beliefs, norms, mores and taboos of the society provides the pupils with a veritable instrument to be applied in making decisions with regards to their behaviours. Arising from the above discussion, the relevance of Social Studies in the Nigerian primary school system cannot be undermined. A child that is well-schooled in Social Studies contents is expected to be styled as worthy in character and learning and this will have a positive multiplier effect in the larger society, but this is far from reality, owing to some problem facing the teaching of Social Studies in primary schools.

2.08 Historical Development of Social Studies Education in Nigeria

Social Studies as an integrated discipline was not in existence during the colonial era in Nigeria (1840-1960). What was found in the primary and post-primary schools in the country was the teaching of a kind of curriculum called "General Knowledge" (Udoh, 2017). Of course, the Nigerian child was, therefore, being educated outside his/her own environment, his/her society and culture. It was more appropriate at that time to know and explain concepts from European examples. The development of Social Studies in Nigeria, however, came earlier than those of other countries in Africa. This was because as early as 1958, Ohio State University in the United States of America had sponsored some Nigerians for training programmes in Social Studies. The arrival of the recipients of such training programmes greatly influenced their thoughts about Social Studies. For instance, they perceived the social ills that accompanied Nigeria's transition from the colonial era to independence. They discovered the high rate of acculturation among

Nigerians and the rate at which the nation's cultural traditions were breaking down. They, therefore, felt that the only way to salvage the country was to train the young ones in a manner that would provide them with opportunities to catch up with the new problem of change (Lawal, 2013).

This pattern of Social Studies thoughts was also complemented with an earlier effort at introducing the subject on an experimental basis in the Northern Nigeria teacher training institutions as a formal school subject. However, between 1964 and 1965, Social Studies had been introduced into Nigeria through the Northern Education Project and the Aiyetoro Comprehensive High School Project of Western Nigeria. During this same period, the then Western Nigeria Ministry of Education began preparation for the propagation of the subject by convening a conference and agreeing to an outline of the Social Studies syllabus for secondary schools classes I and II. This was later assigned to the Department of Social Studies in Aiyetoro Comprehensive High School with the assistance of the Ford Foundation Aid and the Comparative Education Study and Adaptation Centre (CESAC). The experimental teaching of Social Studies did not experience total success in Eastern Nigeria due to the civil war. The Northern states' education committee of the Interim Common Services Agency (after the creation of six states from the existing Northern States), however, made a decision that Social Studies should be introduced into schools and colleges in the Northern states.

However, by 1969, Social Studies department was firmly established in the Institute of Education, Ahmadu Bello University in Zaria. In that very year, a national curriculum conference was held in Lagos and this gave a better national recognition to the subject as a means of achieving national objectives of education. However, 1970 witnessed another

tremendous position change in Social Studies as materials produced for primary and teacher's colleges in the Northern states were out and the CESAC's book was modified and refined. More states such as Lagos, Kwara and Kaduna began to introduce the subject in 1971. Representatives from the East Central State Ministry of Education also attended Social Studies Association of Nigeria (SOSAN) now Social Studies and Civic Educators Association of Nigeria (SOSCEAN) Conference in 1971 with the full support for the teaching and learning of the subject. With the first National Curriculum Workshop held in Ibadan under the sponsorship of the Nigeria Education Research Council (NERC), the first-ever National Social Studies Syllabus for primary schools was produced. Concepts, nature, objectives, teaching strategies, teaching aids, evaluation techniques were discussed at the conference.

Based on the necessity for the training of pre-service Social Studies teachers in primary schools, the Nigeria Education Research Council (NERC) produced syllabus for teachers colleges in 1972 and the Institute of Education; ABU Zaria introduced the subject into its Post Graduate Diploma in Education (PGDE) programme. In the same year, a degree 32 Course in Social Studies in ABU, Zaria and Nigeria Certificate in Education (NCE) programme in Advanced Teacher's College Sokoto was introduced in 1973. Further, 1974 and 1975 witnessed another development at the Institute of Education, University of Lagos, where the subject was introduced at Associateship and NCE levels. 1976 was another year when Universal Free Primary Education was launched throughout the country, and the teaching of Social Studies in the primary schools replaced separate subjects of the social sciences. It became compulsory in teacher's colleges. In 1978, two-

year Bachelor of Education (B.Ed) degree programmes in Social Studies was also introduced at ABU, Zaria.

However, by 1980, the discipline of Social Studies was offered at all levels of our educational system and the National Policy on Education made it a core subject in primary and junior secondary schools. In 1981, the NERC now Nigerian Educational Research and Development Council (NERDC), thought it wise to review the National Primary Social Studies Curriculum Guide which was produced in 1971. The revised guide was published by the Federal Ministry of Education in 1983. However, 1981 and 1984 witnessed another rapid development because many more universities started post-graduate degree programmes in Social Studies. A typical example of such institutions included: Ife, Ibadan, Ilorin, Lagos, Nsukka and Jos. The Joint Consultative Committee (JCC) also approved the Junior Secondary School Social Studies Syllabus (Udoh, 2017). The National Teacher's Institute did not only produce the Grade II Social Studies Syllabus and texts, but it also went ahead to write course books on Social Studies for NCE for Distance Learning System, the distribution of which started in January 1990. Almost all colleges of education now offer Social Studies in their current programmes. Degree and post-graduate programme in Social Studies are now being offered in more than ten universities in Nigeria. The skepticism on the nature, scope and philosophy of Social Studies has been over to some extent. It is now a compulsory subject in the first nine years of a Nigerian child's education courtesy of the new 9-year Basic Education Curriculum launched in 2007.

In a related development, there is an on-going effort by stakeholders in the field of social studies education to pursue the review and full implementation of social studies

education curriculum for senior secondary schools in Nigeria. The curriculum was developed some years back, but its implementation is yet to be realized, this will serve as a measured boost to the subject. However, the merger of Social Studies teachers association and that of Civic Education teachers association under one umbrella in 2012 as Social Studies and Civic Educators Association of Nigeria (SOSCEAN) is another good step in the right direction especially when it comes to pursuing common goals and promoting and protecting their interests; their voices will be louder and their words will have weight.

2.09 Challenges of using Multimedia in Teaching Social Studies

Multimedia resources are useful in teaching social studies they are in most cases associated with some problems in an observational study carried out by Mezieobi, (2015) on the utilization of social studies instructional material in junior secondary school and those finding is generalizable to all social studies classrooms in Kaduna state, educational zone. The following inhibitions readily calls to mind are:

1. With regards to social studies instructional aids utilization, social studies teachers use only textbook, map, journals, mounted magazines plethora of reading resources
2. The teacher's lack of enthusiasm or commitment to effective social studies teaching
3. Some of the materials are very expensive examples; projector, films slides, computer set. This is why the materials cannot be obtained in many schools
4. Inadequate of a teacher's familiarity with a given instructional material

5. Inadequate of knowledge of the operational techniques in schools where they are available, some teachers do not know how to operate them therefore making them be useless.
6. The absence or irregular electricity to use in operating electronic devices in our schools
7. Inadequate of fund and maintenance from the government and management lead to problems facing some schools.
8. A teacher's laziness in either utilizing appropriate materials in the teaching-learning social studies
9. A teacher's ignorance or neglect of the values of instructional audio-visual in the instructional process
10. Unavailability of transport facilities to undertake educational trips or to arrange for visits to resource centre.

2.10 Review of Related Empirical Studies

The review of related empirical studies attempts to look at studies conducted that have bearing to the current study. Many scholars conducted researches on issues that are to some extent similar to the current study. Some of these works are reviewed below.

Algerioy (2016) carried out a study on the impact of using multimedia on the academic achievement of the first-grade secondary school students in mathematics in Riyadh by using the experimental method with the study sample which comprises 62 students. They were divided into two groups where the experimental group studied on its own using multimedia while the control group studied using the traditional method. The study found out no statistically significant differences, between the average achievement of the experimental

group students and those belonging to the control group, in remembrance, understanding and application level. The fundamental difference between the two studies lies in the area of scope, methodology and statistical techniques used. For instance, this study centres on primary school students while that of Algerioy (2016) used secondary school students. The current study used purposive sampling technique while Algerioy (2016) used systematic sampling. The current study uses paired and independent-sample t-test while Algerioy (2016) used ANOVA. However, they are similar in terms of design (quasi-experimental).

Similarly, Losike-Sedimo (2016) carried out a study titled Bringing Teaching to Life: Using Multimedia to Engage and Empower Students'. The paper presents the results of a study on the impact of simulations and virtual reality on university students' achievement and their attitude. These are then discussed in the context of specific media characteristics. The researcher used a mixed-method design and examined hypotheses for effect as well as analysed qualitative data for stated assumptions. The underlying theory for the study is that simulations and virtual reality may bring teaching to life by creating an imaginary life experiential learning. Characteristically, these types of media do not only have graphics, sound, video, text, and the special impact that enhance the overall appeal of teaching, they also allow students to vicariously experience real-life situations. Students can experience past events, current trends, and future possibilities and also interact with each other. Through interactive participation by the students, multimedia software permitted logical thinking, problem-solving, hypothesis testing, inference and many activities of higher-order thinking. Computer simulations presented the potential to create complex and challenging student activities. Conversely, virtual reality has the potential to transport the minds of students into a given set of experiences. Students felt that they were actually in the

experience they were watching on the screen. Virtual reality experience resulted in learning that connects the student with their emotions, cognitive skills, and physical sensations. Such experience promoted the memory of content learned.

This study sought to multimedia in teaching social studies in primary schools in Nigeria. Building on theory, a virtual psychology lab was created to train students to identify human development problems and learn strategies for problem-solving. Students were later examined for improved learning, acquisition of skills, knowledge and attitude. The results show that there are numerous benefits for engaging multimedia in teaching. The study concludes that there is a need for changing teaching methods to empower students by embracing technology. The study by Losike-Sedimo (2016) centred on examining the effectiveness of multimedia resources on learning outcome while the current study centres on the impact of multimedia resources for teaching social studies in primary schools. The current study and that of Losike-Sedimo (2016) is quasi-experimental. The teacher made test for data collection for the current study while Motivation questionnaire and interview guide, achievement tests and attitude survey were used by Losike-Sedimo (2016).

Reis (2011) conducted a study on Video-based multimedia designs: A research study testing learning effectiveness. This paper summarizes research conducted on three computer-based video models effectiveness for learning based on memory and comprehension. In the quantitative study, a two-minute video presentation was created and played back in three different types of media players, for a sample of eighty-seven College freshman. The three players evaluated include a standard QuickTime video/audio player, a QuickTime player with embedded triggers that launched HTML-based study guide pages, and a Macromedia Flash-based video/audio player with a text field, with user-activated links to the study guides

as well as other interactive on-line resources. An assumption guiding the study was that the enhanced designs presenting different types of related information would reinforce the material and produce better comprehension and retention. However, findings indicate that the standard video player was the most effective overall, which suggests that media designs able to control the focus of a learner's attention to one specific stream of information, a *single-stream focused approach*, maybe the most effective way to present media-based content. The Reis (2011) study was quasi-experimental which examined the effectiveness of multimedia on learning outcome while the present study is a cross-sectional survey which centres on the availability, organization and utilization of multimedia resources for teaching social studies in Colleges of Education in Nigeria. The current research uses pupils in primary schools as a sample while that of Reis (2011) used freshman college students as the sample. The fundamental difference between the two studies lies in the area of scope, methodology and statistical techniques used. They are all quasi-experimental.

However, Adedapo, Salawu and Afolabi (2011) conducted a study titled Impact of Video and Audio Taped Instruction on Cognitive Learning Outcomes in Economics. This study assessed the effectiveness of video and audiotaped instructional strategies on cognitive learning outcomes in Economics. The sample used for this quasi-experimental study consisted of 364 Senior Secondary Two (SSII) students drawn from secondary schools in Oyo Metropolis. Two hypotheses were postulated and tested using Analysis of Covariance (ANCOVA), Turkey/Kramer post hoc test and mean. The results of the study showed that there was a significant difference in the student's cognitive achievement and interest in Economics which were mostly enhanced by the video-taped strategy, followed by audiotaped strategy and minimally by the conventional strategy. Recommendations were

made that the video instructional strategy should be given more emphasis during teaching and learning of Economics and be integrated into other related subjects in secondary schools. The difference between the two studies lies in the area of scope, methodology, sample and statistical techniques used. This study centres on primary school students while that of Adedapo, Salawu and Afolabi (2011) used secondary school students. The current study used purposive sampling technique while Adedapo, Salawu and Afolabi (2011) used cluster sampling. The current study uses paired and independent-sample t-test while Adedapo, Salawu and Afolabi (2011) used ANCOVA. The current study used social studies while Adedapo, Salawu and Afolabi (2011) used Economics. However, they are similar in terms of design (quasi-experimental).

In a related development, Akerele and Ajayi (2012) conducted a study titled Effect of Video on the Teaching of Library Studies Among Undergraduate at Adeyemi College of Education, Ondo, State. The objective of the study was to determine the effect of video on teaching undergraduate a course (Library Instruction Programme, LIB001) in a College of Education. The study raised two (2) research questions and three null hypotheses. The study was a survey and a quasi-experiment. Therefore, it employed pre-test post-test control group experimental design using 100 students for the study (i.e. 50 each for experimental and control groups). The instrument used by the study to gather data was titled Effect of Video on Teaching Scale (EVTS). The surveying aspect consisted of 25 items on a four-point LIKERT-types scale. The factor Analytic method was used to validate the questioner as was found to be factually pure while Cronbach value of 0.72 was established. The data of the study were analysed using mean, standard deviation and analysis of covariance (ANCOVA). The study conducted that when the video in teaching, it enhances learners' positive attitude

toward the course. Also, it affects their performance positively. The study recommends that teaching and learning activities be supplemented with media such as video among others.

The fundamental difference between the two studies lies in the area of scope, methodology and statistical techniques used. The current study is in primary school while Akerele and Ajayi (2012) used undergraduate students. The current study used teacher made test while Akerele and Ajayi (2012) used teacher made test and questionnaire as data collection instruments.

Alabi (2014) study investigated the impact of videotape mediated instruction on secondary school students' achievement and retention in social studies. The study employed the quasi-experimental, pre-test, post-test, control group design. The sample consisted of 200 Junior Secondary School two (JSS II) students randomly selected from four schools in chanchaga Local Government Area of Niger State. Fifty 50 students of the intact class were assigned to each group. The research materials used include videotape mediated instructional Packages, the instrument used was the Social Studies Achievement Test (SOSAT) which was developed by the researcher. The reliability coefficient of 0.82 was obtained. Data analyses were done using Analysis of covariance, Post-hoc analysis was all used were necessary. These showed that the videotape mediated instruction package tested were effective in the learning of Social Studies and had great improvement on the student's performance after exposed to this media packages it is therefore recommended that teachers should try to get this package to make their teaching more effective. The fundamental difference between the two studies lies in the area of scope, methodology and statistical techniques used.

Odour and Igwe study, therefore, attempts to determine the effect of video-tape instruction on the teaching of social studies in Nigeria Primary Schools. A total of 102 students in two

intact classes were the study participants. Three null hypotheses were formulated and tested. Four instruments namely: video-tape recorder of the lesson used for the study, pupils' attitudinal scale, the social studies achievement test (SSAT); and Teachers' Guide for conventional teaching were used for the study. The results revealed there was a significant main effect of treatment on students' achievement. Also, it showed that there was a significant main effect of treatment on student's achievement in social studies. (F (1, 97) = 145.474 P.05). There was also no significant main effect of gender on pupils' attitude to social studies (F (1, 97) = 0.640; P>.05). There was no significant 2-way interaction effect of treatment and gender on pupils' attitude (F (1, 97) = 2.041; P>.05). Based on these findings, the government should equip public primary schools with necessary hardware and software facilities, primary school teachers should be encouraged to uptake the challenge of using this strategy and learn how to use it through in-service training. Above all, seasonal educationists should develop video instrumental packages to be used in schools.

Owolabi and Oginni (2013) examined the effect of animation and multimedia teaching on academic performance of students in sciences. 100 students were randomly selected from four secondary schools in Ado Ekiti Local Government Area of Ekiti State. The research design employed for this study was a quasi-experimental research design of two groups' pretest, posttest control design. The study lasted for a period of six weeks due to the experimental nature of the research. The pretest was administered to all the participants in other to be sure of their homogeneity. The treatment was administered to the experimental class with the use of cartoon-style animation and multimedia teaching and the second group was taught with conventional teaching approach. The pre-test and post-test scores of the students in the conventional and multimedia teaching group were used for the purpose of

data analysis. The results were analysed using t-test, three hypotheses were postulated. The result showed that (i) t- calculated (1.89) < t-table value (2.01), (N=100, x (19.50, 20.26), SD (5.02, 5.79), Df= 98) which confirmed the homogeneity of the two groups at the pre-test (ii) t-calculated (6.12) is greater than the t-table (1.98), (N=100, x(23.92, 50.66), SD (4.73, 6.43), Df= 98) which confirmed the effectiveness of the treatment of animation on the performance (iii) t- calculated (0.09) is lesser than the t-table value (2.00) (N=50, x(23.42, 23.92), SD (3.86, 4.73), Df= 48) which confirmed no significant difference in the performance of male and female students at 0.05 level of significance,. The findings, therefore, revealed that there was a significant difference in the performance of students exposed to cartoon style multimedia teaching and those that are conventionally taught. It was therefore recommended that the use of cartoon-style animation and multimedia teaching should be encouraged so as to complement other methods of teaching science in schools and colleges. The fundamental difference between the two studies lies in the area of scope, methodology and statistical techniques used

Salihu, Abdullahi, Alfa &Muhammed (2015) evaluates the impact of interactive multimedia instruction on academic performance of upper basic level students in Kaduna state-Nigeria. The study was specifically aimed at determining whether there is a significant difference between the mean academic performances of upper basic level students who were taught by way of Interactive Multimedia Instruction (IMI) and also to find out whether gender affects the students' academic performances in the experimental group. In light of the above, two corresponding questions and hypotheses were raised. The study used Upper Basic level III students as a population from which the sample was purposively selected. The Social Studies Interactive Multimedia Package (SOSIMP) and Social Studies Conventional Lecture

Method (SOSCOLM) were the instructional packages used. The Social Studies Achievement Test (SSAT) was an instrument for data collection. The mean, standard deviation and t-test independent sample were the data analysis tools. The study discovered that; upper Basic Level students who were taught by way of Interactive Multimedia Instruction (IMI) outperformed their counterparts who were taught through Conventional Lecture Method (CLM); the Interactive Multimedia Instruction (IMI) as an instructional strategy works well for both male and female students at Upper Basic Level as their academic performances improve significantly. In view of the above findings, the study made some recommendations which include the need for Kaduna state government to build and equipped computer laboratories in each secondary school in the state.

Yahaya (2015) conducted a study titled Impact of Multimedia Resources on Students Academic Performances and retention in social studies in Junior Secondary Schools, Kaduna State-Nigeria. The study was quasi-experimental in design. The study used 120 JSSIII students as participants. The study answered two (2) questions and validated two (2) null hypotheses. The arithmetic mean and standard deviation were used to answer the questions raised by the study. The independent sample t-test and paired t-test were used to validate the null hypotheses at 0.05 level of significance. The study discovered a significant difference between the academic performance of the experimental and the comparison groups. By implication students taught with lecture technique supplemented by Multimedia resources out-performed their counterparts taught with lecture technique only. The study discovered that gender has no effect on the performances of the experimental group signifying that the students that were taught with lecture technique aided by multimedia resources responded well irrespective of their gender. In the light of the above, the study

recommended as follows: Social studies teachers should be encouraged to use multimedia resources in their classrooms for students' optimum academic performance; the Kaduna state government through the Ministry of Education should provide all the needed funds for Junior Secondary schools to secure multimedia resources for use by teachers of Social Studies. The fundamental difference between the two studies lies in the area of scope, methodology and statistical techniques used.

Cyril (2016) study is aimed at investigating the impact of multimedia instruction on retention and achievement of basic machining skills in mechanical engineering craft practice. The study was conducted in four selected Technical colleges in Adamawa and Taraba states Nigeria. The population was 252 students in National Technical Certificate (NTC) 2. A sample of 156 was drawn from the population using Yaro Yamane's formula. The design of the study was experimental. The sample drawn were divided into control and experimental groups. The experimental group were taught with multimedia instruction while the control group were taught with demonstration method. Instructional video files, and lesson plan, teacher's made test for pretest and posttest, were the instrument developed, validated by three experts and used for data collection. Two research questions and two hypotheses were raised. Mean and the standard deviation was used to answer the research questions. T-test statistics was used to test the hypotheses at 0.05 level of significance. The research findings indicated that there is a significant difference between the mean performances of students in the experimental group than those students in the control group. The students in the experimental group performed better in mechanical craft practice and in retention test than those in the control group. Hence multimedia instructions have more effect on learning achievement and retention of skills in craft practice. The study

recommended that a multimedia instructional tool is an effective tool for enhancing teaching and learning of practical skills in the mechanical craft.

Based on the reviewed works, it is clear that the fundamental differences lie in the sample, population, methodology and statistical tools used and the findings. While the similarities lie in the use of multimedia resources in effective teaching and learning in social studies and other subject areas.

Summary

This chapter first gives a concise literature review on multimedia resources, especially in the discipline of social studies. It is therefore that the use of multimedia must be given adequate priority in our school system, especially at the primary school level. Multimedia resources are important in the education system are those devices which are used in classrooms to encourage the teaching-learning process and make it easier and interesting. The chapter discusses the following sub-headings: Introduction, Theoretical Framework, System Theory, Innovation Dissemination Theory, Conceptual Framework, Concept of Education, Concept of Teaching, Concept of Learning, Concept of Retention, Concept of Academic Performance, Concept of Multimedia Resources, Concept of Social Studies, Historical Development of Social Studies Education in Nigeria, The Nature of Social Studies Education, The Scope of Social Studies Education, General aims and Goals of Social Studies education, Objectives of Social Studies at Primary School, Justification for the Introduction of Social Studies Education in Nigerian Schools, Challenges of using Multimedia Resources in Teaching Social Studies and Review of Related Empirical Studies.

The review will assist the study with adequate and useful methodological supports which will assist study. The gaps left unfilled by other studies especially in the field of Social Studies will be addressed by the study.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the procedure to be used in carrying out the research. The chapter discusses the following sub-headings:

- Research Design
- Population of the Study
- Sample and Sampling Procedure
- Instrumentation
- Validity of the Instrument
- Reliability of Instrument
- Data Collection Procedure
- Statistical analysis procedure

3.2 Research Design

The design of the study was Quasi-experimental. It is an impact evaluation that assigns members to the treatment group and control group by a method other than random assignment National Centre for Technology Innovation, (NCTI, 2009). There are different types of quasi-experimental designs, as stressed by Olayiwola, (2007). This study used the non-equivalent comparison group designs. It is widely believed to be the most commonly used Quasi-experiment (Shadish, Cook &Campbell, 2002). According to Salihu (2015), the design requires a pretest and post-test for a treated and comparison group. It is a design in which the impact of a treated

or intervention are estimated by comparing outcomes of a treatment group and a comparison group but without the benefit of random assignment (Salihu, 2015). The design is presented below.

$EG \rightarrow O_1 \rightarrow X_1 \rightarrow O_2 \rightarrow O_3$

$CG \rightarrow O_1 \rightarrow X_0 \rightarrow O_2 \rightarrow O_3$

KEY

EG- Experimental Group

CG- Control Group

O_1- Pretest

X_1- Treatment

X_0- Teaching method

O_2- Posttest

O_3- Retention Test

3.3 Population of the Study

The population of this study consisted of all primary school pupils in Giwa Zone, Kaduna State, Nigeria. There were 106,860 pupils consisting of 62,135 male and 44,726 female divided into 21 clusters. There are 210 public primary schools in the Zone based on the official data obtained in April 2017, from State Universal Basic Education Board (SUBEB), Giwa Local Government, Kaduna State, Nigeria. Table 1 shows the population distribution of pupils according to gender and location.

Table One: population distribution of primary schools by gender and location

S/N	CLUSTER	MALE	FEMALE	TOTAL
1	GIWA	4303	3474	7777
2	KAKANGI	2537	1708	4245
3	M/YAKAWADA	2884	2055	4939
4	GANGARA	3385	2556	5941
5	YAKAWADA	3879	3050	6929
6	KAYA	2828	1999	4827
7	GADAGAU	2660	1831	4491
8	IDASU	2884	2055	4939
9	TSAUNIN MAYAU	2268	1439	3707
10	FATIKA	2802	1973	4775
11	GOGI	2342	1513	3855
12	KIDANDAN CLUSTER	3171	2342	5513
13	GALADIMAWA CLUSTER	2284	1455	3739
14	IYATAWA CLUSTER	2801	1972	4773
15	KARAU KARAU CLUSTER	2584	1755	4339
16	PANHAUYA CLUSTER	2683	1854	4537
17	SHIKA CLUSTER	4060	3231	7291
18	GUGA SABUWA CLUSTER	3854	3025	6879
19	DANMAHAWAYI CLUSTER	2838	2009	4847
20	TSIBIRI CLUSTER	2708	1879	4587
21	KUNDUN CLUSTER	2380	1551	3931
		62135	**44725**	**106860**

Source: (SUBEB, GIWA LGA, 2017)

3.4 Sample and Sampling Procedures

The study used purposive sampling to choose the participating schools for the Quasi-experiment. Purposive sampling opined by Oliver and Jupp (2012) is a form of non-probability sampling in which decisions concerning the individuals to be included in the sample are taken by the researcher, based upon a variety of criteria which may include specialist knowledge of the research issue, or capacity and willingness to participate in the research.

Intact classes of three hundred and eighty-nine (389) students were used out of the total population. The choice of the intact class was done in order not to disrupt the normal teaching and learning of academic activities in the sampled schools which may not be welcomed by school authorities. Primary 6A was used as experimental and 6B was used for control in all the four schools out of the total number of 210 schools in the study area. Table 2 shows the distribution of student participants based on their respective school:

Table 2: Sample of the Study for Experimental Group

	URBAN EXPERIMENTAL				RURAL EXPERIMENTAL			
				PRIMARY 6A				
S/N	**School**	**NR**	**Male**	**Female**	**School**	**NR**	**Male**	**Female**
1	Model Primary School, Giwa	38	23	15	Model Primary School, Kidandan	33	20	13
2	Model Primary School, Shika	38	24	14	L.G.E.A Guga-Sabuwa	32	20	12
	Total	**76**	**47**	**29**	**Total**	**65**	**40**	**25**

Table 3: Sample of the Study for Control Group

	URBAN CONTROL				RURAL CONTROL			
				PRIMARY 6B				
S/N	School	NR	Male	Female	School	NR	Male	Female
1	Model Primary School, Giwa	67	37	30	Model Primary School, Kidandan	61	34	27
2	Model Primary School, Shika	65	36	29	L.G.E.A Guga-Sabuwa	55	30	25
	Total	**132**	**73**	**59**	**Total**	**116**	**64**	**52**

3.5 Instrumentation

This study used two teacher-made tests known as 'Social Studies Pupils' Retention Test (SOSPRET) as an instrument used for the purpose of testing the retention ability of pupils' while 'Social Studies Pupils Academic Performance Test (SOSPAPT) was used in ascertaining the academic performances of pupils at pre and posttest. The instrument was designed by the researcher. The (SOSPRET) and (SOSPAPT) consisted of 30 objective test items designed to measure the impact of multimedia resources on pupils' retention and academic performance in social studies in Giwa Education Zone, Kaduna state, Nigeria. The instrument covered the concept of culture, its types and examples extracted from primary VI syllabus. The pupils (experimental and control groups) were pre-tested before receiving any kind of treatment by the researcher. The post-test was administered after the experimental and control groups had undergone their separate treatment using the same topics. The outcomes of the various encounters in

the form of test scores were then subjected to appropriate statistical analysis which supported the study to answer its research questions and test the study's null hypotheses.

Table 4: Table of Specification for Primary School Social Studies

Content Area	Knowledge Objective	Understanding Objective	Application Objective	Total
Meaning of culture	3	2	2	7
Types of culture	3	2	3	8
Examples of material	3	2	3	8
Examples of non-material culture	3	2	2	7
Total	1**2**	**8**	**10**	30

3.5.1 Validity of Instruments

The study used a table of specification to determine the content validity of the test items. Table of a specification according to Yerima (2015); Salihu (2015) is a two-way dimensional table which defines clearly as possible the scope and emphasis of the test items and to relate the objectives to the content, so as to satisfy the most important criteria of the test and that of content validity. Table 4 shows the distribution of test questions in different levels of content areas.

The Table of specification in Table 4 shows the number of questions set at various levels of the cognitive domain. Twelve questions each were set at the knowledge, eight questions at the understanding level and ten questions at the application level making a total of Thirty questions. Moreover, the questions were examined and corrected by the research supervisors from the Faculty of Education, Department of Arts and Social Science Education, Ahmadu

Bello University, Zaria. Also, other experts in test and measurement as well as language experts validated the instruments for content, construct and criterion validity.

3.5.2 Reliability of the instrument

The pilot test was conducted at Staff School, Ahmadu Bello University, Zaria, using 30 pupils. The instrument was administered once. The rationale for the pilot study is to forestall any problem that might arise during the actual study and thereby jeopardize the validity and reliability of the test. This acquainted the researcher with test administration procedure and practical problems involved in carrying out the study so as to rectify them and to assess the relevance and functionality of the research questions and hypotheses. The set of the data obtained from the instrument was used to determine the reliability co-efficient of the research instrument.

The teacher-made test was pilot tested at Staff School, Ahmadu Bello University, Zaria using thirty (30) Primary 6 Social Studies pupils. The tests scores were recorded for the 30 respondents. These 30 pupils were used as they were not used for the main study, but share similar characteristics in all regards. The Guttman Split Half procedure for finding the internal consistency of the items was used. Consequently, the reliability coefficient of 0.670 was obtained from the data. Therefore, the result 0.670 was found to be reliable and suitable for the main study in line with Olayiwola (2011) revealed that reliability coefficient of 0.05 and above is adequate for the purpose of two different results collected for quasi-experimental design theory.

3.6 Data Collection Procedure

The researcher received a letter of introduction from the Department of Arts and Social Science Education, Ahmadu Bello University, Zaria. This enabled the researcher to obtain official data needed for the study from SUBEB, Giwa Local Government Area of Kaduna State. Further, the letters of introduction were forwarded to the schools that fell under the study sample. It was aimed at introducing the researcher and the study motives and also as a means of soliciting for official permission and co-operation to utilize pupils for the study.

The researcher and two trained research assistants who were selected based on competence (in multimedia handling and application) were allowed to use Primary 6 Social Studies lesson periods with the close collaboration of the subject teachers from the sampled schools. The pupils were pre-tested using the designed teacher-made tests. This was aimed at ascertaining the pupils' prior knowledge on the topics or the test items. The researcher and the research assistant used another Social Studies lesson period to teach the control group.

Moreover, after adequate preparations, the researcher with the permission of the school management used the relevant available multimedia resources in the school and brought in those that are not available. It was aimed at giving the pupils first-hand information and practical experience on the topic chosen. This was a post-test for the experimental group. The test papers were marked over (30). The test scores for the pre and post-tests for both groups were then collated for comparison sake using the appropriate statistical procedure. The whole data collection procedure lasted for eight (8) weeks.

3.7 Statistical Analysis Procedure

The data for the study was the scores of the teacher made-tests obtained from the pre-test and post-test administered to the control and experimental groups. The study used a simple percentage and frequency counts to analyse the bio-data variables of the study participants. The study's research questions were answered using arithmetic mean and standard deviation. Two Way Analysis of Variance was used in testing the null hypotheses. According to Salihu (2015), ANOVA is used for determining the significant difference between the two mean. All the null hypotheses were tested at $P \leq 0.05$ level of significance.

CHAPTER FOUR

RESULT AND DISCUSSION

4.1 Introduction

This study was conducted to find the impact of multimedia resources on pupils' retention and academic performance in social studies in Giwa Education Zone, Kaduna State Nigeria. The chapter was presented in the following sub-headings: participants' profile, answers to the research questions, null hypotheses testing, summary of major findings and discussion.

4.2 Participants' Profile

This section presents the profile of the participants based on treatment, location, class and gender. The result of the analysis is presented using descriptive statistics of frequencies and percentages.

Distribution of Participants by treatment

This sub-section presents the number of participants in each treatment group. There were two groups that were used and received different treatment in this study.

Table 5 Distribution of Participants by treatment

Group	Frequency	Percent
Experimental	141	36
Control	248	64
Total	**389**	**100**

Table 5 presents the number and percent of the pupils in the two treatment groups that were used in this study. The number of pupils in the experimental group, 141 (36%) was less than 248 (64%) for the control group. This shows that the number of pupils in the experimental schools who participated in the study was less than those in the control schools.

Distribution of Participants by Location

This sub-section presents the number of participants in each school location. There were two locations that were used and received different treatment in this study.

Table 6. Distribution of Participants by Location

Location	Frequency	Percent
Urban	213	55
Rural	176	45
Total	**389**	**100**

Table 6 presents the number and percent of the pupils in the two school locations that were used in this study. The number of pupils in the urban schools, 213 (55%) was high than 176 (45%) for the rural schools. This shows that the number of pupils from urban schools who participated in the study was more than that of those from rural schools.

Distribution of Participants by Gender

This sub-section presents the number of participants in each gender. There were two groups of different gender that were used and received different treatment in this study.

Table 7. Distribution of Participants by Gender

Gender	Frequency	Percent
Male	214	55
Female	175	45
Total	**389**	**100**

Table 7 presents the number and percent of the male and female pupils that were used in this study. The number of male pupils, 214 (55%) was high than 175 (45%) for the female pupils. This shows that there were more male pupils who participated in the study than there were their female counterparts.

4.3 Answers to the Research Questions

This section presents the results of the analysis conducted in order to answer the research questions. The analysis was conducted using descriptive statistics of means and standard deviations. The research questions were answered using the means and standard deviations obtained from the analysis.

Research Question One

What is the difference in the mean retention level between male and female pupils taught social studies using multimedia resources and pupils taught using traditional method among primary schools in Giwa Education Zone, Kaduna state?

This research question was answered using descriptive statistics of means and standard deviations. The result of the analysis is presented in Table 8.

Table 8. Mean retention level of male and female pupils in the experimental and control groups

Sex	Group	Mean	Std. Deviation	N
Male	1 experimental	21.35	6.494	77
	2 control	15.64	4.687	137
	Total	**17.69**	**6.053**	**214**
Female	1 experimental	17.11	5.387	64
	2 control	14.59	4.950	111
	Total	**15.51**	**5.242**	**175**
Total	1 experimental	19.43	6.360	141
	2 control	15.17	4.825	248
	Total	**16.71**	**5.798**	**389**

Table 8 presents the means and standard deviations for the male and female pupils that made up the experimental and control groups that were used in this study. The mean retention score of male pupils in the experimental group (M=21.35, SD=6.494) was high than (M=15.64, SD=4.687) for the control group. Again, the mean retention score of female

pupils in the experimental group (M=17.11, SD=5.387) was high than (M=14.59, SD=4.950) for the control group. The overall mean retention score for the male and female pupils in the experimental groups (M=19.43, SD=6.360) was higher than (M=15.17, SD=4.825) for the control group. Therefore, the male and female pupils in the experimental group performed better than their counterparts in the control group. This shows that male and female pupils taught social studies using multimedia resources were able to retain most of the concepts than pupils taught using traditional method in Giwa Education Zone, Kaduna State.

Research Question Two

What is the difference in the mean academic performance between male and female pupils taught social studies using multimedia resources and pupils taught using traditional methods in primary schools in Giwa Education Zone, Kaduna state?

This research question was answered using descriptive statistics of means and standard deviations. The result of the analysis is presented in Table 9.

Table 9: Means academic performance of male and female pupils in the experimental and control groups

Group	Gender	Mean	Std. Deviation	N
Experimental	1 male	21.68	6.390	77
	2 female	16.30	6.497	64
	Total	**19.23**	**6.956**	**141**
Control	1 male	16.66	5.398	137
	2 female	15.32	5.695	111
	Total	**16.06**	**5.562**	**248**
Total	1 male	18.46	6.245	214
	2 female	15.67	6.001	175
	Total	**17.21**	**6.284**	**389**

Table 9 presents the means and standard deviations for the male and female pupils that made up the experimental and control groups that were used in this study. The mean retention score of male pupils in the experimental group (M=21.68, SD=6.390) was high than (M=16.30, SD=6.497) for the female pupils. Again, the mean retention score of male pupils in the control group (M=16.66, SD=5.398) was high than (M=15.32, SD=5.695) for the female pupils. The overall mean retention score for the male pupils (M=18.46, SD=6.245) was high than (M=15.67, SD=6.001) for the female pupils. Therefore, the male pupils in the experimental and control group performed better than their female counterparts in the experimental and control group. This shows that male pupils taught social studies using multimedia resources and traditional method performed better than female pupils taught using multimedia resources and traditional method in Giwa Education Zone, Kaduna state.

Research Question Three

What is the difference between the mean retention levels of pupils taught social studies using multimedia resources and pupils taught using traditional method among primary schools in urban and rural primary schools in Giwa Education Zone, Kaduna state?

This research question was answered using descriptive statistics of means and standard deviations. The result of the analysis is presented in Table 10.

Table 10. Mean retention level of rural and urban pupils in the experimental and control groups

Group	Location	Mean	Std. Deviation	N
experimental	1 urban	21.29	6.804	76
	2 rural	17.09	6.065	64
	Total	**19.37**	**6.786**	**140**
Control	1 urban	16.66	5.398	137
	2 rural	15.32	5.695	111
	Total	**16.06**	**5.562**	**248**
Total	1 urban	18.31	6.326	213
	2 rural	15.97	5.879	175
	Total	**17.25**	**6.231**	**388**

Table 10 presents the means and standard deviations for the pupils from urban and rural schools that made up the experimental and control groups that were used in this study. The mean retention score of pupils from urban schools in the experimental group (M=21.29, SD=6.804) was high than (M=17.09, SD=6.065) for the pupils from rural schools. Again, the mean retention score of pupils from urban schools in the control group (M=16.66, SD=5.398) was high than (M=15.32, SD=5.695) for the pupils from rural schools. The overall mean retention score for the pupils from urban schools (M=18.31, SD=6.326) was high than (M=15.97, SD=5.879) for the pupils from rural schools. Therefore, the pupils from urban schools performed better than their counterparts in the rural schools. This shows that pupils from urban schools taught social studies using multimedia resources and those taught using traditional method were able to retain most of the concepts than pupils from rural schools in Giwa Education Zone, Kaduna state.

4.4 Null Hypotheses Testing

This section presents the results of the analysis conducted in order to test the null hypotheses stated at $p \leq 0.05$ level of significance. The three null hypotheses were tested

using inferential statistics of two-way analysis of variance. This was because each of the variables of treatment, gender and location had two levels. Therefore, pairing any two of the factors will produce a 2x2 matrix.

Null Hypothesis One

There is no significant difference in the mean retention level between male and female pupils taught social studies using multimedia resources and pupils taught using traditional method among primary schools in Giwa Education Zone, Kaduna state.

This null hypothesis was tested using inferential statistics of two-way analysis of variance. The result of the analysis is presented in Table 11.

Table 11. Summary of two-way ANOVA on mean retention level of male and female pupils in the experimental and control groups

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	2327.719[a]	3	775.906	27.875	.000	.178
Intercept	105008.916	1	105008.916	3772.556	.000	.907
Gender	623.143	1	623.143	22.387	.000	.055
Group	1511.294	1	1511.294	54.295	.000	.124
gender * group	226.796	1	226.796	8.148	.005	.021
Error	10716.456	385	27.835			
Total	121656.000	389				
Corrected Total	13044.175	388				

a. R Squared = .178 (Adjusted R Squared = .172)

Table 11 presents the results of two-way analysis of variance on mean retention level of male and female pupils in the experimental and control groups. The analysis revealed that

for the gender, the F (1,385)=22.387, p=0.001; revealed a significant difference between the male and female pupils retention level. The null hypothesis which stated no significant difference between male and female retention level was rejected. Again, the analysis revealed that for the treatment, the F(1,385)=54.295, p=0.001; revealed a significant difference between the experimental and control groups pupils retention level. The null hypothesis which stated no significant difference between male and female retention level was rejected. When gender and treatment were compared, the analysis revealed that F(1,385)=8.148, p=0.005; shows a significant difference between the male and female pupils in the experimental and control group retention level. The null hypothesis which stated no significant difference between male and female pupils in the experimental and control group retention level was rejected. Therefore, there was a significant difference in the mean retention level between male and female pupils taught social studies using multimedia resources and pupils taught using traditional method. That is, there was a significant difference in the mean retention level of male and female pupils taught social studies using multimedia resources than pupils taught using traditional method in Giwa Education Zone, Kaduna state.

Null Hypothesis Two

There is no significant difference in the mean academic performance between male and female pupils taught social studies using multimedia resources and pupils taught using traditional method among primary schools in Giwa Education Zone, Kaduna state.

This null hypothesis was tested using inferential statistics of two-way analysis of variance. The result of the analysis is presented in Table 12.

Table 12. Summary of two-way ANOVA on mean academic performance of male and female pupils in the experimental and control groups

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	2029.051[a]	3	676.350	19.589	.000	.132
Intercept	108909.042	1	108909.042	3154.271	.000	.891
Group	801.406	1	801.406	23.211	.000	.057
Gender	1005.321	1	1005.321	29.117	.000	.070
group * gender	362.776	1	362.776	10.507	.001	.027
Error	13293.082	385	34.527			
Total	130514.000	389				
Corrected Total	15322.134	388				

a. R Squared = .132 (Adjusted R Squared = .126)

Table 12 presents the results of two-way analysis of variance on mean academic performance of male and female pupils in the experimental and control groups. The analysis revealed that for the treatment, the F (1,385) =23.211, p=0.001; revealed a significant difference between the experimental and control groups pupils academic performance. The null hypothesis which stated no significant difference between the experimental and control groups academic performance was rejected. Again, the analysis revealed that for the gender, the F (1,385) =29.117, p=0.001; revealed a significant difference between the male and female pupils academic performance. The null hypothesis which stated no significant difference between male and female academic performance was rejected. When treatment and gender were compared, the analysis revealed that F (1,385) =10.507, p=0.001; shows a significant difference between the male and female pupils in the experimental and control group academic performance. The null hypothesis which stated no

significant difference between the academic performance of male and female pupils in the experimental and control group was rejected. Therefore, there was a significant difference in the mean academic performance between male and female pupils taught social studies using multimedia resources and pupils taught using traditional method. That is, there was a significant difference in the mean academic performance of male and female pupils taught social studies using multimedia resources than pupils taught using traditional method in Giwa Education Zone, Kaduna state.

Null Hypothesis Three

There is no significant difference in retention level of pupils taught social studies using multimedia resources and pupils taught using traditional method among primary schools in urban and rural primary schools in Giwa Education Zone, Kaduna state.

This null hypothesis was tested using inferential statistics of two-way analysis of variance. The result of the analysis is presented in Table 13

Table 13: Summary of two-way ANOVA on mean retention level of urban and rural pupils in the experimental and control groups

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	1705.338[a]	3	568.446	6.388	.000	.113
Intercept	109775.200	1	109775.200	3164.712	.000	.892
Group	911.500	1	911.500	26.278	.000	.064
Location	680.004	1	680.004	19.604	.000	.049
group * location	180.654	1	180.654	5.208	.023	.013
Error	13319.909	384	34.687			
Total	130514.000	388				
Corrected Total	15025.247	387				

a. R Squared = .113 (Adjusted R Squared = .107)

Table 13 presents the results of two-way analysis of variance on mean retention level of urban and rural pupils in the experimental and control groups. The analysis revealed that for the treatment, the F(1,385)=26.278, p=0.001; revealed a significant difference between the experimental and control group pupils retention level. The null hypothesis which stated no significant difference between pupils from the experimental and control groups retention level was rejected. Again, the analysis revealed that for the location, the F (1,385)=19.604, p=0.001; revealed a significant difference between pupils from urban and rural schools retention level. The null hypothesis which stated no significant difference between pupils from urban and rural schools retention level was rejected. When treatment and location were compared, the analysis revealed that F (1,385) =5.208, p=0.023; shows no significant difference between the retention level of pupils in experimental and control group from urban and rural schools. The null hypothesis which stated no significant difference between the retention level of pupils in experimental and control group from urban and rural schools was retained. Therefore, there was no significant difference in the mean retention level of pupils in the experimental and control groups from urban and rural schools. That is, there was no significant difference in retention level of pupils taught social studies using multimedia resources and pupils taught using traditional method among primary schools in urban and rural primary schools in Giwa Education Zone, Kaduna state.

4.5 Summary of Major Findings

i. Significant difference was found in the mean retention level of male and female pupils taught social studies using multimedia resources and pupils taught using traditional method in Giwa Education Zone, Kaduna State in favour of the experimental group;

ii. Significant difference was found in the mean academic performance of male and female pupils taught social studies using multimedia resources and pupils taught using traditional method in Giwa Education Zone, Kaduna State in favour of experimental group.

iii. No significant difference was found in retention level of pupils taught social studies using multimedia resources and pupils taught using traditional method among primary schools in urban and rural primary schools in Giwa Education Zone, Kaduna state.

4.6 Discussion of Major Findings

A significant difference was found in the mean retention level of male and female pupils taught social studies using multimedia resources than pupils taught using a traditional method in Giwa Education Zone, Kaduna state. A significant difference was found in the mean academic performance of male and female pupils taught social studies using multimedia resources than pupils taught using the traditional method in Giwa Education Zone, Kaduna State. No significant difference was found in retention level of pupils taught social studies using multimedia resources and pupils taught using traditional method among primary schools in urban and rural primary schools in Giwa Education Zone, Kaduna State.

Contrasting the current findings, Algerioy (2016) study found out no statistically significant differences, between the average achievement of the experimental group students and those belonging to the control group, in remembrance, understanding and application level. Similarly, Losike-Sedimo (2016) study show that there are numerous benefits for engaging multimedia in teaching. The study concludes that there is a need for changing teaching methods to empower students by embracing technology. Reis (2011) study indicate that the

standard video player was the most effective overall, which suggests that media designs able to control the focus of a learner's attention to one specific stream of information, a single-stream focused approach, maybe the most effective way to present media-based content.

Supporting the current finding, Adedapo, Salawu and Afolabi (2011) study showed that there was a significant difference in the students' cognitive achievement and interest in Economics which were mostly enhanced by the video-taped strategy, followed by audiotaped strategy and minimally by the conventional strategy. In a related development Akerele and Ajayi's (2012) study shows that when using video in teaching, it enhances learners' positive attitude toward the course. Also, it affects their performance positively. Similarly, Alabi's (2014) study showed that the videotape mediated instruction package tested were effective in the learning of Social Studies and had great improvement on the students' performance after exposed to this media packages it is therefore recommended that teachers should try to get this package to make their teaching more effective.

Odour and Igwe study revealed there was a significant main effect of treatment on students' achievement. Also, it showed that there was a significant main effect of treatment on students' achievement in social studies. (F (1, 97) = 145.474' P.05). There was also no significant main effect of gender on pupils' attitude to social studies (F (1, 97) = 0.640; P>.05). There was no significant 2-way interaction effect of treatment and gender on pupils' attitude (F (1, 97) = 2.041; P>.05). in the same vein, Owolabi and Oginni (2013) findings show that there was a significant difference in the performance of students exposed to cartoon style multimedia teaching and those that are conventionally taught. It was therefore recommended that the use of cartoon-style animation and multimedia teaching should be encouraged to complement other methods of teaching science in schools and colleges.

Salihu, Abdullahi, Alfa and Muhammed (2015) corroborates the current findings as it discovered that; upper Basic Level students who were taught by way of Interactive Multimedia Instruction (IMI) outperformed their counterparts who were taught through Conventional Lecture Method (CLM); the Interactive Multimedia Instruction (IMI) as an instructional strategy works well for both male and female students at Upper Basic Level as their academic performances improve significantly.

Similarly, Yahaya's (2015) study as lend credence to the current study as it discovered a significant difference between the academic performance of the experimental and the comparison groups. By implication students taught with lecture technique supplemented by Multimedia resources out-performed their counterparts taught with lecture technique only. The study discovered that gender does not affect the performances of the experimental group signifying that the students that were taught with lecture technique aided by multimedia resources responded well irrespective of their gender. Also, Cyril (2016) findings indicated that there is a significant difference between the mean performances of students in the experimental group than those students in the control group. The students in the experimental group performed better in mechanical craft practice and retention test than those in the control group. Hence multimedia instructions have more effect on learning achievement and retention of skills in craft practice

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter treats summary of the research, conclusions based on the findings of the research. Also, some practical recommendations were put forward to enhance the effective use of multimedia resources in social studies classroom for effective service delivery.

5.2 Summary

The study examined the impact of multimedia resources on pupils' retention and academic performance in social studies in Giwa Education Zone, Kaduna State Nigeria. The study was guided by three objectives, three research questions and three hypotheses. The study used system and innovation dissemination theories to give backing to the study.

Relevant literature was reviewed in the study. Similar empirical studies were reviewed citing similarities and identifying differences with the current study. The review further identifies some of the gaps between the current study and those reviewed which the current seeks to fill.

Furthermore, quasi-experimental research design was used. The study used purposively sampling technique to choose the participating schools for the experimental. The study also used social studies Pupils Retention Test (SOSPRET) and Social Studies Pupils Academic Performance Test (SOSPAPT) as data collection instruments. The instruments were validated by supervisors and statisticians for content and face validity. The study pilot tested the instruments and they were satisfied statistically as fit for the main work.

However, the study used a one-way analysis of variance as data analysis instruments. The study, however, discovered the following:

1. A significant difference was found in the mean retention level of male and female pupils taught social studies using multimedia resources than pupils taught using a traditional method in Giwa Education Zone, Kaduna state.
2. A significant difference was found in the mean academic performance of male and female pupils taught social studies using multimedia resources than pupils taught using the traditional method in Giwa Education Zone, Kaduna state.
3. No significant difference was found in retention level of pupils taught social studies using multimedia resources and pupils taught using traditional method among primary schools in urban and rural primary schools in Giwa Education Zone, Kaduna state.

5.3 Conclusions

On the findings of this research, it is concluded that:

1. Multimedia resources enhance the retention level of male and female pupils taught social studies better than pupils taught using the traditional method in Giwa Education Zone, Kaduna State.
2. Also, multimedia resources enhance the academic performance of male and female pupils taught social studies than pupils taught using the traditional method in Giwa Education Zone, Kaduna State.
3. Multimedia resources enhance the retention level of pupils taught Social Studies regardless of location.

- the light of the foregoing, it can be said that multimedia resources are effective in teaching social studies at primary school level than lecture technique as it promotes pupils' retention and academic performance in Social Studies in Giwa Education Zone, Kaduna State, Nigeria.

5.4 Contributions to Knowledge

The study established that:

i. Using multimedia resources in teaching Social Studies facilitates and improve pupils' retention level regardless of their sex and location because of its child centeredness and learner friendliness.

ii. Application of multimedia resources in teaching Social Studies motivate students' academic performance because students taught with multimedia performed academically high than those taught with traditional method during the experiment.

5.5 Recommendations

Following recommendations are suggested as a result of the findings of the study:

1. There is the need for Kaduna State Government to build and equipped computer laboratories in all the primary schools in the state. This will assist in effective utilization of multimedia technologies as a viable instructional strategy for the 21st-century teaching and learning; there should be training and retraining of Social Studies teachers on computer applications especially on multimedia resources;
2. The use of Multimedia resources should be emphasized as it improves students' academic performance and retention of all sex;
3. The use of Multimedia resources should be emphasized as it improves students' academic performances and retention abilities of rural and urban areas.

4. There should also be the training of teachers in computer utilization in teaching both short-term and in-service training for teachers

5.6 Suggestions for Further Studies

Further study should focus on:

1. Problems and prospects of teachers' use of multimedia resources in teaching Social Studies in Kaduna State.
2. There is also the need for the study to be replicated at Junior Secondary Schools in Kaduna State.

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APPENDIX A

SOCIAL STUDIES PUPILS RETENTION TEST (SOSPRET)

PRE-TEST

Treatment: Experimental [ ] Control [ ]

Sex: Male **[ ]** Female [ ]

Location: Rural [ ] Urban [ ]

Instruction: Attempt all questions

SECTION A (Fill in the Blank Space)

1. Name any three (3) influential figures in Hausa traditional hierarchy _____, _____ and _____

2. Who is referred to as mayor in Hausa traditional hierarchy? _____

3. Identify the common foods Hausa people eat _____

4. Identify any two superstitions beliefs in Hausaland

   i._____

   ii._____

5. The two aspects of culture are _____ and _____

6. Name any two festivals celebrated in the traditional Hausaland _____ and _____

7. Long ago we dress mainly in _____ attires.

APPENDIX B

SOCIAL STUDIES PUPILS RETENTION TEST (SOSPRET)

POST-TEST

Treatment: Experimental [ ] Control [ ]

Sex: Male **[ ]** Female [ ]

Location: **Rural [ ] Urban [ ]**

Instruction: Attempt all questions

SECTION A (Fill in the Blank Space)

1. The two aspects of culture are _____ and _____
2. Name any two festivals celebrated in the traditional Hausaland _____ and _____
3. Name any three (3) influential figures in Hausa traditional hierarchy _____, _____ and _____
4. Identify any two superstitions beliefs in Hausaland
   i._____
   ii._____
5. Long ago we dress mainly in _____ attires.
6. Who is referred to as mayor in Hausa traditional hierarchy? _____
7. Identify the common foods Hausa people eat _____

APPENDIX C

SOCIAL STUDIES PUPILS ACADEMIC PERFORMANCE TEST (SOSPAPT)

PRE-TEST

Treatment: Experimental [ ] Control [ ]

Sex: Male **[ ]** Female [ ]

Location: Rural [ ] Urban [ ]

Instruction: Attempt all questions

Section B (multiple choose)

1. Material aspect of culture includes the following except
   (a) Housing style (b) Clothing (c) Art and Craft (d) Superstition
2. Which of the following food is not indigenous to Hausa culture?
   (a) Amala (b) Tuwo (c) Danwake (d) Gauda
3. Which of the following is a name given to a highest traditional ruler in Hausaland?
   (a) Oba (b) Sarki (c) Obi (d) Olu
4. Which of the following profession is not indigenous to Hausa culture?
   (a) Blacksmithing (b) Hunting (c) Boat Making (d) Farming
5. Who among the following is an official in Hausa traditional institution?
   (a) Iyalode (b) Uwangue (c) Waziri (d) Etsu
6. Non- material aspect of culture include the following except
   (a) Superstition beliefs (b) Music (c) Clothing (d) Language
7. The third in command in Hausa/Fulani traditional ruling system is called ___
   (a) Madawaki (b) Galadima (c) Waziri

SECTION C (True/False)

8. Culture is defined as the total way of life of people **T/F**
9. Traditional ruler ship in Hausa land is hereditary. **T/F**
10. Aso-oke is a traditional dress among women in Hausa-land **T/F**
11. The second in command in Hausa traditional hierarchy is Waziri. **T/F**
12. Sarki in Hausaland cannot be succeeded by an outsider. **T/F**
13. Materials and non-material cultures are the types of culture **T/F**
14. Hausa people prostrate when greeting elders**T/F**

15. Culture is also a way of identifying its society. The way we speak, the dress we wear, our hair adornment, the food we eat, our system of marriage and family. **T/F**
16. The cultural beliefs and values of each tribe differs **T/F**
17. Hausa lands common food include Amala and EweduSoup**T/F**
18. Greetings and hospitality are part of culture that should be retained. **T/F**

APPENDIX D

SOCIAL STUDIES PUPILS ACADEMIC PERFORMANCE TEST (SOSPAPT)

POST-TEST

Treatment: Experimental [ ] Control [ ]

Sex: Male **[ ]** Female [ ]

Location: Rural [ ] Urban [ ]

Instruction: Attempt all questions

Section B (multiple choose)

1. Which of the following food is not indigenous to Hausa culture?
   (a) Amala (b) Tuwo (c) Danwake (d) Gauda
2. Which of the following is a name given to a highest traditional ruler in Hausaland?
   (a) Oba (b) Sarki (c) Obi (d) Olu
3. The third in command in Hausa/Fulani traditional ruling system is called ___
   (a) Madawaki (b) Galadima (c) Waziri
4. Who among the following is an official in Hausa traditional institution?
   (a) Iyalode (b) Uwangue (c) Waziri (d) Etsu
5. Non- material aspect of culture include the following except
   (a) Superstition beliefs (b) Music (c) Clothing (d) Language
6. Material aspect of culture includes the following except
   (a) Housing style (b) Clothing (c) Art and Craft (d) Superstition
7. Which of the following profession is not indigenous to Hausa culture?
   (a) Blacksmithing (b) Hunting (c) Boat Making (d) Farming

SECTION C (True/False)

8. Traditional ruler ship in Hausa land is hereditary. **T/F**
9. Aso-oke is a traditional dress among women in Hausa-land **T/F**
10. The second in command in Hausa traditional hierarchy is Waziri. **T/F**
11. Materials and non-material cultures are the types of culture **T/F**
12. Hausa people prostrate when greeting elders**T/F**

13. The cultural beliefs and values of each tribe differs **T/F**
14. Greetings and hospitality are part of culture that should be retained. **T/F**
15. Hausa lands common food include Amala and EweduSoup**T/F**
16. Culture is defined as the total way of life of people **T/F**
17. Sarki in Hausaland cannot be succeeded by an outsider. **T/F**
18. Culture is also a way of identifying its society. The way we speak, the dress we wear our hair adornment, the food we eat, our system of marriage and family. **T/F**

APPENDIX E

MARKING SCHEME ACADEMIC PERFORMANCE TEST

1. D
2. A
3. B
4. C
5. C
6. C
7. TRUE
8. TRUE
9. FALSE
10. TRUE
11. TRUE
12. TRUE
13. FALSE
14. TRUE
15. TRUE
16. FALSE

APPENDIX F

MARKING SCHEME RETENTION TEST

1. Material and non-material culture
2. Kalankuwa, argungu fishing festivals
3. Sarki, waziri, galadima
4. It is an abomination to sweep in the night and its not good to fetch water in the night
5. Magajin gari
6. Tuwo, gauda, danwake, faten tsaki etc.

APPENDIX G

EXPERIMENTAL GROUP

Name of the school	
Class/size	Primary 6 / 67pupils
Age Grade	10-12 years
Subject	Social studies
Topic	Culture
Instructional Materials	Multimedia
Duration	45mns
Name of the Teacher	SANI, AdamaShuaibu
Previous knowledge	The pupils are familiar with their local culture.
Behavioral Objectives	By the end of the lesson, the pupils should be able to: i. Meaning of culture. ii. Differentiate with the help of multimedia presentations the types of culture. iii. The features of culture.
Presentation	The teacher presents the lesson with the following
Step I	Explain the meaning of culture as the total way of life of people.Itemize the two types of culture as follows: material culture which entails the visible aspects like food, clothes, housing patterns etc. while the non-material are the invisibles like the taboos, music, beliefs etc.
Step II	The teacher together with the students identify through the help of multimedia resources the features of culture like; dynamism, relativism etc.
Summary	the teacher summarizes the important points of the lesson.
Evaluation	The teacher distributes the test questions for the pupils to answer in 30 minutes.
Conclusion	The teacher made necessary corrections after collating pupils' scripts.

APPENDIX H

CONTROL GROUP

Name of the school	
Class/size	Primary 6 / 67pupils
Age Grade	10-12 years
Subject	Social studies
Topic	Culture
Instructional Materials	Charts and Posters
Duration	45mns
Name of the Teacher	SANI, Adama Shuaibu
Previous knowledge	The pupils are familiar with their local culture.
Behavioral Objectives	By the end of the lesson, the pupils should be able to: i. Meaning of culture. ii. Differentiate with the help of charts the types of culture. iii. The features of culture.
Presentation	The teacher presents the lesson with the following steps:
Step I	Explain the meaning of culture as the total way of life of people.
Step II	Itemize the two types of culture as follows: material culture which entails the visible aspects like food, clothes, housing patterns etc. while the non-material are the invisibles like the taboos, music, beliefs etc.
Step III	The teacher together with the pupils identify through the help of charts the features of culture like; dynamism, relativism etc.
Summary	The teacher summarizes the important points of the lesson.
Evaluation	The planned teacher made-test items will be used to evaluate pupils understanding in 30 minutes.
Conclusion	The teacher collate the scripts

APPENDIX I

RESULT OF ANALYSIS

```
FREQUENCIES VARIABLES=group sex location
  /ORDER=ANALYSIS.
```

Frequencies

[DataSet0] C:\Users\umar\Documents\Adama Sani Whole Data.sav

Statistics

		group	Sex	Location
N	Valid	389	389	389
	Missing	1	1	1

Frequency Table

Group

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 experimental	141	36.2	36.2	36.2
	2 control	248	63.6	63.8	100.0
	Total	389	99.7	100.0	
Missing	System	1	.3		
Total		390	100.0		

Sex

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 male	214	54.9	55.0	55.0
	2 female	175	44.9	45.0	100.0
	Total	389	99.7	100.0	
Missing	System	1	.3		
Total		390	100.0		

Location

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 urban	213	54.6	54.8	54.8

	2 rural	176	45.1	45.2	100.0
	Total	389	99.7	100.0	
Missing	System	1	.3		
Total		390	100.0		

```
UNIANOVA retentionscore BY sex group
  /METHOD=SSTYPE(3)
  /INTERCEPT=INCLUDE
  /EMMEANS=TABLES(sex)
  /EMMEANS=TABLES(group)
  /EMMEANS=TABLES(sex*group)
  /PRINT=ETASQ DESCRIPTIVE
  /CRITERIA=ALPHA(.05)
  /DESIGN=sex group sex*group.
```

Univariate Analysis of Variance

[DataSet1] C:\Users\umar\Documents\Adama Null One.sav

Between-Subjects Factors

		Value Label	N
sex	1	male	214
	2	female	175
group	1	experimental	141
	2	control	248

Descriptive Statistics

Dependent Variable:retentionscore

sex	group	Mean	Std. Deviation	N
1 male	1 experimental	21.35	6.494	77
	2 control	15.64	4.687	137
	Total	17.69	6.053	214
2 female	1 experimental	17.11	5.387	64
	2 control	14.59	4.950	111

	Total	15.51	5.242	175
Total	1 experimental	19.43	6.360	141
	2 control	15.17	4.825	248
	Total	16.71	5.798	389

Tests of Between-Subjects Impact

Dependent Variable:retentionscore

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	2327.719[a]	3	775.906	27.875	.000	.178
Intercept	105008.916	1	105008.916	3772.556	.000	.907
sex	623.143	1	623.143	22.387	.000	.055
group	1511.294	1	1511.294	54.295	.000	.124
sex * group	226.796	1	226.796	8.148	.005	.021
Error	10716.456	385	27.835			
Total	121656.000	389				
Corrected Total	13044.175	388				

a. R Squared = .178 (Adjusted R Squared = .172)

Estimated Marginal Means

1. sex

Dependent Variable:retentionscore

			95% Confidence Interval	
sex	Mean	Std. Error	Lower Bound	Upper Bound
1 male	18.493	.376	17.754	19.232
2 female	15.847	.414	15.033	16.662

2. group

Dependent Variable:retentionscore

group	Mean	Std.	95% Confidence Interval

		Error	Lower Bound	Upper Bound
1 experimental	19.230	.446	18.353	20.107
2 control	15.110	.337	14.448	15.773

3. sex * group

Dependent Variable:retentionscore

				95% Confidence Interval	
sex	group	Mean	Std. Error	Lower Bound	Upper Bound
1 male	1 experimental	21.351	.601	20.169	22.533
	2 control	15.635	.451	14.749	16.521
2 female	1 experimental	17.109	.659	15.813	18.406
	2 control	14.586	.501	13.601	15.570

```
DATASET ACTIVATE DataSet3.
UNIANOVA posttest BY group gender
  /METHOD= SSTYPE (3)
  /INTERCEPT=INCLUDE
  /EMMEANS= TABLES (group)
  /EMMEANS= TABLES (gender)
  /EMMEANS=TABLES (group*gender)
  /PRINT=ETASQ DESCRIPTIVE
  /CRITERIA=ALPHA (.05)
  /DESIGN=group gender group*gender.
```

Univariate Analysis of Variance

[DataSet3] C:\Users\umar\Documents\Adama Null Two.sav

Between-Subjects Factors

		Value Label	N
group	1	experimental	141
	2	Control	248
gender	1	Male	214

2	Female	175

Descriptive Statistics

Dependent Variable:posttest

group	gender	Mean	Std. Deviation	N
1 experimental	1 male	21.68	6.390	77
	2 female	16.30	6.497	64
	Total	19.23	6.956	141
2 control	1 male	16.66	5.398	137
	2 female	15.32	5.695	111
	Total	16.06	5.562	248
Total	1 male	18.46	6.245	214
	2 female	15.67	6.001	175
	Total	17.21	6.284	389

Tests of Between-Subjects Impact

Dependent Variable:posttest

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	2029.051[a]	3	676.350	19.589	.000	.132
Intercept	108909.042	1	108909.042	3154.271	.000	.891
group	801.406	1	801.406	23.211	.000	.057
gender	1005.321	1	1005.321	29.117	.000	.070
group * gender	362.776	1	362.776	10.507	.001	.027
Error	13293.082	385	34.527			
Total	130514.000	389				
Corrected Total	15322.134	388				

a. R Squared = .132 (Adjusted R Squared = .126)

Estimated Marginal Means

1. group

Dependent Variable:posttest

group	Mean	Std. Error	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
1 experimental	18.986	.497	18.009	19.963
2 control	15.986	.375	15.248	16.724

2. gender

Dependent Variable:posttest

gender	Mean	Std. Error	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
1 male	19.166	.418	18.343	19.989
2 female	15.806	.461	14.899	16.713

3. group * gender

Dependent Variable:posttest

group	gender	Mean	Std. Error	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
1 experimental	1 male	21.675	.670	20.359	22.992
	2 female	16.297	.735	14.853	17.741
2 control	1 male	16.657	.502	15.670	17.644
	2 female	15.315	.558	14.219	16.412

```
DATASET ACTIVATE DataSet4.
UNIANOVA retentiontest BY group location
  /METHOD= SSTYPE (3)
  /INTERCEPT=INCLUDE
  /EMMEANS= TABLES (group)
  /EMMEANS= TABLES (location)
  /EMMEANS= TABLES (group*location)
  /PRINT=ETASQ DESCRIPTIVE
  /CRITERIA= ALPHA (.05)
```

/DESIGN=group location group*location.

Univariate Analysis of Variance

[DataSet4] C:\Users\umar\Documents\Adama Null Three.sav

Between-Subjects Factors

		Value Label	N
group	1	experimental	140
	2	Control	248
location	1	Urban	213
	2	Rural	175

Descriptive Statistics

Dependent Variable:retentiontest

group	location	Mean	Std. Deviation	N
1 experimental	1 urban	21.29	6.804	76
	2 rural	17.09	6.065	64
	Total	19.37	6.786	140
2 control	1 urban	16.66	5.398	137
	2 rural	15.32	5.695	111
	Total	16.06	5.562	248
Total	1 urban	18.31	6.326	213
	2 rural	15.97	5.879	175
	Total	17.25	6.231	388

Tests of Between-Subjects Impact

Dependent Variable:retentiontest

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	1705.338[a]	3	568.446	16.388	.000	.113
Intercept	109775.200	1	109775.200	3164.712	.000	.892
Group	911.500	1	911.500	26.278	.000	.064
Location	680.004	1	680.004	19.604	.000	.049
group * location	180.654	1	180.654	5.208	.023	.013
Error	13319.909	384	34.687			
Total	130514.000	388				
Corrected Total	15025.247	387				

a. R Squared = .113 (Adjusted R Squared = .107)

Estimated Marginal Means

1. group

Dependent Variable:retentiontest

group	Mean	Std. Error	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
1 experimental	19.192	.500	18.209	20.174
2 control	15.986	.376	15.247	16.726

2. location

Dependent Variable:retentiontest

location	Mean	Std. Error	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
1 urban	18.973	.421	18.145	19.801
2 rural	16.205	.462	15.296	17.113

3. group * location

Dependent Variable: retention test

group	location	Mean	Std. Error	95% Confidence Interval Lower	95% Confidence Interval Upper

				Bound	Bound
1 experimental	1 urban	21.289	.676	19.961	22.618
	2 rural	17.094	.736	15.646	18.541
2 control	1 urban	16.657	.503	15.668	17.646
	2 rural	15.315	.559	14.216	16.414