

APPLICATION OF INFORMATION COMMUNICATION TECHNOLOGY FOR  
EFFECTIVE TEACHING AND LEARNING OF SOCIAL STUDIES IN JUNIOR  
SECONDARY SCHOOLS IN NIGER STATE, NIGERIA

BY

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DEPARTMENT OF ARTS AND SOCIAL SCIENCE EDUCATION

FACULTY OF EDUCATION

AHMADU BELLO UNIVERSITY, ZARIA

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P16EDAS8289

A DISSERTATION SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES,  
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OCTOBER, 2018

## DECLARATION

I UMAR, Mohammed Audu (P16EDAS8289), declare that the work in this dissertation entitled “Application of Information Communication Technology for Effective Teaching and Learning of Social Studies in Junior Secondary Schools in Niger State, Nigeria ” was carried out by me under the supervision of Dr. H.I. Bayero and Dr. I. D., Abubakar in the Department of Arts and Social Science Education, Faculty of Education, Ahmadu Bello University. Zaria. The information derived from the literature has been duly acknowledged in text and a list of references provided. No part of this thesis was previously presented for another degree or diploma in this or any other institution to the best of my knowledge. I am liable for any mistake(s) in this work.

Umar Mohammed Audu  
P16EDAS8289

\_\_\_\_\_  
Sign

\_\_\_\_\_  
Date

## CERTIFICATION

This dissertation entitled “APPLICATION OF INFORMATION COMMUNICATION TECHNOLOGY FOR EFFECTIVE TEACHING AND LEARNING OF SOCIAL STUDIES IN JUNIOR SECONDARY SCHOOLS IN NIGER STATE, NIGERIA” by Umar Mohammed Audu meets the regulations governing the award of the degree of Master’s of Education in Social Studies of the Ahmadu Bello University, Zaria, and is approved for its contribution to knowledge and literary presentation.

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Date

## **DEDICATION**

This work is dedicated to my Late parents, Malama Aisha Umar and Alhaji Umaru Girawa (Magajin Gani).

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## ABSTRACT

This study was on application of Information Communication Technology for Effective Teaching and Learning of Social Studies in Junior Secondary Schools in Niger State, Nigeria. Accordingly, five (5) research objectives, five research questions and five null hypotheses each guided the study. Descriptive survey method was employed and the population of study was thirty-one thousand four hundred and sixty-seven (31,467), out of which a sample of four hundred and forty respondents (440) was selected for the study through the use of proportionate sampling technique. The instrument titled Application of ICT for Effective Teaching of Social Studies in Junior Secondary Schools was used for data collection. The instrument was validated by research supervisors, language expert and statistician, while reliability co-efficient of 0.880 was obtained. Mean and standard deviation were used to report the descriptive data collected, while the independent samples t-test was used to test the null hypotheses at 0.05 level of significance. The study revealed significant difference between the mean opinion score of JSS II and JSS III students on the application of ICT for effective learning of Social Studies in Niger state, Nigeria. However, significant difference was not found between the mean opinion score of JSS male and female as well as urban and rural teachers differ on the application of ICT for effective teaching of Social Studies in Niger State. Moreover, there was no significant difference between the mean opinion score of JSS male and female; urban and rural students on the application of ICT for effective teaching of Social Studies in Niger State, Nigeria. Based on the findings, it was recommended that, Government should provide Information Communication Technology devices such as handheld computers, Ipads or mini-computers with installed programmes, themes and topics on Social Studies for junior secondary school students in Niger state. This will help bridge the gap in knowledge of JSS students on application of ICT for effective teaching of Social Studies in the state; Niger State Government should ensure that ICT policy statements are translated into reality. An ICT policy implementation commission should be created, funded and given the power to provide ICT facilities to both male and female social studies teachers in junior secondary schools and monitor their use.

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## LIST OF ABBREVIATIONS

AISI -	Africa Information Society Institute
ASESP -	African Social and Environment Studies Programme
CAI -	Computer Aided Instruction
CESAC -	Comparative Education Study and Adaptive Centre
GSM -	Global System for Mobile Communication
GWIS -	Government Wide Information System
HIS -	Health Care Information System
ICT -	Information and Communication Technology
IT -	Information Technology
MIS -	Management Information System
NCE -	Nigeria Certificate of Education
NERC -	Nigeria Education Research Council
NITDA -	Nigeria information Technology Development Agency
NNIEP -	Northern Nigeria Teacher Education Initiative Programme
NUC -	National University Commission
NUMIS -	Nigeria University Management Information System
OAU -	Obafemi Awolowo University
PDA -	Personal Digital Assistant
PHCN -	Power Holding Company of Nigeria
QOS -	Quality of Service
RINA -	Regular Information Network for Africa
SMART -	Simple Moral Accountable Resources Transparent Government
SOSAN -	Social Studies Association of Nigeria
SPSS -	Statistical Package for Social Science

TQ -	Teaching Questionnaire
UAF -	University Access Fund.
UNESCO -	United Nation Education, Scientific and Cultural Organization
USA -	United State of America
USAID -	United State Agency for International Development

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background to the Study**

The emergence of Information and Communication Technology (ICT) has ushered in a new era in our civilization in which digitalization has almost become a better alternative, because it has influenced every facet of human life, including education (Spiezia, 2011). Teachers in Nigeria need to be prepared to face the challenges of the 21<sup>st</sup> century for imparting the new age education. The entry of Information and Communication Technology (ICT) into education has made education readily available and accessible to the very busy man in both the office and out of the office due to its networking facilities, as individual learners have access to internet facilities and can take educational courses, receive lectures and receive examination through the internet within and outside the confines of the classroom environment.

Today, as the educational sector is faced with a series of changes and reforms, it is good to involve ICT in teaching, reflecting on matters of concern in Social Studies Education and the dissemination of Social studies curriculum contents at secondary school level. More recent reviews of research indicate that technology has a positive influence on teaching and learning in Social Studies classrooms (Gao, Choy, Wong & Jing, 2007). However, there is a need for both quantitative and qualitative research to assess the application of particular types of technology into Social Studies classrooms (Gao, Choy, Wong & Jing, 2007). National Council for the Social Studies (NCSS) standards support the application of technology in the Social Studies as a means to teach civic participation and to afford opportunities for valuable critical thinking activities (NCSS, 2009). The technological shift in society has occurred very rapidly, and the field of education is attempting to keep up

the pace. Recent advances now allow computer technology to serve many more functions for the Social Studies classroom than merely accessing information through the Internet (Gao, Choy, Wong & Jing, 2007). For educators to fully take advantage of the technology available, the technology must be infused more into daily instruction and not used as a mere appendage during one or two lessons (Krutka, & Carano, 2016). Yet, articles continually appear that merely list a wealth of Internet sites with little guidance on how the busy teacher can incorporate these resources into a lesson or project.

However, the political conditions in Nigeria for the past thirty years leave no room for continuity. Over the years, political power in Nigeria has been used to entrench mediocrity, corruption in high places, misplace priority, and consumer culture. The direct effect of these is a battered economy and an educational system that is decaying by the day. In 1988, in an attempt to keep pace with development in computer education, Nigeria enacted a Policy on Computer Education (Nwangwu, Obi & Ogwu, 2014). Thus the chalkboard and textbooks continue to dominate classroom activities in most secondary schools in Nigeria. If a country such as Uganda which has less than a-fifth of Nigeria's resources, is now using information and communication technology to help secondary schools students to become better information users, why is Nigeria lagging behind? The answer is simply mismanagement of the huge resources of the country and inability of political leaders to prioritize Nigeria's developmental needs. There is no doubt that in the current harsh economic competition, the private sector in Nigeria has embraced ICT to stay afloat. The banking sector, insurance, manufacturing industries and multinational companies in the oil sector have embraced multimedia technology to bring innovative solutions to their current challenges (Nwangwu, Obi & Ogwu, 2014).

If Nigerian wants to be a major player in the global market place of ideas and prepare her citizens for the new environment of today and the future, the country should embrace ICT

for the following reasons: ICT as aids to teaching and learning; ICT as a tool for management; ICT as instrument for economic development; ICT as instrument of high technological development, and ICT as a course of study. The push for the inclusion of technology and the efforts made in creating standards for technology in the Social Studies might set in motion the proliferation of various forms of technology use across the curriculum (Nwangwu, Obi & Ogwu, 2014). An evaluation of the state of ICT application in the Nigerian junior secondary schools revealed the existence of enormous challenges against actualizing the goals of instructional delivery (Dhand & Lyons, 2007). This can be attributed to a number of factors which has motivated the researcher to assess the application of ICT in teaching and learning of Social Studies in junior secondary schools.

## **1.2 Statements of the Problem**

The policy on ICT has been developed which aims at empowering the youth with ICT skills and preparing them for global competitiveness and also encouraging capacity building of ICT in the country's secondary schools. The application and use of ICT has also been made mandatory at all levels of educational institutions through adequate financial provision for tools and resources. In spite of the effort of the Federal Government of Nigeria and Niger State Governments in promoting ICT integration into teaching and learning in junior secondary Schools.

However, the attainment of objectives of ICT at junior secondary school level seems to suffer some defects as observed from poor performance in ICT utilization among teachers and students. This problem could also be as a result of poor accessibility of ICT resources by the teachers and students in junior secondary schools. If ICT tools are adequately accessed, they will be utilized for both academic and non-academic activities. This will bring about high degree of infusion into social studies teaching and learning in junior secondary Schools. Hence, the problem of this study hinged on the application of ICT for effective teaching and

learning of Social Studies among male and female teachers and students in both rural and urban junior secondary schools in Bosso and Minna local government areas of Niger state, Nigeria.

### **1.3 Objectives of the Study**

The major objective of this study was to assess the application of ICT for effective teaching and learning of Social Studies in Junior Secondary Schools in Niger State, Nigeria.

Specifically, the objectives of the study were to:

- i. find out the opinions of JSS students by levels of study on the application of ICT for effective learning of Social Studies in Niger state, Nigeria.
- ii. assess the opinion of JSS teachers by gender on the application of ICT for effective teaching of Social Studies in Niger State, Nigeria.
- iii. find out the opinions of JSS students by gender on the application of ICT for effective learning of Social Studies in Niger State, Nigeria.
- iv. assess the opinions of JSS students by location on the application of ICT for effective learning of Social Studies in Niger State, Nigeria.
- v. find out the opinions of JSS teachers by location on the application of ICT for effective teaching of Social Studies in Niger State, Nigeria.

### **1.4 Research Questions**

The following questions guided the study:

- i. What is the opinion of JSS II and JSS III students on the application of ICT for effective learning of Social Studies in Niger state, Nigeria?
- ii. In what ways do the opinions of JSS male and female teachers differ on the application of ICT for effective teaching of Social Studies in Niger State, Nigeria?

- iii. What is the opinion of JSS male and female students on the application of ICT for effective learning of Social Studies in Niger State, Nigeria?
- iv. In what ways do JSS urban and rural students differ in their opinions on the application of ICT for effective learning of Social Studies in Niger State, Nigeria?
- v. What is the opinions of JSS urban and rural teachers on the application of ICT for effective teaching of Social Studies in Niger State, Nigeria?

### **1.5 Null Hypotheses**

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

- HO<sub>1</sub>.** There is no significant difference between the mean opinion score of JSS II and JSS III students on the application of ICT for effective learning of Social Studies in Niger state, Nigeria.
- HO<sub>2</sub>.** There is no significant difference between the mean opinion score of JSS male and female teachers differ on the application of ICT for effective teaching of Social Studies in Niger State, Nigeria.
- HO<sub>3</sub>.** There is no significant difference between the mean opinion score of JSS male and female students on the application of ICT for effective learning of Social Studies in Niger State, Nigeria.
- HO<sub>4</sub>.** There is no significant difference between the mean opinion score of JSS urban and rural students on the application of ICT for effective learning of Social Studies in Niger State, Nigeria.
- HO<sub>5</sub>.** There is no significant difference between the mean opinion score of JSS urban and rural teachers on the application of ICT for effective teaching of Social Studies in Niger State, Nigeria.

## **1.6 Significance of the Study**

The result of this study will be significant in the following ways:-

The findings will help policy makers realize that the world is becoming a global village with varieties of information and communication technology facilities that can enhance teaching and learning. The finding will reveal to government, educational planners and teachers that Information and Communication Technology has the potential to contribute in different faces of educational development and effective teaching and learning of Social Studies.

The findings of the study will help Social Studies teachers in choosing appropriate ICTs devices capable of relieving students' tension towards the subject, thus improving students' academic performance in Social Studies. It will motivate Social Studies teachers to develop positive towards utilizing suitable ICTs devices that will be a possible means for minimizing problems in the teaching and learning of Social Studies at Junior Secondary School level. Findings of this study will help clarify among the teachers, the need for continuous and regular use of ICTs devices for teaching and learning of Social Studies.

Moreover, the results of this study will be of great significance to the Social Studies curriculum planners. The curriculum developers will find the work useful in reviewing the Social Studies curriculum by laying more emphasis on application of ICT devices so as to meet up with emerging needs of the society in the 21<sup>st</sup> century. This study will be of immense benefit to researchers in the field of Social Studies by forming a basis for further studies on the application of ICTs and teachers' quality in learning of Social Studies as a subject.

The study will also equip our educational administrators in both federal and state Ministries of Education, educational test and measurement experts on the need to

provide ICTs devices for effective teaching and learning of Social Studies in our secondary schools particularly in junior secondary schools Niger State as a whole.

The research findings will be useful to education policy makers and curriculum developers of JSS Social Studies curriculum as it will make them appreciate the need to make necessary adjustments especially on incorporation of full and comprehensive application of information and communication technology such as computer, internet, multimedia resources and other devices in teaching and learning of Social Studies.

The study findings will suggest to policy makers the need to provide necessary information and communication technology facilities to Social Studies teachers, this will enable them achieve National Educational goals as spelt out in National Policy of Education on integration of information and communication technology in teaching and learning in Nigeria. The outcome of this study finding will also suggest ways for effective application of information and communication technology facilities to enhance teaching and learning in Junior Secondary Schools. The study finding will add to existing literatures on application of information and communication technology in Social studies education.

### **1.7 Scope of the Study**

This study was on the application of Information Communication Technology (ICT) for effective teaching and learning of Social Studies in junior secondary schools in Niger state, Niger. However, this study was delimited to Bosso and Chanchaga Local Government Areas of Niger state. Add to this, it focused on JSS II and JSS III students and teachers in Public junior Secondary Schools.

## **CHAPTER TWO**

### **REVIEW OF RELATED LITERATURE**

#### **2.01 Introduction**

The cardinal focus of this study is to investigate the application of ICT in effective teaching and learning of Social Studies in Junior secondary schools. This chapter therefore reviewed literature under the following sub-headings:

- Theoretical framework ;
- Concept off Social Studies;
- Nature, scope and Objectives of Social Studies Education;
- History and Justification for Introduction of Social Studies Education in Nigeria;
- Concept of Information Communication Technology;
- Information Communication Technology and Social Studies Curriculum;
- Teachers' Gender and Application of ICT for Effective Teaching of Social Studies;
- Students' Gender and Application of ICT for Effective Learning of Social Studies;
- Students' Location and Application of ICT for Effective Teaching of Social Studies;
- Teachers' Location and Application of ICT for Effective Teaching of Social Studies;
- Review of Related Empirical Studies; and
- Summary.

#### **2.02 Theoretical Framework**

This study utilized the unified theory of Acceptance and Use of Technology.

##### **2.2.1 The Unified Theory of Acceptance and Use of Technology**

As the information technology industry kept growing, several attempts were made to develop and propose various models that could help to predict and explain the acceptance and use of various technologies. Confronted with so many models,

researchers were bound to pick and choose constructs across models or to choose a well-regarded model (Venkatesh, Morris, Davis & Davis,2003). As a result, the contributions from the alternative models were ignored. Venkatesh and colleagues felt a need to develop a unified view of individuals' technology acceptance by revising several technology acceptance models and integrating them to form a single model: the unified theory of acceptance and use of technology. To form the UTAUT model, eight models were integrated, those with the greatest contribution being the theory of reasoned action, the Technology Acceptance Model, the motivational model, and the theory of planned behavior. Other models used are one combining the Technology Acceptance Model and the theory of planned behavior, the Model of PC Utilization, the innovation diffusion theory, and social cognitive theory.

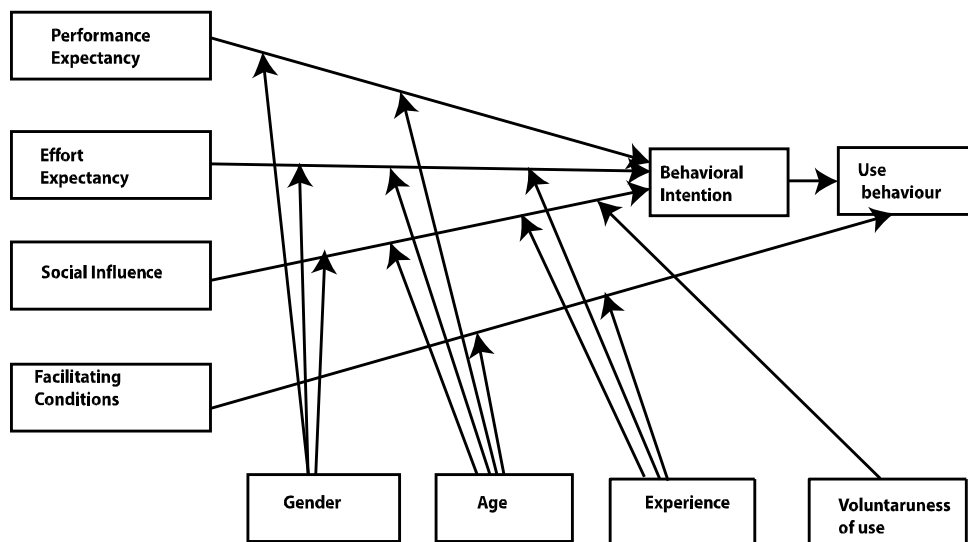
Similar to previous models such as the TRA (Technology Reason Model) and TAM (Technology Acceptance Model), the UTAUT model uses behavioural intentions to predict and explain system usage behavior. In addition, the perceived-usefulness construct famous from TAM work was incorporated into "performance expectancy" and perceived ease of use into "effort expectancy." Likewise, the subjective-norm element was incorporated into the social-influence construct, while facilitating conditions was introduced as a new construct (Venkatesh, Morris, Davis & Davis, 2003). The model encompasses four key predictor constructs. These are:

- i. **Performance expectancy** is defined as the degree to which the teachers/ students believes that using the ICT facilities will help him or her to attain positive teaching/learning outcome or academic performance
- ii. **Effort expectancy** is the degree of ease associated with the use of the information and communication technology in teaching and learning.
- iii. **Social influence** is defined as the degree to which the teacher/student perceives

that significant others believe he or she should apply the new information and communication technology in teaching and learning.

- iv. **Facilitating conditions:** is defined as the degree to which the teacher/student believes that the school has technical infrastructure to support the application of the information and communication technology in teaching and learning processes (Venkatesh, Morris, Davis & Davis, 2003)

The four constructs above are direct determinants of application, intention and behavior. The variables gender, age, experience, and voluntariness of use moderate the key relationships in the model. How the various parts of the model fit together is shown graphically in Figure 1, below.



**Figure 1:** The UTAUT Model (Venkatesh, Morris, Davis & Davis, 2003: 447)

The above theory explain the fact that, junior secondary school teachers and students application of information communication technology for effective teaching and learning of Social Studies in Junior Secondary Schools in Niger state could be influence by their gender, location, age, levels of study, experience and voluntariness of use. In addition, performance expectancy, effort expectancy, social influence and facilitating conditions could

also be some of predetermine factors.

### **2.03.1 Concept of Social Studies**

The definition of Social Studies is numerous and all tried to explain Social Studies as the study of man and his environment. For instance, Bozimo and Ikwumelu (2009), maintain that Social Studies aims at helping people develop the ability to make decisions so that they can resolve personal problems and shape policy by participating in intelligent social action. Mezieobi, Fubara and Mezieobi (2013) viewed Social Studies as an integrative field of study which probes man's symbiotic relationships with his environment, 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. Ndan and Jarimi (2011) stated that 'in Nigeria, Social Studies is perceived as the field of education or the common learning of man's interaction with his social, physical, economic and political environments which influences and brings about human improvement'.

Arisi (2011) view Social Studies as the study of man within his environment, physical, social, economic, psychological, religious, political, cultural, scientific and technological. Social Studies is the study of how man exists in his environment, deals with the multitude of factors that bears on man's existence. It involves man's activities, the activities he engaged in and why he engages in them. These include what he does, why he does them, what he believes in and why he believes in them; his problems and how they can be solved. Social Studies as a subject provides us with the ways of looking at the society in order to understand its structure and its problems and to find ways of solving the problems of the society. Ebirim and Edi (2014) are of the view that, basically, man is the epicentre of Social Studies and the environment (physical and man-made) is the base for man's survival and existence in the environment in which he finds himself thus, man is being examined from

the following comprehensive perspectives; social being, political being, legal being, religious being, cultural and economic being.

In the words of Jackson and Chinatu (2014) Social Studies is the study of how the human being influences his environment with the view of getting maximum benefits from it. It also deals with how the environment deals with human being in return. It equally studies the society, the relationship between people and the world in which they live. They added that Social Studies could be defined from the spatio-temporal angle, which is in the context of space and time. For instance, Nigeria after independent witnessed problem of integration hence the need to teach patriotism and unity which called for the introduction of Social Studies education with its main focus on citizenship transmission. In other words, Social Studies is the integration of interrelationships of different subjects aimed at inculcating national consciousness and national unity, imbibing the right type of values and attitude for self and national survival, the acquisition of necessary skills, ability and competences which individuals needs to be able to contribute to national development (Chukwu, 2011).

To Okam (2016), Social Studies is not, like the social sciences, concerned with the propagation of knowledge as such; its Primary purpose is the social utilisation of knowledge. The aim is to improve the process by which citizens use knowledge from the social sciences and other Areas of disciplined thought in making decisions concerning their individual behaviours and concerning questions which bear on public policy. While, Balarabe and Muhammad (2015), opined that, Social Studies Education can be define as an organized study of man as he lives in the environment, by inculcating in him the values and skill that can help him in solving the problem he may encounter in life for the betterment of his living in the society.

Also, Bayero (2012) viewed Social Studies Education is concerned with the study of man and how his problems could be solved. Also a Study aimed at conquering diseases

and making environment a better place for living. Saba (2015) defines Social Studies as, the study of man's social relationship with fellow man in time which is history, in space which is geography, in groups which is sociology and anthropology, in leadership and followership which is government, in exploitation and utilization of resources which is economics and in reaction to stimulus which is social psychology.

Accordingly, the National Council for the Social Studies (2009) sees, Social Studies as the integrated study of the social sciences and humanities to promote civic competence. Similarly, Tikumah (2009) conceives Social Studies as the type of learning that aims at creating a free society of responsible and responsive citizens by imbuing them with desirable attitudes and values as well as appropriate mental and physical skills and abilities for meaningful living and interaction. This amplified the definition of Ogundare, (2010) who conceived Social Studies as the Subject matter of the academic disciplines somehow "simplified", "adapted", "Modified", or selected for School instruction.

From the above definitions of Social Studies, it can be summarized that is a programme of study in which clients are exposed to carefully select physical and social environmental realities with an in build packages for the development of the skills of various kinds and nurturing of values, attitudes and actions conducive to the continued orderly survivals of the society. it is an avenue for enriching the Nigeria child with attitudes values and skill for effective living thus providing for efficient use of human and natural resources to achieve rapid socioeconomic growth which is among the broad objectives of Nigeria.

### **2.03.2 Scope, Nature and Objectives, of Social Studies Education in Nigeria**

Social Studies should be seen as an indigenous learning exercise. As Olojobou, (2007) rightly put it, Social Studies should be seen as "an African idea and creation of concerned educators such as Kwame Nkrumah, Tafaw Balewa, Julius Nyerere, James

Kenyyatta, Leopold Sengor, and a host of many others”. These pioneer African nationalists who were educated under colonial rule, and who found the transplanted colonial education to be an instrument of European imperialism, sought to free Africans from mental enslavement to Europeans by domesticating the knowledge of the African through Social Studies education. Therefore, Social Studies was borne by the yearnings, aspirations and insights of Africans themselves (Tikumah, 2009).

Also, Social Studies, as earlier stated, is a corrective study; its purpose is to remedy any educational ills at all times. It seeks to replace irrelevant learning experiences with relevant ones, to make the Nigerian learn and understand his own history and geography better than those of Europe and America. Social Studies is a practical enquiry into, and a quest for solution to, societal problem. It is not a speculative body of knowledge. As such it clearly identifies learning objectives before drawing up curriculum contents. Another feature of Social Studies, Balyejusa argues, is that it puts man at the centre of focus: it is a study of everything in man’s environment in relation to man’s action (Ololobou, 2007 & Tikumah, 2009).

The word ‘scope’ refers to the width and breadth, level of quality and quantity of a subject matter. In the case of Social Studies, scope is difficult to determine because of the very nature of the subject- matter. In the words of Oroje in Social Studies is concerned with a dynamic subject-matter-man’s social behaviour and, in consequence of this, no Social Studies text book can claim to be either all inclusive or accurate for all times (Ololobou, 2004; Iyela & Audu, 2006; Tikumah, 2009). The fact is that Social Studies deals with practical issues pertaining to man and his environment, and not only that man’s condition is changeable, dynamic and flexible but also, man’s condition varies from one environment to another (Tikumah, 2009). Another reason militating against a rigid scope for Social Studies is that, as earlier stated, objectives have to be identified and clearly stated

before any curriculum content can be determined. In that case the scope of Social Studies in any given situation or environment will be dictated by the aims and objectives to be pursued. Social Studies frequently change its contents to reflect new national and international realities. In view of the dynamic and flexible nature of Social Studies as explained above, although Social Studies is said to be taken from the Social Sciences, yet it can draw on any other discipline, including the Physical/natural sciences, depending on what specific objectives are to be pursued. In short, the scope of Social Studies will remain an ever-changing area given the factors of space, time and human development (Tikumah, 2009).

Why we teach Social Studies and what we teach in Social Studies are two questions that have, as Fenton in Tikumah (2009) put it, “As many answers as those who ask and answer them”. Social Studies education aims at studying social action, addressing social needs and problems. As such there are as many varieties of objectives of Social Studies as they are varieties of social needs and problems. The objectives of Social Studies vary from one country to another, depending on the social conditions of the country concerned. But by-and-large, according to Ololobou (2007) and Tikumah (2009) a typical Social Studies programme must encompass four cardinal objectives, viz: the environment, the various skills, values and attitudes and emerging issues (or current affairs). Ololobou (2007) also emphasizes that Social Studies in Nigeria seeks to re-establish the pre-colonial traditional African educational values, which include honesty, hard-work, mutual cooperation, and consent and conformity to traditional social order. On their own part, Tikumah (2009) is of the view that based on the rationale and motives behind the creation of Social Studies in Nigeria, the objectives of the programme may be broadly outlined as follows:

- i. the creation of an awareness in the learners about their surroundings;

- ii. the development of specific fundamentals such as attitudes, values and norms of the society;
- iii. the promotion of effective and active citizenship;
- iv. the promotion of understanding of social problems of their locality and finding possible solutions to them;
- v. the nurturing of the ability to relate favourably to the products and peoples of the nation;
- vi. helping the learners to develop the right attitude toward the leaders of the nation;
- vii. the creation of understanding of their role during election, especially on how to discharge their duties efficiently;
- viii. the development of the ability to think reflectively and come to independent conclusion;
- ix. the development of understanding of how the lives of people who lived in the past affect our present day lives and how we can improve the present for the future;
- x. The demonstration of flexibility and willingness to accept necessary changes within a system i.e. education, Government, or the law for the good of all;
- xi. The appreciation of the rules and regulations that guide behaviour for mutual respect as very important regardless of our differences;
- xii. the creation of an awareness that discipline is essential for an orderly society.

As explained by Tikumah (2009), the objectives of Social Studies in Nigeria naturally reflect the national objectives of education as a whole. The reason behind this is two-fold. Firstly, Social Studies is a subject that draws from all the fundamental subjects at the primary and secondary levels of education: History, Geography, Civics, Language, Science, Arts, Religion, Health Education, etc. As such the objectives of Social Studies tend to reflect the objectives of all these subjects. Secondly, because

Social Studies is primarily conceived and designed to offer a comprehensive explanation to societal life, its objectives must necessarily be as comprehensive as the national goals of education. The national educational goals as laid down in the National Policy on Education (2010:4) are outlined below:

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

In view of all that, it should be emphasized that no statement of Social Studies objectives can be taken as all-inclusive; new objectives can always be conceived in line with the dynamic, flexible and all-purposive nature of Social Studies as a problem-solving discipline.

#### **2.04 History and Justification for the Introduction of Social Studies in Nigeria**

These inexact and unreliable views about the origin of social studies have created more confusion, according to Mezieobi, (2008) Social Studies organized in the western world, perhaps Europe or Western Europe and North America, Ezege (1987/1877), Udoh (1989) in Mezienbi et al (2008). From the foregoing, one may quickly incline to believe that Social Studies was imported to Nigeria from Great Britain, even if those who provide the fillip for its introduction were Americans. Mezieobi et al (2008) further stated that Nigeria scholars and writers are not in agreement as to when social studies made its first appearance in Nigeria or its schools. Obilo (1981) and Meziegebe (1987) cited in Mezieobi et al (2008) put the emergence of social studies in Nigeria schools to the early 1960s. Osakwe and Itedjere put it in the mid 60s. Bebe (1987) put it at the late 60s. To Adeyoyin (1982) in Mezieobi et al (2008), social studies was introduced in Nigeria in the colonial era with the

establishment of schools. According to her, social studies which the colonial masters introduced were couched in the then religious curriculum.

Mezieobi (1990) debunks this and said that the ascription of the origin of social studies to the colonial time is a fallacy. He further noted that the 1960s emergent origin theory of social studies in Nigeria is untrue and therefore, unfounded. To Mezieobi, social Studies has been there right from the inception of Nigeria in the pre-colonial days or rather indigenous times with goals, content, methodology and evaluate practices that met the aspirations of the then Nigerians. To him, what is new is the concept social studies – which was really borrowed and which became as a discrete subject in the Nigerian schools. Even today in Nigeria, the social studies content is Nigeria specific as it focuses largely only on the Nigerian environment and its lifestyle.

In a related development, Ololobou (2007) gave another account of the history of social studies. According to him, the African Social and Environment Studies Programme (ASESP, 1994) stated that the purpose and content of social studies as a school subject are closely related to African traditional citizenship education. Viewed from this perspective, the developmental trend of social studies education programme in Nigerian can be traced through the African traditional education, colonial, post colonial and the new integrated approach phases. African traditional education was basically citizenship education. Nigeria, like other African nations had a system of education that integrated the young members into the society through the inculcation of cultural practices, values and beliefs. The goal of this system of education was to make the individual functional and productive members of the society. This agreed with the primary role of modern social studies education.

As a result of colonial role, the formal type of education was introduced. Although, traditional education existed side by side, its value was de-emphasized, education became a

tool for western imperialism as foreign cultures and values were taught in what constituted the social aspect of the curriculum. The discrete social sciences particularly history, geography and civics were taught to produce loyalty and obedient to serve the interest of the colonial masters. At the attainment of independence and subsequently afterwards, Nigeria began to take a critical look at its curricula in the schools to re-direct focus on traditional history, culture and values, indeed, the 1968 Mombassa Conference formally and officially accepted and adopted social studies to achieve this purpose. This marked a new beginning of social studies in Nigeria. Earlier, in 1958, in the former western region, a cooperative effort of the western region and the University of Ohio, U.S.A led to the teaching of Social Studies and subsequent production of a social studies syllabus and textbooks.

In 1953, at the Comprehensive High School, Aiyetoro, Egbado, the joint effort between the western region and the United States Agency for International Development (USAID) saw the appearance of social studies in the school curriculum. Meanwhile, in the northern part of Nigeria, the Northern Nigeria Teachers' Education Project (NNTEP) in 1964 encouraged the teaching of social studies and produced textbook on social studies methodology for teachers. The Institute of Education, Ahmadu Bello University, Zaria was very instrumental in organizing activities that promoted the teaching of the subject. It organized workshops that produce curriculum materials, especially at primary level and sponsored frequent social studies in-service course for teachers at all levels. A major landmark in social studies education nationally was the 1969 National Curriculum Conference which sought to make education relevant to the needs of the child and the nation. Just before this conference in January 1969, the Social Studies Association of Nigeria (SOSAN) had been launched at the Cooperative College, Ibadan to promote the effective teaching of social studies in Nigeria. However, with the National Curriculum Conference and Educational Agency, the Nigerian Educational Research Council (NERC) was formed in

1970. This agency with the Comparative Education Study and Adaptation Centre (CESAC) organized a series of curriculum workshops which led to the production of Social Studies curriculum for primary, Junior Secondary, Senior Secondary and Teacher's Colleges in Nigeria.

The federal government's introduction of the Universal Primary Education (UPE) Scheme in 1976 and the 6-3-3-4 system of education in 1982 saw the eventual introduction of social studies as a core subject. Consequently, materials were produced for social studies at all levels. Although, the history of social studies may appear short, it has continued to make tremendous strides and impact on the Nigeria's education scene. Social Studies is now taught as core subject in primary and junior secondary schools. It is offered as a single major and double major course in most Colleges of Education. At various universities, subsequently, syllabuses and text books were produce for all level by NERC, NTL, JCC and CESAC.

The dynamics of our society and the demand which its placed on individual and the entire society requires the solution to curtail certain prevailing circumstances and challenges. Emergence issue, realities and pressing social needs have compelled many nations across the globe to adopt Social Studies for their countries and School which Nigeria was not exempted.

The reason for introduction of Social Studies among countries varies each country has its own reason for introducing the Subject. For instance, it has been used as a partial solution for social problem in many countries of the worlds. If you take Germany, it was initiated after the Second World War, as a means of developing a new political order. In British, Social Studies was used to legitimize the teaching of social sciences particularly sociology, while preparing Students for their role in the society. In United States of America (USA), Social Studies has continued its Primary function of preparing Students

for effective citizenship in democratic society and instilling patriotic ideas in the young ones NOUN(2010).

Among the African nations too, Social Studies was introduced with different reasons and factors, Social Studies have been used to improve the self image of people in the society after a colonial rule and heritage. In Sierra Leone, it was used to learn ways of improving the economy. In Ghana, it was aimed at transforming the society, especially political culture. In Ethiopia, it came to inculcate the concepts of nationalism, unity and inter-dependency among citizenry of a new nation with diverse population.

The rationale for introducing Social Studies in Nigeria we need to flash back at the philosophy behind its instruction and what really intended to achieve. In Nigeria, it is aimed at helping to build a foundation for a democratic society. In spite of many conferences, seminars and workshops for Social Studies, the Subject did not receive the blessing of so many Schools in Nigeria immediately. Some were scared because of its newness, or lack of understanding of its nature, scope, and dynamism. Others saw the development as a great challenge to their discipline more especially those in Social Sciences (Political Science, Sociology, Economics and History etc) and therefore campaigned against it. This necessitated the formation of Social Studies Association of Nigeria (SOSAN) now Social Studies and Civil Educators Association of Nigeria (SOSCEAN). Several other organizations have since been formed to further promote effective teaching of the Subject in Nigerian Schools. These organizations include National Association of Social Studies Educationists (NASSE) and Social Studies Teachers' Association of Nigeria (SOSTAN).

Social Studies was introduced into the Nigerian School system decades ago, with the goal of breaking down regional, ethnic and religious allegiances, in order to promote national unity. In 1960, immediately after independence, the elites started 'fighting'

amongst themselves at regional and national levels over their share of the ‘national cake’. Conflicts and wars, which broke out at the time, were hinged on religion and ethnicity. Eventually, in 1966, Nigeria experienced its first coup d’ etat. Within a decade of independence, Nigeria was involved in a civil war. A lot of lives were lost and properties were destroyed, and it was against this background that Nigeria introduced Social Studies into the School system immediately after the war.

According to the report of the 1969 National Curriculum Conference, Social Studies was one of the Subjects that would contribute to the attainment of the Nigerian Educational goals including self realization, better human relationships, self and national economic efficiency, effective citizenship, national consciousness, national unity, social and political progress, scientific and technological progress and national reconstruction. Saba (2015), assert that “Social Studies was introduced into Nigeria as an answer to specific national problems”. After independence, most Educationists in Nigeria agreed that the School must be Nigerian in outlook rather than emphasizing foreign ideas, because the then, Education systems was design in such a way that would serve the interest of the colonial masters.

Thus Saba (2015), asserted that “instead of the Educational system to develop positive attitude and values in the Society in African Child lives, it alienate him from his cultural environment” Also Ololobou (2010) stated the following underlying motives of introducing Social Studies in Nigeria were as follows:

- i. The need to make Education more relevant to the needs of the individuals and the society
- ii. The need to use Education for national integration and socio-economic development
- iii. The need to develop the right social values
- iv. The need to make an individual responsive to the society in which he lives.

Tikumah (2009) rightly argued, if no one can dispute the fact that the Nigerian child needs to know more about the history and geography of his own country than the history and geography of Europe, then no one can question the need for Social Studies in the Nigerian School system. Social Studies seek to reverse the colonial order of Education that made the Nigerian child learn more about Europeans than about himself. Tikumah (2009) put it further by submit that, Social Studies in Nigeria aimed at breaking the ethnic, religious, linguistic and cultural barriers that keep apart the various groups that constitute the Nigerian society, so that nation-building can be facilitated by the concerted efforts of those divergent peoples of the Nigerian polity.

In summary, the respect and paramount importance Nigerian Educational thinkers and policy makers have come to attach to Social Studies Education in the country which among is a major development associated with the Nigeria National policy on Education (1981) is the pride of place it has given to the Social Studies Curriculum. The policy regards this Curriculum package as a compulsory core Subject area which all Students in the Secondary Schools cannot dispense with in their learning activities. Very importantly, the policy endorses that the learning of the Social Studies Curriculum in our Secondary Schools must be seen as one of those avenues of establishing strong bases for the production of effective citizens and of forging a cohesive society that will support a notion of nation-building.

The other reasons for introducing Social Studies in the School system which include:

- i. To minimizing the influence of colonial type of Education on children. Before the Social Studies Curriculum was in placed, children in Primary and Secondary Schools were made to study history, which it contained elements of colonialism. Core values and cultural orientation was mainly the inculcation of foreign values

and culture. For that it became important to introduce a new Subject that would help children to understand their traditional values and culture of their Country, which resulting in introduction of Social Studies.

- ii. The African Conference in Mombassa, Kenya. In 1968 play a greater role, this Conference was organized whereby important issues pertaining to Education and African development were discussed. A call was made for Educational evolutionary reforms in Africa, which bring about the Nigerian Curriculum Conference organized in 1969. At this conference, participants emphasized the need for Social Studies as a tool for national unity and citizenship Education.

The last decade of the twentieth century and the first decade of the twenty-first have seen a marginalization of Social Studies Curriculum, instruction, and assessment at all grade levels. In many State houses, in departments of Education and in School districts across this great nation, Education for citizenship has taken a back seat to Education for career and college.

Eventually, Social Studies were introduced to the School system as a panacea to specific national problems. It was believed that when young people were exposure to the Subject, it would instill in them a love for their country and a sense of loyalty to the Nigerian government. It was also believed that if the Subject exposed them to the problems in our society, they become better equipped through the acquisition of necessary skills needed for survival. Therefore, it can be said that Social Studies was introduced to serve two closely related purposes:

- i. To guide learners towards understanding people from different social backgrounds and the methods they use for coping with their problems and conditions

- ii. To guide learners in developing skills for interacting with people, reacting to situations and conditions in order to ensure their survival and growth as well as that of their society.

Social Studies is the most (if not the only) appropriate Subject for addressing Nigeria's societal problems educationally and comprehensively, out of all the Subjects studied in the Nigerian School system.

### **2.05 Concept of Information Communication Technology**

The concept of Information Communication Technology consists of three words. Abdulsalam et al. (2008) postulate that information can be defined as knowledge communicated by others or obtained from investigation of study or instruction. It could be the process by which the form of an object of knowledge is impressed upon by the apprehending mind so as to bring about a state of knowing. Technology, on the other hand, is the science of application of knowledge to practical purposes. Technology determines the quality of life of a people and the overall status of their nation. Information has been the driving force of so many human activities in search of developing one's self, which has created a basis for the need to know. ICT stands for Information and Communication Technology and is defined as a "diverse set of technological tools and resources used to communicate, and to create, disseminate, store, and manage information" (Odhiambo, 2013 & Owusu-Ansah, 2013).

Therefore, Information Communication Technology (ICTs) are commonly defined in education as a diverse set of technological tools and resources used to communicate, create, disseminate, store and manage information (Odhiambo, 2013). These technologies include computers, the internet, broadcasting technologies (Radio and Television), and (Mobile) telephony. Basically ICT is a tool. It can be hardware (such as Computers, Digital cameras), software (such excel, discussion forum) or both.

The term ICT refers to forms of technologies that are used to create, store, share or transmit, and exchange information. This broad definition of ICT includes such technologies as radio, television, video, DVD, telephone (both fixed line and mobile phones), satellite systems, computer and network hardware and software; as well as the equipment and services associated with these technologies, such as videoconferencing and electronic mail (UNESCO, 2002). ICT has been defined by different commentators; many of such definitions focusing particularly on the ‘newer’ computer-assisted, digital or electronic technologies, such as the internet of mobile telephony. Some, however, do include ‘older’ technologies, such as radio or television. Others even do include the whole range of technologies that can be used for communication, including print, theatre, folk media and dialogue processes. Some focus only on the idea of information handling or transmission of data. Others encompass the broader concept of tools to enhance communication processes and the exchange of knowledge (Owusu-Ansah, 2013).

Academics and students who use ICT gain deeper understanding of complex topics and concepts and are more likely to recall information and use it to solve problems outside the classroom (Apple Computer, 2002). In addition, through ICT, Academics and students extend and deepen their knowledge, investigation, and inquiry according to their needs and interest when access to information is available on multiple levels (Owusu-Ansah, 2013). Babalobi (2010) acknowledges that ICT is the processing and maintenance of information, and the use of all forms of computer, communication, network and mobile technologies to mediate information. Communication technologies include all media employed in transmitting audio, video, data or multimedia such as cable, satellite, fibre optics, wireless (radio, infra-red, bluetooth, and Wifi). Network technologies include personal area networks (PAN), campus area network (CAN), intranets, extranets, local area networks (LANs), wide

area networks (WANs), metropolitan area network (MANs) and the internet (Owusu-Ansah, 2013).

Computer technologies include all removable media such as optical discs, disks, flash memories, video books, multimedia projectors, interactive electronic boards, and continuously emerging state-of-the-art PCs. According to him, mobile technologies comprise mobile phones, personal digital assistants (PDAs), palmtops, among others. These technologies have information as their material object. Information is not reserved for use in isolation, but, rather communicated among users. ICT consists of hardware, software, networks, and media for collection, storage, processing, transmission and presentation of information (voice, data, text, images), as well as their related services. It can be divided into two components; Information and Communication Infrastructure (ICI) which refers to physical telecommunications systems and networks (cellular, broadcast, cable, satellite, postal) and the services that utilize information (internet, voice, mail, radio, and television).

In the words of Amenyo quoted by Owusu-Ansah (2013), the characterisation of ICT is robust. He purported that it encompasses automation of the information and meta-information aspects and representations of people, items, goods, systems, tools, equipment, instrument and machinery. It necessarily embraces data capture (gathering, collection, entry, acquisition and measurement), data storage (recording, archiving and logging), data retrieval, data processing (manipulation, calculation, computation, analysis, modelling, representation, presentation and simulation) and data communication (transfer, flow, interchange and exchange).

## **2.06 Information Communication Technology and Social Studies curriculum**

Social studies is the study of man and his interaction with his environment. It is concerned with man as a social being and the way he organizes his society, which include a social, cultural, economic, political, historical and geographical aspects of the society. And in

relation to the environment, the Nigerian Educational Research Centre (1977) was more specific by stating that Social Studies education focuses on “man’s problem of survival, how man influences the environment and in turn how the environment influences man”. Accordingly, therefore, social studies education is designed to help inculcate the masses desirable social habits, attitude as well as acquire useful manipulative skill of problem solution in the society.

Kissock (1981) conceptualized social studies as a programme of study which the society uses to instill in students the knowledge, skills, attitudes and actions; it considers important concerning the relationship human beings have with each other, their world and themselves. In a related development, Akinlaye (1996) stated that the core of social studies is the acquisition of appropriate knowledge and problems in the environment which the learner would encounter from time to time and in daily community life. In the same vein, ICT has a lot of infancy on the teaching of social studies.

Omamurhomu (2007) opined that the world is becoming increasingly complex and interdependent. This is why social studies through its structure of being an interdisciplinary subject is capable of unifying knowledge from the various disciplines with the overall objective to creating awareness and understanding of the evolving social and physical environment. In so doing, social studies seeks to develop positive attitude and desire by the individual to make, positive contributions to the maintenance of a sustainable environment that increases the quality of life. According to Samaila (2009) there are two major types of teaching machine used in the teaching of social studies. These include simple teaching machine and complex teaching machine. Samaila further explained that the complex machine is the computer which can presents multiple choice questions in a window, with various keys to press to indicate the correct answers. The use of computer in teaching social studies makes the users processed at their own pace and also have an opportunity to review their work and

equally help to relieve teachers of some of the time consuming aspects of drilling students, allowing them to give more attention to individuals with specific problem or concentrate on some particular area of instruction.

Kabey and Csizszentmihalyi (1990) opined that in the 20<sup>th</sup> century, new information technology has the potential to influence the lives of ordinary citizens as much as it has influenced business, education and government. They further stressed that ICT entered our homes named our daily lives and have changed the range of activities we pursue, they are use to perform activities, our relationship, with other people and our personal and economic welfare. Willman and Haythorne (2002) stated that: the growing availability of mobile telephones, personal computers and internet as well on the expansion in the range of services they offer, could lead to changes in the lives of the average citizens as profoundly as those that have affected organizations and economic life. They concluded that those technologies are being used in a wide variety of ways to make every activity more efficient and more convenient.

According to Marshall and Taylor (2006), information and communication technology has the potential to provide job opportunities for our teaming youths. In a related findings, Oyedele (2002) in assessing the influence of computer technology to education in general, social studies education in particular stated that teachers of social studies in most of our schools are trained with the responsibility for helping to meet the needs brought about by technological range and progress and the changing meaning of work in our future society. Therefore, this change will internally affect the curriculum and course content of social studies. Nwakolo and Aliummat (2002) stated that information technology embraces all modern system of processing information and communication in data, text, image and voices.

In supporting the above opinions, Okafor (2007) observed that using technology effectively in the classroom is a means of transforming this classroom to be student centred with teachers as coaches and guides. This concurred with Umar (2006) in Adamu (2009) who observed that it is now realized that information tools have some advantages as compared to conventional mode of information sharing and delivery. He further stressed that with the aid of technology, teachers can take social, studies students; beyond traditional classroom limits, creating virtual environment to experiment explore and more so, now that technology can be used to solve many challenges, task and other classroom activities.

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

Ehaman and Glenn (1991) and Tancook (2002) also support the view that the integration of internet technology in the social studies curriculum will enhance teaching and learning. Findings of a research projects reported by Tanook (2002) cited in Oyebola (2007) in which twenty five, nine and ten years old in fourth grade children in an elementary school in the United States of America, were asked to obtain information from the internet through web quest as part of their social studies class activities showed that the use of the internet enabled these students to acquire better knowledge of the content covered.

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

- i. Reading a variety of materials is very important in social studies. The internet contains a rich source of information that the social studies student will find very

useful. According to Tancook (2002). The internet allows these students to see places they had never seen or heard. The images from these sites provided information students could not have gained any other way.

- ii. Students who took part in web-quest to acquired improved computer skills in word-processing and use of the internet web quest are based on the inquiry method, which is a teaching-learning technique. It involves conducting quests and searches into problems. When using inquiry methods, the teacher involves the students to collect, assimilate and investigate information. The information is used to answer questions and discuss issues and events; inquiry method is one of the methods recommended for teaching and learning in social studies. The inquiry method allows students to play an active role in class activities. Unlike the traditional lecture method which is more teacher-centered.

Research has shown that most teaches of social studies in Nigeria make use of only the lecture method. Thus, the use of web quest for teaching and learning in social studies helps to reduce the usual emphasis on the lecture method. In another development Ajayi and Fadekmi (2007) stated that the society is getting more complex and there is need for accurate information on students, personnel and facilities, putting-up of administrative matters, wastage of spaces, lack of feasible budget estimates amongst others to enhance effective teaching and learning. In the same vein, Adebayo (2007) stressed the need for management information system (MIS) in decision making as it provides information that is needed for better decision making on the issues affecting the organizations, education and the society regarding human and material resources. According to NUC (1987) in Ajayi (2007), the objectives of MIS project in Nigeria educational institution are:

- i. To standardize the system of obtaining reports and statistical information from the various educational institutions on students, staff, financial matters and library.

- ii. To record such information on diskettes or tapes at the educational institutions and sent to NUC, NCCE and NBTE for budgeting information storage, analysis and retrieval purpose.
- iii. To ensure that such information are accurate and timely
- iv. To organize information for planning, budgeting and decision-making
- v. To help the educational institutions put in place effective management system and improve utilization of resources.

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

Gupta and Anasari (2007) in agreement with Ajayi et al, (2007) stated that the society expects to be able to manipulate the information it has for its own benefit to increase understanding and discover new relationships. Through the use of computer, the society expects to be able to distribute information quickly, efficiently and cheaply to ensure effective management and control of crimes. Gupta and Anasari (2007) went further by saying that information technologies have enabled researchers to access a wider source of information. Social studies students through the internet and other related technologies, such as electronic mail, can carry out collaborative projects between geographically distant groups. On the contrary, Anderson (2003) stated that in the Republic, Plato warned against the pernicious effects of consuming the mass media of the day (drama and poetry) because

viewers and readers might have difficulty distinguishing fact from fiction and might emulate the worst, rather than the best, behaviors of the tragic heroes. Such ancient concerns are a strange per-echo of concerned social science research findings and argument. For instance, that television and computer games promote violence or other negative behavior.

Television programming is always available, does not require coordination with others and is packaged to be consumed in small chunks, means that watching TV can be a less deliberate act than alternative behavior. Simply because it requires no explicit actions, Television and computers are easy way to kill time and therefore people, perhaps use it more than they want. This type of non-deliberate choice about time can have large personal and social consequences Putman (2000) and Nie (2001) stated that the growth of ICT has expanded options from using the internet primarily for social purposes to more individualistic, recreation and information uses. They further stressed that the growth in the number of people online also means that if people use it socially, they have more options to connect to others whom they came about (expressing or reinforcing strong ties) than they had several years ago. Nie (2001) further opined that internet can promote civic education and can equally promote ties between teachers and students of social studies class. Thus, the potential for social adaptation of the (internet) ICT has increased enormously.

ICT as a means of teaching and learning of social studies education is an indispensable tool. It arouse interest in learning and consequently there is increase in students enrollment in class, national values and cultural heritage can be programmed through computer software, and it promotes skills development, enhance efficiency and promote competency in teaching and learning of social, political, economic and cultural values if properly put into use.

The imperatives of information technology to social studies education according to Adamu (2004) in Danladi and Bulya (2006:225) is premised on the modern constructivist educational theory, which emphasizes critical thinking, problem solving, authentic learning experiences and social negotiation of knowledge and collaboration. According to him, the researcher assumes the role of a facilitator rather than a disseminator of knowledge. He assists students as they are actively engaged with the pool of available information and materials to construct their own understanding. This submission in the perception of the study confers ICT with the status of providing students with what they want to learn, and how to learn and when to learn. ICT has become an indispensable part of the contemporary world. It has made impact on the quality and quantity of teaching, learning and research in traditional and tertiary education using it. In more concrete terms, Yusuf (2005) in Kwache (2007:2) puts it that:

*IT enhances teaching and learning through its dynamic, interactive, flexible and engaging content. It provides real opportunities for individualized instruction. And has the potentials to accelerate, enrich and deepen skills, to help relate school experiences to work practices. That IT helps to create economic viability for tomorrow's workers, contribute to radical changes in school, to strengthen teaching and to provide opportunities for connection between the school and the world. That the pervasiveness of IT has brought about rapid technological, social, political and economic transformation, which has eventuated in a network society organized around IT.*

With these ICT imperatives intrinsic in education, it has proved as discussed in chapter one that there still cannot be education without communication and information. The learner has to be communicated to before he will be able to acquire information, which is central to the building up of knowledge, skills, values and attitudes. Information technology is therefore the hallmark of the educational processes though with myriad of challenges on social studies teaching, particularly the use of ICT-based instruction as pointed out by Bayero (2007:4), where the traditional practice of teacher-centered approach is now a thing of the past. Those teachers who use ICT have additional avenues to engage students in learning as it can provide access to many contexts, for social inquiry and values exploration. He stated

further that teachers who do not integrate ICT into teaching subject the students teacher-centered and subject-centered approaches, thereby limiting their source(s) to knowledge, teachers and text books alone. Thus, for a good and rational application of information technology in the teaching of social studies to progress, Orungbemi (2008:162) submits that there is the need to have an insight into ICT knowledge structure which should serve as the focus of the program. He stated further that:

*Social studies is practical based with theoretical and practical capacity of broad areas of study. It is about disseminating information that have been tested to be factual, current and having social implications. That IT can therefore be used to present learning tasks in reality or something close to reality to greatly enhance learning outcomes as learners will retain more of what is taught involving more senses for perception than hearing alone. IT can also be applied in assisting the students to store learning tasks and this will give student extra access to the lesson more than the volume he/she had in the normal classroom situation.*

Hereinafter, there is no doubt that ICT policy aligns itself with the philosophical underpinnings of social studies education. First and foremost social studies is geared toward the preparation and production of functional and effective citizens (Quartey, 1984:42). It seeks to ensure peaceful coexistence, responsive and responsible leadership, to equip learners with thinking skills, critical decision making skills, healthy attitudes and desirable values (Famwang, 2003:43). The bottom line of social studies in the submission of Danladi and Bulya (2006:227) is to eliminate social ills prevalent in the society, to make the society a better place to live in and tolerate one another in spite of the diversities that do exist. Apparently, no matter how desirable a policy might be, suffice it to say that, if the human (people) who are to implement it lack the will and commitment to do so, it remains a mere blueprint. This in the convincing words of Ajibili (2005:36) has been the fate of Nigerian policies like Jaji Declaration (1978), Ethical Revolution (1982), War Against Indiscipline (1984), Mass Mobilization for Social Justice and Economic Recovery MAMSER (1987), War Against Indiscipline and Corruption (1994), National Rebirth (1999), Due Process, and SERVICOM.

Danladi, (2006) further expanded the commitments of Social Studies when he maintained that Social Studies has always aimed at sanitizing the society of bribery and corruption, that with the new policy on ICT that aims at reducing bureaucracy, the task of Social Studies would be made a lot easier. The assuming importance of the messenger would be made minimized; they will no longer risk their precious life traveling distances to make inquiry. The use of mobile phones has made this possible. With the creation of knowledge-based and simple moral accountable Responsive and Transparent (SMART) governance, Nigerian leaders would be kept on check from corrupt practices. Furthermore they maintained that social studies could expose youngsters to the availability of these facilities. This approach will go a long way to the availability of these facilities. This approach will go a long way-to ensuring the all round development of the school leavers, as they would have the entire human senses exposed to evaluation.

Flowing from the above, Danladi and Bulya (2006) still reported that one of the salient objectives of social studies education is to ensure self-reliance and sustenance in food supply. The role of social studies teacher here is to cultivate the minds of the youngsters to take to productive agricultural practices via ICT. Their emotional state, feelings and attitudes towards farming are instrumental in increasing food production. In the area of trade and commerce, they maintained that social studies can play a useful role by popularizing the opportunities offered by ICT in terms of generating meaningful employment opportunities for Nigeria.

Though Nigeria began late in utilization of ICT (internet and computer/laptops) in the teaching and learning of social studies education, but has progressed rapidly as reported by experts and had tremendous impact on teaching social studies in tertiary institutions. By way of reflective analysis, Ujiakhien (2007) authoritatively and constructively gave a thematic

connotation on the anatomical imperatives of ICT on the teaching of social studies education, which he maintains in his exact words, provides:

- i. **Access to information:** necessary information relating to any area of study in social studies become easily accessible to both students and teachers. If this is achieved, teachers will be well equipped to produce quality students to the lots of the society. ICT will also in the words of Danladi (2000) contribute to the development of good citizenship, the upliftment of moral character and the promotion of social understanding in the societies. He stressed further that it would help students deviate from the traditional approach to learning and acquisition of information based on the peculiarities and differences of our people. In essence, social studies via ICT will create consciousness at all levels of human life that will promote personal, moral and environmental discipline.
- ii. **Development of systematic thinking:** the priority of this modern education demands that the teachers and students alike should develop systematic thinking. Allowing one idea to follow the other. With this new technology, teachers will not be compelled to assimilate pre-package blocks of information instead they will strive at encouraging ideals that will stimulate the curiosity and creativity of their students, so they will be able to discover new ways of organizing reality.
- iii. **Students working in team;** the new technology encourages collaboration, not only among teachers but also among students. With computer Aided Instruction (CAI), students are encouraged to have wide array of ideas about some production process through simulation program-a real life situation program. Instead of teachers standing in front of the students all the times, students can work in team without much of teacher's intervention. With this CAI, Mezieobi (2008) acknowledged in this proceeding that it will encourage active participation of the learners and their thinking in the computer-

learner interaction via the learner's inevitable responses. That it is responsive to and accommodates learners differences since each student work at the programmed materials at his own pace, and his ability level:

- iv. Availability of self-training material: with the 21<sup>st</sup> century technology, there are simplified self-instruction that students will need without teachers reading out until students understand. The new role of teachers under this dispensation emphasized student's observation and providing individualized help. Teachers will not waste their time passing instruction that can be read from modules.
- v. Environmental education: social studies education under this new era will provoke a multi-disciplinary approach that will enable students take interest in other field different from theirs and be able to interact with other fields of study. Students will have better knowledge of their environment. Integrated educational activities involving clubs, exhibitions, events, visit and any other type of organized activity is permissible.
- vi. Technology can make access to Social Studies education more equal: equal access to rich learning environment is not possible without some recourse to technology. Through computer, films or even internet, nearly every urban school and the students and faculty of a small rural college can have direct access to the greatest libraries of the country. People can be anywhere to take advantage of technology. It transmits the impact of knowledge to all people.
- vii. Construction of Instructional materials: with the aid of computer (Desktop publishing) such as Corel draw and page maker, the learner is able to produce and amend graphical displays. The graphical display can be in form of pictures, diagrams, tables, calendars, wedding and greeting cards of different sizes, shapes and colors for display.

In the work of Oyebola (2007), he categorically envisaged the benefits of internet technology when he maintained that "the internet is a rich source of information that social

studies will find very useful”. Interestingly he laid emphasis on the use of Web Quest, which Tancook (2002) stressed that students who take part in the Web Quest acquire improved computer skills in word processing and use of internet. Oyebola (2007) further asserts that:

*Web quests are based on the inquiry methods, which is a teaching/learning technique. It involves conducting quests and searches into problems. When using inquiry methods, the teacher involves the students to collect, assimilate and investigate information. The information is used to answer questions and discuss issues and events. That inquiry is one of the methods recommended for teaching and learning in social studies. The inquiry allows students to play an active role in class activities unlike the traditional lecture method which is more teachers centre. Thus, the use of Web Quest for teaching and learning in social studies will help reduce the unusual emphasis on the lecture method, which most teachers in Nigeria make use of.*

Through the use of internet according to Orungbemi (2008), learners can get access to a huge variety of knowledge from various sources. ICT Networks via internet aids students in gathering necessary and vital information on topical issues of interest. It can strengthen teaching of social studies as they allow for networking of teachers where school teachers have network connecting them to one another. He concluded that ICT in our educational system also encourages distance learning and strategies for implementing social, political, educational and technological growth and development for the country. It encourages private study at the convenient times of the learners in a library, at home, or at work. Many intelligent learners and would be professors loose out of school as a result of cost of education.

Nowadays ICT will assist the Low income learners to achieve their Quest for education. They can combine work with study through the use of information technology. In essence, education in its entirety according to Orungbemi (2008) is to bring about growth and development in learners and to bring about the desired result. Knowledge must be imparted accurately and systematically through the use of different educational materials. That to impart knowledge meaningfully, teachers need the use of appropriate materials for learners to

ensure total development of the three domains of knowledge through selection, organization and evaluation of materials. Practically, he stated that “when all materials are selected on the basis of adequacy, significance and organized in terms of sequence and consistency with the needs of the learners. This will certainly enhance learning activities”. More so, thinking skills, teamwork and problem solving, which are central to social studies, can be developed through information technology.

Despite the enormous benefit inherent in the utilization of ICT in the teaching and learning process, it appears that there are several impediments to the successful use of ICT in schools. It has been observed from reliable findings that there are some problems that militate against the effective application and utilization of ICT-based instruction into social studies education. These supposed problems that have contributed to the underutilization of information technology-based instruction in education as enunciated by Okojie (2007) include:

- i. Computer Illiteracy; findings have shown that most social studies teachers are computer illiterates just as the students are. Teachers have been found not to have knowledge on the modus operandi of the device and these impediments, hampers on the adequate utilization of the gadgets.
- ii. Lack of awareness and culture about usage and benefits of information technology; both staff and student of some schools are not aware of the benefits the usage of information technology has for teaching and learning methods. Investigations have shown that only few among many have taken into cognizance the usefulness of Information Technology to social studies education.
- iii. High cost of information technology accessories; apparently, ICT-based facilities are beyond the reach of an average social studies teacher. It is not an easy task to own a personal computer. The matter is made worst by the prevailing economic down turn of

the country. This has led to the situation whereby those that are interested and have the awareness of the benefit of ICT to learning and teaching cannot afford the cost of ICT sets. This situation compels Awe (2009) to aggressively maintain that; while prices have definitely come down, the cost of access is still too high to have a transformatory impact. Though Kwache (2007) noted that the cost of equipment in a country like Nigeria, with a battered economy and seriously devalued currency is enormous and might not be the problems of fund nor technology, but the will on the part of the government and captains of education to see the imperatives of this new order in education. All these put together has greatly affected the effective application utilization of ICT to achieve educational objectives

- iv. Poor quality of telecommunication connections; another enormous challenge that militates against the utilization of ICT to social studies education is the low level of telecommunication connections. Nigeria as one of the countries that is yet to develop its telecommunication facilities to standard that is judged excellent, has not enabled social studies that have the motivation to utilize this facilities. Those good centers where facilities are available, the services are ineffective. This ineffectiveness is as a result of what Mohammad (1999) in Bayero (2007), Kwache (2007) and Awe (2009) referred to as inconsistent/epileptic electric power supply, non-digitalization of telephone lines in most towns and Quality of Service (QOS). In the exact words of Awe (2009) he lamented that, while availability of ICT has grown, it has not been matched by quality of service. That it is not enough to have cheap lines and low band width. That efficiency and accessibility of telecoms services should be paramount. Most operators have a lot of work to do in QOS especially in the areas of congestion and support. That National Communication Commission has to wield the big stick by sanctioning poor performers.

- v. Language problem; there is also the language problem. This is due to the fact that internet services are mostly in English. There exist some terminologies in local languages and dialects that cannot be translated into English language. Where such problems occur, there is bound to be problem of comprehensibility.

Other supposed constraints to the utilization of ICT in social studies education in tertiary institutions have been identified by Danladi and Bulya (2006) to include lack of commitment on the part of Nigerian leaders or what Albirini (2006) refers to in his concrete words as ‘management’s attitudes’. That the attitudes of most managements in and outside institutions towards the development of ICT related facilities such as the internet and procurement of computers is rather slow in some instances and in others, there are no aids or support by the government at all. Danladi and Bulya perceived that there are fine and well thought-out policies and projects on the papers on ICT. An array of them give us the following: Simple Moral Accountable Response and Transparent Government (SMART); Government Wide Information System (GWIS); Healthcare Information System (HIS); School Net Nigerian Digi Net Center, MRN Book AID Project and so on. Most of these have not seen the light of the day. The general complaint according to Danladi and Bulya (2006), Labe and Akaakase (2006), Nwachukwu (2006) and Kwache (2007), all point to poor funding of IT in tertiary institutions by the government and NGOs

Another constraint as identified by Danladi and Bulya is that most school administrators are conservative and ignorant, not willing to alter the routine of the classroom on account of ICT-based innovations. One of the consequences of education administrators conservatism is the inadequate or lack of preparation and utilization of teachers’ knowledge and skills to promote teaching and continuous assessment through information technology. They further identified ICT constraints when they submitted that ICT hard wares, soft ware’s and firm wares are imported with very little indigenous technological impute. Though the

efforts of Nigerian computer manufacturers such as Omatek and Zinox technologies are commendable and should be encouraged. The skills to maintain and repair these equipments are very limited. Where breakdown occurs, they are packed because most of the spare parts have to be imported into Nigeria. Also a constraint identified by Kwache (2007) is lack of qualified ICT personnel, most institutions lack qualified computer literate teachers and IT experts that would support and manage the internet connectivity and /or application of computer in the teaching-learning process. Also non-inclusion of ICT program in teacher's training curricular and/or at the basic levels of education, further compounds the access to ICT utilization in teaching of social studies. There seems to be no clear and definite policy and/or curriculum for all levels of the Nigerian education system.

## **2. 07 Teachers' Gender and Application of ICT for Effective Teaching of Social Studies**

Research have proved that teachers construct their own principles, ideas and beliefs about the utilization of information communication tools in classrooms and these affect their practices (Cope and Ward, 2002; Velle, McFarlene, Brawn, 2003; Galanouli, Murphy, Gardner, 2004; Jedeskog & Nissen, 2004). Chang (2002) reported that computer-assisted teaching, when compared to traditional education technique, resulted in higher achievement rates. Additionally, computer technology enables individuals to store the knowledge in their minds both in graphics and in symbolic presentation styles. This facilitates the two-dimensional and directional storage of knowledge, which leads to more meaningful learning as well as long term knowledge storing (Yucel & Cevik, 2010). According to Renshaw and Taylor in Yucel & Cevik (2010), in addition to increasing the achievement rates, computer assisted teaching enhanced advanced thinking skill development in students, which enabled students to comprehend rather than memorize (Yucel & Cevik, 2010).

Herron (2010) cited in Costley (2014) conducted a study to examine the experiences of pre-service teachers who used technology in mathematics lessons. The study showed that

the use of technology had a positive effect on student's learning in mathematics. The students were more engaged during the lessons as they made use of technology. The authors thus concluded that technology can be used as a way to create a hands-on and meaningful mathematics lessons. Similarly, Blanskat, Blamire, and Kefala (2006) cited in EdTechReview February (2014) conducted a study which aimed at determining the impact of utilizing ICT in schools' achievements. The study measured the impact of ICT on students' outcomes. and tried to establish a link between the use of ICT and students' results in examination. The findings showed that ICT has positive impact on students' performances in primary schools particularly in English language.

A descriptive research was made by Seferoglu, Akbiyik and Bulut (2008) on the views of primary school teachers and student teachers, the utilization of computers, the role of computers and the utilization of computers in education with 51 teachers and 56 student teachers. Two different surveys were made use of as data collection tools. It was concluded that while teachers learnt how to use computers by receiving in-service training, student teachers learnt it by themselves or by receiving help from their environments. The findings showed that student teachers made use of information technologies at more advanced levels when compared to teachers.

Çımer and Ozkilic (2009) aimed in their study to determine the self-competence of student teachers studying at computer and teaching technologies departments about creating education software. The study concluded that the self-competence levels of student teachers about creating education software were at intermediate level in general. The gender variable did not display any significant difference in terms of project management, teaching design, graphic design or programming among education software development self-competencies, whereas there was a significant difference observed for animation, audio-video design dimensions favoring the male student teachers. Student teachers possessing computers were

found to have higher competency levels in developing education software at all dimensions than non-possessing student teachers.

In a study by Aytun (2007), the attitudes of primary school teachers towards computer-assisted teaching and their computer utilization skills were investigated in terms of age, gender, experience, education received and attendance to in-service training programs. The findings showed that 48.9% of teachers applied computer-assisted teaching in their classrooms. Information technology class was available in 90.7% of schools and 63% of schools had Internet connection (ADSL) available. On the other hand, the available teaching software was limited to 47.8%. Significant differences were found between the computer utilization skills of teachers and their applying computer-assisted teaching. Variables such as age, gender, education level, having received training on computers or possessing computers were found to affect their computer utilization skills. Their attendance to the in-service training programs of Ministry of National Education did not result in any significant difference. The attitudes of teachers towards computer-assisted teaching did not create any significant difference in terms of their ages, education levels, genders, experiences or their attendance to the courses provided by the Ministry of National Education.

Celik and Bindak (2005) concluded in their study on primary school teachers towards computers that the attitudes of teachers towards computers did not differ according to their genders, subject fields and location of teaching. Moreover, it was observed that teachers possessing computers had significantly more positive attitudes towards computers than those who did not possess. Additionally, positive and significant relationships were found between self-competence in computers, frequency of computer utilization and positive attitudes towards computers.

Erkan (2004) tried to determine the attitudes of kindergarten teachers towards computers and whether these attitudes changed according to gender, previous computer

experience and possession of computers at home. He concluded that younger teachers had more positive attitudes than older teachers as well as teachers with more experience with computers having more positive attitudes than those who did not. On the other hand, there was not a significant difference found between the attitudes of teachers possessing computers at home and those who did not.

## **2.08 Students' Gender and Application of ICT for Effective Learning of Social Studies**

Gender issues have been linked with performance of students in academic tasks in several studies but without any definite conclusion. However, there is a general conclusion that general imbalance exists in computer application, access, career and attitude among male and female students (Anunobi, 2015). For instance, Normala, Zaliha and Mohamad Kamil (2005) found that the ICT level of 698 respondents from twelve secondary schools in the state of Kedah in Malaysia is at the moderately-high category, and that there is a significant relationship between the parents' level of education and income with the students' computer literacy. In addition, it was found that there were no significant gender differences for word processing, presentation, spreadsheet, Web use, database, social networking and utility (Hew & Lai, 2011). However, Hew and Lai also reported that in the aspect of computer maintenance, male students demonstrated a significantly superior skill than their female counterparts. Another finding was reported by Judi, Amin, Zin and Latih (2011), who reported that, generally, students have moderately positive attitudes toward ICT, demonstrate low to moderate level of ICT competencies and have limited knowledge on Internet.

In a study conducted by Kennedy, Judd, Churchward and Grey, (2008) on 2000 Australian students revealed that some students use computer for general study purposes, others use computer to develop web pages but a great number of students use computer to play music everyday or once a week. Further and Kvavik, (2005) conducted a study on 4374 students to investigate their use of ICT in school. The study found that students frequently

use ICT for email, instant messaging, word processing and internet surfing. Again, Zakaria, Watson and Edwards (2010) conducted a research on Malaysian students' use of ICT in schools. The result showed that students use email to disseminate and share digital contents.

In a similar study, Yukhymenko and Brown, (2009) investigated the use of ICT among 122 Ukranian high school students. The result found that 53.3% of the students use ICT in school once a week but 33.5% indicated that they never use ICT in school. However, the study was silent on what the students use ICT for in schools. As a comparison with advanced countries, the technology use in education in developing countries is relatively limited. Though, there is much information on the availability of ICT and the way they are being implemented in advanced nations, there is little information in the literature on the use of ICT among students in schools in Africa in general, and especially Ghana (Beukes-Amiss and Chiware, 2007).

In Ethiopia, Woreta, Kebede and Zegeye, (2013) surveyed the knowledge and utilization of ICT among 1096 students. The result showed that 33% of the students use a computer once a week and almost 41% of the students a computer once in a month. Nearly half of the students (47%) never use ICT. In addition, the result revealed that most of the students (51%) use ICT for email or instant messaging.

Further, in Nigeria, Tella et al., (2007) conducted a study on the use of ICT among 700 teachers. The study found that 61% of the teachers have access to computers. However, the result did not indicate the use of ICT among students. Also, Sarfo and Ansong-Gyimah, (2011) surveyed a study on access to ICT and experiences in the use of ICT among 300 students in Ghanaian second-cycle schools. The result revealed that the students have been using mobile phone, computer or internet. In addition, the result showed that reasonably number of the students have access to computers and often use it to gain computer knowledge. However, the result was silent on the use of ICT in terms of the type of school

the students attend and the geographical location of the schools (i.e. urban, semi-urban and rural). Additionally, the study was silent on the factors relating to the use of ICT among students.

Added to this, Withers (2000) cited in Mahmood and Bokhari (2012) believes that gender and ICT interact in complex ways but in the aggregate, females are much less likely to participate in ICT courses, careers and leadership. Also, Sanda and Kurfi (2013) reiterated that despite the much emphasis placed on the use of ICTs in Nigeria, female students are usually underrepresented in terms of access and use to ICT. Fenwick (2004) in Mahmood and Bokhari (2012) showed that gender inequity persists both in access to and experience of learning opportunities with ICT. Ware and Stuck (1985) cited in Mahmood and Bokhari (2012) are of the opinion that stereotypical male images found in computing magazines acted as deterrents for female involvement in technologies. Since ICT in recent times is gradually replacing the traditional teacher- centred teaching and learning environment in education; and emphasis has shifted from the teacher to the learner, it becomes imperative that both male and female teachers adopt the application of ICT in facilitating learning.

### **2.09 Students' Location and Application of ICT for Effective Learning of Social Studies**

An evidence based understanding of girls' and boys' in the rural and urban areas attitudes towards application of Information Communication Technology will help contribute to successful planning and implementation of ICT literacy programmes and gender equity policies for integrating ICT into education in both urban and rural junior secondary schools (Sarfo, Amartei, Adentwi & Brefo, 2011).

Findings from the study of Sarfo et al (2011) on attitudes and motivations towards the ICT for Accelerated Development policy in Ghana among rural and urban schools, established that female and male students' attitudes toward the policy were similar. The study

also revealed that female and male students in urban and rural schools had similar attitudes and motivations toward the use of ICT in the classroom for teaching and learning.

Passey et al (2004) reported that the use of ICT in urban and rural Primary and Secondary schools in England was having positive motivations on students' attitude towards application of ICT in learning. Students stated that they enjoyed learning whenever ICTs were used. Students also used the internet to communicate with their teachers on topics related to their home works when they were off campus. Teachers confirmed that students were eager to do their homeworks when they could use a word processing application. It was noticed that ICTs had positive motivational impacts on boys than girls. On the contrary, Beacham and McIntosh (2012) concluded from their study of student-teachers in one of the Universities in Scotland that there were no differences between males and females in urban and rural schools in terms of their attitudes, confidence and motivation toward the application of ICT infrastructure.

Deaney et al (2003) in Sey (2013) conducted a study in six English Secondary schools to find out students' views on the contribution of ICT infrastructure to teaching and learning. Urban and rural Students reported that ICT infrastructure facilitated more efficiently and reliably the way they carried out their work. Students also reported that ICT infrastructure made lessons more fun, enjoyable and removed difficulties associated with the manual way of doing things. However, students claimed their satisfaction with ICT infrastructure reduced because ICT infrastructure automated tasks and alienated them from actively participating in those tasks. Inadequate competence in using ICT infrastructure also reduced students' satisfaction with ICTs.

The OECD findings demonstrate that women and men tend to use their access differently. It can be argued that the OECD (2007) findings provide comprehensive evidence

that generally, women or female students in urban and rural areas in 31 OECD have negative attitudes towards application of ICT related employment and ICT oriented education and training as compared to men or male students. Similarly, in a research study conducted by Yuhkymenko and Brown (2009) in Ukraine, the results indicate that males in urban and rural areas had significant greater access to a computer at home than females; and males often have more access to internet than females do. This finding is more in line with the findings of OECD (2007). However, research study conducted by Cavas et al. (2009) indicates that the attitudes of females and males science teachers in Turkey do not differ in terms of gender.

Even though this finding generates a lot of debate but it seems to be in line with the view of Cooper (2006) that the gender gap in the use of and knowledge about ICT has diminished. But having diminished does not mean that the gap is closed. Researchers (Hafkin and Taggard in Sarfo, Amartei, Adentwi, & Brefo, 2011) have proposed several reasons for the negative attitude towards application of ICT among women. It is important to take note that biological explanations to females' negative attitudes towards technology fields have generated a lot of complex debate (Sarfo, Amartei, Adentwi, & Brefo, 2011).

However, research conducted by STEM reveals that the negative attitudes of females towards application of ICT can be explained, theoretically, in line with emotional, cultural, and structural barriers (Cunningham, 2007). In terms of cultural barrier, many research findings (Butler, 2003; AAUW, 2000 in Sarfo, Amartei, Adentwi, & Brefo, 2011) provide evidence that the culture of technology classes is unfriendly to girls. According to the results of a study conducted by Isomuru (2004) and Margolis and Fisher (2002) in Sarfo, Amartei, Adentwi and Brefo (2011), girls report that computer culture is masculine. These perceptions and conceptions of girls that the culture of computer is more friendly for boys and unfriendly for them might explain why females have unrealistic attitudes towards the application of computer.

In addition, from the perspective of structural barrier, there is evidence (Young, 2000) that teachers treat boys and girls differently in the classroom; and more specifically teachers encourage girls to remain where they are. For instance, in her research study, Young indicates that girls have lower confidence with their computer skills than boys. Meanwhile girls perceived their teachers as encouraging but boys did not perceive their teachers as encouraging. This suggests that girls like teachers may be because teachers understand their level of confidence.

Young (2000) in Sarfo, Amartei, Adentwi and Brefo (2011) argues that this raises a question such as whether or not teachers are “killing with kindness” and not challenging girls to learn beyond their own. Moreover, according to Hafkin and Taggard (2001), a series of factors including the geographical location of technological facilities constrain women’s access to and application of ICT. In developing countries, most of the technological facilities are concentrated in the urban areas. There is lack of adequate infrastructure such as telephone facilities, satellite facilities, electricity, and more especially communication centers in the rural areas. The study explored the application of ICT among urban and rural junior secondary school students in Niger state.

### **2.10 Teachers’ Location and ICT Application for Effective Teaching of Social Studies**

Urban and rural teachers’ motivation to apply ICT infrastructure in teaching is more likely to be affected by the availability of ICT resources. In a review of literature on the barriers to successful ICT integration into teaching and learning, Bingimlas (2009) found that lack of access to ICT infrastructure discouraged teachers from using ICT for teaching. He noted that ICT infrastructure was not readily available in most rural and urban schools and the limited ones were often shared among teachers for their teaching purposes. This resulted into the situation where teachers had to book appointments in advance for ICT infrastructure before they could use them.

Hennessy et al (2010) also identified many challenges to urban and rural teachers' motivation to integrate ICT into the educational process in Sub-Saharan Africa. Among the challenges identified were lack of reliable access to electricity, limited technology infrastructure and unavailability of software. However, they argued that access to physical infrastructure alone did not motivate teachers to apply them for teaching. What they noted was important to teachers' motivation for applying ICT infrastructure to deliver lessons was the availability of time for teachers to successfully plan towards using ICT in their lessons.

In an assessment of the ICT situation in urban and rural urban Secondary Schools in the Lower Manya Krobo District in the Eastern Region of Ghana, Teye (2012) reported that many factors influenced urban and rural teacher' confidence in using ICT infrastructure for teaching. The factors that influence teachers' motivation and confidence in using ICT for teaching were lack of knowledge about computers, fear of using computers, lack of training and insufficient time to use computers to plan lessons.

A survey conducted by the European Schoolnet in 2013 across thirty European countries on students, teachers and head teachers in urban and rural schools showed that teachers who perceived themselves as confident of the use of ICT used them regularly for teaching than non-confident teachers. The survey also revealed that in urban or rural schools where access to ICT infrastructure was low, teachers who were confident used the infrastructure more regularly for teaching purposes than teachers who taught in schools with high access to ICT infrastructure but were less confident.

In Tanzania, Mwalongo (2011) found that the application of ICT infrastructure for teaching in urban and rural schools was motivated by access to the infrastructure. Computers and Televisions were mostly employed by urban and rural teachers because they had access to them. Due to the availability of computers, teachers were found using applications such as

word processing and spreadsheets for teaching and administrative purposes. Teachers who did not use such applications attributed it to lack of access to computers when needed. Urban and rural teachers' motivation to apply ICT infrastructure in teaching is more likely to be affected by the availability of ICT resources.

In order to determine urban and rural teachers' confidence of using ICT for teaching, Barkar and Mohamed (2008) studied final year teacher trainees of the University Putra Malaysia, Malaysia. They concluded that teacher trainees were quite confident of using ICT for teaching. The study, however, revealed that teacher trainees in vocational education were more confident of using ICT infrastructure for teaching than other students. It was also found that male trainees were more confident than their female counterparts of the use or application of ICT infrastructure for teaching. Teacher trainees with teaching experiences were also found to be more confident of using ICT for teaching than those without prior experience.

Urban and rural schools access to ICT infrastructure may depend on the location of the school. A survey conducted by the European Commission (2006) in Sey (2013) across twenty-seven countries in Europe found that schools in urban and metropolitan areas had better access to computers and internet connection than their rural counterparts. The research however revealed no disparities between rural and urban schools in terms of ICT infrastructure for teaching and learning.

In the Rivers State of Nigeria, Primary schools in rural and urban areas vary in terms of access to computers (Akuoma, 2012). Computers are more accessible to teachers and students of urban schools than rural schools. Teachers in urban schools are also more likely to be computer literates than their rural-counterparts. The situation in Nigeria is not different from that of other countries in Sub-Sahara Africa. Although Nigeria has made tremendous

progress in ICT development, there is still great disparity between rural and urban communities in terms of access to ICT infrastructure. Lack of access to ICT infrastructure by rural schools is more likely to affect students-teachers' motivations and attitudes towards the application of ICT in the classroom.

In a study of rural and urban Senior High Schools in Ghana, Sarfo et al (2011) observed that there was a statistically significant relationship between location of schools and attitudes toward the application of ICT for Accelerated Development policy and teaching/learning process. Teachers of urban schools had positive attitudes towards the policy than those in rural schools. Other studies however suggest that the differences between rural and urban areas in terms of education are closing.

### **2.11 Review of Related Empirical Studies**

This section of the study focused on the empirical studies that are related to the current study which include:

Malaba (2005) investigated the use of Information and Communication Technology (ICT) as a teaching tool in developing countries.. This study was conducted with an aim of finding out how teachers in developing countries use ICT as a teaching tool. The study will help teachers and teacher educators to better understand how the use of technology (ICT) in the classroom can help to enhance the teaching of social studies in schools. A case study approach was used to study one teacher of Social Studies who teaches lower-secondary school. The study investigated typical ICT resources used by the teacher in teaching the subject; how and in which ways the teacher used ICT in teaching Social Studies and the factors that influenced the teacher's decision about the selection of learning activities and resources. After the analysis of data, it was found that the teacher used ICT as a source of information for herself and her students. It was also found that teacher's use of ICT as a simulation tool was instrumental for enabling students to visualize abstract concepts and aid

better understanding. The study also found that the teacher's use of ICT was primarily motivated by the capacity of ICT resources to motivate students during the learning process; thus, providing relevance of the ICT resources to the topic of study. It was evident that the teacher believes that the use of ICT in today's world has become a necessity rather than a choice. The study further indicated that teacher's beliefs about teaching and learning play an important role in the use and selection of ICT materials. It was evident that the teacher's exposure to new concepts about learning influences the teacher's use of ICT. It was, however, further found that much of the use of ICT by the teacher was dominated by the use of CDROMs and internet to achieve conceptual understanding. Less evidence suggested the achievement of higher order and critical- thinking skills. This study is related to the current study for the fact that both studies focused on ICT application in teaching and learning processes . However, the previous study was generally on teaching context, while the current study focused on effective teaching and learning of Social Studies in JSS.

Umar and Jalil (2012) conducted a study on ICT skills, practices and barriers of its use among secondary school students. The survey was conducted to assess the level of ICT skills among secondary school students in Malaysia as well as the barriers that impede its use. A total of 160 students from four schools (rural and urban) from a northern state in Malaysia were involved in this study. The descriptive statistics and t-test method were used to analyze the findings. The study revealed that their levels of ICT skills for basic applications and for Internet applications in accessing and sharing information are at moderate level; their advanced ICT applications at the lowest level, and their Internet applications for communication skills are at the proficient level. The analysis also showed insignificant difference in terms of the students' levels of ICT skills between the male and female respondents. However, there is a significant difference in terms of ICT skills between the urban and rural school students. The findings also indicated that administrative and facility

barriers as the two major factors that impede the use of ICT. These obstacles and barriers need to be reduced to assist the integration of ICT as well as to improve the students' ICT skills. This study is related to the current study for the fact that both studies focused on ICT application in teaching and learning processes in secondary schools. Also, the research design, research instrument and inferential statistics used in both studies were the same. However, the previous studies was conducted in Malaysia, while the current study was in Niger state, Nigeria and as well focused on effective teaching and learning of Social Studies in JSS.

Aytaç (2013) conducted a study on Interactive Whiteboard factor in Education: Students' points of view and their problems. The main purpose of this study is to investigate the students' viewpoints and the problems they face during the use of Interactive Whiteboard (IWB). This research has been applied on 202 students in primary school and high school in Ankara. In this study, the quantitative data were collected through "IWB Survey Questions" (Student Views). To identify any significant differences in terms of gender and duration of using IWB for students' views, t-test and one-way ANOVA were used. No significant differences were found in terms of gender. There is a clear difference between primary school and high school students' views about the use of IWB. During this study it was observed that students generally had a positive attitude towards the use of IWB. Students identified teachers' inefficiency to use IWB, technical problems, insufficiency of e-materials and their wonders about the radiation and eye health as problems. This study is related to the current study for the fact that, both studies focused on ICT application in teaching and learning processes. Also, the research design and research instrument used in both studies were the same. However, the previous study was on use of Interactive Whiteboard, while focused generally on application of ICT devices in teaching and learning processes.

Odhiambo (2013) conducted a study on use of Information Communication Technology in Teaching and Learning Processes in Secondary Schools in Rachuonyo South District, Homa-Bay County, Kenya. The focus was on three main subject matters: on ICT use and competence, on teacher and student and on ICT infrastructure and teaching practices. The study is closely connected to the national educational policy, which has aimed strongly at supporting the implementation of ICT in pedagogical practices at all institutional levels. Six research questions were formulated to guide the researcher investigate the phenomena. A descriptive survey design was used to collect data from the field through the use of questionnaire and an observation schedule. The result indicated that ICT has not been successfully integrated in teaching and learning in schools. In general, students are capable and motivated users of computers. The findings further indicated that ICT integration realized some challenges such as availability of sufficient number of ICT tools, lack of motivation and support and lack of technical support. The challenges are either teacher-level (Microlevel), school level (Meso-level) or system level (Macro-level). These barriers have hindered successful implementation of ICT into teaching and learning processes. The study also recommended that teachers should be given sufficient training on how to use ICT tools to enhance teaching and learning in schools. This study is related to the current study in different ways, starting with the fact that both studies focused on ICT application in teaching and learning processes in secondary schools. Also, the research design, research instrument and inferential statistics used in both studies were the same. However, the previous study was conducted in Kenya, while the current study was in Niger state, Nigeria and as well focused on effective teaching and learning of Social Studies in JSS.

Buabeng-Andoha and Issifu (2015) research on Implementation of ICT In Learning: A study of students in Ghanaian secondary schools. This study was conducted to investigate secondary school students' use of ICT and the factors that relate to their technology use. A

total of 3380 students from 24 public and private schools from four regions in Ghana participated in this study. Descriptive statistics, Analysis of variance and multiple regression analysis were used to analyze the findings. The study found that majority of the students used ICT to communicate with peers more than other types of ICT application. However, the study revealed that students' pedagogical use of ICT was low. The analysis showed that students in public schools pedagogically use ICT more than students in private schools. In addition, urban school students pedagogically use ICT more than semi-urban and rural school students. Finally, the findings indicated that students' ICT competencies were the most predictor of their technology use. The findings of this study have added to the body of knowledge documenting the fact that digital divide continues to exist. This study is related to the current study in different ways, starting with the fact that both studies focused on ICT application in teaching and learning processes in secondary schools. Also, the research design and research instrument used in both studies were the same. However, the previous study used Analysis of variance and multiple regression analysis for testing the hypotheses developed for the study. Also, the previous study was conducted in Ghana while the current study was in Niger state, Nigeria and as well focused on effective teaching and learning of Social Studies in JSS.

Ali (2015) investigated the Use of Information and Communication Technology in Technical and Vocational Education: The Case of Universal Basic Education (UBE) Schools. The purpose of study was to determine how the implementation of ICTS programmes has been in Primary and Basic Secondary schools? And to relate the interest of students/teachers in ICTs programmes in Primary/Secondary schools. The design of this study is descriptive survey. A simple random sample was used to select 180 Primary school pupils from 11260 population, 200 Junior Secondary students out of 5077 and 150 teachers out of 768 from both the primary and secondary section of the UBE. The instrument for data collection was a valid questionnaire containing 25 items and was established at 0.76

reliability. The findings indicated that ICT education at the basic level of our education system is very low. There is significant difference between the attitudes, interest and quest for ICT education among pupils/students and teachers. Teachers also saw the need for compulsory computer education at both levels and considered it very important, said it is not yet important to use ICT knowledge for teacher's employment, but consider it above average important for teachers in-training. It was recommended that attention be shifted to the basic level of education, through strengthening ICT programmes by monitoring implementation at the local government level especially the UBE schools. This study is related to the current study for the fact that both studies focused on ICT application in teaching and learning processes. Moreover, both studies used descriptive survey method and questionnaire for data collection. However, the previous study was on ICT utilization in primary and secondary school, while the current study focused on effective teaching and learning of Social Studies in JSS.

Anunobi (2015) conducted a study on information and communication technology use among student-teachers in universities in north central Nigeria. The study focused on the influence of gender on the student-teachers' use of ICT. The study was a descriptive survey type. A total of 638 student-teachers were sampled using stratified random sampling technique. Research question 1 was answered using mean, hypothesis 1 was tested using t-test, while hypothesis 2 was tested using analysis of variance (ANOVA). The findings of the research showed that university student-teachers in North Central Nigeria are average in their ICT use. There was also no significant difference established in the use of ICT between male and female student-teachers and neither was there any significant difference in the use of ICT by student-teachers in Arts, Sciences, and Social Sciences. The implication of the findings is that there efforts should be made by the universities to make the student-teachers imbibe the culture of integrating ICT into pedagogy and other educational activities. This study is related

to the current study for the fact that both studies focused on ICT application in teaching and learning processes. Both studies used the same research design and instrument for data collection. However, the previous study covered north-central geopolitical zone, Nigeria, while the current study focused on effective teaching and learning of Social Studies in JSS.

Abubakar (2016) investigated the utilization of ICT in the process of teaching and learning in Nigerian secondary schools. This study aimed to assess how ICT is used in teaching and learning in Nigerian public secondary schools particularly those from the Northeastern States from the viewpoint of students, instructors and administrators. Built on the three central research questions, the objective of this study is to assess the degree of usage of the ICT facilities in teaching and learning practices. In this study, a mixed-methods approach for data gathering was applied by using questionnaires and interviews to collect data from students, instructors and administrators in the studied states. The responses were then analyzed based on the research questions outlined in chapter one. The result showed that the use of ICT facilities was very low and this is attributed to the poor policy implementation, lack of basic social amenities and insecurity. This study is related to the current study for the fact that, both studies focused on ICT application in teaching and learning processes in secondary school. However, the previous study was conducted in north-east, Nigeria, while the current study focused on effective teaching and learning of Social Studies in JSS.

Mmaduabuchi, Alugbuo and Onuoha (2016) examined Information Communication Technology (ICT) Implementation in Secondary Schools in Okigwe Education Zone of Imo State. Six research objectives and questions guided the study. The study was a survey research in which out of the sixty three public secondary schools in this area, twelve secondary schools were randomly selected for the study and nine hundred and sixty four students and teachers were also purposively selected. Five research questions were posed and the data were collected with a questionnaire. Mean and percentage frequency distribution

were used in answering the research questions. The result showed that there were not adequate ICT facilities in Okigwe education zone I & II. It was therefore recommended that adequate infrastructural facilities should be put in place in this zone for effective use of ICT in the education sector. This previous study establishes some relationship with the current study for the fact that both studies focused on ICT application in teaching and learning processes. However, the previous study was conducted in Imo state, while the current study focused on effective teaching and learning of Social Studies in JSS in Niger state.

Fomsi and Emeka (2017) investigated gender differences in the use of ICT among teachers in model primary schools in Rivers State, Nigeria. The study sought to determine gender differences in the use of ICT among Teachers in Model Primary Schools in Rivers State, Nigeria. It was a descriptive study with a sample of 200 teachers drawn from 25 functional model primary schools in two local government areas (LGA) of Rivers State namely Port Harcourt City Council and Obio-Akpor. Two research questions and two hypotheses guided the study. The findings showed that there was no significant difference between the mean scores of the male and female model primary school teachers in the use of ICT and no significant difference between the mean scores of female model primary school teachers in Port Harcourt City Council and Obio-Akpor Local Government Areas in the use of ICT. Based on the findings, recommendations were made which included that the Federal, State and Local Governments in Nigeria should equip more schools with ICT facilities and training should be given to both male and female teachers to enable them effectively utilize ICT in their various schools. This study is related to the current study for the fact that both studies focused on ICT application in teaching and learning processes. However, the previous study was conducted in Rivers state, while the current study focused on effective teaching and learning of Social Studies in JSS in Niger state.

## **Summary**

This chapter essentially considered those various views of scholars and researchers as they relate to the application of ICT to teaching and learning of social studies in schools. The review of the literature revolved around Theoretical framework; Concept off Social Studies; Nature, scope and Objectives of Social Studies Education; History and Justification for Introduction of Social Studies Education in Nigeria; Concept of Information Communication Technology; Information Communication Technology and Social Studies Curriculum; Teachers' Gender and Application of ICT for Effective Teaching of Social Studies; Students' Gender and Application of ICT for Effective Learning of Social Studies; Students' Location and Application of ICT for Effective Teaching of Social Studies; Teachers' Location and Application of ICT for Effective Teaching of Social Studies; and the review of Related Empirical Studies. Though, a lot of studies were conducted on ICT and Social Studies education. It was established from the empirical review that, none of the studies have focused on the application of ICT for teaching and learning of Social Studies in Junior Secondary Schools in Niger state. This study therefore, sought to fill this gap in literature.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter describes the procedure that was employed in answering the research questions and testing the hypotheses of the study. The issues treated fall under the following sub-sections;

- ❖ Research design;
- ❖ Population of study;
- ❖ Sample and sampling techniques;
- ❖ Instrumentation;
- ❖ Validity of the Instrument;
- ❖ Reliability of the Instrument;
- ❖ Procedure for data collection; and
- ❖ Statistical Analysis Procedure.

#### **3.2 Research Design**

This study utilized descriptive survey research method. This is because the target population was so large, so a sample from the population was drawn for the study in order to assess the application of ICT for effective teaching and learning of Social Studies in Junior Secondary Schools in Niger State, Nigeria. This is in line with the view of Olayiwola (2007) who held that descriptive survey research design allows the use of questionnaire and/or interviews for collection of data from a population based on appropriate sampling technique.

#### **3.3 Population of the Study**

The population of this study comprises all Junior Secondary School teachers and students in Bosso and Chanchaga Local Government Areas of Niger state, Nigeria. Therefore the population of this study was eighty (80) Social Studies teachers, thirty-eight (38) of them

from Bosso LGA and forty-two (42) from Chanchaga LGA with sixteen thousand five hundred and eight (16508) Junior Secondary School students in Chanchaga LGA and fourteen thousand eight hundred and seventy nine (14, 879) in Bosso LGA, which gave a total population of thirty-one thousand four hundred and sixty-seven (31,467). This population is presented in Table 1.

**Table1: Population Distribution by LGAs, Schools and Gender**

LGAs	NO. of Schools	NO of Teachers		NO. of students		Total
		Male	Female	Male	Female	
Bosso	23	23	15	9475	5404	14917
Chanchaga	25	28	14	9300	7208	16550
<b>Total</b>	48	51	29	18775	12612	<b>31467</b>

*Source: Bosso and Chanchaga Education Secretaries (2017)*

### 3.4 Sample and Sampling Techniques

The researcher selected a sample of four hundred respondents (400) for the study as determined by the Improved Research advisors (2010) which suggested that for a population of thirty-one thousand four hundred and sixty-seven (31,467). a minimum sample of four hundred (400) participants was appropriate for the study at 0.05 level of significance. For the purpose of increased representation 40 (10%) was added to the above minimum sample size given by Improved Research advisors to make it 440. This took care of other unavoidable errors such as incorrect filing and failure of some respondents to return the questionnaire. The researcher used proportionate sampling techniques to selecting the study sample based on the recommendations of Langos (2014) that, proportionate sampling is a sampling strategy (a method for gathering participants for a study) used when the population is composed of several subgroups that are vastly different in number. The fact that the population of teachers and the students selected for the study vary in population size, proportionate random sampling techniques was used and the sample distribution is presented in Table 2.

**Table 2: Sample of the study by Gender, Location and Levels of Study**

<b>Study Variables</b>	<b>Gender</b>		<b>Location</b>		<b>Level of study</b>		<b>Total</b>
	<b>Male</b>	<b>Female</b>	<b>Urban</b>	<b>Rural</b>	<b>JSS II</b>	<b>JSS III</b>	
Teachers	24	18	25	17	-	-	
Students	240	158	261	137	229	211	
<b>Total</b>	<b>264</b>	<b>176</b>	<b>286</b>	<b>154</b>	<b>229</b>	<b>211</b>	<b>440</b>

### **3.5 Instrumentation**

Questionnaire was used for the collection of data in the study. The instrument titled “Application of ICT for Effective Teaching of Social Studies in Junior Secondary Schools “ (AICTESOSJSS) questionnaire was used for data collection. The statements were constructed to elicit relevant information pertaining to the research question. The instrument was the 4 point Likert scales which compel students and the teachers to emit their response to either agree or disagree. The responses were coded as, strongly agreed (4) Agreed (3) Disagreed (2) Strongly Disagreed (1). Both the teachers and students have separate questionnaires and were structured in closed ended form.

#### **3.5.1 Validation of the Instrument**

In order to make sure that the final copy of the questionnaire was valid, after adapting the instrument for the study, the researcher employed the services of researcher supervisors, language experts and statistician. On the basis of their expert inputs the final copy of the questionnaires were produced for distribution.

#### **3.5.2 Reliability of the Instrument**

Pilot study was conducted using a total of thirty (30) questionnaires were produced and administered to teachers and students at Government Junior Secondary School Kuji, Shiroro Local Government Area, which was not part of the study area. The data thus collected from the pilot study were statistically analyzed for purpose of reliability coefficient. The Cronbach Alpha reliability coefficient formula was used. Consequently the

reliability co-efficient of .880 was obtained for teachers' questionnaire and .865 for students' questionnaire all of which were considered adequate for the internal reliability of the instruments. This is in line with the submission of Sekaran and Bougie (2010) which stated that, an instrument is considered reliable if it lies between 0.70 and 1, and that the closer the calculated reliability coefficient is to zero, the less reliable is the instrument, and the closer the calculated reliability co-efficient is to 1, the more reliable is the instrument.

### **3.6 Data Collection Procedure**

The researcher collected an introductory letter from the HOD, Department of Arts and Social Science Education which was presented to the various secondary schools to sought for permission for data collection. Research assistants who were teachers in secondary schools were used to administer the instrument to the respondents. After distributing the instrument, the researcher and research assistants waited and collected the filled questionnaires. This distribution and collection of the questionnaire lasted for four (4) weeks.

### **3.7 Statistical Analysis Procedure**

The data collected from the study was subjected to descriptive and inferential statistics. In order to answer the research questions and test the null hypotheses formulated for the study. The Mean and standard deviation were used to report the descriptive data collected. On the other hand, the null hypotheses were tested using independent samples t-test. The researcher used t-test to find out whether significant difference existed between the variables, reason been that, it is the apt statistical tool for testing significant difference between two (2) independent variables in a study of this nature (McCollough, 2007; Siegel & Castellan, 2008). The null hypotheses were tested at  $P \leq 0.05$  level of significance as a basis for retaining or rejecting the null hypotheses formulated to direct this study.

## CHAPTER FOUR

### DATA PRESENTATION AND DISCUSSIONS

#### 4.1 Introduction

In this chapter, Analysis of the primary data collected from both teachers and students that were randomly selected from the Local Government Areas for the study were subjected to statistical analysis, using Statistical Package for Social Sciences (SPSS) Version 22 to determine the statistical differences between the variables of study. The bio-data of the respondents were analysed using frequencies and percentages, while the research questions were analysed using mean and standard deviation. Also, all the five null hypotheses were tested using the independent sample t-test at  $p \leq 0.05$  level of significance.

#### 4.2 Bio-Data of Respondents

This section dealt with the analysis of response of the instrument and the personal data of the respondents.

##### 4.2.1 Response Rate by Questionnaire

The data for this study was collected from JSS teachers and students in two Local Government Areas in Niger state, Nigeria. The response rate is presented in Table 3.

**Table 3: Response Rate of the Questionnaires**

	Responses	Percent
Response No. of distributed questionnaires	440	100%
Returned questionnaires	418	95%
Returned and usable questionnaires	406	92.2%
Returned and excluded questionnaires	12	2.7%
Questionnaires not returned	22	5%
Response rate	95%	
Usable response rate	92.2%	

Table 3 indicated that out of the 440 questionnaires that were distributed in the course of data collection, 418 were returned. This represented 95% of the total questionnaires administered. A careful study of the questionnaires returned revealed that 12 of them were not properly

filled in. This was checked in the process of data cleaning and screening. Errors were checked by analysing the mean, standard deviation, minimum and maximum scores for the entire 418 cases on all the variables. At the end of data screening and analysis, 406 questionnaires were available for further analysis, which represented 92.2%. This was considered adequate, because it was more than the required minimum sample size of 400 needed for the purpose of this study.

#### 4.2.4. Demographic Variables of Respondents

This section presented the demographic information of the respondents based on gender and location. Number and percent of respondents by gender was presented in Table 4.

**Table 4: Response Rate by Gender (Teachers & Students)**

Status	Gender		Total /Percent
	Male	Female	
Teacher	21(5.2%)	16(3.9%)	37(9.1%)
Student	221(54.4%)	148(36.5%)	369(90.9%)
Total	242(59.6%)	164(40.4%)	406(100%)

Table 4 presented the responses by gender of JSS teachers and students that participated in the study. There were a total of 406 respondents out of which 21(5.2%) were male and 16 (3.9%) were female teachers. While, 221 (54.4%) were male and 148 (36.5%) were female students. The numbers of male teachers and students were more than the number of female teachers and students who participated in the study. This implied that, majority of the respondents were male. Number and percent of respondents according to location is presented in Table 5.

**Table 5: Response Rate by Location (Teachers and Students)**

Status	Location		Total /Percent
	Urban	Rural	
Teacher	21(5.2%)	13(3.2 %)	34(8.4%)
Student	248(61.1%)	124(36.5%)	372(91.6%)
Total	269(66.3%)	137(33.7%)	406(100%)

Table 5 presented the number of respondents by location who participated in the study. There were a total of 406 respondents out of which 21(5.2 %) were teachers in urban JSS and 13 (3.2%) were teachers from rural JSS. On the other hand, 248 (61.1%0 were JSS students in urban schools and 124(30.5%) were JSS students in rural schools. This showed that, majority of the respondents were from urban Junior Secondary Schools. Number and percent of respondents according to level of study is presented in Table 6.

**Table 6: Response Rate by Student's Level of Study**

<b>Level of Study</b>	<b>Frequency</b>	<b>%</b>
JSS II	186	51.1
JSS III	178	48.9
<b>Total</b>	<b>364</b>	<b>100.0</b>

Table 6 presented the number of respondents by level of study who participated in the study. There were a total of 364 students that participated as respondents out of which 186(51.1 %) were in JSS II and 178 (48.9%) were in JSS III. This showed that, majority of the students' respondents were in JSS II.

### **4.3 Answering the Research Questions**

In this section, the research questions were answered based on the data collected. The descriptive statistics of mean and standard deviations were used to answer the research questions.

**Research Question One:** What is the opinion of JSS II and JSS III students on the application of ICT for effective learning of Social Studies in Niger state, Nigeria?

To answer this research question, means and standard deviations and mean difference were used. The result of the computation is shown in Table 7.

**Table 7: Means and standard deviation of JSS II and JSS III students**

<b>Level</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>Std. Error Mean</b>	<b>Mean Difference</b>
JSS II	186	93.89	10.41	.73	
JSS III	178	106.27	12.11	.76	-12.38
<b>Total</b>	<b>364</b>				

From Table 7 result indicated the means and standard deviation of JSS II and JSS III on the application of ICT for effective learning of Social Studies in Niger state, Nigeria. The mean opinion scores of JSS II (M=93.89, SD=10.41) is less than that of JSS III (M=106.27, SD=12.11) students on the application of ICT for effective learning of Social Studies in junior secondary schools. The mean difference was -12.38 in favor of the JSS III students. This implied that, there was difference in the mean opinion scores of JSS II and JSS III students on the application of ICT for effective learning of Social Studies in Niger state. This is, JSS III perceived the application of ICT for effective learning of Social Studies in JSS most important than their JSS II counterparts.

**Research Question Two:** In what ways do the opinions of JSS male and female teachers differ on the application of ICT for effective teaching of Social Studies in Niger State, Nigeria?

To answer this research question, means and standard deviations and mean difference were used. The result of the computation is shown in Table 8.

**Table 8: Means and Standard Deviation of Male and Female Teachers**

<b>Sex</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>Std. Error Mean</b>	<b>Mean Difference</b>
Male	21	58.87	8.33	.76	
Female	16	56.43	8.35	.71	2.44
<b>Total</b>	<b>37</b>				

From Table 8, the result showed the means and standard deviation of JSS male and female teachers on the application of ICT for effective teaching of Social Studies in Niger State, Nigeria. Thus, the mean opinion scores of male (M=58.87, SD=8.33) is higher than that of female (M=56.43, SD=8.35) teachers on the application of ICT for effective teaching

of Social Studies in junior secondary schools. The mean difference was 2.44 in favor of the male teachers. That is, there was difference in the mean opinion scores of male and female teachers on the application of ICT for effective teaching of Social Studies in Niger State. In other words, male JSS teachers perceived the application of ICT for effective learning of Social Studies in JSS most important than their female counterparts.

**Research Question Three:** What are the opinions of JSS male and female students on the application of ICT for effective learning of Social Studies in Niger State, Nigeria?

To answer this research question, means and standard deviations and mean difference were used. The result of the computation is shown in Table 9.

**Table 9 : Means and standard deviation of JSS Male and Female students**

<b>Sex</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>Std. Error Mean</b>	<b>Mean Difference</b>
Male	221	94.33	10.67	.87	
Female	148	92.82	11.21	.81	1.51
<b>Total</b>	<b>369</b>				

From Table 9, result indicated the means and standard deviation of JSS male and female students on the application of ICT for effective learning of Social Studies in Niger State, Nigeria. The mean opinion scores of male (M=94.33, SD=10.67) is higher than that of female (M=92.82, SD=11.21) students on the application of ICT for effective learning of Social Studies. The mean difference was 1.51 in favor of the male students. This established that, there was difference in the mean opinion scores of male and female students on the application of ICT for effective learning of Social Studies in Junior Secondary Schools in Niger State. Thus, male JSS students perceived the application of ICT for effective learning of Social Studies in JSS most important than their female counterparts

**Research Question Four:** In what ways do JSS urban and rural students differ in their opinions on the application of ICT for effective learning of Social Studies in Niger State, Nigeria?

To answer this research question, means and standard deviations and mean difference were used. The result of the computation is shown in Table 10.

**Table 10: Means and Standard Deviation of Urban and Rural JSS Students**

<b>Location</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>Std. Error Mean</b>	<b>Mean Difference</b>
Urban	248	93.87	10.33	.81	
Rural	124	95.43	11.38	.85	-1.56
<b>Total</b>	<b>372</b>				

From Table 10, the result pointed out the means and standard deviation of JSS urban and rural students' opinions on the application of ICT for effective learning of Social Studies in Niger State, Nigeria. Consequently, the mean opinion scores of urban (M=93.87, SD=10.33) is less than that of rural (M=95.43, SD=11.38) students on the application of ICT for effective learning of Social Studies and the mean difference was -1.56 in favor of the rural students. Put simple, this implied that, there was difference in the mean opinion scores of urban and rural students on the application of ICT for effective learning of Social Studies in Junior Secondary Schools in Niger State. In other words, rural JSS students perceived the application of ICT for effective learning of Social Studies in JSS most important than their urban counterparts.

**Research Question Five:** What are the opinions of JSS urban and rural teachers on the application of ICT for effective teaching of Social Studies in Niger State, Nigeria?

To answer this research question, means and standard deviations and mean difference were used. The result of the computation is shown in Table 11.

**Table 11: Means and Standard Deviation of Urban and Rural Teachers**

<b>Location</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>Std. Error Mean</b>	<b>Mean Difference</b>
Urban	21	54.32	8.18	.76	
Rural	13	53.43	8.54	.71	2.44
<b>Total</b>	<b>34</b>				

From Table 11, the result showed the means and standard deviation of JSS urban and rural teachers on the application of ICT for effective teaching of Social Studies in Niger State, Nigeria. The mean opinion scores of urban (M=54.32, SD=8.18) is higher than that of rural (M=53.43, SD=8.54) teachers on the application of ICT for effective teaching of Social Studies in junior secondary schools. The mean difference was 0.89 in favor of the urban JSS teachers. That is, there was difference in the mean opinion scores of urban and rural JSS teachers on the application of ICT for effective teaching of Social Studies in Niger State. Thus, urban JSS teachers perceived the application of ICT for effective learning of Social Studies in JSS most important than their rural counterparts.

#### **4.4 Testing the Null Hypotheses**

Based on the research questions, the following null hypotheses were tested at  $p \leq .05$  level of significance. Each of the null hypotheses was tested using independent sample t-test depending on the variables that were involved.

**Null Hypothesis One:** There is no significant difference between the mean opinion score of JSS II and JSS III students on the application of ICT for effective learning of Social Studies in Niger state, Nigeria.

Independent sample t-test was used to test this null hypothesis. The summary of the computation was presented in Table 12.

**Table 12: Analysis of independent sample t-test of JSS II and JSS III Students**

Variable	N	$\bar{x}$	SD	Df	t-cal	P value	Decision
JSS II	186	93.89	10.41	362	-2.814	.001	Rejected
JSS III	178	106.27	12.11				

Table 12 presents the results of independent sample t-test of JSS II and III on the application of ICT for effective learning of Social Studies in Niger state, Nigeria. The respondents in JSS II recorded lower mean opinion scores of 93.89 compare to JSSIII respondents with mean opinion score of 106.27. The standard deviation was 10.41 for JSSII and 12.11 for JSS III respondents. However, the difference in those mean opinion scores was statistically significant at  $p=0.001<0.05$  and the t-cal was (-2.814). Therefore, there was significant difference between the mean opinion score of JSS II and JSS III students on the application of ICT for effective learning of Social Studies in Niger state, Nigeria.

**Null Hypothesis Two:** There is no significant difference between the mean opinion score of JSS male and female teachers differ on the application of ICT for effective teaching of Social Studies in Niger State, Nigeria.

Independent sample t-test was used to test this null hypothesis. The summary of the computation was presented in Table 13.

**Table 13: Analysis of independent sample t-test of Male and Female JSS Teachers**

Variable	N	$\bar{x}$	SD	Df	t-cal	P-value	Decision
Male	21	58.87	8.33	35	1.762	.561	Retained
Female	16	56.43	8.35				

Table 13, presents the results of independent sample t-test of male and female JSS teachers on the application of ICT for effective learning of Social Studies in Niger state, Nigeria. It can be observed that, male JSS teachers recorded higher mean opinion score of 58.87 than the mean opinion score of 56.43 for female JSS teachers. Added to this, the standard deviation

was 8.33 for male respondents and 8.35 for female respondents. However, the difference in those mean opinion scores was not statistically significant at  $p=0.510 > 0.05$  and the t-cal was (1.762). Thus, there was no significant difference between the mean opinion score of JSS male and female teachers differ on the application of ICT for effective teaching of Social Studies in Niger State, Nigeria.

**Null Hypothesis Three:** There is no significant difference between the mean opinion score of JSS male and female students on the application of ICT for effective learning of Social Studies in Niger State, Nigeria.

Independent sample t-test was used to test this null hypothesis. The summary of the computation was presented in Table 14.

**Table 14: Analysis of Independent Sample t-test of Male and Female JSS Students**

Variable	N	$\bar{x}$	SD	Df	t-cal	P-value	Decision
Male	221	94.33	10.67	367	1.566	.226	Retained
Female	148	92.82	11.21				

Table 14 presents the results of independent sample t-test of male and female JSS students on the application of ICT for effective learning of Social Studies in Niger state, Nigeria. It can be observed that, male JSS students recorded higher mean opinion score of 94.33 than the mean opinion score of 92.82 for female JSS students. Also, the standard deviation was 10.67 for male respondents and 11.21 for female respondents. However, the difference in those mean opinion scores was not statistically significant at  $p=0.226 > 0.05$  and the t-cal was (1.566). Thus, there was no significant difference between the mean opinion score of JSS male and female students on the application of ICT for effective learning of Social Studies in Niger State, Nigeria.

**Null Hypothesis Four:** There is no significant difference between the mean opinion score of JSS urban and rural students on the application of ICT for effective learning of Social Studies in Niger State, Nigeria.

Independent sample t-test was used to test this null hypothesis. The summary of the computation was presented in Table 15.

**Table 15: Analysis of Independent Sample t-test of Urban and Rural JSS Students**

Variable	N	$\bar{x}$	SD	Df	t-cal	P-value	Decision
Urban	248	93.87	10.33	370	-1.511	.268	Retained
Rural	124	95.43	11.38				

Table 15 presents the results of independent sample t-test of urban and rural JSS students on the application of ICT for effective learning of Social Studies in Niger state, Nigeria. The analysis showed that, urban JSS students recorded lower mean opinion score of 93.87 compared to the mean score of 95.43 for rural JSS students, while the standard deviation for urban respondents was 10.33 and that of rural respondents was 11.38. Seemingly, the difference in those mean opinion scores was not statistically significant at  $p=0.268 > 0.05$  and the t-cal was (-1.511). Consequently, there was no significant difference between the mean opinion score of JSS urban and rural students on the application of ICT for effective learning of Social Studies in Niger State, Nigeria.

**Null Hypothesis Five:** There is no significant difference between the mean opinion score of JSS urban and rural teachers on the application of ICT for effective teaching of Social Studies in Niger State, Nigeria.

Independent sample t-test was used to test this null hypothesis. The summary of the computation was presented in Table 16.

**Table 16: Analysis of Independent Sample t-test of Urban and Rural JSS Teachers**

<b>Variable</b>	<b>N</b>	<b><math>\bar{x}</math></b>	<b>SD</b>	<b>Df</b>	<b>t-cal</b>	<b>P-value</b>	<b>Decision</b>
Urban	21	54.32	8.18	32	1.366	.529	Retained
Rural	13	53.43	8.54				

Table 16 presents the results of independent sample t-test of urban and rural JSS students on the application of ICT for effective learning of Social Studies in Niger state, Nigeria. It can be observed that, urban JSS teachers recorded higher mean opinion score of 54.32 which was greater than the mean opinion score of 53.43 for rural JSS teachers, while the standard deviation for urban respondents was 8.18 and that of rural respondents was 8.54. As a result, the difference in those mean scores was not statistically significant at  $p=0.529 > 0.05$  and the calculated t-value was (1.366). Thus, there was no significant difference between the mean opinion score of JSS urban and rural teachers on the application of ICT for effective teaching of Social Studies in Niger State, Nigeria.

#### **4.5 Summary of Major Findings**

Based the inferential and descriptive analyses from this study, the major findings were:

- i. There was significant difference between the mean opinion score of JSS II and JSS III students on the application of ICT for effective learning of Social Studies in Niger state, Nigeria.
- ii. Significant difference was not found between the mean opinion score of JSS male and female teachers differ on the application of ICT for effective teaching of Social Studies in Niger State, Nigeria.
- iii. There was no significant difference between the mean opinion score of JSS male and female students on the application of ICT for effective learning of Social Studies in Niger State, Nigeria.

- iv. Significant difference did not exist between the mean opinion score of JSS urban and rural students on the application of ICT for effective learning of Social Studies in Niger State, Nigeria.
- v. There was no significant difference between the mean opinion score of JSS urban and rural teachers on the application of ICT for effective teaching of Social Studies in Niger State, Nigeria.

#### **4.6 Discussion of Findings**

Discussions of findings are done in view of the hypotheses tested.

Hypothesis one found significant difference between the mean opinion score of JSS II and JSS III students on the application of ICT for effective learning of Social Studies in Niger state, Nigeria. This is in line with findings of Swain (2010); Togia and Tsigilis, (2010); Parlakkılıç (2014); and Rosa (2016); which established that, students' opinion on the application of Information Communication Technology differ to a greater extent, for the fact that, levels of study, thinking ability, exposure to use of ICT devices among others affects students decisions and perception on ICT adoption.

Hypothesis two found no significant difference between the mean opinion score of JSS male and female teachers differ on the application of ICT for effective teaching of Social Studies in Niger State, Nigeria. This finding agreed with Yucel and Cevik (2010); Manyilizu and Gilbert (2015); Sanda and Kurfi, (2013) and Fomsi and Emeka (2017) studies which established no significant difference between the mean opinion scores of the male and female teachers in the use and application of ICT for effective teaching in schools.

Hypothesis three found no significant difference between the mean opinion score of JSS male and female students on the application of ICT for effective learning of Social Studies in Niger State, Nigeria. This concurred with the findings of Kwapong (2009); Hew and Lai (2011); Judi, Amin, Zin and Latih (2011); Umar and Jalil (2012); Aytaç (2013) and

Owusu-Ansah (2013) which revealed no significant difference between male and female students on application and use of ICT in increasing collaboration, academic and research activities and accomplishing of tasks more quickly.

Hypothesis four found no significant difference between the mean opinion score of JSS urban and rural students on the application of ICT for effective learning of Social Studies in Niger State, Nigeria. This is in line with the findings of Osunwusi and Abifarin (2013); Pei-Yu, (2013); who found that student preference and expectation to technology integration did not differ between rural and urban school teachers. However, the study disagreed with finding of Buabeng-Andoha and Issifu (2015) which established that students in public schools pedagogically use ICT more than students in private schools. In addition, urban school students pedagogically use ICT more than semi-urban and rural school students. Also, the study was in contradiction with the findings of Asaolu and Fashanu's, (2012); Haji, Moluayonge and Park (2017) which revealed that private schools students are more proficient in the use of ICT in their learning than their counterparts in public secondary schools.

Hypothesis five established no significant difference between the mean opinion score of JSS urban and rural teachers on the application of ICT for effective teaching of Social Studies in Niger State, Nigeria. This study correlate with the findings of Almekhlafi and Almeqdadi (2010); Aydin (2013); Sipilä (2014); Choy and Ng, (2015) which established that teachers knowledge and opinions on the use and application of ICT in teaching and learning processes did not differ significantly by location.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter dealt with the summary, conclusion and recommendations as way forward for the problem established.

#### **5.2 Summary**

This study focused on the application of ICT for effective teaching and learning of Social Studies in Junior Secondary Schools in Niger State, Nigeria. Specifically, the objectives of the study were to: find out the opinions of JSS students by levels of study on the application of ICT for effective teaching of Social Studies in Niger state, Nigeria; assess the opinion of JSS teachers by gender on the application of ICT for effective teaching of Social Studies in Niger State, Nigeria; find out the opinions of JSS students by gender on the application of ICT for effective teaching of Social Studies in Niger State, Nigeria; assess the opinions of JSS students by location on the application of ICT for effective teaching of Social Studies in Niger State, Nigeria; and find out the opinions of JSS teachers by location on the application of ICT for effective teaching of Social Studies in Niger State, Nigeria.

Similarly, the following questions guided the study: What are the opinions of JSS II and JSS III students on the application of ICT for effective learning of Social Studies in Niger state, Nigeria? In what ways do the opinions of JSS male and female teachers differ on the application of ICT for effective teaching of Social Studies in Niger State, Nigeria? What are the opinions of JSS male and female students on the application of ICT for effective learning of Social Studies in Niger State, Nigeria? In what ways do JSS urban and rural students differ in their opinions on the application of ICT for effective learning of Social Studies in Niger State, Nigeria? What are the opinions of JSS urban and rural teachers on the application of ICT for effective teaching of Social Studies in Niger State, Nigeria?

Also, the following null hypotheses were formulated and tested at  $p \leq 0.05$  level of significance: There is no significant difference between the mean opinion score of JSS II and JSS III students on the application of ICT for effective learning of Social Studies in Niger state, Nigeria; There is no significant difference between the mean opinion score of JSS male and female teachers differ on the application of ICT for effective teaching of Social Studies in Niger State, Nigeria; There is no significant difference between the mean opinion score of JSS male and female students on the application of ICT for effective learning of Social Studies in Niger State, Nigeria; There is no significant difference between the mean opinion score of JSS urban and rural students on the application of ICT for effective learning of Social Studies in Niger State, Nigeria; and There is no significant difference between the mean opinion score of JSS urban and rural teachers on the application of ICT for effective teaching of Social Studies in Niger State, Nigeria.

Chapter two dealt with the review of related literature and as such, the literature was reviewed in line with the research objectives, questions and hypotheses that guided the study. Descriptive survey research method was employed and the population of study was Junior Secondary School teachers and students in Bosso and Chanchaga Local Government Areas of Niger state, Nigeria totaling thirty-one thousand four hundred and sixty-seven (31,467), out of which a sample of four hundred respondents (400) through the use of proportionate sampling techniques. The instrument titled “Application of ICT for Effective Teaching of Social Studies in Junior Secondary Schools” (AICTESOSJSS) questionnaire was used for data collection. Mean and standard deviation were used to report the descriptive data collected, while the independent samples t-test was used to test the null hypotheses at 0.05 level of significance. Based the inferential and descriptive analyses, the study revealed that, there was significant difference between the mean opinion score of JSS II and JSS III students on the application of ICT for effective teaching of Social Studies in Niger state,

Nigeria; Significant difference was not found between the mean opinion score of JSS male and female teachers differ on the application of ICT for effective teaching of Social Studies in Niger State, Nigeria; There was no significant difference between the mean opinion score of JSS male and female students on the application of ICT for effective teaching of Social Studies in Niger State, Nigeria; Significant difference did not exist between the mean opinion score of JSS urban and rural students on the application of ICT for effective teaching of Social Studies in Niger State, Nigeria; and There was no significant difference between the mean opinion score of JSS urban and rural teachers on the application of ICT for effective teaching of Social Studies in Niger State, Nigeria.

### **5.3 Conclusion**

In view of the data collected and tested for the study, it was concluded that, opinions of students based on levels of study varied to a larger extent on the application of Information Communication Technology for effective teaching and learning of Social Studies in Junior secondary schools in Niger state. This could to be attributed to the students' abilities, perception, beliefs and attitude toward the use of modern technology in teaching and learning processes. Nonetheless, gender and location as study variables did not significantly affect the opinions of junior secondary school teachers and students on the application of Information Communication Technology for effective teaching and learning of Social Studies in Bosso and Chanchaga Local Government Areas of Niger state, Nigeria. This implied that, both the teachers and the students have positive knowledge and understanding on the relevance of Information Communication Technology in teaching exercise.

#### **5.4 Contribution to Knowledge**

The study established that:

- i. Information Communication Technology resources proved superior for effective teaching and learning of Social Studies because of its practicality and learner friendliness.
- ii. The application of Information Communication Technology resources in learning Social Studies proved to boost the spirit of inquiry and critical thinking among junior secondary school students.

#### **5.5 Recommendations**

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

- i. Government should provide Information Communication Technology devices such as handheld computers, Ipads or mini-computers with installed programmes, themes and topics on Social Studies for junior secondary school students in Niger state. This will help bridge the gap in knowledge of JSS students on application of ICT for effective teaching of Social Studies in the state.
- ii. Niger State Government should ensure that ICT policy statements are translated into reality. An ICT policy implementation commission should be created, funded and given the power to provide ICT facilities to both male and female social studies teacher in junior secondary schools and monitor their use. This will enable Social Studies teachers to develop positive attitude towards the use of ICT devices in teaching process.
- iii. Niger state government, school administrators and all stakeholders should provide technology resources and training programs, particularly to JSS male and female students to bridge the digital divide issue on effective learning of Social Studies in the state.

- iv. Special programs/workshops by government and Non Governmental Organization should be organized for all students in urban and rural junior secondary schools from time to time as this will assist them in improving their ICT skills and application for effective learning of Social Studies in the state.
- v. Efforts should be made by State Ministry of Education to ensure that adequate and skilled computer literate Social Studies teachers are posted to all secondary irrespective of whether it is located in the rural or urban area.

### **5.6 Suggestion for Further Research**

There is need for further study in the following areas:

- i. Assessment of ICT Literacy among Secondary School Students in Niger State, Nigeria
- ii. Application of ICT in teaching of Social Studies for self reliance development in colleges of Education in Niger state.
- iii. Secondary Students' Perceptions of Information, Communication Technology (ICT) Use in promoting Self-directed Learning in Niger state.

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## APPENDIX A : QUESTIONNAIRE FOR STUDENT

Faculty of Education,  
School of Arts and Social Sciences Education,  
Ahmadu Bello University,  
Zaria.  
Date \_\_\_\_\_

Dear Respondent,

This questionnaire is on the Application of Information Communication Technology (ICT) for effective teaching and learning of Social Studies in Junior Secondary Schools in Niger State. You are kindly requested to respond to the statement below by simply ticking (✓) one of the four options provided that is most appropriate to your choice.

### SECTION A: PERSONAL DATA

1. Gender: (a) Male [   ] (b) Female [   ]
2. Location : (a) Urban [   ] (b) Rural [   ]
3. Study Level : (a) JSS II [   ] (b) JSS III [   ]

### SECTION B: Application of ICT in learning of Social Studies

Kindly respond to all the questions/items in this questionnaire. All information gathered will be used in aggregate form only, and no individual will be identified in any of the reports from the study. Indicate your level of agreement or disagreement by putting a ✓ mark in the appropriate column. **SA = Strongly Agree, A = Agree, D = Disagree and SD = Strongly Disagree**

S/N	Statements	(SA) 4	(A) 3	(D) 2	(SD) 1
1.	It is really important to use computer for learning.				
2.	Using computer for learning will help me in my future life as an adult.				
3.	Most students' lack of knowledge and skill of internet services and ways of using them.				
4.	There is need for the ddevelopment of software for effective learning of Social Studies.				
5.	Students lack of access to personal computer (PCs) and internet services in their homes & school.				
6.	Whenever Social Studies teacher use ICT or a computer to teach Social Studies, it makes the course more difficult.				
7.	Computers are not available for Social Studies learning session in my school.				
8.	The supply of ICT materials is more in urban schools than in rural schools.				
9.	ICT powered lessons are boring.				
10.	The students can learn better on their own with organized ICT package in Social Studies.				

11.	The use of ICT is affected by unavailability of accessories, such as power, network service, spare parts etc.				
12.	The use of various ICT devices will facilitates better understanding of Social Studies lessons.				
13.	The expensive nature of ICT devices limits its availability in schools for use.				
14.	Students can/get distracted when ICT device are used to introduce a lesson in the class.				
15.	ICT assisted learning is boring because it takes more time than normal lesson.				
16.	Application of ICT devices in learning process allow students to engage in inquiring by exploring the unlimited resources available on the world wide web.				
17.	Government and parents rely on NGOs and donor agencies for the provision of ICT devices for learning in school.				
18.	Unprofessional handling of ICT devices constitutes a major challenge to its use for learning activities in school.				
19.	Parents should be made to provide ICT devices for their children to learn effectively in school.				
20.	Applying ICT device in learning could generate multiple educational effects on JSS academic performance in Social Studies.				
21.	The use of ICT in Social Studies could easy student understanding of the subject.				
22.	Time allocated in the time-table for Social Studies is not enough for the application of ICT to learn the subject.				

*Thank you for filling this questionnaire*

## APPENDIX B: QUESTIONNAIRE FOR TEACHES

Faculty of Education,  
School of Arts and Social Sciences Education,  
Ahmadu Bello University,  
Zaria.

Dear Respondent,

This questionnaire is on the Application of Information Communication Technology (ICT) for effective teaching and learning of Social Studies in Junior Secondary Schools in Niger State. You are kindly requested to respond to the statement below by simply ticking (√) one of the four options provided that is most appropriate to your choice.

### SECTION A: BIO-DATA OF RESPONDENT

1. Gender: (a) Male [    ] (b) Female [    ]
2. Location: (a) Urban [    ] (b) Rural [    ]

### SECTION B: Application of ICT in learning of Social Studies

Kindly respond to all the questions/items in this questionnaire. All information gathered will be used in aggregate form only, and no individual will be identified in any of the reports from the study. Indicate your level of agreement or disagreement by putting a √ mark in the appropriate column. **SA = Strongly Agree, A = Agree, D = Disagree and SD = Strongly Disagree**

S/N	Item Statement	SA	A	D	SD
		4	3	2	1
1.	ICT use in teaching and learning is essential to prepare students to live and work in the 21st century				
2.	For ICT to be fully exploited for teaching and learning of Social Studies radical changes in schools are needed.				
3.	ICT use in teaching and learning positively impacts on student motivation.				
4.	Computers and the internet should be used for students to do exercises and practise.				
5.	Government should specific policy or programme to prepare students for responsible internet behaviour.				
6.	Computers and the internet should be used for students to retrieve information.				
7.	ICT materials are not available in sufficient number				
8.	Most social studies teachers are not computer literate.				
9.	The use of ICT by Social Studies teachers is hampered by unavailability of power supply.				
10.	The use of computer will help students understand concepts of Social Studies better.				
11.	Use of Internet in lessons will help to meet certain learning goals of Social Studies.				

12.	Designed technology-enhanced learning activities will help students to understand Social Studies themes better.				
13.	The use of ICT devices in teaching scares Social Studies teachers.				
14.	The idea of using a computer in teaching and learning makes teachers skeptical.				
15.	ICT devices can help students to learn because it allows them to express their thinking in better and different ways.				
16.	Whatever the computer can do, I can do equally well.				
17.	The use of the computer as a learning tool will excites teachers and students.				
18.	The computer is not conducive to teaching of Social Studies because it creates technical problems.				
19.	ICT can be use to provide feedback and/or assess students' learning.				
20.	ICT can be use to create digital learning materials on Social Studies for students.				
21.	There is lack of adequate contents/materials for teaching Social Studies through the ICT devices.				
22.	ICT assisted lesson is boring because it takes more time.				
23.	ICT devices allow the teachers to engage in inquiry by exploring the unlimited resourced available on the world wide web.				
24.	ICT packages can increase cooperative learning in social studies class.				
25.	Most Social Studies teachers lack pedagogical models on how to use ICT for teaching.				
26.	Pressure to prepare students for exams and tests can limit the application of ICT devices by most Social Studies teachers.				
27.	Most Social Studies teachers not in favour of the use of ICT at school.				
28.	Lack of teachers' interest in use of computer and related ICT resources.				
29.	ICT in school will help teachers to use emails to communicate with students.				
30.	Government should provide computer literacy training for Social Studies teachers.				
31.	Teachers' familiarity with ICT devices that can help them in enhancing teaching and learning activities.				
32.	Most teachers do not have access to personal computers in their homes or schools.				

*Thank you for filling this questionnaire*

## APPENDIX C : SAMPLE DISTRIBUTION TABLE

### Research Advisors

Population Size	Confidence = 95.0%				confidence = 99.0%			
	Accuracy/Margin of Error				Degree of Accuracy/Margin of Error			
	0.05	0.035	0.025	0.01	0.05	0.035	0.025	0.01
10	10	10	10	10	10	10	10	10
20	19	20	20	20	19	20	20	20
30	28	29	29	30	29	29	30	30
50	44	47	48	50	47	58	49	50
75	63	69	72	74	67	71	73	75
100	80	89	94	99	87	93	96	99
150	108	126	137	148	122	135	142	149
198	131	158	175	194	153	173	184	196
264	157	198	225	257	189	221	240	260
300	169	217	251	291	207	246	270	295
400	196	265	318	384	250	309	348	391
500	217	306	377	475	285	365	421	485
600	234	340	432	565	315	416	490	579
700	248	370	481	653	341	462	554	672
800	260	396	526	739	363	503	615	763
900	269	419	568	823	382	541	672	854
1,000	278	440	606	906	399	575	727	943
1,200	291	474	674	1067	427	636	827	1119
1,500	306	515	759	1297	460	712	959	1376
2,000	322	563	869	1655	498	808	1141	1785
2,500	333	597	952	1984	524	879	1288	2173
3,900	350	653	1102	2774	567	1005	1580	3158
5,100	357	680	1181	3331	587	1070	1746	3901
5,532	365	710	1275	4211	610	1147	1960	5165
5,908	400	710	1275	4211	610	1147	1960	5165
7,500	400	710	1275	4211	610	1147	1960	5165
10,894	400	727	1332	4899	622	1193	2098	6239
25,000	400	760	1448	6939	646	1285	2399	9972
50,000	400	772	1491	8056	655	1318	2520	12455
75,000	400	776	1506	8514	658	1330	2563	13583
100,000	400	778	1513	8762	659	1336	2585	14227
250,000	400	782	1527	9248	662	1347	2626	15555
500,000	400	783	1532	9423	663	1350	2640	16055
1,000,000	400	783	1534	9512	663	1352	2651	16478
2,500,000	400	784	1536	9567	663	1353	2651	16478
10,000,000	400	784	1536	9594	663	1354	2653	16560
100,000,000	400	784	1537	9603	663	1354	2654	16584
264,000,000	400	784	1537	9603	663	1354	2654	16584

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The recommended sample size for a given population size, level of confidence, and margin of error appears in the body of the table

For example, the recommended sample size for a population of 1,000, a confidence level of 99% and a margin of error (degree of accuracy) of 3.5% would be 575.

Change these values to select different levels of confidence

Change these values to select different maximum margins of error.

Change these values to select different (e.g., more precise) population sizes)

## APPENDIX D: SUMMARY OF PILOT STUDY RESULTS

### Reliability Test for Teachers' Instrument

RELIABILITY  
/VARIABLES=SCALE1 /SCALE('SCALE 1') ALL  
/MODEL=ALPHA /SUMMARY=TOTAL.

#### Reliability

[DataSet1] C:\Users\user\Desktop\UMAR PILOT STUDY.sav

#### SCALE 1 : QUESTIONNAIRE FOR TEACHERS

Case Processing Summary			
		N	%
Cases	Valid	10	100.0
	Excluded	0	.0
	Total	10	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics	
Cronbach's Alpha	N of Items
.880	42

### Reliability Test for Students' Instrument

#### Reliability

[DataSet1] C:\Users\user\Desktop\UMAR PILOT STUDY.sav

#### SCALE 2 : QUESTIONNAIRE FOR STUDENTS

Case Processing Summary			
		N	%
Cases	Valid	20	100.0
	Excluded	0	.0
	Total	20	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics	
Cronbach's Alpha	N of Items
.865	38