

# INFLUENCE OF FAMILY SOCIO-ECONOMIC STATUS ON THE ACADEMIC ACHIEVEMENT OF SECONDARY SCHOOL STUDENTS IN FEDERAL CAPITAL TERRITORY ABUJA, NIGERIA

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## ABSTRACT

This study focused on the influence of family socio-economic status on the academic achievement of secondary schools students in Federal Capital Territory Abuja Nigeria. The study was guided by research questions and hypotheses formulated by the researcher. The population used in this study was fifty thousand two hundred and sixty students (50260) among fifty nine (59) senior secondary schools in FCT. Six schools were selected from each of the six area councils with the population of 50 respondents in each school guiding a total number of 300 students. Also, 300 parents were sampled for the study. The researcher employed the use of Socio-Economic Status Questionnaire (FSESQ) designed by him to test the research questions and hypotheses. The researcher also used secondary data namely academic journals, conference paper, internet material, text books, and other relevant materials. The research design used was descriptive survey, while a simple percentage, T-test Chi-square and ANOVA was used for data analysis. The validity and reliability of the instruments were established. The validity and reliability index of 0.88 showed a high reliability of the items. The sectional mean of 3.35 indicates that Family size had influence on Students' Academic Achievement in the study area. The sectional mean of 3.31 indicated that Parents education level has Influence on student Academic Achievement in the study area. However, the sectional mean of 2.93 indicated that parents' level of income influenced academic achievement of students in the Federal Capital Territory, Abuja. A significant value of .559 (more than p 0.05 level of significance) showed that there is no significant difference in the academic achievement of students on the basis of their family size in the Federal Capital Territory. It was recommended that as the level of income affects the child's academic achievement, it is important that the government should put in place measures to ensure that parents improve their socio-economic status in not only Federal Capital Territory but the entire nation.

## INTRODUCTION

Education is one of the most important tools used to foster creation of worthwhile skills and attitudes needed for national development. According to the Nigerian National Policy on Education (2013), (4th edition) the national education goals which derive from the Nigerian educational philosophy include amongst other things; the acquisition of appropriate skills and the development of mental, physical and social abilities and competencies needed for the individual to live in and contribute to the development of the society. In pursuant to this goal, many ideas, gadgets, and

technologies have been advanced. These advancements especially in technology is geared towards developing skilled and competent labour force that will help in developing the country. This objective according to Madueke (2011) is shared by science education whose goals amongst many include preparing students to: observe and explore the environment, explain simple natural phenomenon, develop scientific attitudes including curiosity, critical reflection and objectivity, apply the skills and knowledge gained through science to solve educational and everyday problems in the society and develop self-confidence and self-reliance through problem solving activities in science. Today, the use of information and communication technology gadgets to teach contents in Social studies has even proved to be a better teaching aid in many developed countries of the world. This claim is supported by UNESCO information and communication technology competency framework for teachers (ICT CFT) (2011) which highlighted gains in using ICT to teach students. Social studies, considered as one of the subjects taught under social sciences have their teachers sharing these same objectives mentioned above. The primary purpose of social studies is to develop the ability to make informed and reasoned decisions for the public good as citizens of a culturally diverse, democratic society in an interdependent world (National Council of the Social Studies, 1994). The great architects of American public education, such as Thomas Jefferson, Horace Mann, and John Dewey, believed that every student must be well versed in his nation's history, the principles and practices which undergird citizenship, and the institutions that define our government. Understandings of commerce and geography were critical to their thinking as well. In essence, Jefferson, Mann, and Dewey viewed the study of social studies as critical to the mission of public schools.

A strong social studies education depends upon a clear understanding of its interrelated disciplines. Without knowledge of the geography and economics of earlier times, history offers only lists of people, events, and dates. Without knowledge of history, the institutions of American government and the dynamics of today's global economy are difficult to understand. Although social studies curricula vary in their breadth and depth, the Social Studies Standards reflect a focus on government, history, geography, and economics as the pillars of the content, with other disciplines within the social sciences deemed important, but not essential (Akinleye, 2010). Social studies teachers in Nigerian secondary schools are teachers who had undergone some training on Social studies in either a recognized university or any other degree awarding higher institution in Nigeria. Social studies teachers are expected to teach junior secondary school students and equip them with knowledge and functional skills that will help them pass junior secondary school certification examination and to be able to apply the skills acquired in solving their daily socio-economic problems. Social studies contents/subjects taught in secondary schools contain both practical and theoretical aspects taught concomitantly through Junior Secondary Schools 1-3.



It appears that teachers had over the years been teaching Social studies in conventional/ traditional ways with the aid of some teaching materials like charts, recommended texts, drawings, and live materials which could be improvised by the teacher for effective instructional delivery. The use of these traditional instructional techniques has not really helped students much in the understating of the concepts embedded in Social studies. Again, teachers because of the limited available teaching aids relied either on the much provided by the school or the out-dated ones found in the libraries. This situation has not only impeded on the teaching abilities and competencies but also on the general academic performance of the students who offered the subject in schools (Madueke, 2011). In the past, many teaching methods have been used for teaching social studies at the Junior Secondary Schools: These methods include; lecture method, demonstration method, questioning techniques, discussion methods which are expository in nature. Expository methods, according to Nwokenna (2010), consist of the presentation of concepts, facts and principles by the teacher while the students are merely asked to listen and take notes. These facts and principles are drawn from text books based on the stipulated contents and cognitive levels within the unit of instruction.

According to Nwokenna (2010), the conventional method of teaching social studies has not improved the achievement of students in their academic pursuit. The above scenario tends to suggest that the conventional teaching methods used have accounted for the persistent poor academic achievement in social studies by junior secondary school students. However recently, new and improved teaching aids and methods have continued to emerge amongst which is information and communication technology. Teaching aids and instructional materials play a major role in facilitating learning and their importance in teaching and learning have been evident. The importance of use of teaching aids cannot be overemphasized. Madueke (2011) pointed out that the use of improvised materials and teaching aids in the art of teaching not only engage both the students' auditory and sensory organs in the art of teaching, but they also help students to remember effectively contents learnt. Enhanced post primary school training is vital to the formation of successful human capital in any nation (Evoh, 2007). In this way, the necessity for ICT in Nigerian junior secondary schools can't be overstressed. In this innovation motivated time, everybody needs ICT capability to excel. Even institutions are discovering it extremely important to prepare and re-prepare their workers to set up or expand their insight into PCs and other ICT services (Adomi and Anie, 2006). Successful implementation of any educational programme can only be assured through teachers who have acquired necessary competencies in terms of knowledge, skills, values and attitudes.

The part of innovation in teaching and learning is quickly becoming a standout amongst the most imperative and broadly talked about issues in a modern-day

education plan especially in urban areas where these facilities are easily accessible unlike in the rural areas (Rosen and Well, 1995). Majority of the specialists in the area of teaching and learning concurred that, when appropriately utilized, ICT advances hold an incredible potential to enhance educating and learning apart from forming more job opportunities. This has really gingered a yet another powerful urge to outfit schools with computer gadgets and trained people (educators) important to create mechanically capable and productive students in developing nations of the world. In a quickly changing universe of worldwide labor market rivalry, industrial computerization, and expanding democratization, essential education is important for a person to have the capacity to get to the needed information and to be able to apply it appropriately (UNESCO, 2006). This capacity pointed toward the use of ICT as the only solution. It is strongly believed that ICT can facilitate the teaching methods and encourage learners understanding as can be seen in using software like Computer Assisted Instruction (CAI), Computer Assisted Learning, (CAL) Computer Based Tests (CBT) etc. Bearing in mind the part of education in the national development and the populace blast in Nigeria nowadays, the use of computers in instructions delivery gets to be basic. This is on account of its acknowledgment by educators will upgrade powerful instructing. Issues like great course association, powerful classroom administration, self-study, collective learning, and compelling correspondence between the partners in the education area. Instructing and learning has gone past the educator remaining before a gathering of understudies and spreading knowledge to them without the students' sufficient involvements (Ajayi, 2008). Social studies teachers have numerous possibilities of applying the ICT competencies in lessons so that elements of ICT aided education are taken into considerations and its benefits harnessed. For instance, the Social studies teacher using a slide show can demonstrate various historical events on various stages of origin and development of man in tandem to the topic he is handling for a lesson. With this slide show demonstrated, the learners will better understand and appreciate the topic after relating the show with the concept taught. Although, most teachers are neither ICT literate nor competence in its utilization, yet there is every need for these skill as the effective instructional delivery of Social studies requires teachers' adequate knowledge in the use of ICT (Adoni, 2006).

United Nations Educational Scientific and Cultural Organization – Information and Communication Technology Competency Test – UNESCO ICT–CT (2011) postulated that for students to become comfortable and effective users of computers, teachers must be able to make wise and effective use of computers in teaching. This means that all social science teachers irrespective of their gender and in particular Social studies teachers should be competent in using the ICT for instructional purposes when and where appropriate. Based on the foregoing, this study seeks to examine the influence



of utilizing ICT in the teaching and learning of social studies in upper basic education in Federal Capital Territory, Abuja.

# REVIEW OF LITERATURE The Concept of Social Studies

A search through the textbooks confounds the reader with numerous definitions of social studies. According to Orakwe (2001), the entire man surrounding constitutes the laboratory of social studies. It is quite difficult to encompass the whole physical, social, cultural, economic and political environment into a single definition. This accounts for definitional dichotomy of social studies discipline. Mezleobi, Fubara & Mezieobi (2008) simplified the definition of social studies as an integrated field of study which probes man's symbolic relationship with his environments, endows man with the reflective or contemplative capacities, intellectual, affective, social and work skills to enable him understand his words and its problems, and to rationally solve or cope with them for effective living in the society. According NERC (1981) states that social studies is the study of man as he interacts with the various environments, physical, economic, psychological, social and intellectual. Thus its true nature is seen as the study of man, how he influences and is influenced by other forces or how he solves his problems. Oqundare, S.F. (2010) defines it as a programme of study which a society uses to instill in learners the knowledge, skills, attitudes and actions it considers important concerning the relationships human beings have with each other, their world and themselves. As Aina., Adedoyin., Obilo, & Ahmadu (2002) rightly explained social studies is a study of man in his totality. Ololobou (2007) defined it as an organized integrated study emphasizing on cognition, functional skills and desirable attitudes and actions for the purpose of producing an effective citizenry. According to Akinola (2014) social studies is an aspect of learning which deals with how to get on (get along) with one's environment, physical as well as human and how to develop those skills knowledge, attitudes and values that characterize a respective and responsible citizen in a free society. Also Danladi (2009) view social studies as a course which is concerned with man as a social being and with the way he organizes cultural, economic, political, historical and geographical aspects of his society.

Mezieobi (2008) defined social studies as a formalized, correlated or integrated study of man and his environment which imbibe the learner with the cognition skills, values, attitudes, abilities and competences that will make him become an informed, rational, analytical, participative and functional citizen. Adekeye (2006) opined that social studies concern itself with learning about people, how and where they live, how they form and structure societies, how they govern themselves and provide for their material and psychological needs, how and why they love and hate each other, how they use and misuse the resources of the planet that is their home. This definition

implies that social studies is particularly interested in man's problems and how to help him solve them. From the above literature it is obvious that social studies is concerned primarily with man's relationship with all his environments, whose variety call for different forms of knowledge and experiences to understand man himself. Ajayi (2008) remarked the problem of definition has continued to be the greatest impediment to the success of social studies education. He added that it has affected both the teaching of the subject and its popularity. Similarly, Mezieobi (2003) asserted that the definitional disagreement among Nigeria scholars and writers on social studies is an impediment to the effective teaching of social studies in the Nigerian school system.

## Nature and Scope of Social Studies

Social studies can be conceptualized as an organized, integrated study of man and his environment, both physical and social, emphasizing on cognition, functional skills, desirable attitudes and actions for the purpose of producing an effective citizenry. It is defined as programme of study which a society use to transmit to students the knowledge, skills, attitudes and action it considers important concerning the relationship human beings have with each other and with their worldl (Rikichi, 2011). Social studies is the integrated study of the social sciences and humanities to promote civic competence. Within the school programme, social studies provide coordinated systematic study drawing upon such disciplines as anthropology, Economics, Geography, History, Law, Political Science, Religion etc, as well as appropriate content from the humanities, mathematics and natural sciences. The purpose of social studies is to help young people develop the ability to make informed and reasoned decisions for the public good as citizens of a culturally diverse, democratic society in an interdependent world.

In line with the above definition, Mezieobi et.al (2008) outlined the following distinguishing characteristics of social studies.

- 1. Unlike the other field of study which sees knowledge in their separateness or in a compartmentalized frame hence the discrete subject areas of the social sciences and the humanities, social studies see knowledge and man's social world as an integral whole. In this way, one gets to exactly know how people live in the real world. It develops an integrated view of reality, (and) free (himself) from the narrow confines of traditional social sciences discipline. It is this integrative flavour of social studies that makes it an inter-disciplinary discipline.
- 2. Social studies draw its content from mainly the social sciences, the humanities and from many other relevant sources including the experiences of the children. The Nigeria centric characteristics of social studies is to emphasize the social relevance



of social studies in which case it addresses the social needs, social realities and social aspirations of Nigeria.

- 3. Social studies is socially or society sensitive. This implies that social studies must keep pace with global changes particularly those affecting Nigeria, and must of necessity reflect the changes, as they occur, in the school social studies syllabus or curriculum.
- 4. One very important characteristic of social studies is its emphasis on classroom without walls in the community. Good social studies programme is activity loaded and predominantly contains activities to be done not knowledge to be acquired and fact to be stored. It makes the learner an active participant in teaching learning process, which discourages learner's passivity. The goal objects of social studies, simply put are to produce responsible and participative citizens with analytic and reflective skills and attitudes to make their environments yield all that make for good and successful living. The essence is to make the society a worthy human habitation with a minimum of problems.
- 5. Another unique characteristic of social studies is that it evaluates criteria focus principally on the affective domain-values and attitudes. The evaluation of the learner performance in the other educational domain-cognitive and psychomotor has meaning and significance only within the context of the affective; Further more instead of the cognitive memory questions that are common in the other disciplines, questions in social studies are largely though provoking, convergent, divergent and evaluative.

Ololobou (2007) sees scope as what does (or should) a typical social studies program encompass. He goes further to highlight four broad areas that readily come to mind as follows:

- 1. The environment, physical and social; emphasizing on unrestricted cognition.
- 2. Various skills (e.g. manipulative, intellectual, group, communication, study, economic etc) for functionally relating with the environment.
- 3. Values, attitudes, aspirations, appreciations and actions which are conducive to peaceful co-existence and overall societal development.
- 4. Emergent issues (e.g. HIV/AIDs, AVIAN FLV, human trafficking, terrorism etc) and other current affairs. He further says that social studies source facts from discrete academic disciplines (the arts, social science, natural sciences, technology, vocations and contemporary events).

Also Orakwue (1990) opined that the real nature of social studies with its ill-defined and almost very broad content constantly outwits even the greatest lion-hearted teacher. So much at times, is the confusion about the nature of social studies that the social studies as a subject is mistaken for a new method of approach.

## Objectives of Social Studies in Junior Secondary Schools

The National Policy on Education (2004) listed Social Studies and Citizenship Education among the core subjects that every student at Junior Secondary School is expected to study to prepare him/her to acquire further knowledge and skills (p. 14). To this end, NERDC (2007) States that the overall objectives of social studies at both Basic Education and Junior Secondary level should enable the pupils and students to achieve the following:

- i. Develop the 'ability to adapt to his/her changing environment;
- ii. Become responsible and disciplined individuals capable and willing to contribute the development of their societies; inculcate the right types of values;
- iii. Develop a sense of comprehension towards other people, their diverse cultures, history, and those fundamental things that makes them human;
- iv. Develop the capacity to recognize the many dimensions of being human in different cultural and social contexts;
- v. Develop a sense of solidarity and sharing based on a sense of security in one's own identity.

The social studies curriculum is basically geared towards inculcating in Nigerian youth ideas, norms, and values that are essential for national development. Rikichi, (2011) maintain that this would produce effective citizens who are Sensitive to their environment: active participants in the polity; democratic-orientated minded; willingness to assume and perform civic responsibilities; obedient to the law of the land; dogged in defense of his rights; positive relation with political class; harmoniously co-exist with other members of the society; and possess nationalistic and patriotic spirit towards societal improvement. In order to present social studies in a holistic manner to students, the thematic approach to content organization was adopted. Major relevant themes were selected and topics were arranged under them across" the 9-year basic education in a spiral manner to sustain the interest of the students. For effective delivery of subject matter and improved learning achievement of basic education, NERDC strongly recommends teacher orientation and training on the implementation of the curriculum, as well as development of relevant resource materials.

## The Activity System Theory

The Activity System Theory (AST) was propounded by Engeström in 1987. This theory emphasizes the distinction between the object or motive of an activity and its outcomes, which may be many and not always those anticipated or desired. Activity Theory provides a rich holistic understanding of how people collaborate, i.e. carry out purposeful collective activities, with the assistance of sophisticated tools (information systems) in the complex dynamic environments of modern organizations. The theory basically emphasize that individuals develop their own particular comprehension and



information of the world through connecting with and encountering new things and thinking about those new encounters in the most general sense, this refers to encouraging students to use active technology tools such as smart board, digital videos, audios and computer programs to experiments real-world issues, problem solving etc. These help them make more learning and after that to consider and discuss what they are doing and how their comprehension is evolving. Activity Theory using the concept of a 'collective activity system', as depicted in the triangle below, with the elements: subject, object, tools, rules, division of labour and community is referred to as Engeström's triangle. This triangle is often used in understanding a holistic interpretation of a real-world situation that is comprehensive and clear. This is shown in the Figure 1.

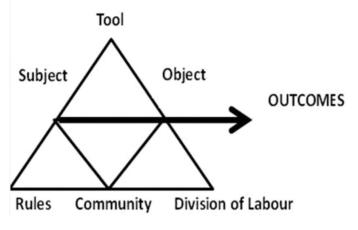


Figure 1 The Engestrom (1987) representing of a collective activity system

The main advantage that Activity Theory offers practitioners and researchers is a holistic lens in understanding the patterns of activities of situations and problems in different industrial sectors and in different cultural context. Activity Theory is grounded in almost a century of research and has a rich tradition applied to many fields of study. This theory is considered relevant to this study because of the emphasis on the use of tools (ICT) by teachers (subject) through a combination of other elements (rules, community and division of labour) in the achievements of the objectives of Social studies gives rise to better and sound academics (outcomes) among students.

## The Cognitive Load Theory

Another theoretical framework adopted for this study is the Cognitive Load Theory of Sweller (1988). This theory suggests that learning happen best under condition that is aligned with human cognitive architecture. The structure of human cognitive architecture while not known precisely is discernible through the results of experimental research showing that short term memory is limited in numbers of

elements it can contain simultaneously. Sweller (1988) built this theory that treats schemas, or combination of elements, as the cognitive structures that make up an individual's knowledge base. These structures permit one to perceive, think, and solve problems, rather than a group of rote learned facts. These structures are known as schemas. They are the cognitive structures that make up the knowledge base. Sweller's theory is best applied in the area of utilization of resources relating to instructional design of cognitive abstract, complex or technically challenging subjects. His contention is that since students have difficulty in learning some curriculum contents, provision of instructional resources, might demystify the contents and make it easier for students to learn using them. Cognitive load theory has many implications in the utilization of instructional resources which must, if they are to be effective, keep cognitive load of learner at a minimum during the learning process. Thus, he came up with specific ideas relative to the design of instructional resources include as follows;

- 1. Change problem solving method to avoid means ends approaches that impose a heavy working memory load, by using goal free problem or worked examples.
- 2. Eliminate the working memory load associated with having to mentally integrate several sources of information by physically integrating those sources of information.
- 3. Eliminate the working memory load associated with unnecessarily processing repetitive information by reducing redundancy.
- 4. Increase working memory capacity by using authority as well as visual information under conditions where both sources of information are essential (that is non-redundant) to understanding.

As this theory has shown, instructional resources (especially modern ICT facilities) are important in every learning situation. In relation to this study, the use of instructional resources (ICT) promotes creativity and encourages other more practical skills. It makes learning more relevant to learners and improvisation of non-existing instructional resources sets a good example to students and teachers. It is therefore important that social studies teachers make quality use instructional materials for effective teaching and learning because they impact on academic performance of students.

# Concept of Instructional Resources

The concept of instructional resources is perceived differently by various authors. According to Olaitan, Nwachukwu, Igbo, Onyemaechi and Ekong (2012), equally referred to instructional resources are those devices developed or acquired to assist teachers in transmitting organized knowledge, skills and attitude to learners within an instructional situation. In the explanation, instructional resources are those practical and skill development resources which facilitate the process of teaching/learning and evaluation schools. Instructional resources include the electronic systems, tools,



equipment and other resource materials that could be utilized for reinforcing the teaching and learning of specified skills. Ebuwa (2010) in his opinion stated that instructional resources refer to the various information carriers employed in instructional delivery. He identified Television, radio, teaching machines, textbooks, computer, models and pictures as some of them. He also concluded that other means of instruction can exist beside teachers and that the students can learn without the teacher if they have access to media capable of presenting viable information. Maitarfsir (2013) defined instructional resources as those materials which maximize learning in the various area of technology. He listed these materials as chalkboards, models, charts, overhead projectors, maps and simulations.

Dike (2013) explained that instructional resources are the resources which may be used by the teacher/learner in isolation or in combination formally to facilitate the acquisition of knowledge, skills and morals. Liber (2010) on the other hand described instructional resources as information carrying technologies that can be used for instruction. He further explained that a teacher can describe a bucket but it is very hard to tell the students exactly what a bucket looks like without a picture for clarity. The picture of this bucket is an instructional resource which would help students understand the lesson. Akinleye (2010) explained that the term instructional resources comprise all available and accessible practical and skill oriented resources which facilitate learning and acquisition of knowledge. These materials also assist teachers in transmitting facts, skills, attitude and knowledge to the learners within the instructional system. Accordingly, he asserted that they are materials or equipment which are essential in teaching some social sciences and vocational technical subjects in schools. Such materials must be utilized in the teaching process to achieve the objectives of teaching. Oluwaqbohunmi & Abdu-Raheem (2015) warned that without the use of some materials, tools and facilities in teaching many subjects in schools, certain skills that might be required for entry into some higher institutions with occupational areas might not be imparted. It therefore means that these instructional resources are necessary for practical skills to be learned by students. Ali (2010) on the issue of instructional resources explained that they are those devices used for the successful and maximal achievement of the objectives of teaching. To her, they have been found to facilitate the quality of instruction when used by teachers. Thus, instructional resources as devices that are presented in different varieties, they stimulate, motivate and arrest learner's interest.

The term resources have also been used to refer to instructional resources. Jimoh (2008) defined resource materials as those devices, machines and resource materials to educational technology which focus on better ways of maximizing educational input and output for the benefit of teachers and learners. He asserted that resource persons invited to schools to deliver one or two lessons to students are regarded as

resource materials. Real objects are so necessary that Aqu (2011) stated that in the absence of real life situations, teachers can make use of representative of such real life situations. These real life representatives have been defined as materials, devices and techniques that help the teacher to make realistic approach to his/her teaching job. The representatives of real life situation are made in the forms of models, diagrams, drawings, dioramas or mock-ups. Nwachukwu (2012) further explained that the objective of teaching resources is to help the teacher convey the intended message effectively and meaningfully to the learner. Instructional resources refer to all human, material, non-material audio-visual school environment and community materials available in an academic environment to facilitate school administration, promote students' performance and simplify the teaching learning process. They also include other fundamental materials used in the school to make teaching very easy and learning more meaningful and comprehensible to the learners. Instructional resources cover all those materials human and non-human, drawn or photographed, built manually or electronically operated, books and all forms of related materials used in teaching and learning process (NTI, 2013). Instructional resources include the teachers in the school, human beings in the community, real objects, specimen or models, chalk and display boards, school buildings and layout, the community at large and other fundamental materials like pencils, pens, exercise books etc which the learners are expected to have at any point in time to facilitate learning (NOUN, 2009). Instructional resources are no doubt important in the development of a conducive teaching-learning environment. The use of these resources could give more valuable and powerful direction to the teacher than any personal efforts without the materials. In school administration, instructional resources are not only limited but can be effectively and efficiently managed when management activities are properly harmonized, organized, coordinated and controlled by the school management team. This is in agreement with Blunt's (2010) opinion that it is not the availability of these resources alone that guarantees effective performance of school and students, but their adequacy and effective utilization.

However, no matter how well packaged a school system is, at any level of education, without adequate and efficient utilization of the available resources, the system may fail to achieve its desired results (Kalu, 2012). Adequate and apposite resources are vital in the good performance of students. The proper acquisition and use of these resources will not only boost the morale of human resources who coordinates other activities in the school system but also ensure the attainment of goals. Meanwhile, shortage or inadequacy of these resources is inimical to goal achievement and the academic performance of students. Accessibility of instructional resources makes teaching effective and efficient thereby enhancing the output of the education system. Writing on the importance of teaching aids in education, Eshiet (2013), explained that there are many things which a dull student cannot learn if they are



presented only verbally to him and that there are those things which the dull and bright students cannot fully comprehend unless the teacher makes use of teaching aids. Clark (2009), therefore defined teaching aids as those devices which teachers employ when teaching to make the students understand the lesson more. He asserted that they are devices or things, which the students can either see, hear, touch or smell in the teaching/learning process. According to him, this definition implies two things: It does not do the whole job as part of the job is performed by other methods usually a teacher. It is the teacher that administers the aid. The aid works because part of the teaching job entrusted to it is performed satisfactorily.

## Concept of Information and communication technology (ICT)

The concept of information and communication technology is used to describe an array of technological gadgets ranging from computer to modern media gadgets which are primarily used to share and communicate information. Information and communication technology' (ICT) is the catch - phrase used to describe a range of technologies for gathering storing retrieving processing analysing and transmitting instruction (Vroko, 2006). The term Information according to Aliyi (2009) can be viewed as crude data that are processed into meaningful form (Oyeyinika, 2001). Thomas and Ballard (2005) cited in Uroko (2006) stated that information technology is never valuable unless it is communicated in the right way to the user. Communication on the other hand is a process of information dissemination. This information may be fact told, heard or discussed. Communication covers a wider spectrum than information. Communication according to Laudon (2007) is the process of transmitting information and understanding from one individual to another. In the view of Hadiza (2009) as cited by Uroko (2006), it is an interpretive medium of self - expression. The material is just like tools with which the communicator expression his or her creative ideas. Also communication is a transaction: symbolic process which gives people the opportunity to relate and manage the environment by establishing human contact, exchanging information, reinforcing the attitude and behaviors of others (Ike, 2009). On the same line communication is a process of information exchange between two or more individuals or organization. Thus communication is a two - way process which involves imparting information to people (Danape, 2000).

Technology is the systematic application of scientific or other organized knowledge to practical tasks in schools and industries (Okeke, 2006). It is a complete integrated process for analysing problems controlling and evaluating those problems. Teaching using technology is seen as a complex integrated organization of men and machines ideas procedure and management. It also includes process system management and control mechanism involving human and non – human (Imogie, 2008). Communication technologies include all media employed in transmitting audio,

video, data and multimedia messages through hosts such as cable satellite wireless radio, infra-red, Bluetooth and Wi-Fi. Network technologies include personal Area Network (PAN), Campus Area Network (CAN), internets extranets Location Area Networks (LANs), Wireless Area Networks (WANs) and the internet (Danape, 2000). Computer technologies include all removable media such as optical disk (a rigid computer storage disk with data stored as tiny pits in the plastic coating, readable by laser beam), disk flash memories, video books, multimedia projectors, interactive electronic board and continuously emerging state of-the-art personal computer Mobile technologies comprising mobile phones, personal digital assistance (PDAs) and palmtops. These technologies have made global information easily accessible. Vincent & Vincent (2005) cited in Uroko (2006) defined information technology as new way of storing, processing and transmitting information which was brought about by rapid development in electronic computing. Information and communication technology (ICT) also is seen as the study of concepts skills processes and applications of designs for representing hypothetical or human relationships created, collected, stored, retrieved, manipulated, protected and presented electronically. It refers to a whole range of technologies involved in information processing and electronic communications.

French (2006) defines ICT as "a broad based technology including methods management and application that supports the creation, storage, manipulation and of information. Information and communication technology can also be seen as a modern way of making information easily accessible to most people. According to Nworgu (2006), ICT originated as information technology but it later became obvious that the communication component ought to be highlighted because of its significance. It was then that the concept transformed to information and communication technology (ICT). Advances in ICT have progressively reduced the costs of managing information enabling individuals and organizations to undertake the related tasks much more efficiently and to introduce innovation in research processes and organizational structures. ICT when applied to education enhances the delivery and access to knowledge and improves the curriculum. It produces richer leaning outcomes compared to education without ICT. It encourages critical thinking and offers unlimited means of achieving educational goals. The key thing is not in ICT itself but in understanding ICT and effectively employing it in the delivery of knowledge and reaching goals in less time. ICT is used as a means but not as an end. Four major approaches according to the UNESCO-ICT framework; have been identified for effectively employing ICT in education. They are the Emerging, Applying, Infusing and Transforming approaches that constitute ICT optimization stages in education. These approaches are simultaneous and depend on each other for maximum benefit from ICT application to teaching. Information and communication technology (ICT) for this study is an electronic based technology



generally used to collect, store, process and package information as well as providing access to knowledge. More also, it includes various technologies and their application such as the use of computer micro – electronic devices and satellite and communication technology. It is the processing, maintenance and the use of all forms of computer communication network and mobile technologies to mediate information.

## ICT Facilities and their Effective use in Teaching and Learning

Considering its part of education in national advancement and the expansion in populace in schools nowadays, the utilization of computers in instruction and learning process get to be basic. This is on the grounds that its acceptance by educator will upgrade the system of instruction delivery to a better one. ICT will also help issues like effective classroom management, collaborative learning, self-study, course/subject organization, and enhance effective communication between peers, teacher and student-teacher. In today's modern day teaching, students partake actively and vigorously in the process unlike before where a teacher will stand in front of a class and giving lectures to students without them contributing to the subject or topic (Ajayi, 2008). The different ICT gadgets utilized during instruction delivery and learning in schools and collages as indicated by Bamidele (2006), and Ofodu (2007) incorporate audio sets, TV, PCs projectors Optical fiber cables, Telephones, Mobile devices, Hand hold devices, Fax machines, Internet, Intranet, CD-ROM, PPT slides, electronic board, digital multi-media, video/VCD, DVD, machines etc. It creates the impression that some of these gadgets are not adequately accommodated teaching and learning in Nigerian government post primary schools. According to Ajayi (2008) the utilization of these resources requires different techniques which incorporate systematic feedback framework, PC based operation/system, video and audio conferencing, LAN, www and Computer Assisted Instruction (CAI). It is ought to be emphasized that the viable utilization of these different strategies for ICT in instructing and learning depends to a great extent on the accessibility of these resources and the skill instructors have in utilizing them. The capacity to utilize PC viably has now turned into a basic part of each ones' academic life. Disciplines like accounting, business management, clerical assistance, science, technology and engineering now constitute a special computerize packages such as word processor, spreadsheet, Corel draws, databases etc. (Raffel and whitworth, 2002, cited in Apagu and Wakili, 2015). The demand of computer and ICT literacy is always raised as employees understood that keeping abreast with the new technology is best option for securing their jobs as the computer knowledge provide them with a maximum job security. The teaching and learning of these skills is now the talk of the day among even professionals. ICT applications in schools proved advantageous in empowering the learning system in Nigeria public schools and give the students a better education.

Improving education is crucial to its formation of effective human capital in every nation (Evoh, 2007).

As innovation enhances instructional capacity, likewise increments reliably. The development of modest PC innovation and mass storage media, for example, optical disc, cloud and so forth has given educators and instructional technologies superior devices with which to work. A PC computer memory nowadays counts in tera bytes which are used to store substantial quantity of information and data. As mentioned by Ajayi (2008), the viable usage of ICT in teaching relies heavily upon the accessibility of these gadgets to the instructors and the teacher's competencies in using them. Research has shown that the schools in northern Nigeria lack functional ICT facilities thus hamper the teachers' ability of using them. Other issues include inadequate teacher competency, irregular power supply, insecurity, and lack of fund.

## Availability of ICT Resources and Student Learning

It is believed that the effective assimilation of ICT in the educational system depends to a great extent on the accessibility, ability and the state of mind of instructors towards the use of the cutting edge innovation in instruction and learning. Idoko and Ademu (2010) found out that availability of ICT is often one of the most critical impediments to technology acceptance and integration in teaching and learning. They demonstrated that there is persistent necessity for more ICT facilities if a nation is to effectively incorporate ICT into its public collages. In an attempt to provide adequate ICT facilities to secondary schools in Nigeria, the Federal Government ordered a Mobile Internet Unit (MIU) through the Nigerian National Information Technology Development Agency (NITDA). The MIU is a customized vehicle that has been changed over into a portable mobile station and digital web hub. It is comprising of ten workstation computers, all organized and associated with the web. The MIV is additionally outfitted with printers, scanners and some other multimedia amenities. Internet service is given by means of VSAT a 1.2m satellite bowl fixed at the roof of the transport van which was furnished with a little power source to guarantee customary supply of electric power. The MIU distributes the web service across the different institutions (Adomi and Kpangban, 2010). They added that the quantity of these vehicle vans is so little and in this way most village institutions are yet to benefit by this errand. Fakeye (2010) likewise discovered in a study conveyed in Ibadan that in a large portion of schools studied don't have PCs, henceforth are not associated with the web (internet).

Abdul-salaam (2012) indicated in the consequence of his study that computer resources were not promptly accessible by the students from the institutions covered by his research. In addition, the study demonstrates that the vast majority of the Nigerian secondary schools are not associated with the web. Those with PCs don't



have the important instructive programming required by their students in general cases. What's more, the PC accessible in these schools can't carter for the needs of the huge populace of learners in the affected institutions. A few institutions with web availability were also disconnected as they cannot afford to pay their access fee. This finding correlates with the discoveries of Fakeye (2010) and Oyejola (2007) that most collages in Nigeria are not well prepared for the utilization of ICT. It is also good to understand that the tendency to use ICTs in teaching and learning activities is highly determined by the availability of these resources in the schools. In a study that explored factors that influence the utilization of ICT in Sub – Saharan African schools. Kiptalam and Rodriguess, (2011) reveal that the integration of technology into education is exceedingly reliant on the accessibility and availability of the resources in schools. This study also believed that Nigeria will not be an exception.

## Accessibility and Utilizing ICT in teaching and learning of Social studies

The utilization of computers and web innovation in instruction is a significant consideration toward instructors everywhere throughout the world (Williams, 2010). Specialists in the field of education like Wodi and Dokubo (2008) are of the feeling that when legitimately grasped, ICT holds awesome guarantee in enhancing educating and learning apart from increasing work power opportunities. In an expanding and fast changing universe of worldwide business sector rivalry, mechanization, and expanding democratization, fundamental learning is vital for a person to be able reach to the knowledge and to apply that knowledge. Such ability is provided only by the Information and Communication Technology. The capacity to get to and adequately use information is no more an extravagance but a need for any improvement (Stephen, 2013). The utilization of new innovative gadgets, for example, PCs, web, CD-ROMs, intelligent video plate guideline, Computer Assisted Instruction, Computer Based Instruction, Computer Based Learning, e-learning, and others for educational modules conveyance have been observed to be extremely viable in instruction and learning. Nwosu, (2009) pointed out that these new advances make learning less demanding, speedier, energizing and fascinating to learners. Adding that computer is an innovation with numerous capacities, some of which are to help with classroom procedures. Hence giving concrete and sensible encounter and make data processing simpler speedier, effective and fun. Okwo (2006) also observed that the accessibility to ICT or Computer Assisted Instruction (CAI) demonstrated ability to give tangible and sensible encounters which makes information handling less demanding, quicker and more effective. This is on the grounds that it conveys outside encounters to the classroom in this manner furnishing the learners with the chance to go past the abilities of their educators. In spite of these praiseworthy focal points, Nigeria is tragically behind even among the African nations in the utilization of ICT as it respects to instructive conveyance. In a study, Amajuoyi (2006) related the hopeless execution of optional school students on elements, like labour, learning and

utilization of computer helped guideline. Researchers have likewise confirmed a low level of ICT mindfulness in a majority of Nigerian post primary institutions (Eroha and Ekweme, 2007). These discoveries are parallels with that of Nwosu (2009) who lamented that post primary institutions in Enugu State have couple of PCs utilized only for authoritative work but not for instructive purposes or as educating helps. This proposed the quantity of PCs accessible in schools is insufficient for the students' populace (Stephen, 2013).

Education as a major sector of life has been greatly influenced and revolutionized by ICT. This developmental tread of ICT and internet in the Educational pursuit has opened up a wide range of innovations, designs and application benefits to the emancipation of teaching and learning the components of the world. Information and communication technologies (ICT) greatly facilitate the acquisition and absorption of knowledge offering developing countries unprecedented opportunities to enhance educational systems improve policy formation and execution and widen the range of opportunities for businesses (Blurfon, 2002). ICTs can enhance the quality of education in several ways by increasing motivation and engagement by facilitating the acquisition of basic skills and by enhancing teacher training. ICTs are also transformational tools which when used appropriately can promote the shift to learner centered environment (Bates, 2002). The use of computers and ICT in the educational system is generally given the term e-learning or e-teaching (electroniclearning and electronic-teaching respectively). It is the application of electronic devices such as computer, radio, television, camera, projectors etc in the teaching and learning process (Chime, 2004). This educational methodology involves the use of electronic technologies such as the internet, television, video-tape intelligent tutoring systems and computer-based trainings. E-learning also encompasses learning at all levels both formal and non-formal that uses an information network such as the internet intranet, Local Assess Network (LAN), Extra Net or Wide Asses Network (WAN) whether wholly or in part for course delivery interaction and facilitation (Haddab & Jurich, 2002). ICT provides rich global resource and collaborative environment for dissemination of ICT literacy material, interactive discussions, research information and international exchange of ideals which are critical for advancing meaningful educational initiatives, training high skilled labour force and understanding issues related to economic development. ICT highlight innovative efforts and partnership and promote ICT literacy and facilitates interaction between all sectors of national economic (Yusuf, 2006). Nwaerondu & Thompson (2002) noted that information and communication technologies which include radio and television as well as digital technologies such as computers and the internet have been seen as potentially powerful enabling tools for educational change and reform. When used appropriately different ICTs are said to help expand access to educational information, strengthen the relevance of education to the increasingly



global network and raise educational quality by helping make teaching and learning an engaging active process connected to real life. Information and communication technology has also been instrumental in distance learning.

In Nigeria, distance learning has been one of the major ways through which adults who may not have been opportune to have formal education learn useful skills and get certification at the end of their learning experiences. The National Open University of Nigeria offers many courses through the distance learning. Of course these inherent benefits and resources could not be possible without ICT. Also the administration of examinations to a large number of candidates are better manages using ICT. This informs the reason why joint admission and matriculation board (JAMB) in her 2014 matriculation examinations stipulated that about fifty percent of the candidates taking the exam will be using the computer. This is prone to the success recorded in using the computer-based test in the year 2013. For this reason, JAMB has decided that all JAMB takers for 2015 will be using computer based test. Education is one of the many areas information and communication technology (ICT) dwells. The field of education has been affected by ICT which has undoubtedly affected learning and research (Yusuf, 2006). Olurunsola (2007) stated that ICT is a means for educational needs to be met: it changes the need of education as well as the potential processes. Ofodu (2007), also refer to ICT as electronic or computerized devices assisted by human and interactive material that can be used for a wide range of teaching and learning as well as for personal use. ICT has broadened the scope of learning by taking people beyond the preparation of learning by developing critical thinking skills information access evaluation and synthesizing skills (Castro, 2003). Based on the above information there is need to find out the ICT competencies of teachers who will use all these facilities for teaching especially teaching social studies. The Ministry of Education in 2006 launched an ICT-driven project known as School Net (Federal Republic of Nigeria 2006: Adoni, 2005). School-Net Nigeria is a nonprofit organization created to address the use of ICT in Nigerian secondary schools with the support of several government ministries. It is a public sector initiative geared at mobilizing Nigeria's human and financial resources for the purpose of using ICT in education. School-Net creates learning communities of educators and learner to use ICT to enhance education by;

- i. Implementing, supporting and coordinating ICT development projects in education
- ii. Providing and supporting lower-cost scalable technology solutions and internet for schools
- iii. Providing support mechanism for schools for technical infrastructure connectivity

According to Osei (2007) school-net Nigeria has in collaboration with the mobile phone operator MTN established ICT laboratories/Cyber Cafes for four schools in

four states in each of a four-phase project using local internet service providers (ISPs). Furthermore, School-Net Nigeria in collaboration with the computer company-Busy net, is setting up ICT laboratories/Cyber cafes in four schools in 12 states across the federation. Another initiative is by Zinox computers a private computer company in collaboration within Microsoft is revolutionizing ICT usage in education from the primary to the university level. Zinox targets the student teachers and institutions themselves. They provide computers at highly subsidized prices and hopes with government support to achieve twenty-five percent (25%) ICT application in Nigeria schools by the end of 2010. First bank of Nigeria is bankrolling the project of ICT labs to be built for schools that can repay in two or three years while teachers repay the cost of their laptops in one year (UNESCO, 2011). The ICT revolution in secondary schools has also registered corporate backing not only with computer companies like Zinox but also with most commercial banks. Over 80 schools have benefited from zenith Bank's ICT for youth empowerment system. The scheme focuses on assisting Nigeria youths in secondary schools to bridge the digital divide through early introduction to ICT. Each school receives a minimum of 10 computers to encourage the use of ICT. The bank organizes an annual ICT empowerment forum for youth totalling 2000 secondary and tertiary level students. The bank distributed 100 personal digital assistants (PDAs) to the first 100 students to arrive at the venue in 2006 in June 2003. At the African summit of the world Economic forum held in Durban, South Africa. The New partnership for African Development (NEPAD) launched the e-School initiative, intended to equip all African high school with ICT equipment including computers radio and television sets. Phones and fax machine communication equipment scanners, digital cameras and copiers among other things it is also meant to connect African student to the internet. According to Aliyi (2009), the NEPAD capacity-building initiative will be executed over a ten-year period with the high school component being completed in the first five years. Three phases are envisaged, with fifteen to twenty countries in each phase. The phases are to be staggered and an estimated 600 schools are expected to benefit. The aim of the initiative is to impart ICT skills to young Africans in primary and secondary schools and to harness ICT to improve enrich and expand education in Africa countries.

Internet is provided via VSAT with a 1.2m dish mounted on the roof of the bus. It is also equipped with a small electric generator to ensure regular power supply. The MIU takes the internet to rural areas and various primary and high schools accessible (Ajayi, 2002). ICT can perform multi-talent roles in teaching Social studies. It can be a complement to the teacher: can also serve as a coping strategy where the teacher as role model is contestable. In the developed world, the role of technology as a resource for teaching and learning is increasing as educator recognize its ability to create both dependent and collaborative learning environments in which students can learn the new same idea in interactive and more exciting manner (Butler, 2007). Social studies



which is the study of as a formalized, correlated or integrated study of man and his environment which imbibe the learner with the cognition skills, values, attitudes, abilities and competences that will make him become an informed, rational, analytical, participative and functional citizen makes use of most of these facilities. Therefore, ICT plays an inestimable role in teaching and learning of Social studies in secondary schools and teacher being a vehicle for conveying information to the learners needs to be competent in handling and manipulating this ICT equipment effectively. There are some ICT competencies and programs needed for teaching of Social studies in secondary schools. A Social studies teacher has numerous possibilities of applying ICT tools in lessons. Especially, so that elements of ICT aided education are taken into consideration. To do this, he or she must adopt available computer tools for his or her needs to form Social studies teaching concepts and to prepare the didactic structure in the form of conspectus or screenplays of lessons carried out on the basis of ICT means and tools used. The ICT facilities which can be used in the teaching and learning are of two components:

1) Hardware components

2) Software components

The hardware components comprise of all the necessary physical (tangible) materials or equipment used as an information and communication technology component like monitor, projector, microphone, central processing unit or a computer (CPU), keyboard, mouse, camera machine etc. According to Eya (2009), the hardware components of ICT which could be used to facilitate learning can be broadly divided into three categories;

(A) - The projected media materials (equipment)

(B) - The non - projected media materials

(C) - Audio materials (equipment).

The projected media are that equipment through which images of all sorts are displayed by the means of light and electrical waves made visible on screens or monitors. Examples include personal computer system, lap tops, televisions, projectors, phones etc. These media materials can be used during teaching learning situation to project and display both life and animated images of various concepts and topics in social studies showing step by step written analogies of teachings and research discoveries in social studies available to the teacher. The non-projected media are that equipment that can be used to produce illustrative or graphic materials like flat pictures, charts, maps, graphs, Journals, Cameras, digital and analogue scanning machines, printing machines and so on. Pictures of various stages of human evolution and the society can be used by the teacher during the teaching and learning processes by the use of these non-projected media of ICT. The audio equipment is that ICT equipment that are used in transmitting and recording of audio (sound) contents e.g. Radios speakers, amplified public address systems, CDs, diskettes, micro phone recorder etc. They are used extensively especially in teaching large classes. The software

dimension on the other hand. Refers to the virtual or in most case the immaterial part of the ICT component which works in an integrative way with the hardware to collect, analyse, process and transmit the output for users' consumption. It comprises of the electronically or otherwise integrated artificial intelligence into the hardware which controls their activities in producing the desired media effect from them. They can be in form of programmes installed into computer system. Film strips in projector, Films in cameras; without them, the hardware will be useless in teaching and communicating social studies instructional materials to the teacher and the learner. They also include the power point spreadsheets, database, coral draw, etc. These software packages are of great relevance to teaching. This software and many others are used both at the local and international level to input, analyse and process Social studies theories and principles for the purpose of interactive teaching of the subject in a quite engaging atmosphere. Other ways through which ICT can be used to improve teaching and learning of Social studies in our secondary schools include the use of print and the non-print media and through the electronic and nonelectronic media in processing, analysing, storing, retrieval and transferring of economics information and studies from the teacher to the learner. DVDs, diskettes, scanning machines, printers, phone and satellites etc can also be used as instructional materials in aiding the teacher electronically demonstrate content he or she is teaching. Through the use of ICT facilities as instructional materials for teaching Social studies, learners are developed beyond the boundaries of the four - walls of the classroom to be global challengers and competitors. According to Ofoefuna, (2001), information can now be generated stored retrieved and transmitted at lightning speed in the privacy of people's bedrooms; people can now see and hear any part of the world. The introduction of satellite and computer technology into educational has placed knowledge at every ones' doorstep. ICT resources for teaching and learning social studies are used with the aid of the computer as mentioned below:

## a. Computer Assisted Instruction (CAI)

Computer Assisted Instruction (CAI) is an extremely effective ICT. Dongre and Jafri (2002) state that Computer Assisted Instruction (CAI) is the use of computer in educational settings and most often refer to drill and practice, tutorials or simulation activities offered either by themselves or as supplements to traditional teacher directed instruction. He further stated that the use of CAI as a supplement to traditional teacher-directed instruction produces achievement effects superior to those obtained with traditional instruction alone. This is true for students of different ages and abilities and for learning in different curricular areas.

## b. Micro soft power point

Micro soft power point is another ICT device that could be used in teachingSocial studies in senior secondary schools. According to Olasunkanmi (2006), Microsoft power point is an ICT resource available for teaching and learning Social studies. The author further describes it as presentation software that enables visual organization



and communication of concepts. Power point presentation helps the teacher to customize his/her presentations with sound, animation, charts, graphics, narration and video capable of making the instruction lively (Olasunkanmi, 2006). Microsoft power point is an indispensable tool for instruction in Social studies as a subject in senior secondary schools, although it is mostly seen or used in private owned schools.

# Teachers and ICT Competency

The core teacher competencies needed by teacher in the utilization of ICT can be grouped into two major clusters: pedagogy and Technology. These will be discussed separately below, and they are not independent of each other in a curriculum where ICT is infused in pedagogical practice.

## Pedagogy

Pedagogy along with content is one of the most important ways of infusing technology in the curriculum. Infusion of ICT begins with teachers' mastery of the content of the subjects. When they begin to incorporate ICT in their teaching they develop new ways of doing things gradually changing the focus of classroom activities from an emphasis on learning. The adoption of ICT in the classroom generally proceeds in stages as depicted in the model of ICT development. At first teachers discover ICT tools such as for example presentation software. They then begin to apply ICT tools in place of previous instructional activities such as preparing a PowerPoint presentation in place of a lecture. As teachers become more familiar with ICT in the subjects they teach, they explore new ways of using ICT and so how they previously taught begins to change. In time their classroom practice becomes transformed as the focus of the classroom becomes learner-centred and students use ICT to solve realworld problems that cut across traditional subject boundaries. It includes theoretical knowledge and practical skills. The theoretical and practical components of pedagogy included in the teacher education curriculum at East China Normal University China as reported by Zhu, (2003), includes for instance knowledge of learning theories and instructional process and design. It also includes assessment and evaluation strategies and it includes planning and designing lesson plans. So these might be added as selection and presentation skills.

Collaboration and networking are other aspects of pedagogy. The real power of ICT comes from new ways of communicating beyond the four walls of the classroom and by locating information from worldwide sources wherever these may be located. The implications for teachers as they assist their students in collaborating with other learning groups and using networks to research assignment topics is that they cease to be the main source of knowledge in the classroom. Instead teachers' roles change from being a sage on the stage to becoming a guide on the side. Teachers need to accommodate a philosophical shift in their approach to teaching. The planning guide

asserts that the development of teachers' competencies in collaboration and networking is essential to infusing ICT in the curriculum. Through collaboration and networking professional teachers promote democratic learning within the classroom and draw upon expertise both locally and globally. Whole books have been written about the ICT competencies required by teachers in the classrooms of today and tomorrow. At the emerging stage, when teachers discover and learn about ICT tools, they need to go through a process similar to that of their students in schools. These competencies often termed ICT literacy include knowledge of ICT concepts and operations. Okpara & Mgbaronye (2005) identified teachers' ICT competency to include the following:

- i. Knowledge of Basic concepts of ICT
- ii. Using computers and managing files
- iii. Word processing
- iv. Working with spreadsheets
- v. Working with databases
- vi. Compositing documents and presentation
- vii. Information and communication

Noteworthy, at this level is the harmonization of the above listed competencies with UNESCO-ICT benchmark which includes; understanding (the concept of) ICT in education, (infusing ICT into) curriculum and assessment, (applying ICT in teaching) pedagogy, exposure to ICT facilities, inculcating ICT in national policy organization and administration, and exploiting ICT in teacher professional learning to create knowledge. Besides the kinds of ICT competency relating to concepts and operations there are many social health legal and ethical issues associated with the use of ICT about which teachers need to know. The facility for instance to access information easily from remote sources download it to a personal computer and then utilize the information in a classroom assignment brings with it a host of social legal and ethical issues relating to copyright evaluation of information sources and appropriate forms of acknowledging electronic information. Healthy issues arising from extensive use of ICT include considerations of correct posture placement of hands and wrist on keyboards avoidance of eyestrain as well as safety issues concerning power supplies and care of equipment. Teachers need to learn how to use ICT tools in different subject areas in which they teach and from these stage teachers need to advance to an understanding of how and when to use ICT tools for particular purposes in teaching as well as for professional and management tasks. Teacher need to have a clear understanding of why ICT is useful to themselves and their students. Allied to the contextual factors of change and lifelong learning further technology competencies required of teachers are the need to update constantly their skills with hardware and to familiarize themselves with new generation software. Technological literacy has an attitudinal dimension also as Usman (2006) reported among the ICT literacy



required of teachers are positive attitudes toward ICT along with a clear understanding of the education potential of ICT.

However, lack of basic ICT competencies can limit teachers from harnessing the gains inherent in use of ICT to teach Social studies. A teacher cannot teach beyond his scope of mastery. Teaching (Social studies) using ICT facilities have been observed to enhance learning (UNESCO, 2011), and any teacher who doesn't possess requisite competencies needed to effectively teach desired content in Social studies cannot benefit from the inherent gains of using ICT to teach Social studies. Teachers and Social studies teachers in particular need to possess the basic ICT competencies needed by teachers for more effective teaching of desired contents in Social studies. The instructional delivery process focuses on how social studies is being taught in schools within the context of Nigerian educational system, the methodologies adopted by teachers, adequate number of teachers in urban and rural locations, teachers experience, effect of teacher gender on instructional delivery, adequacy and effective utilization of instructional resources. Teaching with the aid of ICT facilities had been proved to aid better understanding and performance by students, (UNESCO ICT CFT, 2011), but teachers cannot teach if they do not possess requisite ICT competencies for teaching. For students to learn how to search for knowledge using ICT facilities, teachers must be able to quide them in this task, thus, the Federal Government of Nigeria, in the National Policy on Education (Federal Republic of Nigeria, 2004), identifies the conspicuous role of ICTs in the current world, and decided to incorporate it into her education system.

Modern instructional techniques required the use of ICT which provide a more simplified and reliable teaching and learning methodologies. From the students` viewpoint the integration of ICT education helps in both cooperative and self-paced learning. Students can adjust their learning paces with immediate feedback and selfassessment in an institution where the new technologies are being used. Such students extend their learning capabilities beyond classrooms as they can communicate with peers from everywhere around the globe. This novel achievement of the 21st century is presently not fully employed in most Nigerian secondary schools. This negative development might not be unconnected with the lack of ICT facilities in our schools, negligence from the authorities concerned or the misuse of the available ICT equipment on the ground by the teachers. This unfortunate situation is in fact what has motivated this study.

# Influence of ICT in teaching and learning of Social studies

Students formed the largest part of any academic community and their viewpoint has to be respected. Considering the role, they play in any activity that takes place in the school settings, psychologist argued that student should be seen as dynamic and

integral members of the learning community not just as aloof beneficiaries or even mere consumers. Amajuoyi (2012) observed that ICT evacuates issues concerning space and time where students can correspond with their teacher and exchange information anywhere, anytime. As a rule, the students can bring from a worldwide pool of learning as ICT makes serving and sharing of information simpler. The learners can exclusively and/or together make notes and presentations therefore enlist their advancement and use it for examinations along these lines they are additionally prepared for future support in worldwide exploration and correspondence. Once more, partners in the field of instruction technology agreed that ICT in training will promote students' cognitive qualities through higher order thinking, critical reasoning, enhanced relational abilities and profound comprehension of the learning apparatuses and ideas to be taught. Promoting a strong, intuitive educating and learning environment by making more extensive learning correspondence and hence give learning instruments to students particularly those with exceptional needs. Utilizing computer produced design to outline connections of numerous types particularly methods that can't be represented manually by individual (Amajuoyi, 2012).

Educators, according to Ahmad (2010), recognize its capacity to make both autonomous and collective learning environment in which learners can understand more effectively. In fact, the finding of a study conducted by Yunus, Salehi and John (2013) has shown that teachers have a positive perception that the uses of visual aids arouse students' interests towards learning. Moreover, ICT is of great importance in improving communication skills for computer mediated communication (CMC) provides learners with the opportunities to communicate not only locally but globally for they feel less secured to communicate (Sweeny, 2010). Teachers and school administrators are sceptical about the challenges facing the integration of ICTs in teaching-learning process. These include; poor electric power supply, lack of knowledgeable ICT support personnel, inadequacy of trained teachers in the field of ICT, lack of funds, high cost of ICT equipment, materials and accessories, government's payment to support the implementation of ICT policies, inadequate telephone services, lack of proper maintenance of the broken down equipment and facilities and shortage of ICT facilities. There is most likely that instructors and students in north-eastern Nigeria will have numerous amount of learning resources at their disposal if government lives up to its expectation in the implementation of ICT policies (Amuchie, 2015). The poor availability level of ICT resources in Nigerian secondary schools also means accessibility will be hindered for instructional development purposes. This confirms the observation of Ezeoba, 2007 and Fakeye, 2010 who also found that ICT resources were not available in primary and secondary schools.



## Review of Previous Studies

This section of the study focused on review of studies carried out in the area of ICT. Nwachukwu (2018) examined the availability and utilization of ICT facilities in teaching and learning of social studies in junior secondary schools in Awgu Local Government Area of Enuqu State. The study adopted a descriptive survey design in which four research questions were posed. The population consisted of seven hundred and sixty-nine (769) students and thirty-five (35) social studies teachers in Awqu Local Government Area of Enuqu State. Simple random sampling procedure was used in selecting nine (9) secondary schools to represent the twenty-seven (27) secondary schools in Aqwu local government Area of Enugu State. Eighteen (18) teachers and one hundred and eighty-two (182) students were randomly selected from the selected schools making it a total of two hundred (200) respondents. A questionnaire of four-point rating scale was used as instrument for data collection. Descriptive statistics was used in the analysis of data generated. The result of the study shows that very few information communication technology facilities are available for the teaching and learning of social studies in the selected junior secondary schools, Based on the results, it was recommended among others that, The serving social studies teachers in the government secondary schools in Awgu should be sponsored to attend workshops where they will be taught how to use most ICT facilities and how to use it in teaching as well, also Teachers should try as much as possible to use the available ICT facilities in teaching the students so as to make the lesson interesting and appealing to students. This study is related to the present study as both focused on ICT in teaching Social studies. However, while the reviewed study was carried out in Aqwu local government of Enugu state, the present study is being carried out in FCT, Abuja. Oqbaji(2017) assessed "Teachers' Perception of Utilization of Instructional Materials in Teaching Social Studies in Junior Secondary Schools" in Calabar Municipality of Cross River State, Nigeria. The study was guided by a research question based on the purpose of the study. The study adopted the survey research design. All of the fifty-three social studies teachers in public (junior) secondary schools in the area were used for the study. No sampling technique was used since all of the population of study was used. All the fourteen schools were used in the study. The research instrument is a four-point Likert type scale questionnaire with 10 items. Data collected were analyzed using descriptive statistics including mean, standard deviation and simple percentages. The analysis indicated that social studies teachers perceive instructional materials as necessary for effective teaching and learning. This study is similar to the present study as both focused on the same subject area but differs in the areas of geographical location and the subjects. Also this study dealt with instructional resources in general while the present study focused on ICT.

Aregbesola, Okonkwo and Nnaemezie (2016) assessed the Impact of Information Technology (IT) On Teaching and Learning in some Nigerian secondary schools

based on students' perception. The Awka Education Zone of Anambra State was the geographical area of coverage. The objective of the research was to assess students' perception of the impact of IT in teaching and learning in secondary schools. Asample size of 600 respondents was used. A 15 item structured questionnaire developed within the study was used for data collection. Three research questions were posed and two hypotheses were formulated to guide the study. The study showed that students performed better when exposed to IT methods in teaching and learning than when exposed to traditional methods. The z-test analysis showed that there was significant difference in mean interest of male students and female students towards IT integration in teaching and learning. A significant difference was equally observed in the mean perception of junior and senior students toward IT integration in teaching and learning. This study differs from the present study because it centered on the impact of Information Technology (IT) on teaching and learning based on students' perception while the present study focused on student's perception of teachers instructional delivery process of social studies in junior secondary school in Abuja. Apagu and Wakil (2015) examined the availability and utilization, the benefits and challenges of ICT facilities in teaching and learning vocational and technical education in Yobe state technical college. The five research questions and three hypotheses were used in the study. Descriptive survey design was used for the study. The population for the study was 193. Both descriptive and inferential statistics were adopted in the analysis of data generated. The study revealed amongst others that ICT facilities were lacking in technical colleges and amongst others that some of the challenges facing ICT as: irregular power supply; inadequate computer literate teachers; inadequate ICT facilities. It was therefore, recommended that Yobe state government should increase the funding of education sector to cater for ICT programme in technical colleges and there should be periodic training for teachers on ICT computer skills acquisition. This study differs from the present study as it focused on the challenges of ICT in teaching and learning of vocational and technical education in Yobe state while this study centered on use of ICT in teaching and learning of Social studies in upper basic schools in FCT. The studies equally differed in the level of education studied.

Dangani., Ahmed., Abbas,. Hamisu., & Bashar (2015) investigated "Utilization of ICT Facilities in Sabon-Gari Private Secondary school in Kaduna State. To do this, four research questions were formulated. Four research questions and four hypotheses guided the study. A survey method was employed in the conduct of this study. The total numbers of 10 Private School in Sabon-Gari were used for the study comprising of 268 teachers. The instrument used for data collection was questionnaire; the data collected for the study were presented and analyzed using both descriptive statistics and inferential statistics. Frequency distribution tables, percentages and histograms were used for the descriptive statistics. The study found out that computers, Printer, Photocopiers and telephone are the most available ICT facilities in Sabon-Gari private



Secondary schools, the study recommended that other ICT facilities should be provided in order to facilitate teaching and learning and administrative efficiency in Sabon-Gari Private Secondary School and Kaduna State in general. The two studies are similar to the extent that they examined the utilization of ICT in teaching and learning, but while this study was carried out in private schools in Kaduna, this study focused on upper basic schools in FCT, Abuja. Suleiman (2014) assessed the availability and utilisation of textbooks in teaching and learning English language in Senior Secondary Schools in Kaduna State. The descriptive survey design was adopted for the study. Three research questions were used in the study. A 23 items questionnaire were used to collect data and in answering the research questions that guided this study. A total population of 265 English language teachers were used for the study. The instrument was subjected to research experts, colleagues and the research supervisors for validation. Simple descriptive statistics in form of frequencies and percentages were used to analyse the data to answer the three research questions. The findings of this study showed that, the first research question was rejected while the other two questions were accepted. The result revealed that Senior Secondary Schools in Kaduna State had inadequate textbooks and learning materials. It was recommended that Kaduna State Government should establish a textbook and instructional materials distribution policy to ensure equal distribution ratio of one to one to every student, across the State. This study is different to the present study because it centred on the availability and utilization of textbooks in teaching English language in senior secondary school in Kaduna. The present study on the other hand focused on the Use of ICT in teaching and learning of Social studies in Upper basic schools in FCT, Abuja.

Eya and Ureme (2011) investigated the availability and utilization of instructional materials for social studies instruction in junior secondary schools in Enuqu State. The survey design was adopted for the study. Two research questions guided the study. The population for the study was 300. Means and grand means were used to answer the research questions. The findings reveal among others, that instructional materials for teaching social studies in junior secondary schools in Enugu State were available and also utilized to alow extent. The researcher recommended among others that more instructional materials production centres be established. The two studies are similar to the extent that both focused on the use of ICT in teaching and learning of Social studies, level of education studied and methodology adopted but differ in the geographical location covered. Another study by Ukoha (2010) examined the extent of availability and utilization of computer assisted language learning (CALL) by English Language teachers in secondary schools in Nsukka Education Zone. The success of integrating computer assisted Language Learning (CALL) in teaching and learning English Language depends heavily on the availability of computers for use in schools and computer literate teachers who can use computer in the classroom for

effective teaching and learning. A descriptive survey research design was used. The researcher designed a structured questionnaire to gather information from respondents. Descriptive statistics and t-tests were used to analyze the questionnaire data. Result obtained revealed lack of computers in the schools studied also barriers to technology use and teachers low level of computer awareness. It also revealed the extent teachers are aware of the use of computer in the teaching of English language. The researcher concluded with recommendations to facilitate the use of computer assisted Language Learning in the teaching and learning of English Language to enhance students' performance in English Language. These two studies are related to the extent that both focused on the use of ICT but while the later limited it to English language, the present study focused on use of ICT in social studies. The locations studied are also different. The gap in this study is that although several studies have been carried out in the availability and use of ICT in teaching and learning of Social studies and other subjects including Social studies in upper basic education in individual area councils of FCT, yet no known study to the knowledge of the researcher have focused only on the extent utilization of ICT influences the teaching Social studies in all the upper basic schools in FCT, Abuja. It is this gap that this study seeks to fill.

#### Summary

The main objective of this chapter is to review relevant literature. The theoretical framework adopted in this study is the Activity System Theory (AST) and the Cognitive Load Theory. The Activity System Theory laid emphasis on the use of instructional aids (ICT) to achieve the objectives of teaching and learning in schools. The Cognitive Load Theory on the other hand is best applied in the area of utilization of resources in teaching of technically, complex or challenging subjects. These frameworks explained each theory in the light of how effective instructional delivery of Social studies could be carried out effectively using the appropriate instructional resources. The conceptual issues discussed relevant issues such as concept of instructional resources, concept of Information and communication Technology, concept of Social studies, ICT facilities and their effectiveness in teaching and learning, availability and utilization of ICT facilities for teaching and learning of social studies. Furthermore, teachers' ICT competency was defined and identified. Information and communication Technology was viewed from different definitions as given by various scholars. For this study, Information and communication Technology is seen as an electronic based technology generally used for connection, storing, organizing, processing and packaging information as well as proving access to knowledge. From the review of literature, it was discovered that not much attempt has been made at finding out the ICT competency of Social studies teachers and how effectively these teachers can use the ICT facilities available to support learning. Teacher if they must teach using ICT facilities must possess requisite competencies of using ICT facilities to



support learning. Information and communication technology as an umbrella term that includes any communication device or application, encompassing: radio, television, cellular phones, computer and network hardware and software, satellite systems and so on, as well as the various services and applications associated with them, such as videoconferencing and distance learning. On the empirical studies, the works of Nwachukwu (2018), Ogbaji (2017), Aregbesola, Okonkwo & Nnaemezie (2016) and Apagu & Wakil (2015) were reviewed among others. These studies revealed the availability, use and challenges of ICT in teaching and learning in schools. All the studies focused on the relevance and need for ICT in education, at primary, secondary and tertiary level of education.

## RESEARCH METHODOLOGY

This chapter presents the methodology that was adopted in this study. This will be discussed under the following sub-headings: research design, population of the study, sample size and sampling techniques, instrumentation, validity and reliability of the instrument, data collection procedure and method of data analysis.

## Research Design

The research design that was adopted for this study is the descriptive survey method. Survey method is a method characterized by the selection of random sample from a large and small population in order to obtain empirical knowledge of contemporary nature. Surveys typically provide a relatively easy and efficient means of gathering a large amount of information (Graveter & Forzano, 2006). The survey research design is considered appropriate because it seeks information through the use of questionnaire on the influence of utilizing ICT in the teaching and learning of Social Studies in Upper Basic Education in FCT-Abuja.

# Population of the Study

The entire public upper basic education in the Federal Capital Territory (FCT) consists of the population of this study. According to FCT-UBEB (2017) Statistical records, there are one hundred and fifty-one (151) public upper basic education (JSS) in the FCT with a total of three hundred and twenty-nine (329) Social studies teachers in the six area councils of FCT. This population is made up of one hundred and thirtyfour (134) male teachers and one hundred and ninety- three (193) female teachers respectively. Table 1 shows the population distribution of the respondents.

| S/N Area Councils |            | No. of JSS | No. of Sos. Teache | ers Male Fei | nale |
|-------------------|------------|------------|--------------------|--------------|------|
| 1.                | Abaji      | 12         | 25                 | 09           | 14   |
| 2.                | Amac       | 61         | 114                | 45           | 69   |
| 3.                | Bwari      | 24         | 55                 | 19           | 36   |
| 4.                | Gwagawlada | 17         | 51                 | 19           | 32   |
| 5.                | Kuje       | 21         | 48                 | 27           | 21   |
| 6.                | Kwali      | 16         | 36                 | 15           | 21   |
| Tota              | al         | 151        | 329                | 134          | 193  |

#### Table 1: Population Distribution of Respondents

Source: FCT-VBEB, 2017.

#### Sample Size and Sampling Procedures

The sample size for this study was 135 (40%) Social studies teachers. This sample size is in line with Abraham & Russel (2008) views on small sample size selection. The stratified and simple random sampling techniques were used in the selection of schools and respondents for the study. This is to ensure that upper basic education is well represented from different schools within the six Area Councils of FCT. The simple random sampling technique was used to select fifty- six (56) male and seventy-nine (79) female Social studies teachers from the sampled schools respectively. Thus, a total sample of one hundred and thirty-five (135) respondents was used for the study. The sample distribution is presents in table 2.

| S/N   | Area councils | No. Schs. | Male teachers | Female | teachers Total |  |  |  |  |  |
|-------|---------------|-----------|---------------|--------|----------------|--|--|--|--|--|
| 1.    | AMAC          | 10        | 18            | 28     | 46             |  |  |  |  |  |
| 2.    | Abaji         | 5         | 04            | 07     | 11             |  |  |  |  |  |
| 3.    | Bwari         | 7         | 09            | 14     | 22             |  |  |  |  |  |
| 4.    | Gwagwalada    | 5         | 06            | 09     | 15             |  |  |  |  |  |
| 5.    | Kuje          | 7         | 08            | 14     | 22             |  |  |  |  |  |
| 6.    | Kwali         | 6         | 11            | 08     | 19             |  |  |  |  |  |
| Total |               | 40        | 56            | 79     | 135            |  |  |  |  |  |

## Table 2: Sample Distribution of Respondents

#### Instrumentation

The instrument for data collection in this study was a self-constructed questionnaire titled; "Influence of Utilizing ICT for Social Studies Delivery Questionnaire (IVICTSSDQ)." The questionnaire was divided into two sections, A and B. Section A contains the bio-data of the respondents while section B focused on eliciting information on utilizing ICT for teaching and learning of Social Studies in upper basic education in FCT-Abuja. This section will be made up of thirty-five (35) items. The four point modified likert – scale was used and the weightings were as follows: Very High Level (VHL) 4, High Level (HL) 3, Low Level (LL) 2, Very Low Level (VLL); Very



High Extent (VHE) 4, High Extent (HE) 3, Low Extent (LE) 2, Very Low Extent (VLE).

# Validity and Reliability of the Instrument

The instrument for this study was validated by the supervisors who are experts from the Department of Educational Foundations from the Faculty of education, University of Abuja. The instruments were presented to the supervisors to seek their advices in terms of scope, content and relevance of the instrument to the subject under review, ambiguity of the statement, clarity of language and adequacy of the items. The experts' corrections were effected in the final draft of the instrument. To determine the reliability of the instrument, a pilot test was carried out using the Cronbach spilt-half method. Thirty (30) teachers who are not part of the sampled respondents for the study were used. The reliability index was computed using Cronbach Alpha to establish at reliability 0.83. This index indicates 80% consistency in the scores that are produced from the instrument. According to Awtunde & Ugodulunwa (2002), if the reliability index is above 0.80, it is said to have a very good reliability because it is closer to 1; it is below 0.50, it would then not be considered a very reliable test. Thus the reliability index obtained shows that the instrument is reliable and valid for the study.

# Data Collection Procedure

The researcher distributed the questionnaire with the aid of some research assistants who were advised and guided on how to visit various the schools for data collection. The questionnaires were collected back immediately after it has been responded to within a period of three weeks.

# Data Analysis Technique

Data collected were analysed in respect to the research questions raised and the hypotheses that were formulated for the study. Descriptive statistics of frequency count, simple percentage and mean statistics were employed for the analysis of the data and answering the research questions. A mean score cut-off point of 2.50 and above for any item was regarded as accepted; while mean score cut-off point that is below 2.50 was rejected. Inferential statistics of t- test and ANOVA adopted for testing the formulated hypotheses. The t- test and ANOVA were tested at 0.05 level of significance. T-test were used for hypotheses 1,2 3 and 5; while ANOVA was used for hypothesis 4.

# Table 9: Descriptive analysis of influence of utilizing ICT in teaching and learning social studies based on years of experience

|         |                                          | Years of exp. | Response Categories |           |           |            |       |               |            |
|---------|------------------------------------------|---------------|---------------------|-----------|-----------|------------|-------|---------------|------------|
| 5/<br>N | Statement                                |               | VHE<br>(4)          | HE<br>(3) | LE<br>(2) | VLE<br>(1) | Total | Mean<br>score | Decision   |
| 20.     | Old teachers use projectors in           | 1–5 yrs       | 1                   | 13        | 12        | 13         | 39    | 2.05          | Low extent |
|         | explaining concepts like family,         | 6-10 yrs      | 0                   | 4         | 27        | 14         | 45    | 1.78          | Low extent |
|         | population growth                        | 11–15 yrs     | 0                   | 2         | 26        | 10         | 38    | 1.79          | Low extent |
|         |                                          | >16 yrs       | 0                   | 0         | 10        | 3          | 13    | 1.77          | Low extent |
| 21.     | Old teachers utilize audio-visuals to    | 1–5 yrs       | 0                   | 8         | 23        | 8          | 39    | 2.00          | Low extent |
|         | illustrations and explanations of social | 6–10 yrs      | 1                   | 3         | 25        | 16         | 45    | 1.76          | Low extent |
|         | studies topics                           | 11–15 yrs     | 0                   | 1         | 26        | 11         | 38    | 1.74          | Low extent |
|         |                                          | >16 yrs       | 0                   | 0         | 10        | 3          | 13    | 1.74          | Low extent |
| 22.     | Old teachers use slide during social     | 1–5 yrs       | 0                   | 3         | 21        | 15         | 39    | 1.69          | Low extent |
|         | studies instruction                      | 6–10 yrs      | 0                   | 5         | 28        | 12         | 45    | 1.84          | Low extent |
|         |                                          | 11–15 yrs     | 0                   | 1         | 21        | 16         | 38    | 1.61          | Low extent |
|         |                                          | >16 yrs       | 0                   | 1         | 6         | 6          | 13    | 1.62          | Low extent |
| 23.     | Old teachers make use of internet in     | 1–5 yrs       | 0                   | 2         | 16        | 21         | 39    | 1.51          | Low extent |
|         | lesson preparation and as references for | 6–10 yrs      | 1                   | 2         | 23        | 19         | 45    | 1.67          | Low extent |
|         | social studies instruction               | 11–15 yrs     | 0                   | 2         | 12        | 24         | 38    | 1.42          | Low extent |
|         |                                          | >16 yrs       | 0                   | 0         | 8         | 5          | 13    | 1.62          | Low extent |
| 24.     | New teachers make use of printed         | 1-5 yrs       | 2                   | 16        | 8         | 23         | 39    | 2.18          | Low extent |
|         | materials for better understanding of    | 6–10 yrs      | 0                   | 2         | 27        | 16         | 45    | 1.69          | Low extent |
|         | social studies concepts                  | 11–15 yrs     | 0                   | 1         | 15        | 22         | 38    | 1.45          | Low extent |
|         |                                          | >16 yrs       | 1                   | 0         | 2         | 10         | 13    | 1.38          | Low extent |
| 25.     | New teachers utilize opaque projectors   | 1–5 yrs       | 0                   | 1         | 23        | 15         | 39    | 1.64          | Low extent |
|         | for social studies lesson presentation   | 6–10 yrs      | 0                   | 5         | 18        | 22         | 45    | 1.62          | Low extent |
|         | -                                        | 11–15 yrs     | 0                   | 1         | 23        | 14         | 38    | 1.66          | Low extent |
|         |                                          | >16 yrs       | 0                   | 0         | 2         | 11         | 13    | 1.15          | Low extent |





|                                                                                                                                        | $Grand mean = \frac{1}{11 - 15 \text{ years}} = \frac{1.75}{1.66} = \frac{1.00 \text{ exten}}{1.00 \text{ extent}}$ |           |   |   |    |    |    |      |            |
|----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|-----------|---|---|----|----|----|------|------------|
| Crand mean $=$ $\frac{1-5 \text{ year}}{6-10 \text{ year}}$ $=$ $\frac{1.85}{1.75}$ $=$ $\frac{Low \text{ extent}}{Low \text{ exten}}$ |                                                                                                                     |           |   |   |    |    |    |      |            |
|                                                                                                                                        |                                                                                                                     | >16 yrs   | 0 | 1 | 5  | 7  | 13 | 1.54 | Low extent |
|                                                                                                                                        |                                                                                                                     | 11–15 yrs | 0 | 3 | 28 | 7  | 38 | 1.89 | Low extent |
|                                                                                                                                        | illustrations of social studies                                                                                     | 6-10 yrs  | 0 | 2 | 36 | 7  | 45 | 1.89 | Low extent |
| 28.                                                                                                                                    | New teachers make use of models for                                                                                 | 1–5 yrs   | 1 | 6 | 28 | 4  | 39 | 2.10 | Low extent |
|                                                                                                                                        |                                                                                                                     | >16 yrs   | 1 | 0 | 5  | 7  | 13 | 1.62 | Low extent |
|                                                                                                                                        | understand topics better                                                                                            | 11–15 yrs | 0 | 3 | 21 | 14 | 38 | 1.71 | Low extent |
|                                                                                                                                        | to enable students visualize and                                                                                    | 6–10 yrs  | 0 | 2 | 28 | 15 | 45 | 1.71 | Low extent |
| 27.                                                                                                                                    | New teachers makes use of computers                                                                                 | 1–5 yrs   | 0 | 8 | 12 | 19 | 39 | 1.72 | Low extent |
|                                                                                                                                        |                                                                                                                     | >16 yrs   | 0 | 1 | 4  | 8  | 13 | 1.46 | Low extent |
|                                                                                                                                        | social studies                                                                                                      | 11–15 yrs | 1 | 1 | 21 | 15 | 38 | 1.68 | Low extent |
|                                                                                                                                        | materials for illustration of concepts in                                                                           | 6–10 yrs  | 0 | 2 | 30 | 13 | 45 | 1.76 | Low extent |
| 26.                                                                                                                                    | New teachers make use of graphics                                                                                   | 1-5 yrs   | 0 | 5 | 20 | 14 | 39 | 1.77 | Low extent |

Source: Field Survey, 2020

Table 9 above presents the descriptive analysis of the influence of utilizing ICT in teaching and learning social studies based on years of experience. The result from the table indicated that the four categories of teachers based on their years of experience (i.e. 1 - 5 years, 6 - 10 years, 11 - 15 years and above 16 years) were of the opinion that utilizing ICT influences teaching and learning social studies to a low extent because all the items mean scores and grand mean of the four categories were below the 4 -Likert scale measurement average of (2.5).

|         |                                                                               |            |           | KSponse Categories |            |          |               |            |  |  |  |
|---------|-------------------------------------------------------------------------------|------------|-----------|--------------------|------------|----------|---------------|------------|--|--|--|
| s/n     | Statement                                                                     | VHL<br>(4) | HL<br>(3) | LL<br>(2)          | VLL<br>(1) | Tota<br> | Mean<br>score | Decision   |  |  |  |
| 29.     | Improves and update students on current information and knowledge             | 22         | 81        | 27                 | 5          | 135      | 2.89          | High level |  |  |  |
| 30.     | Makes social studies lesson interesting to students                           | 5          | 23        | 71                 | 36         | 135      | 1.98          | low level  |  |  |  |
| 31.     | ICT makes lesson more diverse                                                 | 9          | 28        | 56                 | 42         | 135      | 2.10          | Low level  |  |  |  |
| 32.     | ICT increases and challenge students creativity                               | 10         | 24        | 56                 | 45         | 135      | 1.99          | Low level  |  |  |  |
| 33.     | The use of ICT increase students motivation to learn                          | 12         | 16        | 55                 | 52         | 135      | 1.91          | Low level  |  |  |  |
| 34.     | The use of ICT creates positive changes in learning climate in class          | 11         | 31        | 43                 | 50         | 135      | 2.02          | Low level  |  |  |  |
| 35.     | It challenges students to be actively engaged during Social studies<br>lesson | 12         | 28        | 64                 | 31         | 135      | 2.16          | Low level  |  |  |  |
| <u></u> | Grand mean = 2.15 = Low level                                                 |            |           |                    |            |          |               |            |  |  |  |

# Table 10: Descriptive analysis of the influence of ICT utilization on academic performance in FCT

Source: Field Survey, 2020

Table 10 above presents the item by item descriptive analysis of the level by which the use of ICT influence students' academic performance in social studies in upper basic education in FCT. The mean score of all the seven items (*mean score = 2.89, 1.98, 2.10, 1.99, 1.91, 2.20 and 2.16*) were greater than the 4 – Likert scale measurement average (*mean = 2.5*). The result also shows that the grand mean rating of the teachers' response to the level by which the use of ICT influence students' academic performance in social studies in upper basic education in FCT (*grand mean = 2.15* is lesser than the 4 – Likert scale measurement average (*mean = 2.5*). This result implies that the use of ICT influence students' academic performance in social studies in upper basic education in FCT (*grand mean = 2.15* is lesser than the 4 – Likert scale measurement average (*mean = 2.5)*. This result implies that the use of ICT influence students' academic performance in social studies in upper basic education in FCT (*grand mean = 2.15* is lesser than the 4 – Likert scale measurement average (*mean = 2.5)*. This result implies that the use of ICT influence students' academic performance in social studies in upper basic education in FCT by a low level.

Response Catedories



# Test of Hypotheses

This section presents the test of hypotheses outlined in chapter one of this study. Five hypotheses were tested using an independent two sample t-test to test for significant difference in the mean responses between the locations (rural and urban) and Sex (male and female) while one-way Analysis of Variance (ANOVA) was used to test for significant difference in the mean responses of teachers' years of experience (1-5 years, 6-10 years, 11-15 years and above 16 years). Some of the basic assumptions of the independent two sample t-test and one-way Analysis of variance (ANOVA), namely; test for Normality, presence of outliers in the data, measurement of the data e.t.c. were met before using this tests. The variables used for the analysis were extracted from the research instruments.

**Hypothesis One:**There is no significant difference in the mean ratings of teachers in rural and urban school with regard to the extent ICT facilities are available for teaching and learning of social studies in upper basic education in FCT Abuja.

Table 11: Two-tailed t- test result between rural and urban teachers on extent of ICT facilities availability

| Categories | Total | Mean | Std. dev. | T- test | t <sub>critical</sub> | D.F. | P-value | Decision  |
|------------|-------|------|-----------|---------|-----------------------|------|---------|-----------|
| Urban      | 85    | 1.93 | 0.34547   | 0.876   | 1.96                  | 133  | 0.76    | Accept Ho |
| Rural      | 50    | 1.70 | 0.29552   |         |                       |      |         |           |

Table 11 shows an independent two sample t-test conducted to compare the mean response between rural and urban teachers on the extent ICT facilities are available for teaching and learning of social studies in upper basic education in FCT Abuja. The descriptive analysis revealed that there is no difference in the mean response of urban teachers (1.93  $\pm$  0.345) compared to rural teachers (1.70  $\pm$  0.2955) with mean difference = 0.23, t<sub>(133)</sub> = 0.876 and p-value = 0.76. Since the t – test of 0.876 was less than the t-critical of 1.96 and the p – value of 0.76 was greater than the 0.05 level of significant at the 133 degree of freedom (d.f.), the null hypothesis is accepted, this implies that; there is no significant difference in the mean ratings of teachers in rural and urban school with regard to the extent ICT facilities are available for teaching and learning of social studies in upper basic education in FCT Abuja. The result also implies that the view of urban teachers do not differs significantly from the views of the teachers located at the rural area on the extent ICT facilities are available for teaching and learning of social studies in upper basic education in FCT Abuja. It can be concluded that the extent of availability of ICT facilities in urban and rural area for teaching and learning of social studies in upper basic education areas in FCT Abuja is low.

**Hypothesis Two:** There is no significant difference in the mean ratings of male and female teachers regarding the extent ICT facilities are utilized for effective teaching and learning of social studies in upper basic education in FCT Abuja.

Table 12: Two-tailed t- test result between male and female teachers on extent of ICT facilities utilization

| Sex    | Total | Mean   | Std. dev. | T- test | t <sub>critical</sub> | D.F. | P-value | Decision  |
|--------|-------|--------|-----------|---------|-----------------------|------|---------|-----------|
| Male   | 69    | 1.5435 | 0.31134   | -0.756  | 1.96                  | 133  | 0.452   | Accept Ho |
| Female | 66    | 1.5934 | 0.44733   |         |                       |      |         |           |

Table 12 presented an independent two sample t-test conducted to compare the mean response between male and female teachers on the extent by which ICT facilities are utilized for effective teaching and learning of social studies in upper basic education in FCT Abuja. The descriptive analysis revealed that there is no difference in the mean response of male teachers (1.54  $\pm$  0.3113) compared to female teachers (1.59  $\pm$ 0.4473) with mean difference = -0.0499,  $t_{(133)}$  = -0.756 and p-value = 0.45. Since the t – test of -0.756 was less than the t-critical of -1.96 and the p – value of 0.45 was greater than the 0.05 level of significant at the 133 degree of freedom (d.f.), the null hypothesis is accepted, this implies that; there is no significant difference in the mean ratings of male and female teachers regarding the extent ICT facilities are utilized for effective teaching and learning of social studies in upper basic education in FCT Abuja. The result also implies that the view of the male teachers does not differs significantly from the views of the female on the extent ICT facilities are utilized for effective teaching and learning of social studies in upper basic education in FCT Abuja. It can be concluded that both the male and female teachers were of the opinion that the extent ICT facilities are utilized for effective teaching and learning of social studies in upper basic education in FCT Abuja is low.

**Hypothesis Three:** There is no significant difference in the mean ratings of male and female teachers regarding the extent social studies teachers possess the competence for utilization of ICT in teaching and learning of social studies in upper basic education in FCT Abuja.

Table 13: Two-tailed t- test result between male and female teachers' competence in utilization of ICT facilities

| Sex    | Total | Mean | Std. dev. | T- test | t <sub>critical</sub> | D.F. | P-value | Decision              |
|--------|-------|------|-----------|---------|-----------------------|------|---------|-----------------------|
| Male   | 69    | 1.97 | 0.3792    | 1.425   | 1.96                  | 133  | 0.157   | Accept H <sub>0</sub> |
| Female | 66    | 1.88 | 0.3727    |         |                       |      |         |                       |

Table 13 showed a two sample t-test conducted to compare the mean response between male and female teachers on the extent social studies teachers possess the



competence for utilization of ICT in teaching and learning of social studies in upper basic education in FCT Abuja. The descriptive analysis revealed that there is no difference in the mean response of male teachers  $(1.97 \pm 0.3792)$  compared to female teachers  $(1.88 \pm 0.3727)$  with mean difference = 0.09,  $t_{(133)}$  = 1.425 and p-value = 0.157. Since the t – test of 1.425 was less than the t-critical of 1.96 and the p – value of 0.157 was greater than the 0.05 level of significant at the 133 degree of freedom (d.f.), the null hypothesis is accepted, this implies that; there is no significant difference in the mean ratings of male and female teachers regarding the extent social studies teachers possess the competence for utilization of ICT in teaching and learning of social studies in upper basic education in FCT Abuja. It can be concluded that both the male and female teachers were of the opinion that the extent social studies teachers possess the competence for utilization of ICT in teaching and learning of social studies in upper basic education in FCT Abuja. It can be concluded that both the male and female teachers were of the opinion that the extent social studies teachers possess the competence for utilization of ICT in teaching and learning of social studies in upper basic education in FCT Abuja is low.

**Hypothesis Four**: There is no significant difference in the mean influence of utilization of ICT in teaching and learning of social studies in upper basic education in FCT Abuja based on years of teaching experience.

|             |     |            |                |            | 95% Confidence | Interval for Mean |
|-------------|-----|------------|----------------|------------|----------------|-------------------|
|             | Ν   | Mean       | Std. Deviation | Std. Error | Lower Bound    | Upper Bound       |
| 1-5 years   | 39  | 1.85185185 | .429071359     | .068706405 | 1.71276301     | 1.99094070        |
| 6-10 years  | 45  | 1.74567901 | .378743731     | .056459782 | 1.63189180     | 1.85946623        |
| 11-15 years | 38  | 1.66081871 | .297859530     | .048319196 | 1.56291472     | 1.75872270        |
| Above 16    | 13  | 1.54700855 | .380765794     | .105605430 | 1.31691408     | 1.77710301        |
| Total       | 135 | 1.73333333 | .381824005     | .032862178 | 1.66833767     | 1.79832900        |

Table 14a: Descriptive statistics of of ICT influence of ICT based on years of Experience

# Table 13: One-way ANOVA result of ICT influencebased on years of experience

|                | Sum of Squares | Df  | Mean Square | F     | Sig. |
|----------------|----------------|-----|-------------|-------|------|
| Between Groups | 1.206          | 3   | .402        | 2.873 | .039 |
| Within Groups  | 18.330         | 131 | .140        |       |      |
| Total          | 19.536         | 134 |             |       |      |

**Remark:**  $f_{cal} = 2.873$ ,  $f_{0.05, 3, 131} = 2.44$ , p-value = 0.039. Since  $f_{cal}$ ,  $f_{0.05, 3, 131}$  and p – value < 0.05, the null hypothesis is rejected.

In table 14, one-way ANOVA revealed the mean response on the influence of utilization of ICT in teaching and learning of social studies in upper basic education of FCT Abuja based on their years of experience. The descriptive analysis revealed that; there is a significant difference in the mean response of teachers with 1 – 5 years of experience (1.85  $\pm$  0.429), 6 – 10 years of experience (1.75  $\pm$  0.379), 11 – 15 years of experience (1.66  $\pm$  0.298) and above 16 years of experience (1.55  $\pm$  0.3808). There existed a statistically significant difference between the mean response of teachers

based on their years of experience as determined by one-way ANOVA (F(3,131) = 2.873 and p = 0.039, therefore; the null hypothesis is rejected in favor of the alternative hypothesis. The decision reached here as determined by the one-way ANOVA is that; there is a significant difference in the influence of utilization of ICT in teaching and learning of social studies in upper basic education in FCT Abuja based on years of teaching experience.

**Hypothesis Five:** There is no significant difference in the mean ratings of teachers regarding extent ICT influence students' performance in social studies in upper basic education in urban and rural area in FCT, Abuja.

Table 15: Two-tailed t- test result between rural and urban teachers on utilization of ICT influence students' performance in social studies in upper basic education in FCT

| Categories |    |       |        |       |      | 11  |       |           |
|------------|----|-------|--------|-------|------|-----|-------|-----------|
| Urban      | 85 | 2.165 | 0.6333 | 1.520 | 1.96 | 133 | O.156 | Reject Ho |
| Rural      | 50 | 2.136 | 0.8055 |       |      |     |       |           |

Table 15 is an independent two samples t-test was conducted to compare the extent by which ICT influence students' academic performance in social studies in upper basic education in urban and rural area in FCT, Abuja. The descriptive analysis revealed that there is no difference in the mean response of urban teachers (2.17  $\pm$  0.633) compared to rural teachers (2.14  $\pm$  0.8055) with mean difference = 0.029, t(133) = 1.52 and p-value = 0.156. Since the t – test of 1.52 was less than the t-critical of 1.96 and the p – value of 0.156 was greater than the 0.05 level of significant at the 133 degree of freedom (d.f.), the null hypothesis is accepted, this implies that; there is significant difference in the mean ratings of teachers regarding extent ICT influence students' academic performance in social studies in upper basic education in urban and rural area in FCT, Abuja. The result also implies that the view of urban teachers differs significantly from the views of the teachers located at the rural area on the extent ICT influence students' academic performance in social studies in upper basic education in FCT, Abuja. It can be concluded that; the extent ICT influence students' academic performance in social studies in urban and rural area for teaching and learning of social studies in upper basic education areas in FCT Abuja is low.

# DATA ANALYSIS AND PRESENTATION

This chapter is concerned with the presentation, analysis and interpretation of data collected from the field and from which inferences were drawn. A total of one hundred and thirty-five (135) was completed and retrieved, this represented 100%, success rate as shown in the table below.

4.2: Descriptive Statistics of Respondents' Background Information



| Sex    | Frequency | percentage |  |
|--------|-----------|------------|--|
| Male   | 69        | 51.%       |  |
| Female | 66        | 49.%       |  |
| Total  | 135       | 100%       |  |

Table 3: Distribution of respondents according to their sex

Source: Field work, 2020

Table 3 presents the distribution of respondent according to their sex. The result indicates that majority of the teachers i.e. 69 representing about 51% are male while 66 teachers representing about 51% are female respondents.

Table 4: Distribution of respondents according to the school location

| Location | Frequency | percentage |
|----------|-----------|------------|
| Urban    | 85        | 63%        |
| Rural    | 50        | 37%        |
| Total    | 135       | 100%       |

Source: Field work, 2020

Table 4 presents the distribution of respondent according to their school location. The result indicates that majority of the respondents i.e. 85 teachers representing 63% are located at the urban area while 59 teachers representing about 37% are located at the rural area.

| Table5: Distribution | of respondents a | according to th | heir years of | experience |
|----------------------|------------------|-----------------|---------------|------------|
|----------------------|------------------|-----------------|---------------|------------|

| Year               | Frequency | Percentage |
|--------------------|-----------|------------|
| 1 – 5 years        | 39        | 28.9%      |
| 6 – 10 years       | 45        | 33.3%      |
| 11 – 15 years      | 38        | 28.1%      |
| 16 years and above | 13        | 9.6%       |
| Total              | 135       | 100%       |

Source: Field work, 2020

Table 5 presents the distribution of respondent according to the number of year they have put in service. The result indicates that majority of the respondents i.e. 45 teachers representing about 33% have put in between 6 – 10 years, this is followed by the teacher who has between 1 – 5 years and 11 – 15 years working experience while 13 teachers representing about 10% have above 16 years working experience.

|     |                                                       | Location | Respo      | nse Ca             | tegories  | ;          |       |               |            |
|-----|-------------------------------------------------------|----------|------------|--------------------|-----------|------------|-------|---------------|------------|
| 5/N | Statement                                             | LOCATION | VHE<br>(4) | HE<br>(3)          | LE<br>(2) | VLE<br>(1) | Total | Mean<br>score | Decision   |
| 1.  | Computers are available for teaching                  | Urban    | 5          | 34                 | 39        | 7          | 85    | 2.44          | Low extent |
|     | social studies topics                                 | Rural    | 0          | 10                 | 32        | 8          | 50    | 2.04          | Low extent |
| 2.  | Projectors are available for                          | Urban    | 0          | 22                 | 46        | 17         | 85    | 2.06          | Low extent |
|     | visualization of social studies concepts              | Rural    | 0          | 1                  | 36        | 13         | 50    | 1.76          | Low extent |
| 3.  | Internet is available for browsing                    | Urban    | 0          | 8                  | 45        | 32         | 85    | 1.72          | Low extent |
|     | information on social studies                         | Rural    | 0          | 2                  | 27        | 21         | 50    | 1.62          | Low extent |
| 4.  | Interactive white board is available to               | Urban    | 1          | 1                  | 51        | 32         | 85    | 1.66          | Low exten  |
|     | aid online teaching and discussion on given topics    | Rural    | 0          | 1                  | 17        | 32         | 50    | 1.38          | Low exten  |
| 5.  | Slides are available for social studies               | Urban    | 0          | 0                  | 45        | 40         | 85    | 1.53          | Low exten  |
|     | lesson presentation                                   | Rural    | 0          | 0                  | 20        | 30         | 50    | 1.40          | Low exten  |
| 5.  | Scanners are available to produce                     | Urban    | 7          | 8                  | 61        | 9          | 85    | 2.15          | Low exten  |
|     | copies of charts/images for explaining social studies | Rural    | 0          | 6                  | 35        | 9          | 50    | 1.94          | Low exten  |
| 7.  | Photocopies are available for                         | Urban    | 8          | 1                  | 55        | 21         | 85    | 1.95          | Low exten  |
|     | production of important social studies                | Rural    | 0          | 2                  | 35        | 13         | 50    | 1.78          | Low extent |
|     |                                                       | d mean = | Urba       |                    | 1.93      | Low ext    |       |               |            |
|     | Gran                                                  | a mean = | Rura       | $\overline{l} = 1$ | 1.70      | Low ext    | ent   |               |            |

Table 6: Descriptive analysis of extent of ICT facilities available to social studies teachers in urban and rural schools for teaching and learning in upper education in FCT

Source: Field Survey, 2020



Table 6 above presents the item by item descriptive analysis of the extent by which ICT facilities are available to teachers in the urban and rural areas for teaching and learning social studies in upper basic education in FCT.

Table 7: Descriptive analysis of ICT facilities utilization by male and female social studies teachers in teaching and learning in upper education in FCT

|     |                                                                   | ~           | Respon     | nse Ca    | ategories |            |       |               |            |
|-----|-------------------------------------------------------------------|-------------|------------|-----------|-----------|------------|-------|---------------|------------|
| 5/N | Statement                                                         | Sex         | VHE<br>(4) | HE<br>(3) | LE<br>(2) | VLE<br>(1) | Total | Mean<br>score | Decision   |
| 8.  | Teachers use computers for giving notes                           | Male        | 0          | 0         | 37        | 31         | 69    | 1.57          | Low extent |
|     | and assignments                                                   | Femal<br>e  | 1          | 9         | 27        | 29         | 66    | 1.73          | Low extent |
| 9.  | Interactive white boards are used by                              | Male        | 0          | 1         | 40        | 28         | 69    | 1.61          | Low extent |
|     | teachers for teleconference with students                         | Femal<br>e  | 0          | 5         | 35        | 26         | 66    | 1.68          | Low extent |
| 10. | Projectors are used for power point                               | Male        | 0          | 0         | 22        | 47         | 69    | 1.32          | Low extent |
|     | presentation by social studies teachers<br>during lesson delivery | Femal<br>e  | 0          | 4         | 27        | 35         | 66    | 1.53          | Low extent |
| 11. | Excel spreadsheet is used for                                     | Male        | 2          | 2         | 31        | 34         | 69    | 1.59          | Low extent |
|     | computation of social studies results                             | Femal<br>e  | 1          | 4         | 24        | 37         | 66    | 1.53          | Low extent |
| 12. | Teachers use slide during lesson delivery                         | Male        | 0          | 0         | 26        | 43         | 69    | 1.38          | Low extent |
|     |                                                                   | Femal<br>e  | 0          | 3         | 31        | 32         | 66    | 1.56          | Low extent |
| 13. | Internet is used by teachers to gather                            | Male        | 3          | 4         | 38        | 24         | 69    | 1.80          | Low extent |
|     | materials for teaching                                            | Femal       | 1          | 7         | 18        | 40         | 66    | 1.53          | Low extent |
|     | Cuand                                                             | e<br>mean = | Mal        | e _       | 1.54      | Low ex     | tent  |               |            |
|     | Grana                                                             | mean -      | - Fema     | le –      | 1.59      | Low ex     | tent  |               |            |

Source: Field Survey, 2020

Table 7 above presents the item by item descriptive analysis of the extent by which ICT facilities were utilized by male and female social studies teachers for teaching and learning in upper basic education in FCT. The grand mean score response of both gender (*Male = 1.54 and female =1.59*) were less than the 4 – Likert scale measurement average (*mean = 2.5*). This result implies that ICT facilities are utilized to a low extent for teaching and learning of social studies in upper basic education by the male and female social studies teachers in FCT Abuja. The result also showed that the grand mean rating of the male teacher utilizes ICT facilities by a lower extent when compared to the female teachers for teaching and learning of social studies in upper basic education in rural areas in FCT Abuja.

| 5/N | Statement                                                                                    | Response Categories |           |           |            |       |               |           |
|-----|----------------------------------------------------------------------------------------------|---------------------|-----------|-----------|------------|-------|---------------|-----------|
|     |                                                                                              | VHL<br>(4)          | HL<br>(3) | LL<br>(2) | VLL<br>(1) | Total | Mean<br>score | Decision  |
| 14. | Teachers are competent in the use of computer during teaching and learning of social studies | 5                   | 35        | 86        | 9          | 135   | 2.27          | Low level |
| 15. | Teachers can create simple presentation using projectors                                     | 0                   | 16        | 99        | 20         | 135   | 1.97          | Low leve  |
| 16. | Teachers can assess information on social studies teaching materials through internet        | 3                   | 21        | 86        | 25         | 135   | 2.01          | Low leve  |
| 17. | Teachers are competent in using interactive white board for instructional delivery           | 1                   | 9         | 82        | 43         | 135   | 1.76          | Low leve  |
| 18. | Teachers are competent in using interactive slides in<br>lesson delivery                     | 0                   | 12        | 74        | 49         | 135   | 1.73          | Low leve  |
| 19. | Teachers are competent in basic function of operating system                                 | 2                   | 14        | 76        | 43         | 135   | 1.81          | Low leve  |
|     | Grand mean = 1.93 = Low level                                                                |                     |           |           |            |       |               |           |

Table 8: Descriptive analysis of competency level of male and female Social Studies teachers in utilizing ICT facilities for teaching and learning social studies

Source: Field Survey, 2020



Table 8 above presents the item by item descriptive analysis of the competency level of social studies teachers in utilization of ICT facilities for teaching and learning social studies in upper basic education in FCT Abuja. The mean score of all the six items (*mean score = 2.27, 1.97, 2.01, 1.76, 1.73 and 1.81*) were less than the 4 – Likert scale measurement average (*mean = 2.5*). The result also showed that the grand mean rating of the teachers' response to competency level of Social Studies teachers in utilizing ICT facilities for teaching and learning social studies (*grand mean = 1.93*) is lower than the 4 – Likert scale measurement average (*mean = 2.5*). This result also showed that the grand mean rating of the teachers' response to competency level of Social Studies teachers in utilizing ICT facilities for teaching and learning social studies (*grand mean = 1.93*) is lower than the 4 – Likert scale measurement average (*mean = 2.5*). This result implies that the competency level of social studies teachers in utilizing ICT facilities for teaching and learning social studies teachers in utilizing ICT facilities for teaching and learning social studies teachers in utilizing ICT facilities for teaching and learning social studies teachers in utilizing ICT facilities for teaching and learning social studies teachers in utilizing ICT facilities for teaching and learning social studies teachers in utilizing ICT facilities for teaching and learning social studies teachers in utilizing ICT facilities for teaching and learning social studies in upper basic education in FCT Abuja is low.

## **DISCUSSION OF FINDINGS**

The findings of this work are discussed in line with the research purposes that guided the study. Research question one sought to find the extent ICT facilities are available for teaching and learning of Social studies in secondary schools in urban and rural areas of FCT. The findings of this study showed that ICT facilities are available to a low extent apart from computers, scanners and photocopiers which are available to a high extent for teaching Social studies. The grand mean for the responses to research question one was 1.93 and 1.70 for schools in urban and rural areas respectively, implying that the extent of availability of ICT facilities for teaching Social studies is not really low. The little availability of computers observed in the study could be as a result of the equipping of secondary schools with computers as a result of the Federal Government campaign and policy of ICT. This finding of low availability of ICT facilities is in line with Yusuf (2006) and UNESCO (2011) findings that there was a dearth of ICT facilities in secondary schools in different parts of the country as there were only very few of such facilities available in most of the schools. The findings of the study also corroborate Ajayi (2002) statement that ICT facilities are not readily available in most secondary schools in Nigeria. On availability of internet, the result negates Alvin (2009) observation that there are no functional internet facilities in most secondary schools. Again, Abdul-Salam (2012) noted that computer resources are neither available nor promptly accessible to both students and teachers in majority of Nigerian schools and these schools are not associated with the web and other ICT facilities. The stated hypothesis was accepted that there is no significant difference in the mean ratings of teachers in rural and urban school with regard to the extent ICT facilities are available for teaching and learning of social studies in upper basic education in FCT Abuja.

Research question two focused of the extent by which ICT facilities were utilized by male and female social studies teachers for teaching and learning in upper basic education in FCT. The grand mean score response of both gender (*Male = 1.54 and female =1.59*). This implies that ICT facilities are being utilized by male and female

teachers in the study area to a low extent and there is no significant difference in the mean ratings of male and female teachers regarding the extent ICT facilities are utilized for effective teaching and learning of social studies in upper basic education in FCT Abuja. The reason for the low utilization of ICT facilities in teaching and learning of Social studies could be the fact that these facilities are available to a low extent in the first place or incompetency on the part of teachers. The findings are in support of Alvin (2009) who reported that the extent of utilization of ICT resources in teaching and learning generally was very low. Also in agreement with the findings of this study are Ahma (2010) who found that ICT devices were not adequately utilized in secondary schools. The reasons to this observed low extent of utilization of ICT in teaching Social studies as a subject include but not limited to teachers' incompetency, erratic power supply, low availability of ICT devices, poor internet connectivity, negligence and laxity towards utilization of ICT in teaching. The finding of this study is equally in agreement with Stephen (2013) who noted that ICT has become an indispensable facility in the field of teaching and learning, yet the extent to which they are being utilized is very low as most of the needed facilities are not readily available in schools. Research question three focused on the competency level of Social studies teachers in using ICT facilities for teaching and learning in secondary schools in FCT. The grand mean of 1.93 revealed that the level of Social studies teachers' competence with the use of ICT facilities in the study area is low. Based on the finding of this study, it can be deduced that teacher's competency has influence on the extent of utilization of ICT in teaching of Social studies in junior secondary schools in FCT. This finding contrasts William (2010) whose findings revealed that teacher's competency and skills affects his or her ability to use of ICT facilities in teaching of Social studies. This finding contrasts Amalu (2015) whose findings revealed that teacher's competency and skills affects his or her ability to use of Computer Assisted Instruction CAI facilities in teaching of Social studies. Competence is a vital tool in the instructional delivery process. This statement seems to be factual because Farrell and Shafika (2007) also confirmed that although ICT is now at the center of educational reform all over the world but not all countries are currently able to fully integrate ICT in to its education system. Indeed, observations shows that Nigeria is one of these countries as narrated by Amuchie (2015) who visited a number of government owned institutions in his research domain and indeed some schools in other areas on teaching practice supervision his encounters show that there is no significant sign that this proudly government policy has been implemented even in a states that that claims education is there biggest industry and in few school where these facilities do exist, teachers lack the competence to use them effectively.

The findings in research question four which focused on the factors that militate against effective use of ICT in teaching and learning of Social studies showed that erratic power supply, slow connectivity, cost of training teachers for ICT use, lack of



adequate and competent ICT staff, poor ICT facilities amongst others are all challenges against the effective utilization of ICT in teaching of Social studies in junior secondary schools in FCT. Also, there existed a statistically significant difference between the mean response of teachers based on their years of experience as determined by oneway ANOVA (F(3,131) = 2.873 and p = 0.039, therefore; the null hypothesis is rejected in favor of the alternative hypothesis, implying that there is a significant difference in the influence of utilization of ICT in teaching and learning of social studies in upper basic education in FCT Abuja based on years of teaching experience. This finding is in consonance with Nwosu (2009), who noted that although new advances make learning and teaching easier but teacher's competence in the use of ICT remain an issue. These findings are in support of Ofoefuna and Eya (2009) that there are significant factors affecting the utilization of ICT for instructional purposes. Such factors in agreement with the findings of this study include among others: irregular power supply (Yusuf, 2006; Okwudishu, 2005; & Olorunsola, 2007); inadequate computer literate teachers inadequate fund and reluctance to change. On the other hand, Fakeye (2010) discovered that a large portion of schools do not most ICT facilities that would challenge teachers' competence in its use. He observed that teachers can only develop competence, when the needed facilities are duly provided for to facilitate teaching and learning.

Research question five sought to find out the level to which use of ICT influence students' academic performance in secondary schools in FCT. A grand mean of 2.15 revealed that the use of ICT influences student's academic performance to a low level. The findings of this study revealed that the utilization of ICT in teaching of Social studies in junior secondary schools in FCT have not positively increased students' academic performances in the areas of creativity neither has it increased students desire and interest to learn, nor students' motivation and engagement during classroom instructions amongst others. These findings negate the findings of Adeyemi (2010) and Adoni (2010) whose study revealed that students from schools where ICT are effectively utilized tend to perform better than their counterparts in school that have little or no ICT facilities for instructional purposes. The findings also do not agree with Osei (2007) who found that students show more positive attitudes towards use of ICT as compared to the traditional teaching methods obtainable in most schools. Kulik, Bangert and Williams (1985) in their study on "Effects of Computer-Based Teaching on Secondary School Students" also found out that the use of computer assisted instruction in teaching electronics students improved their academic performance in the subject than students with traditional instructional methods. Although, the subjects used above are science based subjects which may likely favour the use of computer, the impact in social studies has shown that the use of computer assisted instruction has no much positive development in relation to students' performance. The assertion of Kling (2010) who pointed out that the use

of computer based learning procedures appears more result oriented than the conventional instruction differs from the finding in this study. He concluded that student learning rate is faster with computer based learning than with conventional instruction. The result of the hypothesis also implies that the view of urban teachers differs significantly from the views of the teachers located at the rural area on the extent ICT influence students' academic performance in social studies in upper basic education in FCT, Abuja.

## SUMMARY

The study investigated the influence of Information and Communication Technology (ICT) in the teaching and learning of Social studies in upper basic education in Abuja FCT. Relevant issues relating to availability, utilization and influence of ICT on teaching and learning of social studies were discussed. The design for the study was descriptive survey. The study was conducted with five research objective and five hypotheses. The total of one hundred and fifty (150) Social studies teachers responded to the questionnaire. The analysis of the data collected was done using descriptive statistics of frequency, percentage and mean and inferential statistics of ttest and ANOVA. The findings of the study revealed that ICT facilities available for teaching and learning of Social studies are to a low extent, ICT facilities are utilized to a low extent by Social studies teachers in the study area; Social studies teachers' level of ICT competency is very low; many factors militate against the effective utilization of ICT facilities in upper basic education in Abuja- FCT and that the use of ICT in teaching and learning of Social studies influences students to a high extent. The use of information communication tools such as computers. Internet, slides and video conferencing have made it possible to overcome barriers of space and time, and opens new possibilities for learning. There is now an increasing awareness regarding the potentials of ICTs in learning. Meanwhile, this study has shown generally that ICT now have far reaching implications in teaching and learning at the secondary school level in Nigeria. This is because teachers themselves have now perceived it usefulness. However, it is worthy of note that the effective utilization of ICT facilities in teaching and learning of Social studies and other school subjects can only be possible when the necessary facilities are put in place and also the competency of teachers are assured.

## CONCLUSION

The finding of this study has shown that Nigeria secondary schools in the country are now infusing ICT into their teaching activities. it was concluded that information and communication technology facilities are not readily obtainable in upper basic education in Abuja, FCT and the level of application of such ICT in teaching and learning social studies is very low. The study revealed that teachers lack the skills and competence in using most of the ICT facilities. It is clear that the education sector of with regard to upper basic education in FCT and the country at large has no smooth



running education system and has not fully integrated the ICT policy. In fact, most upper basic education (especially public schools) are overwhelmed with list of problems ranging from underfunding to mismanagement. ICT infrastructural facilities in term of modern classrooms equipped with electronic computer systems which are connected to the internet and highly qualified staffs that can effectively utilize these resources is still a dream in the study area.

# RECOMMENDATIONS

Based on the findings of the study the following recommendations are made:

1. Government, non-governmental organizations, communities, schools and other well-meaning individuals should assist in providing ICT facilities in schools for effective teaching and learning of Social studies as well as other subjects.

2. All school heads and administrators should strongly emphasize and encourage the integration and use of the few available ICT facilities for teaching and learning.

3. Opportunities for seminars and workshops should be promoted and encouraged for the teachers to enable them acquire the skills and competence to display various levels of confidences in using those facilities available to them.

4. There is need for government to increase funding for the entire educational sector with emphasis on ICT. This will help improve the level of ICT utilization in the schools.5. Teachers should continue to encourage student on the need to improve and increase their creativity and zeal for better achievement in the field of education by acquainting themselves with knowledge of and use of ICT.

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