UNIVERSITY OF EDUCATION, WINNEBA

ICT INTEGRATION IN THE TEACHING AND LEARNING OF SOCIAL STUDIES IN SENIOR HIGH SCHOOLS IN THE NEW JUABEN MUNICIPALITY

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DECLARATION

Student's Declaration

I, Mensah Eric Gyasi, declare that this thesis, with the exception of quotations and references contained in published works which have all been identified and duly acknowledged, is entirely my own original work, and it has not been submitted, either in part or whole, for another degree elsewhere.

Signature: …….

Date: ……..…...

Supervisor's Declaration

I hereby declare that the preparation and presentation of this work was supervised in accordance with the guidelines on supervision of the thesis as laid down by the University of Education, Winneba.

Supervisor's Name: Dr. Hikah Benson

Signature: ……..

Date: ……..…….

DEDICATION

To my wife, Gifty Tse

ACKNOWLEDGEMENTS

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ABBREVIATIONS

ICT	:	Information and Communication Technology
CK	:	Content knowledge
PK	:	Pedagogical knowledge
TK	:	Technological knowledge
PCK	:	Pedagogical Content knowledge
TCK	:	Technological Content Knowledge
TPK	:	Technological Pedagogical Knowledge
TPCK	:	Technological Pedagogical Content Knowledge

ABSTRACT

The study was conducted to determine the integration of ICT in the teaching and learning of Social Studies in Senior High Schools in the New Juaben Municipality. The study was guided by four research questions. The study was a descriptive survey and had a population of one hundred and seven respondents. The study employed the census technique and therefore the entire one hundred and seven Social Studies Teacher‘s were used for the study. Questionnaire was developed to solicit for information from the respondents. The data gathered were analyzed using tables, frequencies, and percentages. The study revealed that the integration of ICT in the teaching of Social Studies makes lessons more interesting. It was further revealed that ICT improves Social Studies lesson presentation. It was noticeable from the study that availability of ICT tools in the teaching and learning of Social Studies were limited. The study revealed that most Social Studies teachers have little knowledge in the use of ICT in teaching the subject. It was further found that teachers have not been given adequate training in the use of ICT in teaching Social Studies. The study recommends that, heads of the various schools in the New Juaben Municipality, encourage the teachers in their schools to make appropriate use of ICT facilities in the teaching and learning of Social Studies. The researcher further recommends that, the Ministry of Education should make budgetary allocations annually to maintain, replace, and expand ICT facilities in the schools.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

In many fields, including education, the term "ICT" has remained an essential component. This is because in many countries, ICT has become the highway for knowledge transfer. Grabe (2007) argues that technology integration has now passed through innovation and has transformed organization and societies that have completely changed people's way of thinking, working and living. As a matter of urgency, schools and other educational institutions whose goals and visions are to train and prepare students to live in ~~a~~ knowledge society" need to consider ICT integration in their curriculum (Ghavifekr, Afshari & Salleh, 2012).

Information Communication Technology (ICT) includes the full range of electronic technology and methods used to handle information and knowledge, according to the United Nations Development Plan (UNDP) 2001. It is an undeniable fact that it is not possible to ignore the pace with which ICT is evolving and its effect on socio-economic activities. It's a major reality that ICT has been integrated into virtually every aspect of commerce, governance and civic activity in developed countries and has become a critical factor in creating wealth worldwide. This integration which has undoubtedly brought such rejuvenation in all aspects of life, and has also had a rippling effect on education as well.

Acknowledging the success of new technologies on the workplace and everyday life, today's educational institutions try to reconstruct their instructional and educational programs and classroom facilities in order to reduce the teaching and learning technology gap between advanced and the developing countries. This restructuring

process is improving learners‘ knowledge and understanding of specific subject areas, to improve meaningful learning and to enhance professional productivity (Tomei, 2005).

ICT integration in education generally enhances and bring to life the essence of education as learners are made to learn focusing on concrete materials as against learning in the abstract. Due to the fact that students are familiar with technology they tend to learn better with a technology-based environment, the issue of ICT integration in educational set ups, specifically in the classroom is very important. This is because, the use of technology in education helps to advance pedagogical methods which will lead to effective teaching and learning with the help and supports from ICT elements and components (Jamieson, Procter, Burnett, Finger, 2013). It is permissible to conclude that almost all ranges of subjects‘ starting from mathematics, science, languages, arts and humanistic and other major fields can be taught and learned more effectively through technology-based tools and equipment. Jorge (2003) supports the notion that ICT provides the help and additional supports for both teachers and students where it promote effective learning with the help of the computers to serve the purpose of learning aids.

The ability to improve upon pedagogical methods in teaching, improve understanding and better classroom interaction to enhance quality classroom delivery and also to access quality education thereby improving the management of educational systems are some of the many advantages of ICT integration into education. (World Bank, 2002). Integrating ICT into teaching and learning refers to the process of being able to select the appropriate ICT available that best suits a class, and how to use it appropriately to ensure it fits into the lesson delivery to ensure better understanding. (Ifegbo, 2005). Integrating ICT into teaching and learning demands that, the teacher

above all should have an in-depth knowledge and understanding of the available ICTs and the expertise in utilizing it, so as to effectively integrate it into the teaching and learning, for maximum lesson delivery. The teacher is expected to integrate ICT to achieve the specified objectives, through the use appropriate ICT materials and methods to ensure better lesson delivery.

Several studies supports the notion that the use of ICT in the classroom is paramount in the provision of opportunities for learners to learn and function in an information age. Yelland (2001) supports this notion that, traditional classroom learning is not effective in the preparation and training of the learner to function or be productive in the workplace of the modern society. Furthermore research, by Dede (2001) posit that, there is the improvement of memory retention, the increase in understanding of lessons taught, and increase in self-motivation when ICT is integrated in lesson delivery. ICT integration is also effective when dealing with large class sizes, as it promotes easier group learning, role playing, group discussions and group projects. (Forchen & Molfino 2000). The teacher plays an important role in the management of learning, teachers should therefore equip themselves with ICT competencies to design new learning environments using the most modern technologies in the field of education. Sugar, Crawley, and Fine (2004) indicate that technology integration decisions are influenced by teacher perceptions and attitudes towards technology adoption, which are formed from specific underlying personal beliefs about the consequences of adoption. One of the most important factors for successful ICT classroom implementation is teachers‘ positive beliefs on ICT in education. This informs them of the right choice of technological tool to employ in the teaching and learning segment (Gulbahar & Guven, 2008). The role of teachers for ICT integration is vital and cannot be overlooked, because they serve as gatekeepers (Hong, 2014). In

other words, students‘ access to an ICT environment depends on teachers‘ perceptions and attitudes towards ICT. If teachers are reluctant to implement ICT, their students may not have an opportunity to use ICT in the classroom.

Teachers are important elements in classroom interaction and their perceptions do have an impact on what they teach and how they teach it. Baylor & Ritchie (cited in Miima, Ondigi, & Mavisi 2013) argue that the use of technology in the teaching and learning process depends to a large extent on teachers‘ perception, which is a key factor in determining their pedagogical practices. Gulbahar & Guven (2008) agree to this argument by contending that the attitudes and perceptions of teachers are major predictors of the use of new technology in instructional settings, and that these attitudes toward technology shape teachers' own experiences as well as experiences of the students they teach. Notwithstanding the powerful state of a particular technology, the extent to which it is implemented is determined by the attitudes its users have towards it (Huang & Liaw, 2005). This implies that the integration of technology into the curriculum is not likely to succeed without teachers acceptance and commitment to technology use (Zhao, 2007).

As the gatekeeper of classroom change, the teacher is tasked to make significant use of technology in teaching and learning and to make sure that students are well trained for a digital future (Dawson, Bull & Swain, 2000). As Meyers (1999) has noted, one of the mistakes that has been made in implementing educational technology was focusing first on students, rather than on teachers. It is true, if teachers feel reluctant and are not used to technology integration, it is unlikely that they will effectively integrate technology into the lessons. Therefore, understanding teachers‘ perceptions of technology integration and knowing their success and challenges in effectively using technology in their classrooms is extremely important (Becker, 2001).

There are a number of computer- and Internet-supported teaching strategies that are applied in the Social Studies classroom as well as other disciplines. According to the National Council for Social Studies (1994), Social Studies is the integrated study of the social sciences such as anthropology, archaeology, economics, geography, history, law, philosophy, political science, psychology, religion, and sociology, as well as appropriate content from the humanities, mathematics, and natural sciences. According to Berson (1996), the disciplines of Social Studies are indented to develop effective citizens who possess the critical thinking and decision making skills to function in a democratic society.

Likewise, Tezci (2011) reported that the web based teaching do not only improve students‘ academic skills, but also has positive effects on the development of democratic conscious of students. Thus, reflective inquiry, problem solving and decision making are considered as essential skills for the contemporary Social Studies education, which promotes effective citizenship in a democratic society (Berson, 1996; Rice & Wilson, 1999).

ICT integration in Social Studies was expressed as _a sleeping giant‘ by Martorella (1997), this is because Social Studies classrooms have not adopted ICT as much as other disciplines have done, and this is very worrying as Social Studies among other subjects was arguably the ideal subject to integrate ICT (Doering, Scharber, Miller & Veletsianos, 2009; Martorella, 1997; VanFossen & Waterson, 2008). Bolick, Berson Friedman and Porfeli (2007) agree to this notion when they posit that the speed of ICT integration in Social Studies has also been slower than other subject areas which is a sad development. In order to promote ICT integration in Social Studies, several scholars have conducted studies to identify potential of ICT integration in the Social Studies classroom (Doering et al., 2009; Friedman, 2006).

Ghana‘s national development strategy (Government of Ghana, 1995) highlight the use of information and communications technology (ICT) to promote the socioeconomic development of the country. In achieving this national goal, a national commission on ICT was set up in 2002 to develop a national ICT policy. The report of this commission is what is now known as the Ghana ICT for Accelerated Development Policy (ICT4AD) (Republic of Ghana, 2003). The ICT4AD policy statement became the road map for the development of Ghana‘s information society and economy. It emphasized the basis for facilitating the socio-economic development of the country in the emerging technological age. One of the fourteen (14) identified pillars of the ICT4AD policy, was to promote, develop and exploit the potential of ICT in the educational sector particularly the classrooms. In light of this, ICT integration into teaching and learning began to receive governments' attention in this past decade. The ICT in Education Policy required the use of ICT in teaching and learning at all stages of the educational system. This became evident in making of ICT a core subject from basic to Senior High Schools level in Ghana. There has been the provision of laptop computers to most senior high schools under the program one child one laptop, all in the view of meeting the demands and challenges of globalization. Most senior high schools and some basic schools in Ghana have well-furnished computer laboratories. (Mereku, Yidana, Hordzi, Tete-Mensah, & Williams 2009). The Ministry of Education/ Ghana Education Service [MOE/GES] and other non-governmental organizations have also made huge investment in the provision of ICT to educational institutions with the aim of improving the quality of education and also preparing the learner for the new informative and technological world.

ICT integration in educational institutions in Ghanaian schools has generally increase and on the ascendancy in recent years. However, while lots of research has brought to

light knowledge about the availability and use of ICT in schools, there is not much information about how ICT is integrated into teaching and learning of other subjects. There is a great assumption that there us a wide gap in the use and availability of ICTs between rural and urban schools. (Aduwa-Ogiegbaen & Iyamu, 2005). Adubifa (2001) supports the essence of evaluating the state and use of ICT when he posit that ―each institution must be able to assess its current situation with regard to its capacity to use ICT in teaching and learning, research outreach and professional services, as well as to achieve administrative efficiency" (p. 6).

1.2 Statement of the Problem

The government of Ghana has over the past decade invested hugely in the provision of ICT to educational organizations and institutions, from the basic level up to university level. There has been the provision of logistics and infrastructure, particularly, at the colleges of education and universities (Ministry of Education, 2009). The vision is to train technologically competent graduate teachers, who will be able to integrate ICT in their future instructional practice. However, even though 87% of second cycle institutions in Ghana are well equipped with ICT facilities (Ministry of Education, 2009), however research by Anderson and Becker (2001) indicates that Social Studies teachers are not integrating ICT in the Social Studies classroom as expected.

Research undertaken by Gulbahar and Guven (2008), on computer usage by Social Studies teachers in Turkey was found to be as follows: 53.1% uses a computer for less than one hour, 30.7% uses a computer for between 1 and 3 hours, 2.8% uses a computer for between 3-5 hours and 1.5% uses a computer for more than five hours a day. The case in Ghana, seems not to be different because related research conducted

by Boakye and Banini (2008), revealed that 71% of teachers (of which Social Studies are included) in Ghana, never use the computer in class (i.e. using a computer during class time or taking students to the computer laboratory). This means that the extent to which the potential of ICT is being fully utilized in the Social Studies classroom has not been sufficiently explored by teachers.

Within the Social Studies curriculum, ICT integration has been likened to a sleeping giant (Martorella, 1997). A giant because many Social Studies educators argue that ICT integration in the Social Studies class, can promote better understanding and enhance the teaching and learning of Social Studies, however sleeping because little ICT research, development, and implementation has taken place among Social Studies educators (Ehman & Glenn, 1991). Despite the potential of ICT to provide learning opportunities ranging from drill- and practice exercises to exploratory activities, Social Studies teachers seem to have not been able to integrate ICT into their curriculum and instruction. According to a Teaching, Learning, and Computing (TLC) national survey reports (Anderson & Becker, 2001; Becker, 2001), Social Studies teachers and mathematics teachers were among the least likely to use ICT (12% and 11% respectively) and the least likely to involve students in higher order thinking activities.

Given this acknowledged low rate of ICT use in Social Studies curriculum, it is necessary to assess the state of ICT integration in the teaching and learning of Social Studies in senior high schools in the New Juaben Municipality, to understand why and how Social Studies teachers‘ integrate ICT in the classroom, and to explore what successes and challenges they encounter in the process of implementing ICT-connected lessons.

1.3 Purpose of the Study

The main purpose for conducting this research is to assess the state of ICT integration in the teaching and learning of Social Studies in Senior High Schools in the New Juaben Municipality.

1.4 Objectives of the Study

To achieve the purpose of the study, the study sought to:

1. Explore the perception of Social Studies teachers towards ICT integration in the teaching and learning of Social Studies in senior high schools in the New Juaben Municipality
2. Assess the availability of ICT tools used in teaching and learning of Social Studies in senior high schools in the New Juaben Municipality
3. Ascertain the use of ICT in the teaching and learning of Social Studies in senior high schools in the New Juaben Municipality
4. Determine the challenges facing Social Studies Teachers in the integration of ICT in teaching and learning of Social Studies in senior high schools in the New Juaben Municipality

1.5 Research Questions

Based on the specific objectives of the study, answers shall be sought for the following research questions.

1. What are the perception of Social Studies teachers towards ICT integration in the teaching and learning of Social Studies in senior high schools in the New Juaben Municipality?
2. What are the available ICT tools used in teaching and learning of Social Studies in the senior high schools in the New Juaben Municipality?

3. To what extent do teachers make use of ICT facilities in the teaching of Social Studies in the New Juaben Municipality?
4. What are the challenges facing Social Studies teachers‘ in integrating ICT in the teaching of Social Studies in the New Juaben Municipality?

1.6 Significance of the Study

The importance of Social Studies in the school curriculum cannot be overemphasized. Social Studies and national development are interwoven and inseparable. In view of this, a good understanding of the subject, which can be aided by the right pedagogical knowledge, is relevant for applying Social Studies concepts to solving real world problems. The study would help uncover the possibilities of incorporating ICT in the teaching of Social Studies, thereby, improving instructional outcomes. In addition, this research study has the potential to contribute to existing research in relation to the availability and utilization of the ICT facilities in the teaching of Social Studies. This research is expected to benefit educators by extending the knowledge base that exists already, as it presents empirical evidence in relation to these availability and utilization. It will also benefit researchers by adding to the pool of information that already exists in this area. Researchers can therefore fall back on information gathered here by replicating this study in another setting.

The schools‘ administration will be informed of the state of ICT equipment for teachers‘ use for teaching and learning, whether they are adequate or in deficit. This study may help to raise awareness among Policymakers, Directors of Education, Headmasters and teachers, about the perception of teachers towards ICT utilization and the teachers‘ factors that influence ICT utilization in Senior High Schools. A thorough understanding of factors and perception on ICT utilization, will inform

educators in deciding how to address them, with the hope that they can be minimized if not eliminated entirely from the teaching and learning process.

1.7 Delimitation of the Study

The study should have covered the whole country, Ghana, but only the New Juaben Municipality in the Eastern region of Ghana was considered. Again, the study should have involved teachers in varied disciplines, but was limited to only Social Studies teachers.

1.8 Limitations of the Study

The instruments used to gather data was questionnaire. Therefore, the possibility that some respondents may not give accurate information when answering questionnaire, despite assurance that information provided would be anonymous cannot totally be ruled out.

Unintentionally, my personal opinions may influence the discussion of the findings. There are varied ICT tools that can be used to enhance students‘ learning but only a few was used as a yard stick to assess teachers on their use of CT in their classrooms, this provides findings limited to the use of few ICT tools by teachers to the neglect of the others. This makes it difficult to generalize findings based on the use of all technological tools.

1.9 Organization of the Study

The research was organized in five chapters. Chapter One, provides information on the background to the study, statement of the problem, purpose of the study, research objective, research question, significance of the study, delimitations, limitations of the study and organization of the study. Chapter Two looked at the review of related

literature of the topic under study, it covers areas like concept of ICT and ICT integration, theoretical review, conceptual frame work, perception of Social Studies teachers towards ICT integration in the teaching and learning of Social Studies, availability of ICT equipment in teaching and learning of Social Studies, usage of ICT in the teaching of Social Studies and the challenges facing Social Studies Teachers in the integration of ICT in teaching and learning of Social Studies. Chapter Three discussed the research methodology which includes research design, population, sampling and sample procedure, instrument, data collection procedure and data analysis. Chapter Four presented the results and discusses it in relation to the literature and chapter five focused on the summary, conclusion and recommendations, as well as suggestions for future research.

1.10 Definition of Key Terms

The following terms will be used in this study. The meanings of the terms in the context of this study are explained below.

- **Information and Communication Technology:** refers to any electronic equipment that can be used to enhanced teaching and learning: systems that enable easy communication between the teacher and the students beyond the physical barrier (either by space, time or both) in the Social Studies classroom. (Lim and Chai, 2004).
- **Content knowledge**: this refers to knowledge about a specific subject matter, example, knowledge about Social Studies
- **Pedagogical knowledge**: this refers to knowledge about the specific techniques and strategies required to teach, example, techniques in teaching Social Studies

- **Technological knowledge**: this refers to knowledge about specific technologies that can be integrated into teaching
- **Pedagogical Content knowledge**: this refers to teachers‘ knowledge about how to design specific activities for intended content to teach.
- **Technological Content Knowledge**: this refers to teachers‘ knowledge about the existence of modern technologies that can be employed to teach specific aspects of subject matter**.**
- **Technological Pedagogical Knowledge:** this refers to teachers‘ knowledge about specific technologies that can be employed to perform specific instructional strategies.
- **Technological Pedagogical Content Knowledge:** this refers to teachers‘ understanding of how to blend technology, content, and pedagogy in the right mix for instruction.

- **Social Studies Teacher's:** Any teacher who has been given a Social Studies class in public Senior High Schools in the New Juaben Municipality.

CHAPTER TWO

REVIEW OF LITERATURE

2.0 Overview

In this chapter, the researcher reviewed literature related to the topic as contributions and findings by some writers, theorists, authorities and researchers. This chapter has been organized into two parts, being theoretical and empirical review. The review of related literature on this study is organized under the following sub-headings: technological pedagogical content knowledge, historical development of Social Studies, concepts of Social Studies, concept and definition of Information and Communication Technology (ICT), benefits of ICT in education, policy framework for ICT in education in Ghana, availability of ICT facilities in Social Studies education, Social Studies teachers' use of ICT facilities in teaching and learning Social Studies, Social Studies teachers' perception on the use of ICT facilities in teaching Social Studies, teacher-factors that influence the use of ICT facilities in the teaching and learning of Social Studies, challenges Social Studies teachers' face in the use of ICT facilities in teaching of Social Studies.

2.1 Theoretical Review

2.1.1 Technological pedagogical content knowledge (TPACK)

The model technological pedagogical content knowledge, was developed by educational researchers Mishra and Koehler (2006), the framework was designed around the idea that content (*what* you teach) and pedagogy (*how* you teach) must be the basis for any technology that you plan to use in your classroom to enhance learning.

Before the inception of TPACK by Mishra and Koehler (2006), Shulman (1986) had developed a conceptual/theoretical framework –Pedagogical Content Knowledge" (PCK). Shulman blended the single knowledge domains content knowledge and pedagogy knowledge to produce a two set Venn diagram with the interception being pedagogical content knowledge. Shulman's PCK had been used by most teacher training institution and educational researchers in assessing teacher's competence and effectiveness. In going forward and matching into the future, Mishra and Koehler (2006) saw the need to map a theoretical/conceptual framework to meet 21st century teacher competence and effectiveness by introducing the third variable (technology) to Shulman (1987) –Pedagogical Content Knowledge. The amalgamation of technological knowledge, pedagogical knowledge and content knowledge produced a three set Venn diagram with technological pedagogical content knowledge at the very interception (Mishra & Koehler, 2006; 2009).

TPACK is a theory that emerged to describe the set of intelligence that teachers must poses to effectively teach their students using ICTs. The TPACK framework explains the use of ICT for teaching and learning from a knowledge context. It classifies three basic forms of knowledge that must be available in any ICT integrated class: Technological Knowledge (TK), Pedagogical Knowledge (PK) and Content Knowledge (CK). The TPACK model has introduced a new structure that guides the use of ICTs for teaching and learning purposes and how it fits into the structure of the classroom to enable quality educational practices when using ICT. The use of ICT for teaching around a particular topic desires creating sensitivity to the dynamic, value-based connection between these segments of

learning arranged in special settings. Instructors, grade-level, school-particular elements, socioeconomics, culture, and different elements guarantee that each circumstance is exclusive, and no single blend of substance, innovation, and instructional method will apply for each educator, each course, or each perspective of educating. The TPACK model puts forward two basic arguments;

1. Mindful interweaving of technology, instructional method and content knowledge is required by the educator/teacher to guarantee a beneficial utilization of ICTs in teaching and learning.
2. There is no single mechanical arrangement that applies for each instructor, each course, or each perspective of educating. (Mishra & Koehler, 2006)

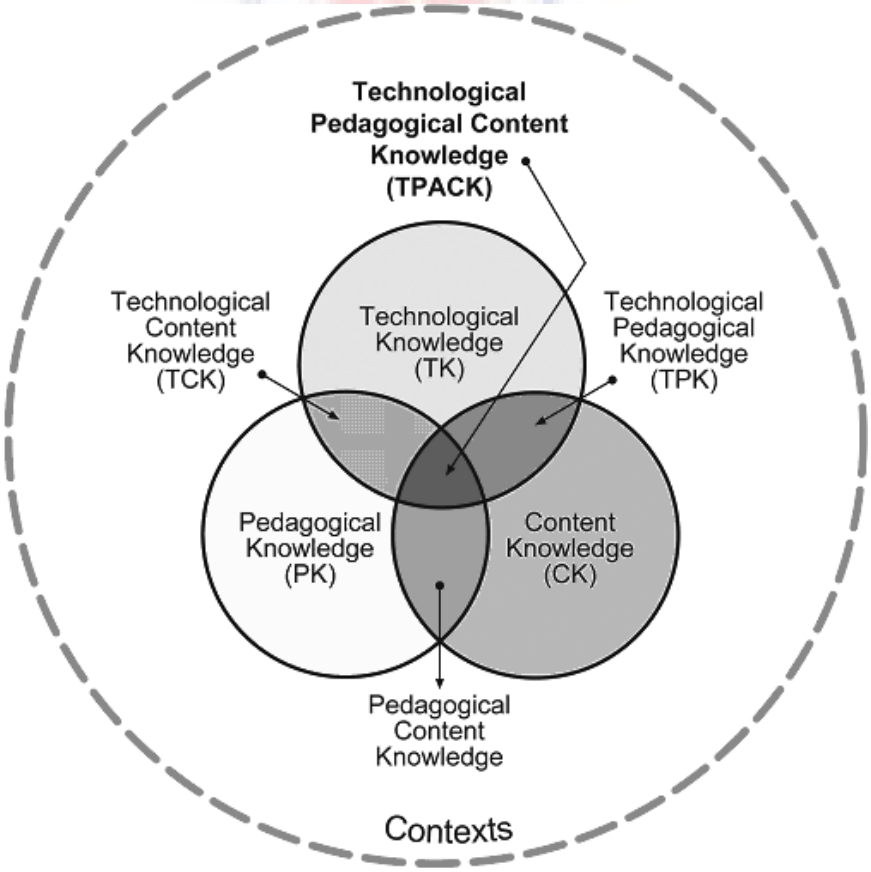

Figure 1: Technological pedagogical content knowledge

Source: Koehler and Mishra, 2008. Adopted and modified.

The circles in the TPACK diagram represent content knowledge, pedagogical knowledge, and technological knowledge. The areas where the circles overlap — where the three kinds of knowledge combine — can be explained as follows:

Pedagogical Content Knowledge (PCK) is the knowledge that teachers have about their content and the knowledge that they have about how to teach that specific content. First identified by Shulman in 1986, we can see evidence of PCK as we consider the different strategies that science teachers use as compared to the strategies used by language arts teachers, or teaching strategies used by art teachers as opposed to teachers of mathematics. This specialized knowledge allows teachers to use the most effective methods for teaching specific content.

Technological Pedagogical Knowledge (TPK) is the set of skills, identified by Mishra and Kohler in 2006, which teachers develop to identify the best technology to support a particular pedagogical approach. For instance, if you want your students to work in collaborative groups (pedagogy) you might choose to have them share their learning in a wiki (a digital tool that is collaborative) or communicate what they have learned in a multimodal presentation using for example, PowerPoint, Glister or Prezi (digital tools that allow students to present what they know).

Technological Content Knowledge (TCK) is the set of skills, also identified by Mishra and Kohler in 2006, which teachers acquire to help identify the best technologies to support their students as they learn content. For instance, if you wanted your students to recognize and understand the sequence of steps leading up to a hurricane (content) you would look for online hurricane tracking sites,

allow them to find photographs that represented the formation of hurricanes and have them document the different stages in a timeline.

2.1.2 Using TPACK in classroom

Keeping technology as a separate knowledge set causes problems, but when we understand the framework of TPACK, we can integrate technology into the content and pedagogy of our classrooms. The integration will help our students learn more effectively. Mishra and Koehler (2006) suggest that TPACK should guide curriculum development and teacher education. To apply TPACK to our classrooms now, Harris and Hofer (2009) worked with colleagues from universities around the United States to create Activity Types. Their article, _Grounded' Technology Integration: Instructional planning using curriculum-based activity type taxonomies," explains how TPACK should change the way we plan our daily lessons. They describe a planning process where we first choose the learning outcomes that we will be working on that day or during that class session.

The learning outcomes are the content. The second step they proposed is choosing an activity type. The activity type is the pedagogy or how are the students going to learn the content. Finally, we can choose technologies that will support the activity type and aid the students in learning. Harris and Hofer (2009), showed with example after example of how our instructional planning should include each part of the TPACK framework and allow us to create and develop the overlapping knowledge to make the best learning environment for our students. The simplest idea at play in TPACK is that a person who is a world-renowned expert in a subject might not be a great teacher because they lack the pedagogical knowledge to make the subject accessible and understandable Harris and Hofer (2009). To be

a great teacher, we have to combine our knowledge of the subject with our knowledge of how to teach. With the increasing focus on technology, we need to also learn how to combine technology with our content and pedagogy to create an effective learning environment.

2.2 Conceptual Framework

The conceptual framework considers a lot of factors in the full realization of ICT incorporation in the teaching and learning of Social Studies. The framework comprises of the availability, accessibility and perception in a quest to integrate ICT into teaching and learning. From the framework (fig.2), it can be seen that the ICT incorporation into the SHS system has several components. Firstly, the perceptions teachers have and form about the use of ICT facilities. Teacher‘s perceptions are very important as it triggers the use of ICT materials in the teachers‘ class, the availability of ICT facilities is also very important, these facilities include computers, printers, internet system, android mobile phones and overhead projectors etc. The availability of ICT tools result in utilization of the aforementioned relevant ICT facilities in teaching and learning process. Teachers‘ perceptions of ICT includes; it makes lesson delivery interesting and understanding, saves time and makes lessons more diverse. In addition, possession of personal computer, confidence, willingness and competence in the use of ICT facilities may be seen as all teacher-factors which affect the use of ICT facilities. Also, lack of confidence, insufficient ICT facilities, lack of training and lack of knowledge about ICT facilities are challenges teachers face on the utilization of ICT facilities. The factors discussed above all contribute to the utilization of ICT facilities.

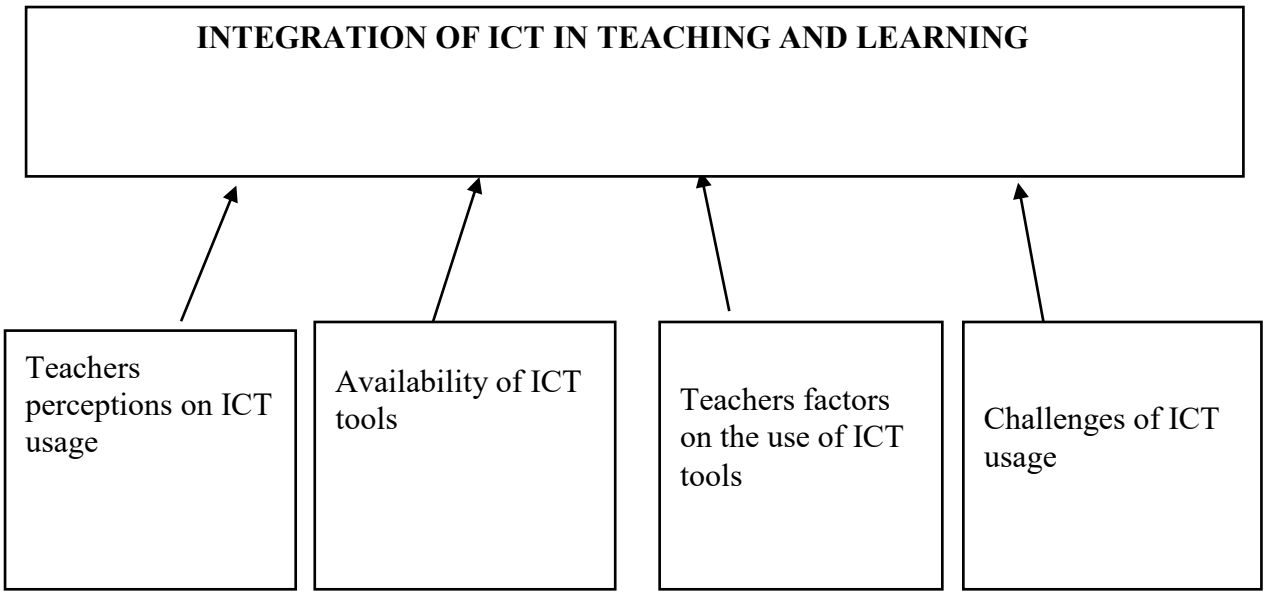

Figure 2: Conceptual framework

Source: author's construct, 2019

2.3 Historical Development of Social Studies

The field of Social Studies was developed in the United States of America in the early years of the 20th century. It was built on historical foundations that were recognized as the central study of Social Studies. The move from conventional topics in history to Social Studies resulted in the Jones Report (Ravitch, 2003) on Social Studies; incorporated into the famous Cardinal Principle Report of the National Education Association in 1918. This indicated that the goal of Social Studies was good citizenship and that historical studies that did not contribute to social change did not have any meaning. This study offered a significant boost to the instruction of Social Studies. History learning was deemed too "academic" and far from the immediate needs of participants, so they rendered few public productivity contributions. It was in the field of social efficiency that Social Studies was born. The aim was to teach students knowledge and skills related to their own society's structures as well as to train them for the real world they would encounter once they left school. The Social Studies curriculum had replaced history by the 1930s with its evolving conceptions of the world, the family, the

city and the society (Ravitch, 2003). Therefore, Social Studies was intended to provide an integrative education aimed at training students as decision makers.

In Africa, ideas on how to modernize the teaching of Social Studies in the school curriculum were expressed as early as 1961 at the Endicott Summer House Study in the Massachusetts Institute of Technology (MIT), U.S.A. where prominent African, British and American educationalists addressed themselves to the issues of educational problems facing post-war Africa, especially the newly independent nations and how to find solutions to their educational problems in the humanities and social sciences, language, mathematics, science and teacher education. At the summit various subcommittees were set up, one of which was charged to prepare a syllabus for the social sciences. The subcommittee on Social Studies decided among other things that:

> *"The teaching of geography, history and civics as separate disciplines in the primary schools in Africa introduces an artificial division in the social sciences which should be discouraged in the early years of schooling. The child should be introduced to the social sciences as an integrated field of study and should be made to appreciate right from the beginning of his education the close relationship between the disciplines which later emerge as distinct fields of learning" (ASSP Report, 1990, p. 57).*

In the group's opinion, this was to make the child conscious of being culturally, traditionally, socially and economically one with the family. The subcommittee proposed that such an incorporated study area should be classified as' Social Studies' for the sake of an appropriate name. In 1967, a meeting took place at Queens College, Oxford, where the attendees agreed that attention should be paid to the need to give attention to the development of Social Studies in primary schools. This meeting was sponsored by the Education Development Centre (EDC) and Centre for Research and Overseas School Creation (CREDO). In 1968 another conference was held in

Mombasa, Kenya. The Mombasa Conference marked the turning point in Social Studies development in Africa, according to Tamakloe (1976). This conference gave birth to the African Social Studies Program (ASSP) which aimed primarily at helping African countries by:

a. Collecting and disseminating information of Social Studies projects in Africa and elsewhere through reports, newsletters and original documents.
b. Assisting member countries to organize workshops, courses, seminars, and conferences for the exchange of ideas and for in-service training of teachers to enable them adapt to the new approach to the teaching of Social Studies.
c. Encouraging the initiation of research in Social Studies teaching in the development of materials for primary and secondary schools in Africa and involve professional and university people (Dondo, Krystall & Thomas, 1974, cited in Melinger, 1981, p. 314).

It is important to note that the major objective of the African Social Studies Programme now African Social and Environmental Studies Programme (ASESP) is that Social Studies should be taught as an integrated discipline. On the Ghanaian scene, Bruce (1988) reports, that there had been attempts at _integration of a sort' in the social sciences. According to him between 1950 and 1954, some sort of integration appeared in the syllabuses of teacher training colleges, namely Wesley College, Winneba Government Training College, and Presbyterian Training College Akropong-Akuapim. Nevertheless, because of a lack of staff to teach the blended subject, the curriculum had failed by 1955. Tamakloe (1976) also points out that before 1968, there existed an area of study termed _œenters of interest' in the primary school curriculum which appeared to be an integration of subjects like history,

geography and civics which was only undertaken at the lower primary level (primary one to three). He further observed that this programme –consisted of just topics which had been jumbled up in the name of integration; the topics [however] lacked cohesion" (p 16). With the creation of the Curriculum Research and Development Division (CRDD), the development of the Social Studies curriculum in Ghana started in 1967. Between August and September 1968, under the auspices of the British Council, a conference was held at the Advanced Teacher Training College, Winneba. A pilot program on teaching Social Studies was implemented in four designated locations namely Saltpond and Assin Fosu in the Central Region, and Ho and Hohoe in the Volta Region. According to Tamakloe (1976) –there was a great controversy on the choice of name for the new programme being developed. While one group felt it should be called Social Studies one contended it should be called environmental studies" (p.16). The programme in its fourth year of pilot testing saw the inauguration of the National Association of Curriculum and Courses (NACC). All primary Syllabuses were reviewed and improved with the sub-committee on Social Studies agreeing that the new programme should be officially called environmental studies.

The implementation of the 1987 Educational Reforms introduced the name _Social Studies' to the Ghanaian curriculum once again. It was officially used in exchange of environmental studies in all levels of the school system. New textbooks published by the CRDD in 1988, was titled _Ghana Social Studies series' in replacement of the environmental studies in all schools. The name Social Studies continued throughout the Ghanaian educational systems, during the introduction of the Free Compulsory and Universal Basic Educational (FCUBE) in both the primary and junior secondary school. However in 1998 the term _environmental studies' was again used in primary school level, whiles the name Social Studies was maintained at the junior and senior

secondary schools. Currently under the 2019 Educational reforms in Ghana, the subject has been renamed –our world, our people", with the name Social Studies, currently used in the junior and senior high schools pending the conclusion of the Educational reforms. At the college of Education, the subject is referred to as Social Studies, and at the University level such as the University of Education, Winneba, and the University of Cape Coast the term ‗Social Studies is used as a programme'

2.4 Concepts of Social Studies

The subject Social Studies, is the school subject that is interested in the individual and his interaction with others and his environment. Tamakloe (1994) posit that Social Studies as a subject is interested in man and his relationship with his environment. This suggest that, the teaching and learning of Social Studies should train the individual to appreciate the fact that human beings, plants and animals are all dependent on each other and thus must be very careful of his actions and decisions.

Linguist (1995) defines Social Studies as a an integration of knowledge, skills and processes, He further goes on to explain that the subject provides powerful learning in the humanities and social science for the purposes of helping children learn to be good problem solvers and wise decisions makers" Martorella (1994) in agreement posit that Social Studies deals with information and modes of investigation from the Social Studies, and selected knowledge from other areas that relates directly to an understanding of individuals, groups and societies and how this can be applied in the individuals in does. These definitions seem to suggest that the sole rational of the teaching of Social Studies is to promote citizenship and the use of social science concepts. Barr, Barth and Shermiss (1997) posit that –Social Studies is an integration of experience concerning human relations for the purpose of citizenship education". (p.69). Similarly, the African social and Environmental Studies Programme (ASSESP

1994) sees Social Studies as ―the integration of purpose of promoting and practising effective problem solving, promoting citizenship skills in social, political and economic issues and problems" (p.5). The Ghana Education Service (GES, 2001) describes Social Studies as ―an integrated body of knowledge, skills and attitudes that will help the pupils develop a broader perspective of Ghana and the world" (p iii). The National Council for Social Studies (NCSS)'s official definition includes a strong interdisciplinary focus to address social issues. It states that Social Studies are the integrated social sciences and humanities study aimed at promoting civic competence within the school program. To the NCSS, addressing these problems requires multidisciplinary training as public concerns such as health care and violence are multidisciplinary in nature.

From these definitions it is evident that one of the main characteristics that distinguish Social Studies is that it incorporates many fields of effort. Therefore the integrative nature of Social Studies requires critical thinking about social issues that lead to the development of student thoughtfulness through incorporating learners to learn a variety skills, including those of inquiry, investigation and discovery as they actively involved in the teaching and learning process.

2.5 Concept of ICT and ICT Integration

ICT is an acronym that stands for Information and Communications Technology. There is no universally accepted definition of ICT because the concepts, methods and applications involved in ICT are constantly evolving on an almost daily basis. ICT cover any product that will store, retrieve, manipulate, transmit or receive information electronically in a digital form. For example, personal computers, digital television, email, internet etc. The field of education has been affected by ICTs, which have

undoubtedly affected teaching and learning. Pelgrum and Law (2003) state that near the end of the 1980s, the term ‗computers' was replaced by ‗IT' (information technology) signifying a shift of focus from computing technology to the capacity to store and retrieve information.

This was followed by the introduction of the term ‗ICT' (information and communication technology) around 1992, when e-mail started to become available to the general public (Pelgrum & Law, 2003).

According to a United Nations Economic Commission for Africa-UNECA (1999) ICTs cover Internet service provision, telecommunications equipment and services, information technology equipment and services, media and broadcasting, libraries and documentation centers, commercial information providers, network-based information services, and other related information and communication activities. UNESCO (2002) information and communication technology (ICT) may be regarded as the combination of ‗Informatics technology' with other related technology, specifically communication technology. The various kinds of ICT products available and having relevance to education, such as teleconferencing, email, audio conferencing, television lessons, radiobroadcasts, interactive radio counselling, interactive voice response system, audiocassettes and CD ROMs and many others have been used in education for different purposes (Sharma, 2003; Sanyal, 2001; Bhattacharya and Sharma, 2007). It could be viewed as a set of activities which is facilitated by electronic means. It could also mean the processing, transmission and display of information via electronic means. British Educational Communications and Technology Agency (BECTA, 2000) defined ICT as techniques people use to share, distribute, and gather information and to communicate through computers and

computer networks. Yuns (2007) described ICT as a complex varied set of goods, applications and services used for producing, distributing, processing, transforming information (including) telecoms, TV and radio broadcasting, hardware and software, computer services and electronic media. Adeleke (2005) and Abba, Kigongo, Bukenya, and Nyemba (2004) and Stevenson (1997) viewed ICT as a cluster of associated technologies defined by their functional usage in information access and communication. Information and Communication Technology are computer based tools used by people to work with information and communication processing for the needs of an organization. It covers computer hardware, software, the network and other digital devices like video, audio, camera and so on which convert information (text, sound, motion etc.) into digital form (Muehleisen, 1997).

According to Nwagwu (2006), Information and Communication Technologies (ICTs) are electronic technologies used for information storage and retrieval. Ayodeji (2004) defined ICT as electronic-based technology that is generally used to retrieve store, process, and package information as well as provide access to knowledge. The development of microcomputers, optical disc, the establishment of telecommunication network, television, internet, etc. have assisted in broadening people‘s knowledge and facilitating effective communication. Ugwu and Oboegbulem (2011) stated that ICTs in education encompasses a great range of rapidly evolving technologies such as desktops, notebooks, digital camera, local area network (LAN), the internet and the World Wide Web (WWW), CD-ROM (Compact Disc Read-Only Memory) and DVDs and applications spread sheets, tutorials, simulations, electronic mails, digital libraries, computer-mediated conferencing, video conferencing and virtual reality. In effect, ICT has reduced the barriers that characterized interrelationship in terms of space, time, and learning activities. ICT tools for teaching and learning include

computer, internet, PowerPoint, television, overhead projectors, camera, radio cassette, video tape, audio cassette, audio cd, www, telephone, etc. (Gannon, 2004). Information and Communication Technology as tools within the school environment include use for school administration and management, teaching and learning of ICT related skills for enhancing the presentation of classroom work, teaching/learning tasks, teaching/learning intellectual, thinking and problem solving skills, stimulating creativity and imagination, for speech by teachers and students and as communication tool by teachers and students (Pennington, 1996 and Moore 1996).

As public awareness grew, this need for computer literacy became extremely influential and many schools in the developed world purchased computers based on this rationale. The 1990s was the decade of computer communications and information access, particularly with the popularity and accessibility of internet-based services such as electronic mail and the WWW. At the same time, the CD-ROM became the standard for distributing packaged software replacing the floppy disk. This allowed large information based software packages such as encyclopedia to be cheaply and easily distributed. As a result, educators became more focused on the use of the technology to improve student learning. This transformation requires that the education sector be able to harness the full potential of ICTs to improve the quality of teaching and learning. It is, therefore, not surprising that the use of ICTs is on the rise in many educational institutions because they serve numerous purposes in teaching and learning. Fan and Ho (2012) identify three main uses of ICT in education. The primary role of ICT is to improve teaching and learning using application software. The second purpose is to facilitate administrative roles such as grading and keeping records in schools for tracking students‘ learning history and performance. The third role of ICT in education is to build information literacy of students.

The rationale for ICT investments in education is based on the assertion that traditional teaching and learning methods in which knowledge is imposed on learners have not provided enough opportunities for learners to create their own knowledge and develop critical minds. Osun (1998) thus argues that the use of computers in classrooms provide key ingredients in teaching and learning that were lacking in all previous tools that raised high expectations when introduced in the educational system. Previous tools such as the blackboard only presented information to students. Computers have resulted in what he calls ‗individualized interactivity'', providing the opportunity for information to be given to students as well as adopting presentations to students' needs and preferences. The integration of information and communication technologies can help revitalize teachers and students. This can help to improve and develop the quality of education by providing curricular support in difficult subject areas.

To achieve these objectives, teachers need to be involved in collaborative projects and development of intervention change strategies, which would include teaching partnerships with ICT as a tool. According to Zhao and Cziko (2001) three conditions are necessary for teachers to introduce ICT into their classrooms: teachers should believe in the effectiveness of technology, teachers should believe that the use of technology will not cause any disturbances, and finally teachers should believe that they have control over technology. However, research studies show that most teachers do not make use of the potential of ICT to contribute to the quality of learning environments, although they value this potential quite significantly (Sheets, 2005).

2.6 Benefits of ICT in Education

The world is gradually being transformed into an informative and a smaller community with the help of ICTs. This transformation therefore requires the education sector to be able to integrate ICT into their daily endeavors to be able to help promote the quality of teaching and learning. This is evident in the recent rise in the use of ICTs in many educational institutions because of its significance in education. Fan and Ho (2012) describe three significant academic applications of ICT. ICT‘s primary role is to use ICT software to improve teaching and learning.

The second objective is to promote administrative roles such as marking and record keeping in schools to monitor the academic experience and progress of learners. ICT‘s third position in education to develop student‘s data literacy. The rational for ICT investment in education was focused on the premise that traditional methods of teaching and learning which force information on learners have not created enough incentive‘s for learners to build their own skills and develop critical minds. Osin (1998) argues that the use of computers in classrooms provides key ingredients in teaching and learning that were missing from all previous tools that raised high expectations when introduced into the educational systems. Past devices like the blackboard just provided students with Date.

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Harris (2002) performed case studies at three primary and three secondary schools based on creative ICT-related pedagogical activities. Harris (2002) suggests that the advantages of ICT are gained when committed educators are willing to explore potential opportunities to change their strategies in the classroom through ICT.As a result, the use of ICT will not only enhance learning environments but will also

prepare future lives and careers for the next generation (Wheeler, 2001).Changing instructor demographics may result in changing tasks and skill sets for potential teaching requiring high ICT standards and the need for more facilitative than didactic teaching positions (Littlejohn, Suckling, Campbell & McNicol, 2002) ICT impacts on a large section of education, from record keeping and school websites to the creation of online learning communities (Bishop, 2007). Educational institutions can use specialized websites to make learning resources available online at any time. Some educational institutions do not even require students to be physically present. Virtual classrooms have flourished in tandem with improved internet accessibility. The significant barriers of time and distance are rendered almost obsolete in such virtual classrooms (Stennes, 2008).

Another advantage for using ICT in education is that using ICT tools correctly, in and out of the classroom, can increase communication and collaboration between teachers in and out of school, between teachers and students and between students and students moving away from the old ―banking" way of teaching where information is only moved from teacher to students without any freedom for critical analysis on the part of the learner (Hawkins, 2002). In their research report Digital Horizons: Laptops for Teachers' Evaluations, Cowie, Jones, Harlow, McGee, Millar, Cooper and Gardiner (2008) found that ICT tools such as the laptop were supporting communication and the sharing of work between teachers and students in and out of class time. Students were said to be seeking to engage with teachers' lesson materials in different ways and teachers were more easily able to share teaching notes and exemplary work with students via CD and email. Furthermore, teacher and student experiences have been improved when working around a computer or using ICT tools.

Jacobson and Levin (1993) observed that educators were firmly convinced that the use of software can assist learners in their learning and agreed that the use of electronic mail for study and correspondence, for instance, would enable teachers and students save time. Balanskat, Blamire and Kefalla (2007) support the position of Jacobson and Levin by stressing that the greatest progress has been made throughout recent years, the optimistic attitudes of educators towards ICT have been strengthened by recognizing their importance for education through more exposure and integrated use. Teachers are constantly utilizing ICT to better prepare their jobs and gain time. 90% of educators in Europe are already using ICT to plan their lessons in the new Euro barometer benchmarking survey (September, 2006). However, the benefits of ICT use in the classroom depend on the success with which it has been integrated (Condie & Munro 2007). Dawes (2001) asserts that new technologies could support education across the entire curriculum, providing innovative opportunities for effective communication. ICT in education has undoubted potential, to be influential in changing teaching methodologies.

UNESCO (2007) claims that the use of ICT in education systems has the potential to improve the quality of education provision and to promote greater access by disadvantaged groups and communities to knowledge and services. Therefore, ICTs could be used effectively:

1. Make education simpler, less expensive and safe of range limitations.
2. The consequence of improvements in teaching and learning is better academic success.

Research have also shown that the use of machines can contribute to successful improvements in literacy. Empirical evidence shows that learners with learning

disabilities can be inspired and involved by using ICT (Lynch, Fawcett & Nicolson 2000; O Murchú 2000; Segers & Verhoeven 2002).

2.7 Policy Framework for ICT in Education in Ghana

Ghana has not failed in her efforts to equip her citizens with ICT skills to be able to function efficiently in a world that is progressively being transformed into a knowledge based one. ICT inception in all sectors of the economy, including education, has therefore become a public policy priority. Efforts to introduce ICT in schools derive from the national ICT for Accelerated Development policy of 2003 and the ICT in Education policy of 2008. The Government of Ghana has placed a strong emphasis on the role of ICT in contributing to the country‘s economy. The country‘s medium-term development plan captured in the Ghana Poverty Reduction Strategy Paper (GPRS I&II) and the Education Strategic Plan 2003-2015 all suggest the use of ICT as a means of reaching out to the poor in Ghana (Government of Ghana, 2004). In 2004 the Ghanaian Parliament passed into law Ghana‘s ICT for Accelerated Development (ICT4AD) policy, which is currently at various stages of implementation. This policy represents the vision of Ghana in the information age and addresses 14 priority focus areas including accelerating human resource development and promoting ICT in education.

In 2008, the Ministry of Education came up with the ICT in Education policy which outlines the plans and strategies for integrating ICT in education at all levels. The overall vision of the ICT in Education policy is the use of appropriate ICTs to support and align the sector Ministry‘s policies, objectives and strategies, particularly as it relates to equitable access to education, quality of education, educational management, science and technology and labour market needs. The mission is to

articulate the relevance, responsibility and effectiveness of utilizing Information and Communication Technologies (ICTs) in the education sector, with a view to addressing current sector challenges and equipping Ghanaian learners, students, teachers and communities in meeting the national and global demands of the 21st Century. The specific objectives of the policy are to:

1. Facilitate the deployment, use and development of ICT within the education system to improve access to and delivery of education in order to support teaching and learning from the primary level upwards.
2. Improve the education system to improve the quality of education and preparation at all stages of the education system and to maximize access to education, training and study assets
3. Focus on teaching and studying science and technology at all stages of the country's educational system to promote the assimilation of science and technology to society.
4. Ensure universal basic education and boost the nation's standard of basic education and computer literacy.
5. Ensure that all people are literate and efficient at least functionally.
6. Expand end increasing access to education at secondary and tertiary levels.
7. Strengthen education in science at all levels of the education system, especially at the basic and secondary levels.

The methods for meeting the specific goals described in the plan were focused on four key factors. They are capital in resource allocation, competitive and continuing ICT service exposure, capacity building of users and the development of norms and standards with regard to ICT use.

In contrast, there are seven thematic fields in the plan. Those sections detail the guiding principles and approaches to be applied in order to achieve the goal of implementing ICT in learning. The first thematic area aims to improve the management of education by building the capacity of the Ministry of Education and all its agencies. In this way, ICT can be used successfully to produce informed decision-making results. The second thematic field is to develop the ICT capacity of all persons involved in the provision of education, especially educators, to encourage the integration of ICT into teaching and learning at all educational levels in Ghana. In all universities, the third thematic region includes the availability of services, e-readiness and equal exposure to ICT. Other areas of concern are content development, ICT integration into the curriculum, technical support, maintenance and sustainability of ICT infrastructure.

Implementation of the policy is made up of three stages. The initial phase is to boost academic institutions ' ability to use ICT in teaching, training, and administrative roles. The second phase is to promote community support for educational institutions for ICT services and to implement curriculum standards for ICT implementation. The final phase includes incorporation of ICT into teaching, learning, education management and governance.

Translating policy goals and plans into action requires support from the government and organizational cooperation. Generally, the Ministry of Education is responsible for the Education Policy application of ICT. Nevertheless, insufficient resources limit the ability of the ministry to bear this burden. Partnerships with other departments and growth companies both local and international, is essential in the successful implementation of the policy. Indicators and targets are to be developed at the

national and regional levels to effectively measure the successes or otherwise of the policy implementation. Annual reviews as well as three years evaluations are to be conducted to help in the implementation process.

2.8 Social Studies teachers' and Students perception on the use of ICT Facilities in Teaching Social Studies

Teacher perceptions of ICT is important as it forms a tendency that helps them to be favorable or unfavorable towards the usage of the modern technology in the field of education. Previous research focused on explaining technology adoption and acceptance; how technology's attributes affect an individual's perception of technology. This in turn affects the usage of specific technology and technological readiness (Porter & Donthu, 2006) to embrace and use new technologies to accomplish goals in home, life, and at work (Parasuraman, 2000). Previous studies have stated the importance of teacher perceptions as a critical factor among teacher ICT readiness to integrate ICT into classroom teaching.

The application of ICT in senior high schools in Ghana is acknowledged as a medium for revolutionizing the educational process, and has since been welcomed with momentous eagerness (Mfum-mensah, 2003). ICT integration into educational curricula for students in senior high schools do impact positively on the knowledge and abilities on both students and teachers (Petard, Bannister, & Dunn, 2003). British Educational Communications and Technology Agency (BECTA) (2004), noted that the perceived benefits of fusing ICT into education could be measured by the pedagogical knowledge of both students and teachers. For instance, in a study of students of some selected schools in Hong Kong, the research found out that the positive result that came out of the educational methods that utilized ICT was the

endorsement it gave educators and students. Consequently, teachers over the globe keep on ascribing an importance to the use of ICT in teaching and learning (Law, Lee & Chow, 2002). Gragert (2000) noted that students in second cycle institutions were more anxious to study as a result of using ICT related devices and also through computer-based knowledge acquisition. Teachers in the study affirmed the fact that using ICT for teaching and learning increased student_s participation in the educational process. In similar research, Schulz-Zander, Butcher & Dalmer (2002) perceived student's cooperation and concluded that students tend to assist each other technically with problems that arise from the use of ICT thereby functioning as an academic discourse community, and working together in joint associations with different schools. Haddad and Drexler (2002) revealed that ICT integrated teaching and learning stimulates scholarly interest and offer a feeling of satisfaction that will shift the students from the static part of beneficiaries of knowledge to the dynamic part of manufacturers of information.

On the other hand, in an empirical study conducted by Hennessy, Ruthven, & Brindley (2005), it was established that there was an anticipated pressure with the integration of ICT in the educational process and this conformed to external conditions of traditional examinations. Conditions needed to integrate ICT into education to intensify teaching and learning were deemed problematic. For instance, the use of ICT gadgets was not allowed during examinations and this action brought about a decline in motivation amid educators and students using ICT for teaching and learning (Hennessy *et al.,* 2005).

In a study conducted by Eugene (2006), an observation method was used to investigate educators _expectation and perception on the use of ICT for teaching. The

study found out that there was disparity between educators _expectation and their perception on the substantial utilization of ICT in the classroom. Another study carried out by Simonson (2004) to investigate the beliefs of high school teachers confirmed that there was a correlation between teachers' perception and their use of ICT in teaching. Drent and Meelissen (2008) confirmed the assertion made by Simonson (2004) which revealed a study of two hundred and ten teachers showing a confirmation of teachers' technological use and positive attitude towards the utilization of ICTs had a correlation on the innovative use of ICTs in teaching. Huang & Liaw (2005) in a related study involving six European Union countries affirmed that teachers _perception with the use of ICT has a positive effect on their recognition of the benefits of ICT and its use in education.

A study also conducted by Rozell and Gardner (1999) revealed an interrelationship between teachers' ICT knowledge experience and their perception in the integration of ICT into teaching and learning. Van Braak, Tondeur, & Valcke (2004), supported this assertion with a study conducted which revealed that knowledge in ICT is envisage to allow for an efficient use of computers and their related technologies in teaching and learning. In Africa, Mbah (2010) also explored the influence of ICT integration on the learning pattern of students of University of Buea in Cameroon and found out that students were more comfortable using ICTs and used it to improve their learning habits. The study also highlighted the positive relationship between students _approach towards the use of ICT and their study habit. Buabeng-Andoh (2012) however stated that in Ghana, study of teachers‘ perception in the utilization of ICT in education in second cycle institutions is limited as compared to senior high schools in developed countries. His study therefore spanned from teachers‘ perception, their perceived skills through to the extent of using ICT for teaching and

learning. In the study, a greater percentage of the research participants strongly agreed that ICT can improve students _engagement in the educational process, assessment to educators and also increase students _participation. The discovery of the study also revealed a positive correlation between ICT use and competences and inferred that educators' capability and certainty were indicators of utilizing ICT in teaching and learning.

2.9 Challenges facing Social Studies teachers in the Integration of ICT in Social Studies Classrooms

Regardless of the numerous benefits of the use of ICT in teaching and learning, the system comes with a countless of challenges. According to Koehler et al. (2012), the use of ICT for teaching and learning comes with several challenges and it is further complicated with the introduction of new technologies each and every day. Several challenges have been identified from review of previous empirical studies. (Koehler et al., 2012) classify the challenges into four main categories which are resources, knowledge and skills, institution and subject culture (Koehler et al., 2012). For example, in recent times Educational policymakers and stakeholders in Ghana are focused on the way students and teachers integrate ICT into teaching and learning in the various secondary schools and how this adoption has supported their practices. This notwithstanding, educators have not encouraged the meaningful use of ICTs by students for learning activities (Becker, Ravitz, & Wong, 1999). Inadequate resources arise when there is the need for ICT to be integrated into teaching and learning. These resources may include technology, access to the needed application and support from technical expert. Inadequate technological resources include obsolete and insufficient computers, incompatible hardware and software (Karageorge, 2005), leads to little chance for teachers to include ICT into teaching and students into learning.

Integration of ICT into teaching and learning according to Koehler *et al.* (2012), goes beyond the availability of technology in the schools, it includes making the right hardware and software accessible to teachers and students for use. Insufficient time is also a resource-type challenge in the use of ICT for teaching and learning. Teachers according to Butzin (2001) need more time to go through web pages and to identify pictures they need for multimedia assignment they give to students. Inadequate technical support as a resource as posited by Rogers, Medina, Rivera, & Wiley (2005), has led to teachers and student not able to use different technological approaches in integrating ICT into teaching and learning. Also, British Educational Communications and Technology Agency (BECTA) (2004), also laid emphasis on some challenges to the use of ICT for teaching and learning and attributed it not only to the lack of access to ICTs but rather poor organization and utilization of availability of resources. This affirmation was supported by Empirica (2006), who saw lack of access as the predominant challenge in the utilization of ICT. The use of inappropriate equipment and lack of infrastructure are among the challenges associated with the integration of ICT into senior high schools (Gomes, 2005). Insufficient technological knowledge and skills, unsupported pedagogical knowledge and skills have been captured as a crucial challenge to the integration and use of ICT for teaching and learning (Koehler et al., 2012). Inadequate technological know-how is a major reason why teachers and students are not using ICT (Snoeyink & Ertmer, 2001).

In an empirical study conducted in Scottish schools, Williams, Coles, Wilson, Richardson, & Tuson (2000), identified that insufficient skills in the use of databases and Microsoft excel was a major factor by some secondary school teachers and students. A study also conducted in Australia by Newhouse (2002), emphasized on

the inadequate knowledge and skills by teachers and students to manipulate computers characterized the challenges faced by the use of ICT for teaching and learning. According to Newhouse (2001), teachers were not excited about the changes and integration of ICT into teaching and learning practices. In the study of high schools in the United States of America, Snoeyink and Ertmer (2001), noted that inadequate pedagogical knowledge was a contributing factor to the challenges associated with the use of ICT for teaching and learning. In the same study, teachers made sure they acquired basic skills such as connecting to a network, surfing through applications, and simple word processing techniques before they engage in technology-related activities with their students and this they also found to be time-consuming. This was justified by Hughes (2005), who argued that teachers must poses the requisite technological skills to be able to integrate ICT in teaching.

Institutional challenges can also be associated with the use of ICT by teachers and students and these may include school authorities and school time table or calendar as posited by Koehler *et al.,* (2012). Studies have proven that school authorities can impede the integration of ICT into teaching and learning. Fox and Henri (2005) affirmed to this in their study which highlighted that most Hong Kong teachers felt their heads in secondary schools did not have knowledge in technology and its importance to the country‘s shift to leaner-centered activities. A timetable which is not flexible can also be a challenge in the use of ICT by teachers and students. In a research which covered over four thousand teachers in more than one thousand one hundred high schools in America, students had less than an hour period for subjects they learn in a class (Somekh, 2008) such limited time will not allow for the variety of ICT usage by both student and teachers.

Subject culture in the context of ICT integration refers to the ‗'general arrangement of standardized practices and requirements which have grown up around a specific school subject, and shapes the meaning of that subject as a particular area of study" (Goodson & Mangan, 1995). Subjects taught in secondary schools are shaped by their content and subject pedagogy. Teachers do not have the urge to use ICT to teach subjects which seem incompatible with ICT (Hennessy, Ruthven, & Brindley, 2005). Selwyn (2004) also emphasized on an art teacher who rejected the use of computers when painting, arguing that a student will be more inclined with using his physical hands. The art teacher believed that using a computer mouse makes one‘s mind and hands disjointed. In Africa, Alemneh & Hastings (2006) conducted an empirical study which suggests the lack of trained teachers who will impact into the intellect of students in secondary school as the major challenge that is faced with the use of ICT for teaching and learning. The same study also found out that trained teachers who were well equipped in the use of ICT for teaching and learning purposes preferred leaving the continent to the western world due to poor remuneration coupled with inadequate ICT infrastructure.

In Ghana, the use of ICT in education is fraught with several challenges. Mereku, Yidana, Hordzi, Tete-Mensah, & Williams (2009) found out that out of ten Ghanaian senior high schools in Ghana which had computer laboratories, the ones accessible to both students and teachers easily got damaged due to defective air-conditioners in the computer laboratories, power fluctuations, obsolete computers and malware attacks. The study also found out that none of the computer laboratories in the ten schools were connected to a server and only four computers out of twenty computers in one of the schools was connected to the internet. Mereku et al. (2009) maintained that the official curricula designed for the ten schools emphasized on the need to improve

students‘ proficiency in manipulating ICT but not as a medium to teach other subject‘s aside ICT. The Ghana Education Service at then was at the stage of integrating ICT into teaching and learning but eight years after the study, the situation has not changed, and ICT is seen as a different entity standing on its own whiles other subjects being taught are in isolation (Mereku *et al*., 2009).

2.10 Empirical Review

The various empirical review considered in this study are grouped according to the following headings: Availability of ICT Facilities in Teaching and learning of Social Studies, Teachers‘ use of ICT Facilities (ICT integration) in Teaching Social Studies,

Social Studies Teachers‘ Perception of the use of ICT Facilities in Teaching Social Studies and challenges Social Studies teachers face in teaching and learning of Social Studies.

2.11 Availability of ICT Tools in Teaching and Learning of Social Studies

Adebi-Caesar (2012) conducted a descriptive study on assessment of ICT situation in Senior High Schools in the Lower Manya Krobo District. A total sample of 154 teachers took part in the studies. The four (4) schools were considered as strata. The main instrument used for the study was a questionnaire Proportional allocation was then used in calculating the number of respondents to be selected from each school. With the help of the headmaster and his assistants the teachers of all the schools used in the study were called to their staff common room and with a simple random sampling the questionnaire was administered. Teachers were questioned on extent of availability of ICT tools or equipment‘s in the schools. The study revealed that 69 97.9% of the teachers in all the schools had insufficient computers and resources and only 2.1% agreed they had enough computers. Again when teachers questioned

whether they use computers in their school 90.7% responded they never made use of computers in their school and only 9.3% agreed they made use of them. This clearly reveals that all the schools used in the study do not have enough computers for studies.

Ayebi-Arthur, Aidoo and Wilson (2009) conducted a study on utilization of the Internet in senior high schools in the Cape Coast Metropolis in the Central Region of Ghana. Also, reveals that majority of the teachers had access to the internet. Again, 70% of the students had access to the internet. This shows that majority of the students and teachers had access to the internet. Agyei and Voogt (2011) conducted a study on ICT use in the teaching of mathematics: Implications for professional development of pre-service teachers in Ghana. In-service teachers were asked if certain ICT facilities were available. Interviews and survey were used for data collection. A total of 180 educators constituting 60 in-service mathematics teachers and 120 pre service mathematics teachers participated in the study. About 98% of the in-service teachers from the 16 SHS reported having at least one computer laboratory in their schools. Some teachers also indicated that Parents-Teachers Association (PTA) had been helpful in providing computers in their schools. Further questions were asked to ascertain how accessible these facilities were. Relatively low figures: (access to computers (office/computer lab) was 21%, access to computers (staff common room/Library) was 13% and internet connectivity was 46%) indicating low accessibilities of computer facilities were observed. The teachers indicated further that computer laboratories were used mainly for information technology (IT) lessons which were compulsory for all students; making it difficult to access facilities in computer lab for personal use or other purposes.

2.12 Teachers' use of ICT Tools (ICT integration) in Teaching Social Studies

Ocak and Akdemir (2008) in Turkey conducted a study on primary school science teachers' use of computer applications. The snowball sampling was utilized to identify participants for the study. The total of 63 science teachers agreed to participate in the study. A survey developed by Demiraslan and Usluel (2005) was adapted for the data collection in this study. Results demonstrated that improving the computer literacy of science teachers seemed to increase science teachers' computer use and consequently increase their integration of computer applications as an instructional tool. Internet, email and educational software, Compact Discs (CDs) were found to be used frequently in the classrooms. Ayebi-Arthur, Aidoo and Wilson (2009) conducted a study on utilization of the Internet in senior high schools in the Cape Coast Metropolis in the Central Region of Ghana. The sample consisted of 100 students and 25 teachers in three Senior High Schools. The stratified random sampling technique was used to select the three schools to represent the school types (co-ed, girls, boys, schools) with one school in each stratum, respectively. For each stratum, respondents were selected using the simple random technique. Structured questionnaires consisting of closed items were used to collect the data from the sample. Teachers were asked how they use the available internet. The findings showed that majority of teachers did have access to the internet but hardly used it. For the few who used it, very often used it for personal development. Also 28% often used it for communicating with other teachers and making lesson presentations.

A study conducted by Amenyedzi, Lartey and Dzomeku (2011) on the use of computers and internet as supplementary source of educational material: a case study of the senior high schools in the Tema metropolis in Ghana. The study utilized quantitative and qualitative methodology for data collection. Stratified sampling

method was used to select students and teachers. Three different sets of questionnaires were used for data collection from students, teachers and heads of schools. A total of 120 students were selected from the three schools. Sixty tutors were also selected from the three schools for the study. Respondents (students and teachers) from each program offered in the selected schools were chosen randomly. The study used structured questionnaires and interviews. Teachers were questioned on their use of computers in teaching. The study revealed that about 24% of teachers use the computer for collection of academic data of the students; about 11% type test items of their students with the computer, about 13% use it in teaching as Teaching and Learning Materials (TLMs), practical demonstration or for drill and practice. Less than 35% of teachers use ICT for research work whereas about 16% use the facility for entertainment.

2.13 Social Studies Teachers' Perception of the use of ICT Tools in Teaching Social Studies

In Malaysia, a study was conducted by Sim and Lau (2014) on teachers' Perceptions of the use of ICT as an instructional tool in Mathematics and Science. Teachers were questioned on their perceptions of the use of ICT in classrooms. The study deployed a survey method to collect basic data on the current practice of ICT in the teaching of Science and Mathematics at secondary schools, and to investigate teachers' needs for training and support in relation to the effective use of ICT. The study focus on the Science and Mathematics teachers who are currently teaching at 21 governments secondary 72 schools in Kuching, Sarawak. Two hundred and fifty copies of questionnaires were randomly distributed to Science and Mathematics teachers from 18government schools located in Kuching. The findings showed that the respondents broadly agreed that utilization of ICT makes them more effective in their teaching

(75%), and more organized in their work (80%), rely less upon textbooks (37%), and better able to meet the varying needs of students (48%). While 39.2% of the respondents broadly agreed that with the uptake of ICT they need longer blocks of time for instruction, 43.4% of them disagreed that they give up too much instructional responsibility with the use of technology. In general, respondents broadly agreed that with the use of internet and technology, their lesson plans are richer (55%), and the way they organize classroom activities has changed (56%). A further positive sign is 85% of them indicated that they would like to integrate more ICT applications into their teaching. Use of ICTs such as computer technology and internet is intended to enable teachers to facilitate learning more effectively and enhance students' understanding of concepts which are expected to translate into expansion of Knowledge and improved examination outcomes.

In Ghana, a study was conducted by Amengor (2011) on history teachers' perception of ICT in promoting teaching and learning. The study adopted a descriptive research design. Questionnaire was used in collecting the data for the study in both Kumasi and Cape Coast Metropolis. The study conducted a census survey among the 78 history teachers. The study revealed that 95.6% believe ICT make teaching more effective, 80.6% believe ICT helps to meet the varying needs of students and 85.1% believe ICT 73 increases their productivity. The results clearly show that respondents had fairly good perception towards ICT. Buabeng-Andoh (2012) looked at an exploration of teachers' skills, perceptions and practices of ICT in teaching and learning in the Ghanaian second cycle schools. The study was conducted in public second-cycle institutions. Two hundred and thirty-one teachers were selected from fourteen schools who participated in the study. A simple random sampling technique was used to select the teachers in second-cycle institutions who participated in this

study. Questionnaire was used in collecting the data for the study. The findings showed that majority of the teachers perceived that ICT can offer opportunities to teachers for obtaining educational resources from the internet to enrich course content and also can improve teaching and learning processes. The majority of the teachers also agreed or strongly agreed that ICT can enhance students‘ participation and feedback to teachers (90.9%) and improve students‘ collaboration (90.4%). On the other hand, ICT can improve students‘ language writing skills (76.2%) was perceived as the lowest. In general teachers‘ perceptions of the application of ICT in teaching and learning environment were positive. Teachers-Factors that Influence the use of ICT Facilities in the Teaching of Social Studies.

Hadley and Sheingold (1993) reported the results of a survey conducted in the USA during 1989. Data were obtained from over 600 teachers in almost as many schools who had been nominated by principals as being ―known for their efforts in integrating computer technology into their teaching". As many as 88% of the teachers indicated that computers had made a difference to their teaching. Overall, the changes included higher 74 expectations for students‘ work, greater opportunity to support students working individually and independently and a change from teacher-cent red to student-cent red classrooms with the teacher acting more as a coach than as information dispenser. The data showed discernible patterns in the evolution of teachers‘ practices with computers over time. Overall the pattern appeared to be one in which teachers began with approaches that were similar to familiar practices like the use of printed workbooks and, as they gained experience, decreased these uses in favor of approaches that afforded more opportunity for self-generated learning by students. In summarizing their results, Hadley and Sheingold (1993) noted that the achievements of these teachers appeared to be the result of a combination of factors,

namely, the teachers' own motivation and commitment, peers support for their efforts and access to technology. Multiple profiles of accomplishment emerged, suggesting that "integration of computers into classrooms is a local phenomenon that is highly influenced by the particular context" (p. 299) despite being influenced by the same key factors. The implication seemed to be that there is no simple formula for computer integration and that typically it may require five to six years for a teacher to adapt to teaching with computers.

In Ghana a study was conducted by Mereku, Yidana, Hordzi, TeteMensah and Williams (2009) on Ghana's Report on ICT. Five institutions which were representative of the nation's pre-tertiary and tertiary educational institutions were purposively selected for the study. The study utilized quantitative and qualitative methodology for data collection. The study made use of structured questionnaire and interview schedules for students, 75 educators, and school administrators. The study revealed that, availability of ICT syllabuses/manual, ICT teachers who are willing to provide educators and learners with training and availability of computers and computer laboratories that can be accessed periodically are some of the factors that encourage the usage of ICT in tertiary institutions. In Mekong Delta, Vietnam a study was conducted by Mai and Hong (2014) on factors affecting secondary school English teachers' adoption of technologies in Southwest Vietnam. The study aimed to seek rich descriptions of the current environment of ICT integration and teaching practices accompanying it in English Language Teaching (ELT) at the secondary level; thus, a qualitative research design was used. The main data collection methods were open-ended questionnaire and semi structured interviews in English. Different sources of information and various types of data collection methods were used to minimize the

biases that might occur in qualitative research. Fifty English teachers from secondary schools in Can Though and Dong Tap agreed to participate in the research. The open-ended questionnaire was adapted from a number of previous studies in the related area of ICT in teaching. The findings of this study indicate that external factors have a significant impact on teachers‘ uptake and integration of ICT in their classrooms. The first influential factor refers to ICT availability and accessibility.

In addition, technical support is also necessary. The teachers in these provinces are also influenced by their colleagues‘ activities. The school culture motivates or inhibits the teachers‘ willingness to use ICT. The teachers indicate that they expect more encouragement from their colleagues in their 76 uptake of ICT. Internal factors are more influential in enabling teachers‘ ICT adoption and implementation in ELT. Their beliefs about the positive effects and benefits of ICT on their instruction and their students‘ performance motivate them to adopt and integrate ICT in their teaching. In addition, their personal interests contribute to motivating them to use more ICT in class.

2.14 Factors that Influence the use of ICT Tools in the Teaching of Social Studies

Several research studies have shown the value of information and communication technology in the context of teaching and learning to be an important way to support teaching and learning. While many educators are not using new technologies as educational resources, some are innovatively incorporating information and communication systems into their teaching. There are a number of factors which encourage these teachers to use information and communication technologies in the teaching and learning environment (Cubukcuoglu, 2013). Teachers will continue to pursue the mission of learning beyond the walls of the classroom with the aid of ICT. Students and teachers will communicate outside the classroom and outside the curriculum (Loveless and Ellis, 2001). Using ICT could help teachers accomplish several educational goals and promote teaching and learning in and out of the classroom. Most educators, however, who are many teachers who are used to traditional teaching methods and do not want to change their teaching strategies may not believe in the benefits of ICT in education. Moreover, as a result of many other factors, new technologies may not be integrated into the teaching environment by specific subject teachers. On the other hand, teachers in many countries attempt to make innovative use of these technologies since they believe in their benefits and positive effect on student learning or for other reasons there appears to be numerous factors that influence teachers‘ use of ICT tools. The encouraging factors that influence teachers‘ innovative use of technology in the teaching of their subject can be divided into two sub-categories, namely, school factors and teacher factors.

2.14.1 School factors

These factors are related to the conditions and facilities provided to teachers that facilitate the use of ICT in teaching (Veen, 1993). Many of these considerations occur (Scrimshaw, 2004). For example, teachers believe they would be encouraged to integrate ICT into their teaching if they had their own laptop and easy access to computers (Scrimshaw, 2004). Cox, Cox and Preston (1999) it has also been noted that educators believe that having their own computers is one of the positive factors affecting the perceived ease of use of ICT. Abdullah, Abidin, Luan, Majid, and Atan (2006) proposed that offering a desktop, screen, and technology programs to educators will empower learners as well as teachers in the teaching and learning phase. When educators have convenient access to computers, they may have enough time to prepare content, search the internet, and/or test the tools they need. In fact, educators may use ICT better if they have the ability to use high-quality tools and have full access to hardware and software (Forgasz, 2006; Scrimshaw, 2004).One of the factors that prevent teachers‘ use of ICT, namely, technical problems and inadequate technical support, demonstrates that providing high level technical support whenever needed would enable teachers to use ICT (Forgasz, 2006; Lim and Khine, 2006; Scrimshaw, 2004; Yilmaz, 2011; Assan & Thomas, 2012). In addition, it is important to have easy access to the available technology rooms and equipment (Forgasz, 2006; Scrimshaw, 2004).

Adequate learning on the use of ICT resources in teaching is the other most important factor which promotes the use of software by educators (Scrimshaw 2004). The learning will include not only basic skills in technology, but also education to develop the use of software in pedagogy. This type of training will help teachers feel confident and competent when they use ICT at the right time.

Because if teachers at any time had the opportunity to access these tools and rooms, they would be more keen to integrate them into their teaching (Scrimshaw, 2004). Moreover, when training offers real life examples, it will help trainees to understand the best way and time to use ICT in teaching and learning. It is also discovered that commerce educators believe that professional support in teaching with ICT is also an important issue (Assan & Thomas, 2012). Teachers have claimed that providing "full school guidelines on curriculum-wide use of ICT" is one of the enablers for the successful use of ICT in the classroom (Scrimshaw 2004, p.9). Enablers for educators will be the positive attitude of the principal towards the use of ICT in teaching and learning and the school policy in this topic (Forgasz, 2006; Veen, 1993). Ottenbreit-Leftwich, in Ertmer, Ottenbreit-Leftwich, Sadik, Sendurur and Sendurur (2012) research, teachers mentioned that the support from the administrators is one of the most influential enablers in integrating technology. It could be argued that the enablers mentioned above are all interrelated with this one. This is because without a school-wide ICT policy, there would not be quality technical support, effective timetabling of ICT rooms and/or equipment, access to ICT resources, or training on the use of ICT in subject teaching.

2.14.2 Teacher factors

The factors that allow teachers to use ICT have to do with their own beliefs and abilities (Veen, 1993), which is why they are identified as personal factors. Because they are intrinsic to teachers, they may be more effective than school factors in enabling the use of ICT in teaching and learning. Some of the factors affecting the use of ICT for teaching and learning are "Attitude of teachers, priorities of teaching, computer skills and preferences of teaching" (Bakar, 2007,

p. 29). The trust of educators in the use of ICT, knowledge, ability, encouragement, and the perceived utility of ICT in teaching and learning are some other significant facilitators in the use of education technology (Cox et al., 1999; ChanLin, Hong, Chang & Chu, 2006; Mumtaz, 2000). Drent and Meelissen (2008) discovered that having strong ICT competence is an important factor in innovatively using ICT in teaching, although not more important than other factors. Another big supporting element is the degree of pedagogical expertise of educators, that is, if teachers are able to properly implement ICT and know exactly how they are going to teach using ICT (Veen, 1993). Knowing how and when to use technology in teaching is, of course, related to proper training in the subject. Ertmer *et al*. (2012) have pointed out that the behaviors, opinions of the educators themselves beliefs and knowledge and skills were mentioned as the biggest enablers in integrating technology.

The last but no less important personal empowering element is the consciousness of educators in their instruction about the educational benefits of using ICT. When an educator becomes conscious of a new method or tool's positive effects and advantages for the learners, he / she may become more likely to use it in teaching. The use of ICT in the teaching and learning setting has been shown to inspire learners (Abdullah et al., 2006). In addition, some teachers are of the opinion that technology use is useful for lesson preparation as well as for actual teaching (Cox et al., 1999). Being aware of all these benefits may thus promote the use of ICT in teaching.

As stated in many research studies, various factors enable teachers to use ICT in their teaching. Individual considerations should be considered more important than the other ones, though, since the introduction of new technology relies on the optimistic

attitudes and beliefs of the educators about its usefulness. Some of the enablers promoting the effective use of ICT in education as indicated by teachers from a variety of countries were described here. Several researchers (Hadley and Sheingold, 1992; Sheingold and Hadley, 1993) utilized survey data to identify influences among teachers who have incorporated ICT to some degree into their teaching practices. Sheingold and Hadley (1993) published a national study of educators in the United States from fourth through twelfth grade. The three main factors involved in the success of these' accomplished' teachers success were: teacher motivation and commitment to their students‘ learning and to their own development as teachers, the support they experienced in their schools and access to sufficient quantities of technology (Mumtaz, 2000).

A study by Goyal, Purohit and Bhagat (2010) also revealed that, ease of availability of ICT, upgrading teacher‘s ICT skills, convenience (time and place), time to upload and download (speed), improving communication between students and teachers, reliability of ICT, data security, availability of specialized IT teachers, availability of educational software, improving the presentation of the subject, providing encouragement to teachers to use technology in their teaching more often, ease of navigation of the course through an ICT device, financial readiness of the institute to support ICT and learners with training are other factors that encourage the use of ICT.

2.15 Challenges Social Studies Teachers’ face on the Use of ICT Tools in Teaching of Social Studies

A challenge is anything that pushes back the progress or completion of any fixed target or objective. Therefore, it means that removing one or more of these challenges or barriers, such as those in ICT integration, might help to advance the integration

process significantly. Classroom ICT incorporation is the use of technology to help, develop and grow students in the classroom is the application of technology to assist, enhance, and extend student knowledge (Omwenga, 2004). Using ICT in education means more than simply teaching learners how to use computers. Technology is a means for improving education and not an end in itself. Olufemi, Olukayode and Oladele (2013) conducted a study to investigate the Challenges of Information and Communication Technology (ICT) in secondary schools in Ondo State. It sought to find out the level of access to ICT among secondary school teachers and students. Also, the study investigated the level of utilization of ICT for instructional purposes and the attitude of teachers and students towards ICT utilization of ICT in secondary schools. The study adopted the descriptive survey design. The sample for the study consisted of 450 teachers randomly selected from two hundred and ninety- six (296) secondary schools in the eighteen Local Government Areas of Ondo State. A combination of multistage, stratified and simple random sampling technique was used in selecting the sample. Research instrument employed was the questionnaire. The data obtained were analyzed using frequency counts, percentages, mean and bar chart. The result showed that the majority of the respondents agreed on the whole that teacher‘s lack of ICT skills, lack of confidence in using ICT, low knowledge on how to use ICT equipment, unavailability of infrastructure, lack of knowledge of how to evaluate the use and the role played by ICT in teaching and learning and insufficient knowledge of appropriate software are factors hindering the effective utilization of ICT facilities for instructional purposes.

Adebi-Caesar (2012) conducted a descriptive study on assessment of ICT situation in Senior High Schools in the Lower Manya Krobo District. A total sample of 154 teachers took part in the studies. The four (4) schools were considered as strata. The main instrument used for the study was a questionnaire Proportional allocation was then used in calculating the number of respondents to be selected from each school. With the help of the headmaster and his assistants the teachers of all the schools used in the study were called to their staff common room and with a simple random sampling the questionnaire was administered. Teachers were questioned on the barriers that hindered them from integrating ICT in their teaching. The study revealed that 128 (12.4%) responses each respectively went in favor of lack of knowledge about computers and the lack of training as the reasons that is preventing the respondents from using or introducing the use of ICTs in their teaching and learning. 126 (12.2% and 102 (9.9%) of the response also went in favor of little previous experience with computers and their age respectively as the factors restraining respondents from using ICTs to teach. 101 (9.8%) and 98 (9.5%) responses respectively went to the fear in the use of the ICTs, and the lack of confidence, as the inhibiting factors in the use of ICTs in the classrooms. 83 (81%) and 77 (75%) responses went in favor of lack of time to use the computers, and not being sure of how useful computers can be in the teaching and learning process, as the factors that hinder the use of ICT in the ,classroom. Another 71 (69%) and 68 (66%) of the responses went to _no support if something goes wrong with the computer, and their headmasters or management not being concern about whether computers are used to teach or not as some of the inhibiting factors. The study revealed that three (3) major barriers prevented the use of ICTs in Senior High Schools classrooms. These were,

the lack of training in the usage of the ICTs, lack of knowledge about the computers or the ICTs and finally the little or no previous experience in the use of the ICTs.

A study was conducted by Afful-Dadzie (2010) on the use of ICT by students and teachers in senior high schools in the Sekondi-Takoradi Metropolis. The study employed a descriptive survey as the research design. The data collection instrument for the study was a questionnaire for students and teachers and an observation checklist. Population for the study was derived from students and teachers of all the eleven public Senior High Schools in the Sekondi-Takoradi Metropolis. Sampling selection of the teachers and student used the lottery method. With regard to the barriers to the use of ICT in the senior high schools in the catchment area, the teachers agreed that the integration of ICT is associated with uncertainty. They did not know how to incorporate ICT into the normal teaching process. The study also revealed that teacher do not want to change their habit of teaching in the traditional way to the use of ICT as they agreed that force of habit is a hindrance to the interrogation of ICT. Moreover, the study revealed that inadequate support network is a barrier to the integration of ICT. Inadequate follow- up support was also seen to be a hindrance to the integration of ICT in the teaching and learning process.

A study conducted by Organization for Economic Cooperation Development (OECD) in 2009 confirmed that there are a number of barriers or challenges that inhibit the use of ICT in education. These barriers included an inconsistent number of computers to students, a deficit in maintenance and technical assistance and finally, a lack of computer skills and/or knowledge among teachers (OECD, 2009). Jenson, Lewis and Smith (2002) classified these barriers as: limited equipment, inadequate skills, minimal support, time constraints and lack of interest or knowledge by teachers.

In a research report conducted by British Educational Communications and Technology Agency (BECTA) in 2004, a number of other important barriers were identified. These were: lack of confidence, accessibility, lack of time, fear of change, poor appreciation of the benefits of ICT and age. Ertmer (1999) concurs with Schoepp (2005), asserting that if teachers are aware of and understand such barriers, they can initiate strategies to overcome them. Although valuable lessons may be learned from best practices around the world, there is no one formula for determining the optimal level of ICT integration in the educational system. Significant challenges that policymakers and planners, educators, education administrators, and other stakeholders need to consider include educational policy and planning, infrastructure, language and content, capacity building, and financing.

Research has classified these barriers in different ways. Several studies have divided the barriers into two categories: extrinsic and intrinsic. However, what was meant by extrinsic and intrinsic differed among studies. In one such study, Ertmer (1999) referred to extrinsic barriers as first order barriers citing as examples: lack of time, support, resources and training. She referred to intrinsic barriers as second order barriers, citing as examples: attitudes, beliefs, practices and resistance to change. Balanskat *et al.* (2006) classified barriers as _micro level' (teacher attitude) and _meso level' (institutional). He added a third category called _macro level', to account for the wider educational system. Meanwhile, Pelgrum (2001) identified material barriers as a lack of real or physical equipment and non-material barriers as somewhat intangible entities such as lack of knowledge, confidence or time. The challenges that confront the successful integration of ICT into education will be looked at from two (2) major angles. This approach which was adopted from what the British Educational

Communications and Technology Agency (BECTA) used in 2003 will firstly look at the barriers from the teachers‘ perspective. The second will consider the barriers that confront the school itself.

2.16 Teacher Related Barrier

The researcher is of the view that the teacher (s) is/are the principal actors or stakeholders in the learning process. This belief of the researcher is affirmed by the view of Baylor and Ritchies (2002) who posited that teacher related issues were crucial in determining ICT use in the classroom. Again, Gressard and Loyd (1985) asserted that teacher‘s attitude towards ICT is one of the key factors which determine successful integration, while Jegede (2008) recognizes the teacher as a key instigator in fostering ICT integration in education. From the above, it is clear that the teacher is one key determinant factor among the other factors in the integration of ICT. It therefore implies from the above that the barriers of integration in relation to teachers can have a negative impact on the whole integration process. The following sessions will look at some of the teacher related challenges or barriers.

2.16.1 Lack of knowledge or competence

According to Bingimlas (2009) teacher competence refers primarily to the ability to integrate ICT into pedagogical practice. Lack of knowledge/competence is regarded as a significant teacher related barrier to ICT integration. A teacher‘s lack of knowledge serves as a considerable challenge to the use of computers in teaching methods and practices. Tezci (2009) posits that if teachers have a high level of ICT knowledge, then there will be a higher level of ICT use in education. These barriers according to some researchers vary from country to country.

Pelgrum (2001) found that lack of knowledge/competence in technology, among teachers in developing nations, is the primary obstacle to the uptake of ICT in education.

2.16.2 Lack of confidence

Numerous studies carried out posit that the lack of confidence prevents teachers from using ICTs. According to a BECTA Reports in 2004, many teachers who are unskilled in ICT are not prepared to use them in the classroom or in front of students who might probably know more than them. This lack of confidence is further deepened with the expectation of students on the competence of the teacher in the use of ICTs. This is so because students are of the view that their teachers know more than them, and with this at the back of the mind of the teacher if the teacher lacks the requisite knowledge about ICTs, the teacher will not be willing to go and disgrace himself before the students. .

The lack of confidence in the use of ICTs is in most instances accounted for by the inconsistency between training and usage. This is so because most teachers even if they have received training in the use of ICTs can still fail to integrate it into teaching. BECTA report 2004 says that the lack of confidence is linked to other barriers affecting the use of ICT in education. The report mentioned the fear of ICT as a factor compromise the level of confidence. Other factors that were mentioned included the lack of technical assistance which can lead to low confidence levels, lack of competence and the quality of training received.

According to Jegede, Dibu-Ojerinde and Llori (2007) as teachers become more appreciative of the use of ICTs as a pedagogical aid, attitudes and interest become positive. The rationale therefore, is that increased interest fosters commitment to

honing skills and thereby boosting competence levels. Beggs (2000) posits that fear of failure is a possible cause of lack of confidence whereas Balanskat et al (2006) said the limitation in the knowledge base of the teacher in ICTs use make them feel anxious about using it and thus not confidence to use it in teaching. Some researchers are also of the view that the lack of confidence and experience with the use of technology influences the motivation of teachers in the use of ICTs. Cox et al (1999) found that teachers who have confidence in using ICT, identify that technologies are helpful in their teaching and personal work and that they need to use them more frequently. From the above it can be concluded that when most of the barriers to the use of ICTs in education is removed many of the problems associated with lack of confidence will be resolved.

2.16.3 Fear

Computer anxiety or fear is a key barrier, limiting or preventing the use of ICT by teachers. Underlying these anxieties are a fear of humiliation when using computers and a fear of losing professional status through the downgrading of traditional teaching skills. According to a BECTAs 2004 Report, teachers who admitted to a lack of confidence ascribe this lack of confidence primarily to fear. According to several reports some teachers have the fear that computers might challenge or compromise their vocation by downgrading their role. The researcher is of the opinion that if teachers are trained in ICT and ICT integration, they should realize, that rather than downgrading pedagogical skills, ICT aims to enhance those skills, in the same way it aims to enhance the learning process and skills acquisition

2.16.4 Lack of training

A full and complete integration of the use ICT in education requires high quality frequent training and professional development. If this training is not provided, then attempts at integration will inevitably be unsuccessful. This is significant, as according to most researchers. Another barrier that is frequently cited, is the lack of effective training. A study by Pelgrum in 2001 revealed that there were not enough training opportunities for teachers in the use of ICTs in the classroom. The training of teachers in the integration of ICT in the learning and teaching process is a difficult one. This is so because it involves a number of complex factors in order to render the training effective. These complex factors include finding the time for training, training in pedagogy, skills training and the use of ICT in the teacher‘s initial training (Bingimlas 2009).

BECTA (2004) concurs, asserting that training is particularly complex, because it is important to consider several components to ensure the effectiveness of the training. A similar study conducted by Cox et al (1999) argues that ICT training for teachers needs to incorporate pedagogical aspects. This study concluded that when teachers received basic ICT training without considering the pedagogical aspects of ICT, they still did not know how to use ICT in class. Schoepp (2005) maintains that if new technology is going to be integrated into education, teachers should receive training on how to use the specific ICTs, while Trotter (1999) concludes that training in ICT integration must be preceded by and supplemented with basic skills training. Research by Gomes (2005) also concluded that lack of training in digital literacy, lack of pedagogic and didactic training in how to use ICT in the classroom and lack of training concerning the use of technologies in specific subject areas, were obstacles to the use of new technologies in classroom practice.

Cox *et al*. (1999) again assert that if teachers are to be convinced of the value in using ICT in their teaching, their training should focus on pedagogical issues. This in the view of the researcher is due to the fact that, even after teachers had attended professional development courses in ICT, they still did not know how to effectively use ICT in their classrooms. This was because too much emphasis was placed on acquiring technical ICT skills during training, as opposed to skills in how to incorporate ICT into the curriculum and some studies assert that attention must be given to both skills training and pedagogical training (Becta 2004; Schoepp, 2005; Snoeyink and Ertmer, 2001). According to Newhouse (2002), some training is still needed for teachers to develop appropriate skills, knowledge and attitudes, regarding the effective use of computers to support learning by their students. He argued that this also requires continuing professional development, to maintain these appropriate skills and knowledge.

According to (Osborne and Hennessy 2003) when there are new tools and approaches in education, teacher training is essential if they are to integrate them into their teaching. In conclusion, the researcher is of the opinion that enough training can address some of the barriers in the integration of the use of ICTs in the teaching and learning process. This is because acquiring the necessary skills will enhance their knowledge base and competence and by extension the level of confidence. The result of this is that it would in the long run reduce the fear of ICT and the anxieties related to student expectations and perceptions.

2.16.5 Extent of previous ICT experience

Poor previous ICT experience among teachers can clearly be regarded as a very real barrier to ICT integration in the classroom. Drent and Meelissen (2008) posit

that solid experience in the use of ICT and the changes related to ICT, support the development of a learner centered pedagogical practice, while Becker (1994a) views substantial previous computer use by teachers, as one of the key determinants, in his classification of teachers, as either _exemplary computer-using‘ or _non-exemplary computer-using.

2.16.6 Difficulty in changing teaching method (Pedagogy)

Teachers have to accept that the widespread use of ICT in schools is having an impact on teaching methods and requires a significant rethinking of approach. Beckar (2000) describes two main teaching methods and their effects on the ways in which ICT is used in lessons. Traditional transmission institution assumes that students will learn through teacher explanation or reading from texts. Skills are learnt through practicing skill in a sequence prescribed by the teacher. Constructivist institutions assume that understanding comes from relating new ideas to the learners‘ prior beliefs skills acquisition comes in as unstructured way as new skills are used as required to solve practical problems.

In conclusion one could deduce that using ICT in lessons, the constructivist approach is more likely to lead to successful outcomes. Furthermore, teachers with the most constructivist philosophies tend to use computers more often and in a more challenging way both in classroom and as users themselves.

2.16.7 Age

The researcher‘s personal observation has it that the age of an individual is a factor in the person‘s quest to adapt to changes, more especially in the areas of technology. It is against this backdrop that this literature is being reviewed to find out the view of other researchers. Kumar, Rose and D‘SIiva (2008) posited in his

study with some teachers that age is a significant factor to the use of ICT. The researcher concurs with this but believes that the age factor in relation to the use of ICTs is not only peculiar to teachers in the classroom but also permeates all spheres of life.

Young (2000) asserts that younger and less experienced teachers use computers more, because they are more likely to be computer fluent, had more technologically rich teacher training and are less likely to be limited by previous habits, perceptions or attitudes, than older teachers. Lee (1997) points out that many older teachers have not had any computer education when training and as a result are in need of training to allow them to make use of computers in their work. Cavas, Cavas, Karaoglan and Kisla (2009) revealed that there is a relationship between teacher‘s age and their computer attitudes. Another study by Korte and Husing (2007) conclude that younger teachers appear to be less sceptical about the benefits of ICT in learning. A report by the European Commission in 2002 found that age is a factor in the use of computers and the internet, arguing that the percentage of teachers using computers falls as their age increases, although the report acknowledged that the importance of this factor is declining.

Bradley and Russell (1997) point out that, although computer anxiety may increase with age, this does not mean that training or professional development should be specifically targeted at older teachers. They strongly dispute the notion that because computer anxiety may increase with age, younger teachers are unlikely to need training in ICT. Despite this, a substantial body of research

literature strongly argues that age has no bearing on the use of ICT by teachers (Al Senaidi, Lin & Poirot 2009; Lau & Sim 2008).

2.16.8 Institution Related Barriers

The environment or conditions prevailing in the various institutions or schools can also be a factor that will inhibit the integration of ICT into the learning and teaching process. These conditions can be varied depending on where the school is located and the class or category of the school. Some of these include but not limited to the following: technical problems and shortage of computers in laboratory, lack of detailed planned into how ICT can be used to enhance the teaching and learning, timetable difficulties, willingness of school authorities to provide the needed funds when the need arises

2.17 Technical problems and Shortage of Computers in Laboratory (ICT Infrastructure in Place)

It is important to acknowledge that ICT can have technical problems and contingency planning is necessary to ensure alternative strategies are in place. Where the infrastructure and the platform for the application are unreliable, the output may be affected and this can adversely affect student motivation. As computers are becoming more sophisticated and the range of software used by schools continues it increase, the schools must recognize the need to employ more and highly qualified technical staff. However, with pleasure on budgets and competition from the commercial sector for the best staff, it is becoming increasingly difficult for schools to attract and retain technical staff with the appropriate skills and experience.

2.17.1 Lack of detailed planning into how ICT could be used to enhance the teaching and learning process

Much of the research highlights the need to plan carefully the use of ICT in lessons. Sutherland (2004) sum this up as, –ICT alone does not enhance learning. How ICT is incorporated into learning activities is what is important". Abbott, Lachs and Williams (2001) also stress the importance of detailed lesson planning when using ICT and that, students must be encouraged to understand the process involved rather than simply focusing on the output. Some teachers may use ICT as a way of encouraging independent learning skill needs to be planned and supervised with the teacher directing the student's activities and outputs ICT though is an effective tool in the hands of an effective teacher, and not a panacea in its own right. It would seem that prerequisite for success is the subject knowledge of the teacher and his ability to weave the use of ICT into the existing curriculum. Becta (2001) suggested that success comes when teachers use applications that open up new ways of working. It acknowledges that this involves planning and imagination, and the result will be –spectacular".

2.17.2 Timetable difficulties

Incorporating ICT across curriculum requires careful timetabling and corporation among department. Sutherland, Armstrong, Barnes, Brawn, Breeze, Matthewman, Olivero, Taylor, Triggs, Wishart and John (2004) point out that in Science department; it may not be possible to move practical classes to ICT because of health and safety consideration or site computers in Science laboratory due to space constraints. On other subjects, the time ICT suites are available may not suit the schemes of work planned by the teacher's. Hence much more cross-curricular and departmental planning is required than most schools do in the past.

2.18 Summary

The literature reviewed depicts that ICT has undisputable prospective, to be prominent in altering teaching and learning approaches. Again, disposal of ICT facilities leads to the effective utilization by both teachers and student in the teaching learning process. The review also showed that teachers use ICT facilities for preparing teaching learning materials, practical demonstration, and lesson notes and among others. Furthermore, teachers‘ perception is seen to be influential on the utilization of ICT facilities. Some of the perceived benefits of using ICT facilities include giving to wider learning content and resources and allowing students to become more motivated, more active and independent, and more attentive in teaching learning process. Furthermore, the encouraging factors that influence teachers‘ innovative use of ICT facilities in the teaching of their subject can be divided into two sub-categories, namely, school factors and teacher factors. Finally, the review has examined a number of different barriers that may prevent the integration of ICT into teaching and learning processes. These barriers may be teacher based, school based or indeed a combination of both. Understanding these barriers and how they impact on teacher use of ICT can assist educators in deciding how to tackle them. These were the issues that were of interest

CHAPTER THREE

METHODOLOGY

3.0 Overview

This chapter consist of the methodology adopted for the study, which includes the study design, the population, how the population was attained, and the sampling and data collection procedure, employed by the researcher. It also described how data was analyzed.

3.1 Research Design

A research design is a plan, blue print or idea for obtaining responses to the questions being studied and for managing and controlling some difficulties that may be encounted during the research process. The purpose of research design is normally to be able to develop an appropriate research pattern to meet the unique requirement of the study (Polit & Beck 2004). Polit and Beck (2004) and Wood and Haber (1998) suggest that an overarching criterion must direct the selection of a good research design, the design must offer the best possible job of presenting trustworthy answers to the research question. To achieve the research objectives and to address the research problem, the research design adopted for the study was descriptive survey. The descriptive survey is an attempt to gather information from members of a population to assess the population‘s current status in relation to one or more variables (Gary, 2004). The importance of the descriptive survey to research in the field of education cannot be underestimated and has been addressed by scholars' such as Fraenkel and Wallen (2003). These scholars conclude on the view that descriptive survey approach offers a researcher the opportunity to gain valuable insight into the current status of a phenomenon with respect to factors or circumstances in a given

situation. Sincich (1993) stresses that descriptive survey approach is useful for examining a range of educational problems including perceptions evaluation, demographic information, behaviours, procedures and conditions. This gives an implication that descriptive information is mostly gathered via questionnaire delivery, interview or through observations.

Sincich's (1993) share's with Akinboye opinion in finding out that a descriptive survey research is done if researchers begin from observations and strategically review of existing conditions for actual real-world events and attempt to explain existing scenes. While the researcher acknowledges that this design has its own drawbacks such as difficulty in getting respondents to answer questions in the reflective and honest manner. However it was considered the best of this research as it deals with understanding the interaction between variables and explaining their relationship (Gay 1992). Again Descriptive approach was considered for the study because such approach is conducive at producing ~~in~~formation on groups and phenomenon that already exist" (Fink, 2003, P.22). The descriptive survey was considered best for the study as it was the best approach for collecting information on large group of people, and a less expensive and a faster way of getting information on a census population. The aim of the researcher was to seek the current status of ICT integration in the teaching and learning of Social Studies in Senior High Schools in the New Juaben Municipality.

3.2 Population

Polit and Beck (2004; 290) defined a population as ~~t~~he entire aggregation of cases that meet a designated set of criteria. The target population is the aggregate of cases about which the researcher would like to make a generalization". The

population of the study consisted of all the Social Studies teachers of all public Senior High Schools in the New Juaben Municipality (North & South).

The schools are: Oyoko Methodist Senior High School, Pope John Senior High School, Ghana Senior High School, S.D.A Senior High School, Koforidua Technical Institute, Pentecost Senior High School, Koforidua Senior High Technical School, New Juaben Senior High Schools and Oti Boateng Senior High School. In all the nine public Senior High Schools, the Social Studies teachers were one hundred and seven (107). This constituted the accessible population of the study.

Table 1: Population for the study

Name of schools	**Number of Social Studies teachers**
Oyoko Methodist Senior High Schools	14
Pope John Senior High Schools	12
S.D.A Senior High Schools	10
Pentecost Senior High Schools	10
Oti Boateng Senior High Schools	13
Koforidua Senior High Technical School	12
New Juaben Senior High Schools	13
Koforidua Technical Institute	10
Ghana Senior High Schools	13
Total	**107**

Source: Field data 2019

3.3 Sample and Sampling Procedure

The study was a census and therefore the entire population, both teachers and the public Senior High Schools were used for the study. This is in agreement with Cohen et al. (2005) who proposed that for a population size of 107, the entire population can be used as a sample size for a survey study. Purposive sampling

was used to select the subjects for the study. This refers to the sampling technique where a particular group is expressly selected with a definite purpose based on the evidence available. In this technique, the researcher purposively selected the subjects who were relevant for the study. The important criterion of the choice was the knowledge of the respondents about the problem under investigation and hence their suitability for the study.

3.4 Research Instrument

Questionnaire was employed for the study. The researcher used questionnaire for the collection of the quantitative data. Polit and Beck (2004:729) define questionnaire as

―An instrument for gathering self-report information from respondents through self-administration of question in a paper-and-pencil format". The utilization of structured questionnaires enhances the objectivity and support statistical analysis. The respondents respond to series of pre-developed questions posed by the researcher.

Close ended types of questions were used. Each section contained ten (10) items to solicit information from the respondent. There were four (4) sections in the questionnaire. Section ‗A' contained items used to solicit information about the perception of social studies teacher towards the use of ICT in the teaching and learning of social studies, section ‗B' sought information about the availability of ICT facilities in the teaching and learning of social studies in S.H.S. Section ‗C' contained information on the usage if ICT tools in the teaching and learning of Social Studies, and Section ‗D' contained information on challenges social studies teachers face in using ICT's in teaching and learning of social studies.. Items on a four and two point likert type questionnaire were created for the accurate

representation of information. It has been noticed that the Likert scale is the most suitable form of an instrument for attitudes and perceptions assessment. This is because it provides respondents the opportunity to demonstrate their degree of approval with a series of statements on how respondents feel or think about a question (Bryman, 2004). It was the preferred instrument because it was easy to design, administer and score (Borg & Gall 1983).

The questionnaire was used because, in comparison to other methods, it has the following advantages, it has a high response rate, and it simplifies the data analysis steps. It setbacks can be seen in the areas where respondents may not have appropriate answers to the items as the process usually involves the use of structured items.

3.5 Validity and Reliability of the Instrument

The need to get the validity, reliability and appropriateness of the questionnaire instrument, a pilot test of the instrument was conducted in the Ofori Panin Senior High Schools and W.B.M Zion High School in the Abuakwa North Municipality. This District was chosen as it shared boundary with New Juaben Municipality and has similar characteristics of the study area. Brink (2000) explains reliability as the likelihood of obtaining the same results when the researcher measures the same variable more than once, or when more than one person measures the same variable. Reliability therefore relates to the measurement accuracy of the Data collection instrument. It can be said that an instrument is reliable if its measurement accurately reflects the true score of the attribute under investigation (Polit & Beck 2004). The significance of Pre-test has been discussed by various writers. Bryman (2004:159) asserts that it ~~–e~~nsures that the instrument as a whole functions well. In support Cohen, Marison and Morrison (2004:215-216) emphasized that there is the need for

–the researcher, to select appropriate levels for which to test the independent various in order for differences to be observed and to identify possible snags in connection with any aspect of the investigation". Based on these principles, respondents from these two Public Senior High Schools were used for the Pilot test. The pilot test results were of great help to the researcher as it revealed flaws in the wording of some of the questions that might have corrupted the responses. Responses to some of the items on the questionnaire and again suggestions from teachers helped to identify the items that were unclear. This made it possible for the researcher to reach the final items that was used for the study. The researcher calculated the Cronbach's coefficient Alpha scores. The Cronbach's coefficient Alpha was calculated to test the reliability of the questionnaire with specific reference to its internal consistency. It is the most commonly used statistic for evaluating internal consistency, and its scores communicate reliable statistics. It measure the extent to which the performance is a good indicator of performance in any other item in the same instrument (Brink, 1990). The reliability coefficient of all sections (A, B, C, D) were computed for the main questionnaire, the table (Table 2) indicates the Cronbach's coefficient Alpha scores of the various sections of the instrument.

Table 2: Cronbach's coefficient alpha

Section	Cronbach's coefficient Alpha	Number of items
A	0.74	10
B	0.86	10
C	0.81	10
D	0.82	10

Source: Field data 2019

3.6 Data Collection Procedure

An introductory letter was taken from the Social Studies department, University of

Education, Winneba. This letter was sent to the New Juaben Municipal Educational offices (both South and North) for permission to enable the researcher have access to the headmasters and mistresses and also the Social Studies teachers in within the Senior high Schools in the Municipality. Based on the letter of introduction, the researcher gained access to the various Senior High Schools, where Social Studies teachers in the various senior high schools were contacted mainly with mobile phone calls. Teachers were informed of the purpose of the study as well as their anonymity and confidentiality. The researcher visited these schools and distributed questionnaires and retrieved them on the next day from the respondents. Retrieval rate was 100%.

3.7 Data Analysis

Data were handled in three stages; first was the editing of questionnaires, secondly coding in the responses and last but not least the data analysis stage. The editing stage involved checking the questionnaires‘ inaccuracy after they were retrieved to determine if all the items were responded to. This stage also allowed the researcher to create responses categories and discard irrelevant responses as well. The third stage was the stage for data analysis. The quantitative data were transferred to the Statistical Product for Service Solution (SPSS spread sheet) and analyzed using descriptive statistics (mean, stand deviation, frequencies and percentages) and inferential statistics (independent sample test).

CHAPTER FOUR

FINDINGS AND DISCUSSION

4.0 Introduction

This chapter presents the findings and the discussion of the main data. One hundred and seven (107) questionnaires were distributed to the Social Studies teachers in the New Juaben Municipality (North and South) with 100% retrieval. The analysis was done using the 107 returned questionnaire. The data was analyzed based on the research questions.

4.1 Research Question 1

What are the perception of Social Studies teachers towards ICT integration in the teaching and learning of Social Studies in Senior High Schools in the New Juaben Municipality?

A four likert scale ranging from 1 to 4 was used to rank the perception of Social Studies teachers towards ICT integration in the teaching and learning of Social Studies in senior high schools in the New Juaben Municipality as follows: 1 – Strongly disagree, 2 – Disagree, 3 – Agree and 4 – Strongly Agree.

Table 3: perception of Social Studies teachers towards ICT integration in the teaching and learning of Social Studies

Item	Strongly Disagree Freq. (%)	Disagree Freq. (%)	Agree Freq. (%)	Strongly Agree Freq. (%)	Total
Make lessons more interesting	9(8.0)	6(5.6)	80(75.0)	12(11.4)	100
Make lessons more diverse	3(2.8)	12(11.4)	55(51.4)	37(34.4)	100
Improves lesson presentation	7(6.5)	5(4.7)	81(75.7)	14(13.1)	100
Motivate students in their learning	6(5.6)	7(6.5)	45(42.1)	49(45.8)	100
Gives the teacher more confidence in teaching	5(4.7)	21(19.6)	67(62.6)	14(13.1)	100
Enable the teacher to manage instructional time very well	9(8.0)	12(11.4)	77(72.6)	9(8.0)	100
Increase productivity in lesson preparation and lesson update	9(8.0)	4(4.0)	62(58)	32(30)	100
Help students to understand what they have been taught	10(9.3)	11(10.3)	66(61.7)	20(18.7)	100
Makes students attentive in class	11(10.3)	18(16.8)	78(72.9)	-	100
Makes lessons more concrete in class	12(11.4)	18(16.8)	55(51.4)	22(20.4)	100

Source: Field data 2019

Results from Table 3 indicate that out of a total of 107 respondents, 92 (86.4%) of the respondents agreed that, the integration of ICT in teaching and learning of Social Studies makes lesson more interesting while 15 (13.6%) of the respondents disagreed. Also, 92 (86.4%) agreed that ICT integration makes Social Studies lesson more diverse as 15(13.6%) disagreed. In addition, 95 respondents (88.8%) were in agreement of the view that, ICT integration improves lesson presentation in the Social Studies classroom, whereas 12 respondents (11.2%) disagreed. Results further reveal that majority of the respondents being 94 (87.9%) agreed

that integrating ICT in teaching and learning of Social Studies motivate students in their learning, but 13 (2.1%) disagreed.

More than three-quarters of the respondents (75.7%) agreed that ICT integration in teaching and learning of Social Studies, gives the teacher more confidence in teaching whilst 26 (24.3%) disagreed. There were 86 respondents (80.6%) who agreed that the integration of ICT in the teaching of Social Studies enables the teacher to manage instructional time very well, whereas 21 (19.4%) disagreed. When asked about ICT integration increasing productivity in lesson preparation and lesson update, 94 respondents (88%) agreed while 13 (12%) disagreed. Further analysis from Table 3 portrays that 86 of the respondents (80.4%) greed that integrating ICT in the teaching and learning of Social Studies help students to understand what they have been taught, but 21 (19.6%) disagreed.

On the issue of ICT integration in the teaching and learning of Social Studies making students attentive in class, majority of the respondents representing 78(72.9%) agreed while 29(27.1%) disagreed. With the issue of ICT making lessons more concrete and real for the learners, 77 (71.8%) agreed while 30 (28.2%) disagreed.

From the analysis of the data as depicted in Table 3, one could infer that the perception of teachers on ICT integration in the teaching and learning of Social Studies are numerous. A large percentage of respondents agreed that ICT arouses the interest of the learners during the teaching and learning process. This confirms a study conducted by Haddad and Drexler (2002). They found that the integration of ICT in teaching and learning, stimulates scholarly interest and offer a feeling of

satisfaction that will shift the students from the static part of beneficiaries of knowledge to the dynamic part of manufacturers of information.

These findings are also in line with the view of Perrotta (2013) that the perceived benefits of using technology included aspects such as the access that it gives to wider learning content and resources, and the fact that it allows students to become more motivated, more active and independent, and more attentive in their learning process. Again, these results were congruent to the view of Slouti and Barton (2007) who indicated that ICT can motivate students in their learning by bringing variety into the lessons and at the same time sustaining teachers own interest in teaching. Balanskat *et al* (2006) are of the view that ICT use, enables teachers to save time and to increase productivity in such activities as preparing and updating daily lessons and maintaining records.

This current study also affirmed the findings of Lai and Pratt (2004) who concluded that teachers considered ICT to be beneficial to their teaching but not in the area of methods of delivery and classroom practice. Significantly, the most obvious effect identified by teachers was not a change of philosophy or pedagogy but improved efficiency in the administration and management of teaching, including lesson preparation and presentation.

4.2 Research Question 2

What are the available ICT tools used in teaching and learning of Social Studies in the Senior High Schools in the New Juaben Municipality?

The main purpose of the research question was to assess whether ICT tools for teaching Social Studies in Senior High Schools in the New Juaben Municipality were available. In answering this question, data on the responses, to items on the available ICT tools used in teaching and learning of Social Studies in senior high schools in the New Juaben Municipality collected, were collated and analyzed using percentages. In doing this, the frequency counts of the number of respondents who gave different responses were computed. The findings are shown in Table 4.

Table 4: Available ICT tools used in teaching and learning of Social Studies

Item	Strongly Disagree Freq. (%)	Disagree Freq. (%)	Agree Freq. (%)	Strongly Agree Freq. (%)	Total
Computers	56(52.3)	28(26.2)	9(8.0)	14(13.5)	100
Internet systems e.g. Wi-Fi	74(69.2)	20(18.7)	7(6.5)	6(5.5)	100
Televisions	66(61.7)	18(16.9)	16(14.9)	7(6.5)	100
Photocopier	45(42.1)	50(46.7)	8(7.5)	4(3.7)	100
Educational software for teaching Social Studies	72(67.3)	20(18.7)	8(7.5)	7(6.5)	100
Overhead projectors	67(62.7)	20(18.7)	13(12.1)	7(6.5)	100
Printers	76(71.0)	17(15.9)	8(7.5)	6(5.6)	100
Digital video recorder	19(17.9)	69(64.8)	10(9.3)	9(8.0)	100
Android phones	24(22.4)	64(59.8)	2(1.9)	17(15.9)	100
Digital cameras	22(20.6)	66(7.3)	12(11.2)	7(6.5)	100

Source: Field data 2019

From Table 4, it can be seen that on the issue of availability of computers for teaching Social Studies, most of the respondents 84(78.5.0%) disagreed whereas 23(21.5%) agreed. Further analysis revealed that 94(87.9%) disagreed to the

availability of internet systems in teaching Social Studies while 13 (12.1%) agreed. Another issue was the availability of televisions in support of teaching Social Studies. Majority of the respondents, 84(78.6%) disagreed whereas 23(21.4%) agreed.

On the issue of availability of photocopier machine for printing materials to support students learning, 95(88.8%) of the respondents disagreed while 12(11.2%) agreed. In response to the statement: availability of educational software for teaching Social Studies, more than two-thirds of the respondents 92(86.0%) disagreed while 15(14.0%) agreed to the statement. Results from Table 4 further revealed that out of the total of 107 respondents selected for the study, 87(81.3%) disagreed with the availability of overhead projectors for teaching Social Studies, while 20(18.7%) agreed. 93(86.9%) disagreed with the availability of printers to support the teaching and learning of Social Studies while minority of them 14 (13.1%) agreed. Further analysis from Table 4 indicated that 88(82.7%) of the respondents disagreed on the issue of availability of digital video recorder as a facility in teaching Social Studies while 19(17.3%) disagreed. Most respondents, constituting 88(82.7%) disagreed with the availability of android phones as a facility in teaching Social Studies while 19 (17.3%) agreed. It is obvious from the analysis that majority of the respondents representing 88 (82.7%) disagreed with the availability of digital cameras to support the teaching and learning of Social Studies.

A look at Table 4 reveals that majority of the respondents are of the view that there are inadequate computers in the schools. A study by Adebi-Caesar (2012) revealed that 69 (97.9%) of the teachers in all the schools had insufficient computers and resources and only 2.1% agreed they had enough computers. Again when teachers were questioned whether they use computers in their school

90.7% responded they never made use of computers in their school and only 9.3% agreed they made use of them. This clearly reveals that all the schools used in the study do not have enough computers for Social Studies lessons. It is evident from Table 4 that most of the schools do not have internet facilities to support the teaching and learning of Social Studies. This is contrary to a study conducted by Ayebi-Arthur, Aidoo and Wilson (2009) on utilization of the Internet in senior high schools in the Cape Coast Metropolis in the Central Region of Ghana. It was revealed that majority of the teachers had access to the internet. Again, 70% of the students had access to the internet. This shows that majority of the students and teachers had no access to the internet. Majority of the respondents (78.6%) disagreed with the availability and the use of television in teaching Social Studies. This attested to the fact that most of the schools do not use televisions as aid in teaching Social Studies. Majority of the respondents disagreed with the availability of ICT facilities such as photocopier, educational software, overhead projectors, printers, digital video recorder and digital cameras for teaching Social Studies. This is contrary to a study conducted by Ocak and Akdemir (2008) in Turkey. Results demonstrated that improving the computer literacy of science teachers seemed to increase science teachers‘ computer use and consequently increase their integration of computer applications as an instructional tool. Internet, email and educational software, Compact Discs (CDs) were found to be used frequently in the classrooms.

4.3 Research Question 3

To what extent do teachers make use of ICT facilities in the teaching of Social Studies in the New Juaben Municipality?

The question sought to find out the extent teachers make use of ICT facilities in the teaching of Social Studies in the New Juaben Municipality. To get answers to this research question, the respondents were made to respond to 10 items. Data relating to the above research question are summarized in Table 5 in the form of frequency counts and percentages.

Table 5: The extent teachers make use of ICT facilities in the teaching of Social Studies

Item	Strongly Disagree Freq. (%)	Disagree Freq. (%)	Agree Freq. (%)	Strongly Agree Freq. (%)	Total
Practical demonstration	69(64.5)	21(19.7)	10(9.3)	7(6.5)	100
Teaching and learning materials	64(59.8)	22(21.1)	12(11.1)	9(8.0)	100
Drill and practice	56(52.0)	45(42.1)	4(4.0)	2(1.9)	100
Finding information	63(58.9)	30(28.1)	7(6.5)	7(6.5)	100
Keeping records of students' scores	9(8.0)	20(18.7)	50(46.7)	28(26.6)	100
Making presentations	63(58.9)	19(17.9)	8(7.5)	17(15.7)	100
To store vital data or information	18(16.8)	20(18.7)	61(57.0)	8(7.5)	100
For video presentation	72(67.3)	23(21.5)	5(4.7)	7(6.5)	100
For group presentation	74(69.1)	14(13.6)	10(9.3)	9(8.0)	100
For video and group presentation	64(59.8)	24(22.4)	8(7.5)	11(10.3)	100

Source: Field data 2019

As presented in Table 5, 90(84.2%) of the respondents disagreed with the use of

ICT to serve as practical demonstration in the teaching and learning of Social Studies while 17(15.8%) agreed. Moreover, while 86 (80.9%) of the respondents disagreed with the use of ICT as teaching and learning materials in teaching and learning of Social Studies, 21(19.1%) agreed. It is noticeable from Table 5 that concerning the issue of using ICT as a drill and practice in teaching Social Studies, majority of the respondents constituting 101(94.1%) disagreed while 6 (5.9%) agreed. Also, on the issue of using ICT to find information to improve teaching and learning, 93 (87.0%) of the respondents disagreed whilst 24(13.0%) agreed. On the issue of using ICT to keep records of students, 78(76.8%) agreed while 29(26.7%) disagreed.

Further analysis from Table 5 indicated that 82(78.8%) of the respondents disagreed on the issue of using ICT in teaching Social Studies through making presentation while 25(23.2%) agreed. On the issue of using ICT to store vital data or information in teaching and learning of Social Studies, majority of the respondents representing 69(64.5%) agreed while 38(35.5%) disagreed. The study further revealed that most of the respondents 95(88.8%) disagreed with the use of ICT as video presentation in the teaching and learning of Social Studies whilst 12(11.2) agreed. It is clear from Table 5 that, majority of the respondent representing 88(82.7%) disagreed with the use of ICT for group presentation in teaching and learning of Social Studies whereas 19(17.3%) agreed. It is also noticeable from the study that 88(82.7%) disagreed with video and audio lessons through the use of ICT while 19(17.3) disagreed.

It is clear from Table 5 that majority of the respondents disagreed that teachers use

ICT for practical demonstration in the teaching and learning of Social Studies. On the issue of using ICT as teaching and learning materials, drill and practice, for video presentation, group presentation and for video and audio lessons, majority of the respondents were on the view that they do not use ICT facilities for such purposes.

This is contrary to the argument purported by Fan and Ho (2012). According to them, the world is gradually being transformed into an informative and a smaller community with the help of ICTs. This transformation therefore requires the education sector to be able to integrate ICT into their daily endeavours to be able to help promote the quality of teaching and learning. This is evident in the recent rise in the use of ICTs in many educational institutions because of its significance in education. Osin (1998) also argues that the use of computers in classrooms provides key ingredients in teaching and learning that were missing from all previous tools that raised high expectations when introduced into the educational system. Computers have resulted in what he calls ‗individualized interactivity'', providing the opportunity for information to be given to students as well as adopting presentations to students' needs and preferences. UNESCO (2007) also claims that the use of ICT in education systems has the potential to improve the quality of education provision and to promote greater access by disadvantaged groups and communities.

4.4 Research Question 4

What are the challenges facing Social Studies teachers in integrating ICT in the teaching of Social Studies in the New Juaben Municipality?

The purpose of the research question was to identify the challenges Social Studies teachers faced in integrating ICT in the teaching of Social Studies. In answering this question, data were analysed and discussed using percentages. In doing this, the

frequency counts of the number of respondents who gave different responses were computed. The findings are shown in Table 6.

Table 6: Challenges facing Social Studies teachers in integrating ICT in the teaching of Social Studies in the New Juaben municipality

Item	Strongly Disagree Freq. (%)	Disagree Freq. (%)	Agree Freq. (%)	Strongly Agree Freq. (%)	Total
Low level of knowledge in the use of ICT	14(13.5)	9(8.0)	56(52.3)	28(26.6)	100
Limited time in using ICT facilities	74(69.2)	20(18.7)	7(6.5)	6(5.5)	100
Fear of making mistakes when using ICT facilities	70(65.4)	20(18.7)	12(11.2)	5(4.7)	100
Belief in the use of traditional method of teaching due to old age	8(7.5)	4(3.7)	50(46.7)	45(42.1)	100
Lack of confidence in the use of ICT	68(63.7)	18(16.8)	8(7.5)	14(13.0)	100
Insufficient ICT facilities	7(6.5)	23(21.8)	68(63.7)	9(8.0)	100
No technical support in using ICT facilities	6(5.6)	8(7.5)	17(15.9)	76(71.0)	100
Little experiences on the use of ICT facilities	10(9.3)	6(5.6)	69(64.6)	22(20.5)	100
No training on ICT integration on Social Studies lesson	12(11.2)	15(14.0)	30(28.3)	50(46.5)	100
No electricity in classrooms	70(65.9)	20(18.7)	10(9.3)	7(6.5)	100

Source: Field data 2019

From Table 6, it can be seen that on the issue of low level of knowledge in the use of ICT most of the respondents 84(78.5%) agreed whereas 23(21.5%) disagreed. Further analysis revealed that 94(87.9%) disagreed to the limited time in using ICT facilities as a challenge of integrating ICT in Social Studies lesson delivery while 13 (12.1%) agreed. Another issue was the fear of making mistakes when using ICT

facilities. Majority of the respondents, 90(84.1%) disagreed whereas 17(15.9%) agreed.

On the issue of belief in the use of traditional method of teaching due to old age, 95(88.8%) of the respondents agreed while 12(11.2%) disagreed. In response to the statement: lack of confidence in the use of ICT facilities, more than two-third of the respondents 86(80.4%) disagreed while 22(20.5%) agreed to the statement. Results from Table 6 further revealed that out of the total of 107 respondents selected for the study,

77(71.7%) agreed that there is insufficient ICT facilities while 30(28.3%) disagreed. 93(86.9%) agreed that there is no technical support in using ICT facilities while minority of them 14 (13.1%) disagreed. Further analysis from Table 6 indicated that 91(85.1%) of the respondents agreed on the issue of little experiences on the use of ICT facilities while 19(17.3%) disagreed. Most respondents, constituting 80(74.8%) agreed with the issue of no training on ICT integration on Social Studies while 27 (25.2%) disagreed. It is obvious from the analysis that majority of the respondents representing 90 (84.6%) disagreed with the issue of no electricity in classrooms whilst 17 (15.4%) agreed.

A look at Table 6 reveals that majority of the respondents are of the view that low level on knowledge in the use of ICT is a key challenge in integrating ICT in lesson delivery. This confirms Koehler *et al.* (2012) argument that insufficient technological knowledge and skills, unsupported pedagogical knowledge and skills have been captured as a crucial challenge to the integration and use of ICT for teaching and learning. This is supported by Snoeyink and Ertmer (2001). According to them, inadequate technological know-how is a major reason why

teachers and students are not using ICT. In an empirical study conducted in Scottish schools, Williams, Coles, Wilson, Richardson, and Tuson (2000), identified that insufficient skills in the use of databases and Microsoft excel was a major factor by some secondary school teachers and students. A study also conducted in Australia by Newhouse (2002), emphasized on the inadequate knowledge and skills by teachers and students to manipulate computers characterized the challenges faced by the use of ICT for teaching and learning.

It is evident from Table 6 that majority of the respondents disagreed with limited time in using ICT facilities. This is contrary to what Butzin (2001) purported. According to him teachers need more time to go through web pages and to identify pictures they need for multimedia assignment they give to students. Further analysis from the study indicated that 86.9% of the respondents were on the view that there is no technical support in the use of ICT facilities. This is supported by Rogers, Medina, Rivera, & Wiley (2005). According to them inadequate technical support has led to teachers and student not able to use different technological approaches in integrating ICT into teaching and learning.

Majority of the respondents (71.7%) agreed that there is insufficient ICT facilities. This is in corroboration with Becker, Ravitz, and Wong (1999). According to them inadequate resources arise when there is the need for ICT to be integrated into teaching and learning. These resources may include technology, access to the needed application and support from technical expert. This is supported by Karageorge (2005). According to him, inadequate technological resources include obsolete and insufficient computers, incompatible hardware and software. This

leads to little chance for teachers to include ICT into teaching and students into learning.

Majority of the respondents agreed that lack of training on ICT integration in teaching and learning Social Studies. In Africa, Alemneh & Hastings (2006) conducted an empirical study which suggests the lack of trained teachers who will impact into the intellect of students in secondary school as the major challenge that is faced with the use of ICT for teaching and learning. The same study also found out that trained teachers who were well equipped in the use of ICT for teaching and learning purposes preferred leaving the continent to the western world due to poor remuneration coupled with inadequate ICT infrastructure.

On the issue of belief in the use of traditional method of teaching, majority of the respondents agreed that it affect the integration of ICT in the teaching and learning of Social Studies. This is in corroboration with a study conducted in Australia by Newhouse (2002) According to Newhouse, teachers were not excited about the changes and integration of ICT into teaching and learning practices. Further analysis from Table 6 indicated that 91(85.1%) of the respondents agreed on the issue of little experiences on the use of ICT facilities. In the study of high schools in the United States of America, Snoeyink and Ertmer (2001), noted that inadequate pedagogical knowledge was a contributing factor to the challenges associated with the use of ICT for teaching and learning. In the same study, teachers made sure they acquired basic skills such as connecting to a network, surfing through applications, and simple word processing techniques before they engage in technology-related activities with their students and this they also found to be time consuming. This was justified by Hughes (2005), who argued that

teachers must poses the requisite technological skills to be able to integrate ICT in teaching.

CHAPTER FIVE

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

5.0 Overview

This chapter was the last chapter of the research. The chapter presented the summary, conclusion, and recommendations for the study.

5.1 Summary of the Study

The study was conducted to determine the integration of ICT in the teaching and learning of Social Studies in Senior High Schools in the New Juaben Municipality. The study was guided by four research questions. The study was a descriptive survey and had a population of one hundred and seven respondents. The study employed the census technique and therefore the entire one hundred and seven Social Studies Teachers' were used for the study. Questionnaire was developed to solicit for information from the respondents. Validity and reliability of the instrument was ensured by making the instrument available to experts and the supervisor for scrutiny and the instrument pilot tested in Ofori Panin Senior High Schools and W.B.M Senior High Schools in the Abuakwa North Municipality. The data gathered were analyzed using tables, frequencies, and percentages.

5.2 Summary of Major Findings

Based on the analysis undertaken, the following findings were made:

1. The integration of ICT in the teaching and learning of Social Studies makes lessons more interesting.
2. ICT makes teaching of Social Studies more diverse, as it gives room to include a number of activities from drill- and practice exercises to exploratory activities
3. ICT improves Social Studies lesson presentation.
4. Integrating ICT in the teaching and learning of Social Studies motivates students to learn.
5. ICT integration in the teaching and learning of Social Studies increase productivity in lesson preparation.
6. Availability of ICT tools like computers and internet system in the teaching and learning of Social Studies were found to be limited.
7. Teachers hardly made use of ICT facilities in the teaching and learning of Social Studies because of insufficient supply of ICT tools.
8. The study revealed that most Social Studies teachers have little knowledge in the use of ICT.
9. Most Social Studies teachers prefer using traditional method of teaching instead of ICT facilities.
10. Teachers have not been given adequate training in the use of ICT.

5.3 Conclusions

From the study, the following conclusions are drawn:

The findings confirm that, ICT inclusion in the teaching and learning of Social Studies makes lessons more interesting, makes lesson more diverse, improves lesson presentation and enable the teacher to manage instructional time very well. It can also be concluded that ICT integration helps students to understand what they have been taught, makes lesson more concrete and makes students attentive in class.

It is clear from the findings that ICT tools like computers, internet systems, educational software, printers and overhead projectors were found to be limited in the schools. The study also reveals that teachers hardly use ICT facilities because of the limitedness of the ICT tools.

The study revealed that challenges facing Social Studies teachers are enormous. These include: low level of knowledge in the use of the ICT, the use of traditional method of teaching, insufficient ICT facilities, no technical support in the use of ICT facilities and no training in the use of ICT.

5.3 Recommendations

Based on the findings and conclusions drawn from the study, the following recommendations are made:

1. Based on the findings it is incumbent on heads of the various schools in the New Juaben Municipality to encourage the teachers in their schools to make appropriate use of ICT facilities in the teaching and learning of Social Studies.
2. The Ministry of Education should make budgetary allocations annually to maintain, replace, and expand ICT facilities in the schools.

3. Heads of the schools in the Municipality should intermittently organize in-service education and training on the use of ICT for the Social Studies teachers in the schools.
4. Barriers that have and are still hindering the integration of ICT in the teaching and learning of Social Studies should be tackled by policy implementers. In this regard, as teachers who are unwilling to change from the traditional methods of teaching to using information and communication technologies, they should be encouraged by policy makers and sensitized from time to time to understand the good side of technology.

5.4 Suggestions for Future Research

This research highlighted the ICT integration in the teaching and learning of Social Studies in senior high schools in the new Juaben Municipality. Therefore further research should be conducted on the availability and usage of ICT facilities in teaching and learning in senior high school in other municipalities

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APPENDIX A

INTRODUCTORY LETTER

UNIVERSITY OF EDUCATION, WINNEBA
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7th August, 2020

7th August, 2019

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

LETTER OF INTRODUCTION: MR. MENSAH ERIC GYASI

We write to introduce to you Mr. Mensah Eric Gyasi to your outfit. He is a Master of Philosophy Social Studies student with index number 8180140004 from the above-named Department.

As part of the requirements for the award of Master of Philosophy in Social Studies Education, he is undertaking a research on the topic "*ICT Integration in the teaching and learning of Social Studies in Senior High Schools in the New Juaben Municipality.*"

We wish to assure you that any information provided would be treated confidential.

Thank you.

Yours faithfully,

MARGARET GANTIER NYALA (MRS.)
***FOR*: THE HEAD OF DEPARTMENT**