UNIVERSITY OF CAPE COAST

THE AVAILABILITY AND USE OF INFORMATION AND COMMUNICATION TECHNOLOGY RESOURCES FOR TEACHING SOCIAL STUDIES IN SELECTED SENIOR HIGH SCHOOLS IN AWUTU SENYA DISTRICT

FRANK AFFUL ENCHILL

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BY

FRANK AFFUL ENCHILL

Dissertation submitted to the College of Distance Education, University of Cape Coast, in partial fulfilment of the requirements for the award of Master of Education degree in Information Technology

MAY 2020

DECLARATION

Candidate's Declaration

I hereby declare that this dissertation is the result of my own original research and that no part of it has been presented for another degree in this University or elsewhere.

Candidate's Signature …….. Date ……

Name: Frank Afful Enchill

Supervisor's Declaration

I hereby declare that the preparation and presentation of the dissertation were supervised in accordance with the guidelines on supervision of dissertation laid down by the University of Cape Coast.

Supervisor's Signature ……. Date …….

Name: Dr. Valentina Arkorful

ABSTRACT

The objective of this study was to assess the availability and utilization of ICT resources in teaching of social studies. The descriptive research design was adopted for the study. A census technique was used for the fifty social studies teachers in Awutu Senya district. The study is underpinned by Bates Action model. The questionnaire was used to gather the requisite data for the study. The data were analysed through the computation of descriptive and inferential statistics such as frequencies, percentages, mean of mean distributions and independent sample t-test. The study among other things found out that ICT resources are available for teaching and learning social studies in the public senior high schools. Also, the study revealed that social studies teachers use ICT resources in teaching the subject. Again, the study showed that social studies teachers have positive perception towards the use of ICT facilities in the teaching of social studies. Based on the numerous benefits of the use of ICT resources to both teachers and students, it is recommended that barriers that hinder the integration of ICT resources in teaching 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.

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DEDICATION

To my wife: Marian and our children: Frank, Diane and Merry

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CHAPTER ONE

INTRODUCTION

Background to the Study

In Ghana, many Senior High Schools (SHSs) are embracing computerized systems but are failing to integrate computing in the normal day classroom teaching and learning process. Alesina (2010) posits that many educational institutions around the globe have made the efforts to computerize schools, but few have developed corresponding strategies to fully integrate its use as a pedagogical tool in the classroom. Hence, developing countries have the responsibility not to merely provide computers for schools, but also to foster a culture of acceptance amongst the end user of these tools. Unless teachers develop positive attitudes towards the technology, they may simply ignore them.

In his book "Oversold and Underused: Computers in Classroom", Cuban (2001) indicates that technology will always play a major role in the 21st century and more than ninety percent of jobs created now will require advanced technological training. He further explains that for students in this generation to compete for future jobs, they must acquire adaptive skills in the use of information and communication technology.

Information and Communication Technology (ICT) can be defined as a diverse set of technological tools and resources used to communicate, and to create, disseminate, store, and manage information (Victoria, 2002). ICT is used for education as well as in education. ICT for education means the development of ICT for teaching and learning purposes while ICT in

education involves the adoption of general components of ICT in practical use in teaching and learning processes (Voogt & Pelgrum, 2005; Watson, 2006). In the view of Acquah-Doughan (2015), the use of ICT is making dynamic changes in society. According to him, ICT use is influencing all aspects of life. The influences are felt more and more at schools. This is so because ICT provide both students and teachers more opportunities in adapting learning and teaching to individual needs. In a similar vein, Tinio (2002) indicated that the potentials of ICT are increasing access and improving relevance and quality of education.

The use of ICT is touted as a potential powerful enabling tool for educational change and reform (Acquah-Doughan, 2015). According to Acquah-Doughan (2015), ICT are used to expand access to education, strengthen the relevance of education and raise educational quality to make teaching and learning an active process connected to real life. In turn, Hakkarainen, Ilomaki, Lipponen, Muukkonen and Rahikainen (2010) observed that ICT is a transformational tool and its use in the school system is necessary to prepare students for the information society they will inherit.

The implementation of ICT in education is to transform the teaching and learning process from the traditional instructional teacher-centered endeavour to a learner-centered approach with active participation of the learner (Voogt, 2008; Voogt & Pelgrum, 2005; Voogt, 2010; Voogt, Knezek, Cox, Knezek & ten Brummelhuis, 2013). This brings to bare the emerging, contemporary and far reaching constructivist approach to effective teaching where the role of the teacher is now to organise the classroom and facilitate lessons by giving students more opportunities and control over learning.

Constructivism is based on the belief that learning occurs when students are actively involved in the process of knowledge construction upon their previous knowledge as opposed to passively receiving information. It is therefore paramount to make students the makers of meaning and knowledge. In the view of Voogt (2008), constructivism is based on the assumptions that knowledge is constructed from experience and learning is a personal interpretation of the real world, and learning is an active process in which meaning is developed on the basis of experience. The notion is that people learn better through the use of technology or multimedia compositions than through traditional methods of teaching (Cheng, Cheng & Chen, 2012; Eady, 2013).

Mishra and Koelher (2006) emphasises that ICT can be used to support the content and pedagogic knowledge of the teacher for effective educational practices in the classroom. Research has shown that the absence of efficient ICT development policies in most African countries has widened the information gap between the developed and the developing countries in the world (United Nations Development Programme Report, 2001).

There are some factors that influence teachers use of ICT in teaching. The factors influencing the use of ICT in the teaching and learning process have been identified by researchers. Rogers (2003) mentioned technological characteristics or attributes as factors that influence teachers' decision to use ICT. In a similar vein Stockdill (2012) also revealed user characteristics, content characteristics, technological considerations and organisational capacity as factors influencing ICT integration into teaching and learning. According to Chen (2008) and Li and Chai (2008), integrating ICT into

teaching and learning process is also influenced by organisational factors and teachers attitudes towards technology.

According to Acquah-Doughan (2015), the teaching of social studies can be improved by the use of ICT to compose, document and present issues. Producing reports using ICT tools in social studies topics is greatly motivational for students (Duah, 2018). According to Duah (2018), students enjoy adding graphics photographs, pictures and other information about a topic to reports they write on social studies topics. A whole range of graphical information, including diagrams, photographs and other pictures is readily available on the internet for teachers to use in their teaching.

The use of ICT in Ghanaian schools is generally increasing and fast growing. However, while there is a great deal of knowledge about how ICT are being used in high schools in developed countries, there is not much information on how ICT are being used by teachers and students in Ghanaian schools (Acquah-Doughan, 2015). There is also an assumption that there are wide gaps in the use of ICT between rural and urban high schools (Aduwa-Ogiegbaen & Iyamu, 2005). This study, therefore, aimed at assessing the availability and use of information and communication technology resources for teaching and learning social studies in selected Senior High Schools in Awutu Senya District.

Statement of the Problem

Resolutions have been made by policy makers concerning ICT to make teaching and learning easier (Barakabitze, 2019; Acquah-Doughan, 2015; Ghavifek, 2014). For instance, in Anamuah-Mensah Committee's Report (Government of Ghana, 2004) it was revealed that it is necessary for students

in the senior high schools system to be exposed to technology through the use of ICT starting from the junior high school and upward. The committee proposed that ICT should be fused or blended into the curriculum and should be used in the teaching and learning process.

Social studies is a discipline that has the goal of ensuring transformation of students and equipping them with competencies that are required for social participation and self-actualisation (Wu, 2017). The introduction of ICT in the teaching process has the ability to enhance quality of teaching and learning (Kashorda, Waema, Omosa & Kyalo, 2007). According to Ghavifekr (2016), Serah (2014) and Hennessy (2010), opportunities for realizing the benefits of using ICT in education face a number of challenges in the developing countries. Accessing ICT facilities for teaching and learning is a challenge facing most African countries (Acquah-Doughan, 2015).

The government of Ghana has been trying to provide teachers and students with free ICT resources to improve teaching and learning (Ahiatrogah & Barfi, 2016). Successive Ghanaian governments have made strides at establishing computer laboratories in Senior High Schools (SHSs) but, these efforts have been bedevilled with inadequate funding (Duah, 2018). Also, it is however sad to note that when you go round the Awutu Senya district, even though, social studies teachers are aware of the importance of ICT resources, some do not use them in their teaching processes. Students on the other hand, do not make use of ICT resources to learn (Boateng, 2015). This has resulted in poor preparation towards examinations and its resultant poor performances (Yeboah, 2014; Essel-Okyeahene, 2008).

Gaining an appreciation of social teachers' perception and perceived competence level in the use of ICT may provide useful insight into the future of technology integration, acceptance and usage in teaching and learning. Therefore, the present study sought to assess the availability and use of ICT resources for teaching and learning social studies in selected senior high schools in Awutu Senya district.

Objectives of the Study

The objective of the study is to assess the availability and use of ICT resources for teaching and learning social studies in Senior High Schools (SHSs).

Purpose of the Study

The study seeks to achieve the following specific purpose:

1. Examine the availability of ICT resources in teaching social studies.
2. Investigate how social studies teachers' use ICT resources in teaching social studies.
3. Assess teachers' perception of the use of ICT resources in teaching social studies.
4. Investigate the challenges social studies teachers face in the use of ICT resource in teaching social studies.

Research Questions

In order to address the specific objectives, the following questions were formulated to guide the study:

1. What are the available ICT resources for teaching social studies in selected Senior High Schools in Awutu Senya district?

2. How are the available ICT resources used in teaching social studies in selected Senior High Schools in Awutu Senya district?
3. What are the perceptions of teachers towards the use of ICT resources in the teaching of social studies?
4. What are the challenges social studies teachers' faces in the use of ICT resources in teaching social studies?

Research Hypotheses

The research was guided by this hypothesis:

H_0: There is no significant difference in male and female teachers' perception on the use of ICT resources in the teaching of social studies.

Significance of the Study

The study is expected to come out with some useful findings that helped to deepen the integration of ICT resources into the pedagogy of the Ghanaian education system. The results of this study was significant since it informed government to formulate the appropriate policies and programmes that ensured the provision, improvement, maintenance and the promotion of ICT usage for teaching social studies in schools.

The government will know the cost benefits of ICT resources for schools and therefore make the necessary budget allocations to support schools. Also, the schools' administration will be informed of the state of ICT resources for social studies teachers' use for teaching and learning, whether they are adequate or in deficit. Teachers in Awutu Senya district and other schools also stand to benefit from the findings of the study.

This study may also help to raise the awareness among policymakers, directors of education and school heads about factors that influence ICT

utilization in selected Senior High Schools in Awutu Senya district. A thorough understanding of factors and perception of ICT utilization will inform educators in deciding how to address them, with the hope that they can be minimised if not eliminated entirely from the teaching and learning process.

Delimitation of the Study

The study covered only selected social studies teachers in Awutu Senya district in the Central Region of Ghana. The findings of study were generalised with caution. The scope of the study assessed the availability and use of ICT resources for teaching and learning social studies. These ICT resources include laptops/computers, internet systems, power point presentations, television, radio and among others. Thus, the competence level of social studies teachers towards the use of ICT resources for teaching were the delimitations.

Limitations of the Study

The limitations of this study warrant discussion and suggest the need for caution when interpreting the results. The findings of this study was only generalized for all selected social studies in Awutu Senya district teachers, but could not be generalized for all Senior High Schools in Ghana because of the sampling procedure that was used for selecting the teachers and schools.

The study encountered some challenges which included the response rate of the respondents, vacations when schools are closed, teachers being difficult to reach to respond to the questionnaire and teachers' unwillingness to participate in the study. Thus, some of the findings may not hold as a result of the changing pace in the use of ICT resources for teaching and learning.

Measures were however taken to minimize the effects of these on the final results of the study.

Organization of the Rest of the Study

The study is organized into five different chapters. The first chapter talks about the background to the study, the statement of the problem, the research objectives and questions. The chapter also deals with the significance of the study, the delimitations and limitations encountered in the study. The second chapter deals with the review of the related literature. The third chapter talks about the research methodology that was used in the study. The fourth chapter dealt with the presentation and analysis of the data collected. The last chapter, which is chapter five talks about the summary of findings, the conclusions that were drawn and the recommendations thereof.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

Introduction

The research seeks to review literature based on the objectives and research questions. There is the need to review literature related to this work to establish the basis for the study. For easy referencing, this literature is reviewed under the following sub-headings: Theoretical framework, historical development of social studies, concepts of social studies, information and communication technology in teaching, benefits of ICT use in education, availability of ICT facilities in social studies education, social studies teachers' perception on the use of ICT facilities in teaching social studies and challenges social studies teachers' face in the use of ICT facilities in teaching of social studies.

Theoretical Framework

The study is underpinned by Bates Actions model. The Actions model is based on Bates (1995) methodology for assessing learning technologies. The Actions model provides a framework for using technology in teaching. According to Bates (1995), major changes are needed in the education system in order to meet the need for a higher skilled workforce and for lifelong learning. The Actions model is based on these questions:

Access: How accessible is a particular technology for students? How flexible is it for the particular target group?

Costs: What is the cost structure of the technology? What is the unit cost per student? What are the opportunity costs versus other technology choices?

Teaching and learning functions: What kinds of learning are needed? What instructional approaches will best meet these needs? What are the best technologies for supporting teaching and learning in this environment? Can the content be adapted to the technology? What skills does the technology develop?

Interactivity and user friendliness: What kind of interaction does this technology enable? (Synchronous or asynchronous). How easy is it to use and learn? What kind of interaction does it provide?

Organizational issues: What are the organizational and institutional requirements to provide stability and support? What are the barriers to using this technology successfully within the classroom? What changes need to be made within the organization to incorporate the technology? What barriers need to be removed for the success of this technology?

Novelty: How new is this technology? What are its technical capabilities?

Speed: How quickly can courses be created and distributed with this technology? How quickly can materials be changed?

By answering the questions generated by the Actions theory, this research sought to establish the availability and utilization of computers in the teaching and learning of social studies in Awutu Senya Senior High schools. For any technology to be useful to teachers and students it should be available and accessible. Bates (1995) considers cost as a strong discriminator between technologies and it is often the first issue considered by institutional decision-makers. Generally, the technologies that are easy to use or are user friendly tend to be more accessible to teachers and students because they seek them out willingly. Teachers and students seek for technology that is versatile with

many functions such as the computer. Under organizational issues, Bates says that we need educational organisations that can exploit the new technologies to meet the needs of the twenty-first century. He calls for changes in institutions that would allow new technologies to be used even if it is to give prestige due to their novelty. Novel technologies may also create curiosity and bring about effective learning if used in the classroom.

Historical Development of Social Studies

According to Acquah-Doughan (2015), the field of social studies was begun in the early years of the 20th century in the United States of America. It was built on the foundations of history which was recognized as the main theme of social studies. The subjects of history to social studies occurred when the Jones famous Cardinal Principle Report gave strong boost to social studies teaching (Ravitch, 2003). According to Ravitch (2003), the study of history was considered "academic" and far removed from students' immediate needs and that they made no contributions to social efficiency. It was in the field of social efficiency that social studies subject was born. The idea was to teach students facts and skills that were relevant to the institutions of their own society and also to prepare them for the real world that would confront them when they left school (Acquah-Doughan, 2015). According to Acquah-Doughan (2015), social studies were therefore intended to provide an integrative education aimed at training students as decision makers.

In Africa, ideas on how to modernise the teaching of social studies in the school curriculum were expressed as early as 1961 where prominent African, British and American educationalists addressed the issues of educational problems facing post-war Africa (Acquah-Doughan, 2015). In the

view of Acquah-Doughan (2015), the newly independent nations wanted to find solutions to their educational problems in the humanities and social sciences, language, mathematics, science and teacher education.

In a similar vein, Bruce (1988) indicated that there had been attempts at 'integration of a sort' in the social sciences. According to him between 1950 and 1954, some form of integration appeared in the syllabuses of teacher training Colleges notably Wesley College, Government Training College (Winneba), and Presbyterian Training College-Akropong Akwapim. However, by 1955 the programme had collapsed due to lack of personnel to teach the integrated subject. Tamakloe (1976) also points out that before 1968, there existed an area of study termed 'centres 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).

The development of the social studies programme in Ghana began in 1967 with the setting up of the Curriculum Research and Development Division (Acquah-Doughan, 2015). According to Acquah-Doughan (2015), between August and September 1968 a conference was held at the Advanced Teacher Training College, Winneba under the auspices of the British Council. From there a pilot programme on social studies teaching was started in four selected centres 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.

With the advent of the Education Reforms in 1987 the term 'social studies' was once again officially used for the subject in all levels of the school system (Acquah-Doughan, 2015). In 1988, the CRDD published new textbooks 'Ghana Social Studies Series' to replace the environmental studies programme in all schools. In 1996, when the Free Compulsory and Universal Basic Education (FCUBE) was introduced, the term 'social studies' was still used for the subject at both the Primary and the then Junior Secondary but in the syllabus that was introduced in the Primary Schools in 1988, the term 'environmental studies' was once again used at the primary school level (Acquah-Doughan, 2015). Presently, the subject is referred to as 'environmental studies' at the Primary school level while at the Junior and Senior Secondary Schools the term social studies is used. At the Teacher Training Colleges and the University of Cape Coast the term 'environmental and social studies' is used for the programme.

Concepts of Social Studies

The term social studies is used to explain a subject which deals with human relationship with others. In turn, Tamakloe (1994) looks at social studies as a subject that deals with man and his relationship with his immediate environment. This implies that the teaching of social studies should

aim at exposing students to the way of life of the society and the realization that humans, plants and all the other animals are dependent upon each other.

In a similar vein, Linguist (1995) defined social studies as "an integration of knowledge, skill and processes and goes on to say 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 decision makers" (p. 1). To Martorella (2014) understanding, "social studies are selected information and modes of investigation from the social sciences, selected information from any area that relates directly to an understanding of individuals, groups and societies, and application of the selected information to citizenship education" (p. 7). To these authors, social studies is taught to promote citizenship by using social science concepts.

According to Barr, Barth and Shermis (2007), "the 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 (1994) views 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).

On its part, the Ghana Education Service (GES, 2001) defines 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 official definition of the National Council for the Social Studies (NCSS) contains a strong inter-disciplinary focus with the aim of solving social problems. It states that social studies is the integrated study of the social

sciences and humanities to promote civic competence within the school programme. To the NCSS, because civic issues such as health care and crime are multi-disciplinary in nature, understanding these issues require multi-disciplinary education.

It is evident from these definitions that one main characteristic that makes social studies more distinct is that it incorporates many fields of endeavour. The integrative nature of social studies therefore calls for critical thinking about social issues leading to the development of thoughtfulness in students. Through integration, pupils acquire a variety of skills including those of inquiry, investigation and discovery as they are actively involved in the teaching and learning process.

Information and Communication Technology in Teaching

British Educational Communications and Technology Agency (BECTA, 2004) in its own definition defined information and communication technology (ICT) as a techniques people use to share, distribute and gather information and to communicate through computers and computer networks. Yunus (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 Agba, Kigongo-Bukenya and Nyemba (2004) viewed ICT as a cluster of associated technologies defined by their functional usage in information access and communication. ICT 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.

The various kinds of ICT products available and having relevance to education, such as teleconferencing, email, audio conferencing, television lessons, radio broadcasts, 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, 2011; Bhattacharya & Sharma, 2007).

ICT 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 and problem solving skills, stimulating creativity and imagination (Pennington, 2016).

Availability and use of ICT to teachers in schools will determine the role that ICT play in the classroom. Murdock and Desberg (2014) observed that teachers can use ICT tools to share and have access to information to support students learning. Candau (2013) reveal that access to ICT tools for teaching can ignite students' thoughts and eventually move them towards a better learning experience.

The integration of ICT tools in teaching can motivate teachers and students in their teaching and learning respectively. The use of ICT can help to improve and develop the quality of education by providing curricular support in difficult subject areas (Acquah-Doughan, 2015). To achieve this, teachers need to be involved in collaborative projects and development of intervention change strategies, which would include teaching partnerships with ICT as a tool for teaching. According to Zhao and Cziko (2011) 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

Teachers should believe that they have control over technology.

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 and students in and out of school (Hawkins, 2002). Cowie, Jones, Harlow, McGee, Millar, Cooper and Gardiner (2008) found that teachers and students experience have been improved when working using ICT tools.

UNESCO (2007) is of the view that adopting ICT into the educational systems has the potential of increasing the quality of education delivery as well as facilitating greater access to information and services by marginalized groups and communities. Therefore, when used effectively, ICTs could:

Make education easier, cheaper to access and free of the limitation of distance.

Result in better academic performance due to changes in teaching and learning.

Studies have also demonstrated that ICT use in teaching and learning can result in effective literacy gains. There is empirical evidence that students, who are having difficulties with reading, can be motivated and engaged through the use of ICT (Lynch, Fawcett & Nicolson 2010; O Murchú, 2010; Segers & Verhoeven, 2002).

Benefits of ICT Use in Education

The use of technology in the learning environment has become an unstoppable force in recent years (Cohen, 2004; Laubsch, 2006). 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).

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.

Studies have also demonstrated that ICT use can result in effective literacy gains. There is empirical evidence that students, who are having difficulties with reading, can, be motivated and engaged through the use of ICT (Segers & Verhoeven, 2002). Condie and Munro (2007) concluded that the use of ICT has had positive effects in a number of subjects, as well as being constructive in assisting students that are marginalized as a result of personal or familial issues.

Research has shown that many students benefit from the use of ICT (Frear & Hirschbuhl, 1999). Wishart and Blease (2009) claim that students get

immediate feedback or rewards when using educational games in learning. Papert (2003) asserts that the computer is a tool, allowing for the construction of higher order thinking, facilitating users to take responsibility for their learning when making decisions, while Korte and Housing (2007) refer to its ability to motivate students learning.

Furthermore, Kozma and Anderson (2002) claim that ICT is transforming education by introducing new curricula based on real life problems, providing different tools to enhance learning, providing students and teachers with more opportunities for feedback and reflection. Social Constructivism places emphasis on this type of student centered learning, viewing the teacher as a guide or facilitator, motivating students to discover things for themselves (Vygotsky, 1978).

Schoepp (2015) asserted that constructivist approaches dominate learning environment for technology to have a significant impact on learning. However, it must be remembered that the use of ICT in classrooms is a relatively new phenomenon when compared to traditional teaching methods in Ghana.

According to Hawkridge (1990), computers as pedagogical tools in Computer Assisted learning or Computer Assisted Instructions offer advantages over other methods of teaching and have revolutionized education in advanced countries. He further stated that computers are useful tools for pupil's drills and practice. The computer serves as a cognitive tool. Its software programs are able to amply, extend or enhance human cognition (Kozma, 2008). They are designed to aid users in task relevant, cognitive components of performance, leaving the performance open-ended hand

controlled by the learner (Fouche, 2005). The importance of ICT in teaching and learning has prompted Todd (1997) to declare that a real learning revolution has stand in which educators use information technologies to provide learning experiences that are qualitatively different from their predecessors. Despite the advantages that computers offer in education, Bigum (2007) recommends that ICT should not be seen as the only educational tool, but as one of a number of possible tools which could be used to teach content. Thapisa and Baribwa (2008) stated that evidence shows that to innovate and create stocks of information and knowledge by utilizing ICT, developing nations need telecommunication networks that can support electronic data exchange. Dankwa, (2007) points out that many secondary schools in Ghana can boast of a computer laboratory through which students are gaining basic computer literacy. A number of these schools have internet facilities, enabling students to deepen their connection to the outside world.

Although this is encouraging information, extensive review of documents of NGOs that are spearheading ICT implementation in Ghanaian schools reveals that most secondary schools now are benefiting from ICT and are either located in urban areas or are classified as premier secondary schools (Dankwa, 2007). In spite of these benefit ICT offers, many teachers are reluctant to facilitate substantial student use of computers for learning activities (Corte, 2010). Although ICT learning is good, it can also have its bad sides. Some students may use it for trivial purposes or use it to engage in immoral activities (Dellit, 2002). However, literature has attested to the power of ICT, if effectively taught in the classroom, can have effect on teaching and learning processes (Fonkua, 2006).

It has even been suggested that using technology well in the classroom can even prepare students to be more effective citizens in increasing open and democratic societies (John & Sutherland, 2004). Research in West and Central Africa shows that ICT for teaching and learning in school environment can contribute to developing child centered approach to pedagogy (Rocare, 2006).

Availability of ICT Facilities in Social Studies Education

The availability of ICT resources in schools depends on whether the school has procured the resources or the department has provided the resources. According to Szeto and Cheng (2013) and Tezci (2011), the availability of ICT resources is important to generate situations in which teachers can make use of ICT in their classrooms with certainty and correctly (Szeto & Cheng, 2013; Tezci, 2011). An important variable of integration ICT in schools is availability. In the view of Ottesen (2016), one of the fundamental problems facing ICT integration in schools is the lack of computer facilities. In a related study, Norris, Sullivan, Poirot and Soloway (2013) reveal that appropriate access to ICT facilities is another key factor in the effective integration of ICT into the teaching and learning process. In another study, Yildrim (2007) reveals that teachers agreed that access to ICT facilities is one of the effective means to integrate ICT in classrooms.

ICT is increasingly being used to improve access to education and employment. The efficacy of ICT in education has been proved beyond reasonable doubt. It has been known to enhance educational opportunities of individuals and groups for drills and practice as well as instructional delivery (Umoren, 2016). The unfortunate thing is that, ICT resources are beyond the

reach of teacher educators and as such, they cannot access them for the purpose instructional development in some schools.

In an attempt to investigate availability and access to the internet, Kenya School Net (2013) found that email was yet to be recognised as a tool for collaboration among social studies teachers. It went on to affirm that in the schools surveyed, access to the internet was severely limited and when available was only for administrative use. The study found that almost 40% of these schools had less than 10 computers and were therefore inadequate for teaching and learning. More than 20 per cent had less than 5 computers, indicating that the computers were mostly for administrative use. Only a third of schools studied had dedicated computer laboratories.

Social Studies Teachers' Perception on the Use of ICT Facilities in Teaching Social Studies

Teachers' beliefs about teaching and how students acquire knowledge play a critical role in determining not only the degree to which technology should be used in the classroom but how technology is used to support teaching and learning. Teachers often view the technology integration as an additional imposition on their already demanding time schedule when they simply want to get on with the business of teaching (Acquah-Doughan, 2015). In addition to the fact that some teachers do not believe that they have the technical competence to effectively use technology in the classroom, they fail to see its importance for their subject (Hall & Hord, 2001).

In a survey of 170 secondary school teachers in New Zealand, Lai and Pratt (2004) found that 82% of the teachers considered ICT to be beneficial to their teaching but not in the area of methods of delivery and classroom

practice. Significantly, one of the obvious effects identified by the teachers was not a change of philosophy or pedagogy but improved efficiency in the administration and management of teaching, including lesson preparation and presentation.

Similar findings were reported by Balanskat, Blamire and Kefalla (2006) in their review of the ICT impact studies conducted in Europe. They found that ICT use enabled teachers to save time and to increase productivity in such activities as preparing and updating daily lessons and maintaining student's records. In addition, ICT use has fostered greater collaboration between teachers with increased sharing of resources and ideas. However, with respect to pedagogical practice the social studies teachers continued to use a more traditional approach to teaching simply viewing ICT as a tool to support their didactic approach. As such, they concluded that "teachers do not yet exploit the creative potential of ICT and engage students more actively in the production of knowledge" (p. 41).

Studies conducted by Inan and Lowther (2010), Knezek, Christensen and Fluke (2003),Van Braak, Tondeur and Valcke (2014) shows that teachers' perceptions of instructional benefits are an influential factor that affects technology integration in classrooms. Current evidence shows that instructional benefits are defined as the perceived effectiveness of digital technology, which Petko (2012) describes as "the belief that student learning is improved with the help of digital media" (p. 1355). According to Petko (2012), the element of effectiveness should include items related to "whether the use of digital media could improve the quality of teaching, learning

outcomes, interest and creativity, collaborative work and learning strategies for the students" (p. 1355).

Van Braak, Tondeur and Valcke (2014) measured teachers' attitudes toward the effects of computer adoption in the classroom. Some items they included in their measures were: "increases the level of creativity of pupils", "helps pupils to achieve better text writing", or "used as a learning tool, increases student motivation". The results of the study showed that general computer attitudes which included items such as computer liking, computer anxiety and computer confidence have a direct effect in the attitudes toward the use of computers in teaching. The study concluded that the attitudes toward computers in education have a considerable influence in teachers' technological innovativeness and teachers' classroom use of computers.

Perrotta (2013) has explored the influence of individual, classroom, school and system-level issues on how teachers experience the educational benefits of digital technology. In the study, they perceived the 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. The study concluded that broader contextual and cultural conditions might influence teachers' perceptions of the benefits of digital technology.

Plomp, Brummelhuis and Rapmund (2011) identify three objectives which distinguished the use of ICT in education such as, the use of ICT as object of study, the use of ICT as aspect of a discipline or profession and the use of ICT as medium for teaching and learning. Peck and Domcott (2014)

gave some reasons that technologies should be used in schools: technology enables teachers to individualize instruction, which allows students to learn and develop at their own pace in a non-threatening environment; students need to be proficient at accessing, evaluating and communicating and information; technology can increase the quantity and quality of students' thinking and writing through the use of word processors; technology can develop students' critical thinking and allowing them to organize, analyse, interpret, develop and evaluate their own work; technology can encourage students' artistic expression; technology enables students to access resources outside the school; technology can bring new and exciting learning experiences to students; students need to feel comfortable using computer, since they will become an increasingly important part of students world; technology creates opportunities for students to do meaningful work and schools need to increase their productivity and efficiency. Thus, teachers are expected to make good use of modern teaching technology and develop effective teaching resources.

BECTA (2004) reported that negative attitude was a barrier towards integration of ICT in teaching and learning while Rhoda and Gerald (2000) found that positive attitudes towards ICT use are widely recognized as a necessary condition for effective computer use in teaching and learning. In a similar vein, Kubiatko and Halakova (2009) observed that social studies teachers attitude towards use of ICT in teaching and learning in learners was as a result of its impact. According to Selwyn (1999), integration of ICT in education environment depends, to a great extent, on teachers and student attitude towards their use. This view was corroborated by Slouti and Barton (2007) findings which 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.

Challenges Social Studies Teachers' Experienced in the Use of ICT Tools in Teaching and Learning

A challenge is anything that retards the progress or achievement of any set objective or aim. It therefore means that the removal of one or more of these challenges or barriers such as the ones in ICT integration should assist perhaps significantly advance the process of integration. Computer integration 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.

A study conducted by OECD in 2009 confirmed that there are a number of barriers or challenges that inhibit teachers 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 BECTA (2004), a number of other important barriers were identified as the reasons why teachers do not use ICT to support their teaching. These were: lack of confidence, accessibility, lack of time, fear of change, poor appreciation of the benefits of ICT and age. Ertmer (2009) concurs with Schoepp (2015), asserting that if teachers are aware of

and understand such barriers, they can initiate strategies to overcome them within the shortest possible time.

According to Annan (2012) 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 (2009) 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 (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 lack of physical equipment and non-material barriers as somewhat intangible entities such as lack of knowledge, confidence or time.

Technical Support

Jones (2004) reported that the breakdown of a computer causes interruptions and if there is lack of technical assistance, then it is likely that the regular repairs of the computer will not be carried out resulting in teachers not using computers. The effect is that teachers will be discouraged from using computers because of fear of equipment failure since no one would give them technical support in case there is technical problem. BECTA (2004) agreed that "if there is a lack of technical support available in a school, then it is likely that technical maintenance will not be carried out regularly, resulting in a higher risk of technical breakdowns" (p.16). In Ireland, the NCTE census on ICT infrastructure (as cited in ICT strategy group report, 2008-2013) found that about 85.3% of schools reported technical support and maintenance as a 'high' or 'very high' priority and claimed that it should be an important element of the school ICT environment with proper technical support.

Similarly, Yilmaz (2011), in assessing the technology integration processes in the Turkish education system reported that in providing schools with hardware and internet connections, it is also crucial to provide the schools with technical support with regard to repair and maintenance for the continued use of ICT in schools for effective teaching and learning.

Therefore, if there is no technical support for teachers, they become frustrated resulting in their unwillingness to use ICT in their teaching (Tong & Trinidad, 2005). Even though, lack of technical support discourages teachers from adopting and integrating technology in classrooms, a study by (Korte & Housing, 2007) revealed that schools in Britain and the Netherlands have

appreciated the significance of technical support to help teachers to integrate technology into their teaching.

Teacher Related Barrier

Teachers are the principal actors or stakeholders in the learning process that can influence school authorities to purchase ICT materials to support teaching and learning. Gressard and Loyd (2005) asserted that teacher's attitude towards ICT is one of the key factors which determined successful integration, while Jegede (2007) recognizes the teacher as a key instigator in fostering ICT integration in education.

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 with 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 to their usage of ICT in supporting teaching and learning in their various schools.

Lack of Knowledge or Competence

According to Bingimlas (2009) teacher competence refers primarily to one's ability to integrate ICT into pedagogical practice. Lack of knowledge or competence is regarded as a significant factor that discourages teachers in integrating ICT in their teaching. A teacher's lack of knowledge serves as a considerable challenge to the use of computers in teaching methods and practices. Tezci (2011) posits that if teachers have a high level of ICT knowledge, then there will be a higher level of ICT use in their teaching.

Difficulty in Changing Teaching Method

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, Ravitz and Wong (1999) describe 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.

Lack of Confidence

Numerous studies carried out posits that lack of confidence prevents teachers from using ICT. According to BECTA (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 their teachers in the use of ICT. This is so because students are of the view that their teachers know more than them and with this at the back of their mind, if he or she the teacher is even having a fair knowledge about ICT, will not be willing to go and disgrace him or herself before the students.

The lack of confidence in the use of ICT 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 ICT can still fail to integrate it into teaching. BECTA (2004) says that lack of confidence is linked

to other barriers affecting the use of ICT. The report mentioned fear of ICT as a factor that can compromise the level of confidence. Other factors that were mentioned included lack of technical assistance which can lead to low confidence levels, lack of competence and the quality of training received.

According to Jegede (2007) as teachers become more appreciative of the use of ICT 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 (2016) said the limitation in the knowledge base of the teacher in ICT 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 ICT. Cox (2009) 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 to master their skills. From the above it can be concluded that when most of the barriers to the use of ICT in education is removed many of the problems associated with lack of confidence will be resolved.

Gender

Technological progress aims at improving the standard of living of people. Yet not all people will in general benefit equally from that progress. It is obvious that for women the enhancement of their life is not always visible. In many societies, because of traditional role patterns, there frequently are

clear obstacles in a society which causes that both sexes do not benefit equally from the advantages of the technological progress in general.

Yu (2002) studied the need for ICT in developing countries and why gender issues play an essential role in this regard. He focused on the relationship between attitudes toward ICT in relation with gender. He concluded that gender-sensitive aspects play a central role. He declared that gender needs special attention in the context of the technology. The challenges are on the issue of creating an environment in which a harmonious and justified cooperation between both sexes is of great importance for a positive development in general and in particularly in the area of ICT.

Lack of Training

A full and complete integration in the use of 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 ICT 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 time for the training, training in pedagogy, and skills training (Bingimlas, 2009).

A study conducted by Cox (2009) 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 effectively to improve their teaching skills.

Schoepp (2015) maintains that if new technology is going to be integrated into education, teachers should receive training on how to use the ICT, while Trotter (2009) concludes that training in ICT integration must be preceded by and supplemented with basic skills training. Research by Gomes (2005) also asserted 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 (2009) again asserts that if teachers are to be convinced of the value in using ICT in their teaching, their training should focus on pedagogical issues. According to him, this 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 teaching. 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.

Some literature suggests that lack of adequate training and experience is one of the main factors why teachers do not use technology in their teaching. This also results in teachers' negative attitude towards computer and technology. In addition, lack of confidence leads to reluctance to use computers by teachers (Kumar & Kumar, 2003). Another problem has been the impact of the lack of training on the integration of ICT into teacher preparation programmes in Ghana.

In fact, there is an urgent need for ICT training to be given to fresh university or college of education students in order to obtain successful learning outcomes from the use of ICT and to satisfy the needs of their head teachers. The most important ICT training needs should include skills development to assist ICT teaching and learning approaches for specific areas of specialization; maintenance training; research oriented training on ICT use for data analysis, numerical data and spread sheets.

In conclusion, enough training on ICT can address some of the barriers in the integration of the use of ICT in teaching and learning. This is because acquiring the necessary skills through training will enhance teacher's knowledge base and competence levels. The result of this is that it would in the long run reduce the fear that some teachers have on ICT teaching. The above literature is a review of several literatures related to the study. The research under consideration examines the attitude and competence level of basic school teachers in the teaching of ICT in Cape Coast Metropolis.

Empirical Review

Yusuf, Bashir and Dare (2013) conducted a study on assessment of the availability, utilization and management of ICT facilities in teaching English language in secondary schools in Kaduna State, Nigeria. The study adopted a descriptive survey research design. A questionnaire was used for the data collection. Twenty randomly selected secondary schools from Kaduna metropolis were used for the study. A total of 100 teachers participated by responding to the items on the questionnaire. The findings of the study revealed that there is a dearth of ICT facilities in secondary schools in Kaduna as there are only very few of such facilities available in most of the schools

visited. This indicates that ICT facilities are not readily available in schools. Teachers do not have enough computers, no interactive boards' educational software's or multimedia facilities. Projectors and e libraries are available only in a few schools.

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 (mixed, girls and 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. Both student and teachers were asked whether they have access to the internet. The findings show 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 and the teachers use ICT in the teaching of social studies subject.

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 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 in the schools. The study revealed that 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 studies.

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 of 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.

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.

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, 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 social studies 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 social studies teaching 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. 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.

In Ghana, a study was conducted by Amengor (2011) on social studies 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 increases

their productivity. The results clearly show that respondents had fairly good perception towards ICT.

Conceptual Framework

From the framework, it can be seen that the ICT incorporation into the SHS system has several components. Firstly, the availability of ICT facilities is very important and these facilities include computers, scanners, Internet and overhead projectors. This will then result in utilization of the aforementioned relevant ICT facilities in teaching and learning process. Again, the perceptions teachers have and form about the use of ICT facilities play a role in the utilisation of these facilities. Some of these perceptions are; it makes lessons more interesting, saves time and makes lessons more diverse. Furthermore, barriers or challenges teachers face in the use of ICT resources in teaching are ownership of personal computer, confidence, willingness and competence in the use of ICT facilities are 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 utilisation of ICT facilities. The factors discussed, all contribute to the utilisation of ICT facilities.

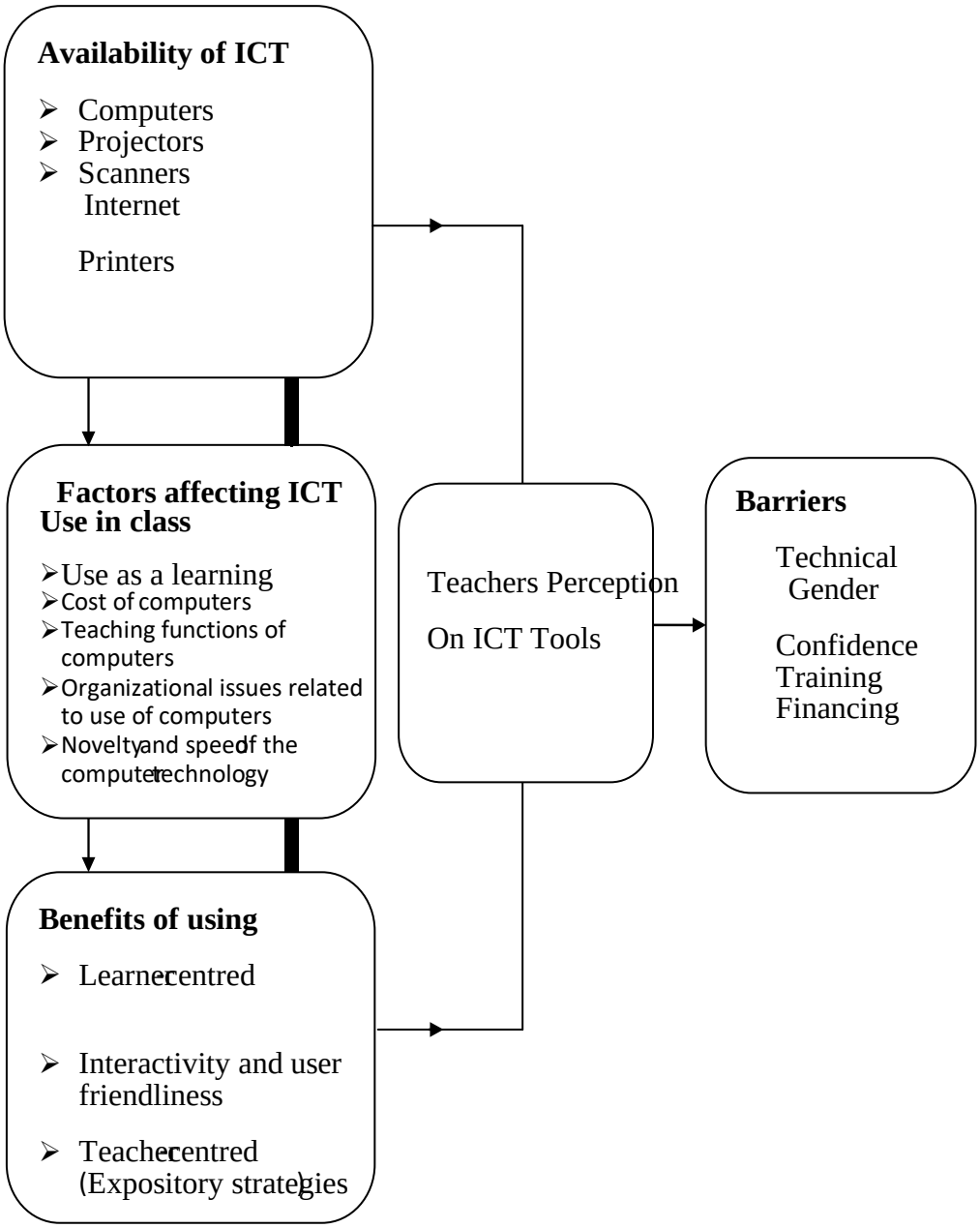

Figure 1: The Conceptual Framework

Chapter Summary

Looking at the literature reviewed, it could be seen that, ICT has undoubted potential, to be influential in changing teaching methodologies. Again, availability of ICT facilities leads to the effective utilisation by both teachers in the teaching learning process. The review also showed that

teachers use ICT facilities for preparing teaching learning materials, practical demonstration, and lesson notes. Also, teachers' perception is seen to be influential on the utilisation 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.

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 to the present study.

CHAPTER THREE

RESEARCH METHODS

Introduction

This chapter deals with the method and procedure that was used in collecting the data for the study. It also describes the population, sampling technique and the data collection instrument.

Research Design

According to Katundu (2014), the purpose of research and its objectives determine the type of research design employed for a study. Considering the nature of the research problem and purpose of this study, the most appropriate research methodology that was used is the descriptive survey design. Descriptive survey design according to Amedahe and Gyimah (2003) makes use of various data collection techniques involving questionnaire in quantitative study.

A descriptive research has the advantage of producing good responses from a wide range of people, and also involves accurate and objective collection of data to describe an existing phenomenon (Nwadinigwe, 2005). According to Amedahe (2002), it allows for accurate description of activities, objects, processes and persons. The design was employed because it helped to provide accurate and valid representation of the variables, and also help to describe precisely the phenomenon under consideration.

Fraenkle and Wallen (1993) listed the following as advantages of descriptive research:

1. It provides a good number of responses from numerous people.

2. It provides a meaningful picture of events and seeks to explain people's perception and behavior on the basis of information obtained.
3. It can be used with greater confidence with regard to particular questions which are of special interest and values to a researcher.
4. In-depth follow-up questions can be asked and items that are not clear can be explained.

They also provide the following demerits:

1. Answers can vary greatly depending on the exact wording of the questions or statements.
2. It can produce untrustworthy results because they may delve into private and emotional matters that respondents may not be completely truthful about it.

One major weakness of descriptive research is that answers to descriptive research do not enable us to understand why people feel, think or behave in a certain manner, why programs pose certain characteristics, why a particular strategy is used at a certain time and so forth.

In spite of these couple of demerits, the rationale for this design chosen was to enable more respondents to be questioned fairly. Also it allows for greater degree of accuracy, reliability, standardizations of measurement and uniqueness of the study.

Population

Population is defined as all members of a defined category of elements such as people, events or individuals items of interest under consideration (Ary, Jacobs & Razavieh, 1990). For the purpose of the study, the population is made up of all the Senior High School social studies teachers in Awutu

Senya District in the Central Region of Ghana. There are five Senior High Schools in the district. Therefore, all the five senior high schools in the Awutu Senya district in the Central Region of Ghana were selected for the study. The five senior high schools are Bawjiase Senior High School, Obrachire Senior High/Technical School, Awutu Winton Senior High School, Bontrase Senior High School and Senya Senior High School. In all the five SHS, the social studies teachers were 50. This constituted the accessible population of the study.

Sample and Sampling Procedures

Sampling is a process of selecting a number of individuals for a study in such a way that they represent the larger group from which they were selected. Welsh (2006) defined sampling as the process of choosing from a much larger population, a group about which we wish to make generalised statements so that the selected part represented the total group. Sampling per say is not a technique or procedure for getting information but it ensured that any technique used helped in getting information from a smaller group, which accurately represented the entire group (Teye, 2012). The sample for the research was chosen from the selected senior high school social studies teachers in Awutu Senya district.

The sampling procedure employed for the study is census. Census, according to Teddie and Tashaskkori (2003), is a study of every unit, everyone or everything, in a population. It is also known as a complete enumeration, which means a complete count. Teddie and Tashaskkori (2003) further argued that census is used in inductive studies to gather detail and in-depth information or data to represent the target population in order to yield detailed

information about the issue. Results from this procedure are most reliable and accurate. Errors from this procedure are less or equal to none. The researcher chose this sampling method because it affords true representation of the population (Gall, Borg & Gall, 2006). All the fifty (50) social studies teachers in the district were selected for the study.

Data Collection Instrument

Questionnaire was used as research instrument to collect data for the study. The questionnaire contained closed and open ended questions. The use of close-ended ones offered options for the respondents to choose the appropriate one. Kerlinger (2003) observed that questionnaires are widely used for collecting data in educational research. It is very effective for securing factual information about practices and conditions of which the respondents are presumed to have knowledge about. It is also used to enquire opinions and attitudes about the topic under discussion. The questionnaire was used because it has the following advantages over other instruments: it has high response rate. It also simplifies the stages of data analysis. Its weaknesses may be seen in the areas of the fact that respondents may not provide appropriate answers to the items since the method usually involves the use of structured items.

There were five sections in the questionnaire. Section 'A' contained items used to elicit the background information about teachers and teaching experience so far as the teaching of social studies was concerned. Section 'B' sought information about the availability of ICT resources in teaching social studies in the school. Section 'C' contained general information about the use ICT resources in teaching social studies in the school. Section 'D' contained

information about the perceptions of teachers towards the use of ICT resources in the teaching of social studies in the school. Section 'E' contained information on challenges social studies teachers face in using ICT resources in teaching of social studies in the senior high schools.

The instruments were checked for its validity and reliability before it was used. The basis of the validity of a questionnaire is to ensure that the right questions are asked without ambiguity. A drafted copy of the questionnaire was made available to my supervisor for face to face discussion and content validity. This ensured that the items in the questionnaire are related to the research questions. Statistical Product and Service Solutions (SPSS), version 21.0 was used to check for the reliability of the questionnaires using Cronbach alpha coefficient. According to Stevens (1996), Cronbach alpha coefficient of a scale above .7 is considered reliable, and a scale value below .5 is considered low. The questionnaire yielded a Cronbach's Alpha of .80 using SPSS, which is considered reliable.

The questionnaires were pilot-tested at Agona Nsaaba Senior High School. Agona Nsaaba Senior High School was chosen because it has some attributes similar to the accessible population of the study. The results were analyzed afterwards to determine the content validity of the instrument and those items that needed revision. The pilot-testing is important in that it served the purpose of enhancing the content validity and reliability of the instrument and also to improve the question format and the scales. The basis of the validity of a questionnaire is to ensure that the right questions are asked without creating any ambiguity. A drafted copy of the questionnaire was made available to my supervisor for face to face discussion and content validity. A

careful analysis of the items was done based on the comments passed by respondents concerning the weakness, clarity and ambiguity in all aspects of the questionnaires.

Data Processing and Analysis

Data analysis helps to manipulate the data obtained during the study in order to assess and evaluate the findings and arrive at valid, reasonable, and relevant conclusions. According to Onwuegbuzie and Leech (2005), data analysis is a systematic search for meaning. SPSS version 21.0 was the software used for the analysis. The entire questionnaire was coded with the help of SPSS for the quantitative data.

All respondents were given serial numbers to facilitate coding and analysis. Frequency tables, means, standard deviation and pie charts were also used in presenting the data. Research questions will be analyzed or answered using descriptive statistics (frequencies and percentages) and inferential statistics (mean, standard deviation and t-test). Conclusions from relevant related literature were captured along to authenticate the findings of the study.

Ethical Considerations

Ethics refers to doing what is morally and legally right in conducting research (Tobin & Begley, 2004). Research ethical consideration is important and researchers should protect the dignity of their subjects and publish well the information that is researched (Fouka & Mantzorou, 2011). Some of the ethical issues requiring consideration are the length of time the questionnaire took, statement indicating the confidentiality and anonymity for the participants. The participants were assured that the data would be used for academic purposes only.

Furthermore, confirmation that participants had no obligation to take part and that participants had the right to withdraw from the study or not to answer any particular question. The researcher obtained an ethical clearance from University of Cape Coast to conduct the study and adhered to the ethical principles of the University of Cape Coast. The researcher also acknowledges all scholarly works and information consulted from journal articles, books, dissertation, theses and data from the field.

Chapter Summary

This chapter described the methodology and procedures that were used to collect the data from the respondents in the study. The descriptive research design was used to allow the researcher to interpret the results in different ways. The population, the sample and sampling procedures, the research instruments as well as the data collection procedures and the data analysis procedures were also described in this chapter. The chapter further discussed the ethics considered in ensuring the humane treatment of the participant in the research.

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

This chapter deals with the data presentation and analysis. All data gathered for the study are organised, analysed and this is followed by discussion of key issues relating to the findings of the study. Frequency tables are provided to give statistical reflections on key issues in terms of the research questions.

Demographic Characteristics of the Respondents

The demographic characteristics considered in the study were age, sex, highest educational level, years of teaching experience and rank of the teachers. Out of 50 social students teachers sampled for the study, 100% valid questionnaire was retrieved.

Age distribution of the respondents

It was necessary to determine the ages of the ICT teachers, since this information would help to know how young or mature the respondents are. Table 2 indicates that 4.0% of the respondents fell under the 25 years age bracket. Similarly, 14.0% and 20.0% fell in the 26 – 30 and 31 – 35 years age brackets. Interestingly, 12.0% and 16.0% of them respectively fell in the age groups of 36 – 40 and 41 – 45 years. Another 10.0% of them fell in the 46 – 50 age brackets while 18.0% of them fell in 51 – 55 age brackets. The remaining 6.0% fell in the 56 – 60 age brackets. The details of their responses are provided in Table 1.

Table 1: Age distribution of the respondents

Age	Frequency	Percent
Under 25 years	2	4.0
26 – 30 years	7	14.0
31 – 35 years	10	20.0
36 – 40 years	6	12.0
41 – 45 years	8	16.0
46 – 50 years	5	10.0
51 – 55 years	9	18.0
56 – 60 years	3	6.0
Total	50	100

Source: Field survey, Enchill (2019).

The data presented in Table 1 show that the teachers used for the study spread across all the categories of age groups; that is young, middle age and those preparing to retire from active teaching service. They therefore catered for all the age groups needed for this study.

Gender of the Respondents

Out of the 50 respondents selected, 54.0% were males and 46.0% were females. This suggests that most of the teachers used in the study were males. The details are provided in Figure 2.

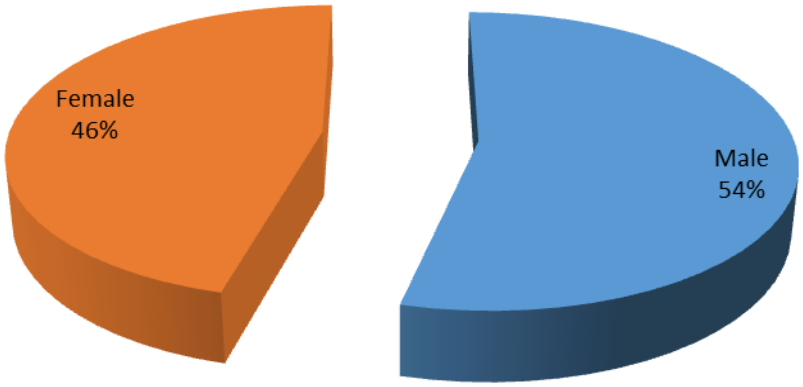

Figure 2: Respondents based on gender

Source: Field survey, Enchill (2019).

Most studies allege that teaching in the senior high school is a male dominated area while others think otherwise. For instance, some research studies revealed that there are more male teachers teaching at the senior high schools than their female counterparts (Yusuf, 2011). However, in Western US schools Breisser (2006) found that female teachers were more than male teachers. Even though this was not the focus of the research, males were in a greater proportion compared to females at the schools sampled.

Highest Educational level of Respondents

The data reveals that as many as 70.0% of the respondents possessed First Degree certificate as their highest level of education whilst 30.0% possessed a Master's degree. The details are provided in Table 2.

Table 2: Educational level of the Teachers

Educational level	Frequency	Percent
First Degree	35	70.0
Master's degree	15	30.0
Total	50	100

Source: Field survey, Enchill (2019).

A deduction from the Table 2 is that majority of the respondents are first degree holders. This shows that for someone to teach as a teacher at the senior high school level, they should possess at least a first degree.

Teaching Experience of the Respondents

As shown in Table 3, most of the teachers (34.0%) had only up five years of experience. Indeed, 60% of them had 10 or less years' experience in teaching with only 20% with more than 15 years of experience. The details are in Table 3.

Table 3: Distribution of teaching experience of the respondents

Age	Frequency	Percent
1 – 5 years	17	34.0
6 – 10 years	13	26.0
11 – 15 years	10	20.0
16 – 20 years	6	12.0
Above 30 years	4	8.0
Total	50	100

Source: Field survey, Enchill (2019).

An inference from the Table 3 is that majority of the respondents have spent more than five years as teachers. The fact that more than 65% of the teachers had more than five years of working experience as teachers is encouraging. Experience might not necessarily be the best, but it almost always results in the most enduring lessons.

Current Rank of the Respondents

With regards to the current rank of the teachers, Table 3 shows that 22% were both Superintendent I and II respectively. Again, 16% of the respondents were Senior Superintendent I and Senior Superintendent II respectively. Four percent respondents were Assistant director II and the remaining 10% were Assistant director I. The details of their responses were represented in Table 4.

Table 4: Distribution of Teachers by Rank

Rank	Frequency	Percent
Superintendent II	11	22.0
Superintendent I	11	22.0
Senior Superintendent II	8	16.0
Senior Superintendent I	8	16.0
Principal Superintendent	5	10.0
Assistant Director II	2	4.0
Assistant Director I	5	10.0
Total	50	100

Source: Field survey, Enchill (2019).

Research Question 1: What are the available ICT resources for teaching social studies?

This question sought to establish whether ICT resources for teaching social studies were available at the selected senior high schools. The values in the study were analysed and discussed using the mean and standard deviation. The mean score of 1.50 and above indicates ICT resources were available and the mean score of 1.49 and below reveals that ICT resources were not

available in the senior high schools. The details of their responses are provided in Table 5.

Table 5: Availability of ICT Resources for Teaching Social Studies

Statements	Available N (%)	Not Available N (%)	Mean	Std. Deviation
Computers	43 (86%)	7 (14%)	1.85	.314
Internet connection	39 (78%)	11 (22%)	1.61	.434
Television and radios	40 (80%)	10 (20%)	1.80	.431
Photocopier	41 (82%)	9 (18%)	1.81	.440
Educational software for teaching social studies	10 (20%)	40 (80%)	1.0	.213
Overhead projectors	34 (68%)	16 (32%)	1.50	.425
Printers	42 (84%)	8 (16%)	1.83	.312
Digital video recorder	15 (30%)	35 (70%)	1.25	.480
Digital cameras	18 (36%)	32 (64%)	1.22	.460
Total Mean/Std. Deviat.			13.87	3.50
Mean of Means/Std. De			1.54	0.39

Source: Field survey, Enchill (2019).

The result in Table 5 reveals that the available ICT resources in the selected Senior High Schools in the Awutu Senya district. With regard to the availability of computers in school, it was found that majority 43 (86.0%) of social studies teachers agreed to the statement. Majority of the teachers (78.0%) social studies teachers indicated that internet connection is available in the school. Similarly, majority (80.0%) of the social studies teachers reported that they have television and radios in the schools to support

teaching. Again, regarding the photocopier as ICT resource that supports teaching, most (82%) of the teachers indicated that the items were available.

As shown in Table 5, majority (80.0%) of the social studies teachers revealed that educational software was not available in schools. This was followed by digital video recorder where majority (70.0%) of the teachers indicated that it was not available. Furthermore, majority (64.0%) of the teachers also revealed that digital cameras as ICT resources that support teaching were not available in schools.

Moreover, the results in Table 5 clearly show that there are ICT resources available for teaching and learning social studies in the selected Senior High Schools. This is because the mean of means score (M=1.53; SD=0.39) indicates that majority of the teachers agreed that ICT resources are available in their school. The ICT resources that are available in the schools for teaching include computers, internet connections, televisions and radios, photocopier, overheads projectors and printers.

The finding of the study supports the study of Yunus (2007), who reported that ICT resources available in schools include telecoms, TV and radio broadcasting, hardware and software, computer services and electronic media. Similarly, the result of this study also supports the study of Ayebi-Arthur, Aidoo and Wilson (2009) and Thapisa and Baribwa (2007), who concluded that majority of the teachers in Senior High Schools in Cape Coast Metropolis, had access to the Internet. However, this study contradicts the findings of Kenya School Net (2003) where almost 40% of schools had few computers to support teaching and were therefore inadequate for teaching and learning.

Research Question 2: How are the available ICT resources used in teaching social studies?

The purpose of this research question was to identify how social studies teachers use the ICT resources in their teaching. The data were analysed and discussed using the mean and standard deviation. A mean score of 2.50 and above indicates that the teachers use the ICT resources in their teaching and mean score of 2.49 and below shows that the ICT resources are not used by the selected teachers. The details of their responses are represented in Table 6.

Table 6: Use of ICT Resources in Teaching Social Studies Subject

Statements	Mean	Std. Deviation
Practical demonstration	2.94	.593
Teaching learning materials	3.01	.645
Drill and Practice	2.20	1.467
Finding information	2.50	.537
Keeping records of students' scores	2.51	1.464
Preparing and delivering lessons	3.23	.285
Communicating with other teachers	3.17	.600
Making presentation	3.15	.632
Storage of vital data or information	3.12	.693
Total Mean/Standard Deviation	**25.59**	**6.916**
Mean of Means/Standard Deviation	2.84	.768

Source: Field survey, Enchill (2019).

As shown in Table 6, majority (M=2.94; SD=.593) of the teachers agreed that they use ICT resources for practical presentation in the lesson

delivery. Majority of the teachers also agreed (M=3.01; SD=.645) that they used ICT resources as teaching and learning material in the classroom. The result in Table 6 found that the teachers use ICT resources for finding information (M=2.50; SD=.537) to facilitate the teaching process. Most of the teachers were found to be in agreement (M=2.51; SD=1.464) with the statement that they use ICT resources for keeping records of students' scores.

It is clear from Table 6 that, majority of the teachers agreed (M=3.23; SD=.285) to the statement that they use ICT resources to prepare and deliver lessons in class. To the statement "ICT resources are used for communicating with colleagues teachers to improve teaching", it was realised that majority of the teachers agreed (M=3.17; SD=.600) to the statement. Majority of the teachers strongly agreed (M=3.12; SD=.693) to the statement that they use ICT resources to store vital data or information.

This implies that, majority of the social studies teachers in the Awutu Senya district use ICT resources in teaching because the mean of means score was (M=2.84; SD=.768). The value for the standard deviation reveals that majority of the teachers responses concerning the items was similar and clustery around the mean score. The result, therefore, shows that the social studies teachers in the Awutu Senya district use ICT resources for practical presentation, find information, prepare and deliver lessons, communicate with other teachers, store vital data or information and as well as teaching with them. This this support to the findings of Haddad and Drexler (2002), who concluded that ICT resources can be used in different ways in education like preparing for presentation, demonstration and interacting with colleague teachers. Similarly, Becker, Ravitz and Wong (1999) study support this study.

They revealed that teachers use ICT resources to write lesson plans, prepare materials for teaching, record and calculate student grades, and communicate with other teachers.

Research Question 3: What are the perceptions of teachers towards the use of ICT resources in the teaching of social studies?

The motive of this question was to identify the perception of Senior High School teachers towards the use of ICT resources in the teaching of social studies. The results were analysed and discussed with the support of the mean and standard deviation. The mean value of 2.50 and above shows positive perception of teachers towards the use of ICT resources and means value of 2.49 and below shows negative perception of teachers towards the use of ICT resources. The details are provided in Table 7.

Table 7: Teachers Perception towards the use of ICT Resources in Teaching Social Studies

Statement	Mean	Standard Dev.
ICT resources make lessons more interesting	2.82	.692
ICT resources improve the presentation of lessons	2.78	.785
ICT resources motivate students in their learning	2.45	1.101
ICT resources give me more confidence	2.81	.923
ICT resources increase productivity in preparing and updating daily lessons	2.69	.867
ICT resources make me to meet the different learning needs of students	2.93	1.697
ICT makes student attentive in teaching process	3.24	.188
Total Mean/Standard Deviation	19.72	6.253
Mean of Means/Standard Deviation	2.82	.893

Source: Field survey, Enchill (2019).

The results in Table 7 show that, majority of the teachers agreed (M=2.87; SD=0.74) that the use of ICT resources in teaching make social studies lessons interesting. To the statement the use of "ICT resources improve the presentation of material for lessons", it was found that most of the teachers agreed (M=2.78; SD=.785) to the statement. Majority of the teachers strongly agreed (M=2.81; SD=.923) to the statement that the use of ICT resources give them more confidence to teach.

Similarly, it was observed that majority of the teachers agreed (M=2.69; SD=.867) that ICT resources increase productivity in preparing and updating daily lessons in social studies. Also, it was realised that most of the teachers were in agreement with the statement that ICT facilities makes them to meet the different needs of their students (M=2.93; SD=1.697). Furthermore, most of the teachers revealed that the use of ICT resources in teaching makes student attentive in the teaching learning process (M=3.24; SD=.188).

The results in From Table 7 reveals that majority of the teachers have positive perception towards the use of ICT resources in teaching social studies. This was because of the mean of means value of (M=2.82; SD=.893), which revealed a cluster of teachers agreeing to the statement while the standard deviation revealed that most of the teacher were having conscientious response to the items. The results indicated that teachers in the Awutu Senya district perception about ICT resources are that it makes student attentive in the teaching process, using ICT resources helps to meet the different needs of students, makes teachers more confidence and makes lessons more interesting.

This conclusion supports the study of Perrotta (2013) who revealed that the benefits of using technology in teaching include giving access to wider learning content and the fact that it allows students to be more attentive in the learning process. Similarly, Balanskat's (2016) study also concluded that ICT resources in teaching enabled teachers to increase productivity in such activities as preparing and updating daily lessons and maintaining records.

Research Question 4: What are the challenges social studies teachers' faces in the use of ICT resources in teaching?

This question sought to establish the challenges teachers face when using ICT resources in their teaching. The results were analysed and discussed using the mean and standard deviation values. A mean value of 2.50 and above indicates that teachers face challenges in the use of ICT resources in teaching and mean value of 2.49 and below shows that teacher does not face any challenges. The details are provided in Table 8.

Table 8: Challenges Teachers face when Using ICT Resources in Teaching

Challenges	Mean	Standard Dev.
Lack of knowledge about ICT resources	3.42	1.276
Limited time in using ICT resources	3.38	.539
Age	2.42	1.571
Lack of confidence	2.90	.598
Insufficient ICT resources for teaching	3.21	1.720
No technical support when using ICT resources	2.91	.891
Little experience on the use of ICT resources	2.98	1.645
Lack of training	3.43	.636
Total Mean/Standard Deviation	24.65	8.876
Mean of Means/Standard Deviation	3.08	1.10

Source: Field survey, Enchill (2019).

The finding in Table 8 reveals the challenges teachers encounter in the use of ICT resources in teaching social studies. It was realised that most of the teachers agreed (M=3.42; SD=1.276) that they lacked the knowledge about using ICT resources in the teaching and learning process. It was revealed that the majority of the teachers strongly agreed (M=3.38; SD=.539) they have limited time in using ICT resources in their teaching.

Similarly, it was observed from Table 8 that majority of the teachers were in agreement (M=2.90; SD=.598) with the statement that they lack the confidence in using ICT resources in teaching social studies. It was also revealed that most (M=3.21; SD=1.720) of the teachers agreed that insufficient ICT resources in their school discourage them from using them in their teaching, no technical support when using the ICT resources in teaching (M=2.91; SD=.891), little experience on using ICT resources (M=2.98; SD=1.645) and lack of training on how to use ICT resources for teaching (M=3.43; SD=.636) were challenges faced by teachers in the use of ICT resources in teaching social studies.

Moreover, it is clear from Table 8 that majority of the teachers face challenges in the use of ICT resources in the teaching of social studies. This is so because the mean of means value of (M=3.08; SD=1.10) indicated that the teachers face challenge in the use of ICT resources in teaching. The mean value summarize the average responses of the teachers to the items while the mean of the standard deviation revealed that the teachers varied in their responses to the items.

The results showed that majority of the teachers agreed that lack of knowledge about ICT resources, lack of confidence, insufficient ICT

resources, no technical support when using ICT resources, little experience on the use of ICT resources and lack of training was the majority challenges they face when using ICT resources in teaching. On the contrary, some of the teachers were of the opinions that age was not a major challenge.

The findings are consistent with Organization for Economic Cooperation Development (2009) who concluded that lack of computer skills and knowledge about ICT are the major barriers teachers when it comes to using technology for teaching. These barriers were similar to the reasons given by Schoepp (2015) as the challenges teachers face when it comes to the use of ICT resources in teaching.

Research Hypothesis

H_0: There is no significant difference in male and female teachers' perception on the use of ICT resources in the teaching of social studies in the selected Senior High Schools in Awutu Senya district.

Table 9: The results of the Independent t-test analysis

Gender	M	SD	T	df	Sig. (2-tailed)
Male	16.11	6.54	.232	48	.678
Female	15.25	7.45			

Source: Field survey, Enchill (2019).

Table 9 indicates that the difference between the perception on the use of ICT resources in the teaching of social studies of male and female teachers was not statistically significant. The Levene's test revealed that the difference for the male and female teachers was statistically insignificant ($p > 0.05$) and hence, this study was undergirded by equal variances not assumed. The results in Table 9 indicated that there was no significant difference in mean scores for

male teachers (M=16.11; SD =6.54) and female teachers (M = 15.25; SD = 7.45), t (50) = .232, p = .678, (two tailed). Therefore, it is seen that male and female teachers did not differ in their perception towards the use of ICT resources in the teaching of social studies in Awutu Senya district; therefore, the null hypothesis is hereby retained. This could be attributed to the fact that the challenges in the teaching of ICT cut across all the schools selected for the study not on gender base. This may be the reason why there is no significant difference between them.

Chapter Summary

This study assessed the availability and use of ICT resources for teaching and learning social studies in selected senior high schools in Awutu Senya district. Specifically, the study revealed that majority of the teachers use ICT resources for practical presentation, finding information, prepare and deliver lessons, communicate with other teachers, store vital data or information and as well as teaching with them.

The studies revealed that majority of the teachers have positive perception towards the use of ICT resources in teaching social studies. Lack of confidence, insufficient ICT resources, no technical support when using ICT resources, little experience on the use of ICT resources and lack of training were the majority challenges they face when using ICT resources in teaching social studies.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

Introduction

This chapter presents a summary of the findings, conclusion and outlines recommendations including areas for further research.

Summary

The study assessed the availability and use of ICT resources for teaching and learning social studies in selected Senior High Schools in Awutu Senya District. Census sampling technique was used to select all the social studies teachers in the Awutu Senya District. In all fifty Senior High Schools social studies teachers in the Awutu Senya District were selected for the study. Self-administered questionnaire was used as an instrument for the study. SPSS version 20.0 was the software's used for the data analysis. Frequency tables and pie charts were also used in presenting the data. Conclusions from relevant related literature were captured along to authenticate the findings of the study. The summary of the findings are presented as follows:

1. The results of the study revealed that the ICT resources that are available in the schools for teaching includes computers, internet connections, televisions and radios, photocopier, overheads projectors and printers.
2. Majority of the teachers use ICT resources for practical presentation, finding information, prepare and deliver lessons, communicate with other teachers, store vital data or information and as well as teaching with them.

3. The study revealed that majority of the teachers has positive perception towards the use of ICT resources in teaching social studies.
4. Lack of knowledge about ICT resources, lack of confidence, insufficient ICT resources, no technical support when using ICT resources, little experience on the use of ICT resources and lack of training were the major challenges teachers face when using ICT resources in teaching social studies.
5. The independent sample t-test results showed there was no significant difference in male and female teachers' perception on the use of ICT facilities.

Conclusions

The following conclusions were drawn based on the research questions that were set:

It can be concluded that majority of the teachers indicated that the ICT resources that are available in the schools for teaching includes computers, internet connections, televisions and radios, photocopier, overheads projectors and printers. The findings revealed that apart from the ICT resources being available for teaching, teachers made use of them. The teachers use the ICT resources for practical presentation, finding information, prepare and deliver lessons, communicate with other teachers and store vital data or information. Moreover, the use of these resources in teaching and learning process will enhance students' understanding when using ICT resources in teaching social studies.

The findings revealed that factors such as lack of training, limited teaching hours, no technical and school support hinder the integration of ICT

facilities into the teaching and learning process. However, it was concluded that the senior high school social studies have positive perception about the use of ICT resources in teaching. Gender has no statistically significant difference between the male and female teachers' perception on the use of ICT facilities.

Recommendations

From the summary of the major findings of this study, it is recommended that:

1. Majority of the teachers have positive perception towards the use of ICT resources in teaching social studies, it is recommended that the Ministry of Education should make budgetary allocations annually to maintain, replace, and expand ICT resources in the schools.
2. Barriers that have and are still hindering the integration of ICT resources in teaching 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.
3. Also, it is recommended that policy formulators should be clear on ICT policy and its direction of implementation with the necessary guidelines so that the implementation agents like Ghana Education Service, Ministry of Finance and the likes can help to make it a reality since ICT resources is the modern way of acquiring critical skills and knowledge effective and efficient for economic development.

Suggestions for Further Research

It may be necessary for further research to be conducted in other districts in the region or other regions of Ghana for a more generalized conclusion to be made on the use of ICT facilities by teachers to enhance the teaching and learning of social studies in senior high schools.

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APPENDIX A

UNIVERSITY OF CAPE COAST

COLLEGE OF DISTANCE EDUCATION

QUESTIONNAIRE FOR SOCIAL STUDIES TEACHERS

The researcher is a post-graduate student in University of Cape Coast who is writing his dissertation on the topic; Assessing the availability and use of ICT resources for teaching and learning social studies in selected senior high schools in Awutu Senya district. Answer the following questions by ticking or writing the appropriate responses. All responses will be treated confidential.

Thank You.

Section A: Demographic Characteristics

Age : Under 25 [ ] 26 – 30 [ ] 31 – 35 [ ]

36 – 40 [ ] 41 – 45 [ ] 46 – 50 [ ]

51 – 55 [ ] 55 – 60 [ ]

What is your gender: Male [ ] Female [ ] Prefer not to say [ ]

Highest educational level attained:

1st Degree [ ] Masters [ ] PhD. [ ]

Name of School: …….

How long have you been teaching?

1 – 5 years [ ] 6 – 10 years [ ] 11 – 15 years [ ]

Above 16 years [ ]

Rank: Teacher [ ] Assistant Superintendent [ ]

Superintendent II [ ] Superintendent I [ ]

Senior Superintendent II [ ] Senior Superintendent I [ ]

Assistant Director II [ ] Assistant Director I [ ]

Have you being using ICT facilities in your teaching?

Never use [ ] Rarely use [ ] Sometimes use [ ]

Often use [ ] Very often use [ ]

Did you receive ICT training before joining the teaching profession?

Yes [ ] No [ ]

Section B: Availability of ICT Resources in Teaching Social Studies

Please indicate by ticking (√) the availability of the following ICT resources in teaching social studies. Indicate your response by ticking the appropriate column making use of the following key: 1 – Available and 2 – Not Available.

ICT Facilities	Available	Not Available
Computers		
Internet system		
Television and radios		
Photocopier		
Educational software for teaching social studies		
Overhead projectors		
Printers		
Digital video recorder		
Digital cameras		

Section C: The Use of ICT Resources in Teaching Social Studies

Please use the likert scale below to indicate the extent to which you agree or disagree with the following statements.

SN ITEM	Strongly Agree	Agree	Strongly Disagree	Disagree
18. Practical demonstration	[ ]	[ ]	[ ]	[ ]
19. Teaching learning materials (TLMs)	[ ]	[ ]	[ ]	[ ]
20. Drill and Practice	[ ]	[ ]	[ ]	[ ]
21. Finding information	[ ]	[ ]	[ ]	[ ]
22. To keep records of students' scores	[ ]	[ ]	[ ]	[ ]
23. Communicating with other teachers	[ ]	[ ]	[ ]	[ ]
24. Making presentation	[ ]	[ ]	[ ]	[ ]
25. I use ICT resource to store vital data or information	[ ]	[ ]	[ ]	[ ]

Others (specify): …….

Section D: Teachers Perception towards the Use of ICT Resources in Teaching Social Studies

Please use the likert scale below to indicate the extent to which you agree or disagree with the following statements.

SN ITEM	Strongly Agree	Agree	Strongly Disagree	Disagree
26. ICT resources makes lessons more interesting	[ ]	[ ]	[ ]	[ ]
27. ICT resources improve the presentation of materials for lessons	[ ]	[ ]	[ ]	[ ]
28. ICT resources motivate students in their learning	[ ]	[ ]	[ ]	[ ]
29. ICT resources gives me more confidence	[ ]	[ ]	[ ]	[ ]
30. ICT resources increase productivity in preparing and updating daily lessons	[ ]	[ ]	[ ]	[ ]
31. ICT resources makes me to meet the different learning needs of my student	[ ]	[ ]	[ ]	[ ]
32. ICT resources makes student attentive in the teaching learning process	[ ]	[ ]	[ ]	[ ]

Section E: Challenges Social Studies Teachers' Face on the Use of ICT Facilities.

Please use the likert scale below to indicate the extent to which you agree or disagree with the following statements.

SN ITEM	Strongly Agree	Agree	Strongly Disagree	Disagree
33. Lack of knowledge about ICT resources	[ ]	[ ]	[ ]	[ ]
34. Limited time in using ICT resources	[ ]	[ ]	[ ]	[ ]
35. Age	[ ]	[ ]	[ ]	[ ]
36. Lack of confidence	[ ]	[ ]	[ ]	[ ]
37. Insufficient ICT resources for teaching	[ ]	[ ]	[ ]	[ ]
38. No technical support when using ICT resources	[ ]	[ ]	[ ]	[ ]
39. Little experience on the use of ICT resources	[ ]	[ ]	[ ]	[ ]
40. Lack of training	[ ]	[ ]	[ ]	[ ]

Thank you for your time and cooperation.