

Influence of Teachers' Variables for The Utilization of Information Communication Technology (ICT) For Social Studies Instruction in Basic Schools in West Mamprusi Municipality of the North East Region, Ghana

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ABSTRACT: *This study examined the influence of teachers' variables for the utilization of ICT for Social Studies instruction in Basic Schools in the West Mamprusi Municipality of the North East Region, Ghana. Three research questions were formulated to achieve the research objectives. The researchers adopted the combined paradigm or the mixed research design, administered questionnaires and solicited opinions through interviews. Descriptive survey was used by the researchers to seek and analyzed information from pupils and teachers' of Social Studies in the Basic Schools in the West Mamprusi Municipality of the North East Region, Ghana. Ten (10) Basic Schools were randomly selected for the study. Thirty (30) Social Studies teachers, one (1) each from basic seven (7), eight (8) and nine (9) as well as sixty (60) pupils, two (2) each were selected from basic seven (7), eight (8) and nine (9) using purposive and random sampling respectively. The result of the findings indicated that most teachers of Social Studies do use ICT in the teaching of Social Studies. However, there are a number of challenges militating against their frequent use of ICT in the teaching and learning process such as the large nature of the classes they handle, insufficient time for the organization of ICT tools and equipment, financial constraint to purchase some ICT tools and equipment for teaching and learning purposes, and lack of support from school administration for ICT use. Based on these findings, recommendations were made that teachers should be orientated on the use of ICT tools and equipment through attendance of seminars, workshops and conferences and that government through Teacher Education Division of Ghana Education Service should support Social Studies teachers in the basic schools within the West Mamprusi Municipality financially for improved efficiency on their use of ICT to promote effective teaching and learning. Teaching time table should be flexible to allow teachers to organize fix ICT tools and equipment in their respective schools to bring about effective teaching and learning.*

KEYWORDS: Information Communication Technology. ICT tools and equipment. teaching and learning of social studies. utilization of ict, teaching methods and strategies for teaching.

INTRODUCTION

Social Studies is an integrated subject that is geared towards equipping an individual with basic knowledge, skills, attitudes and values needed in guiding him/her in solving personal and societal problems (Quartey, 2011). It aims at producing a responsible citizen who is well informed, concerned, participatory, reflective, productive and willing to contribute to national development (Adam et al, 2018). Martorella (1985:10) shared the same opinion when he stated the purpose of Social Studies succinctly as “to develop reflective, competent and concerned citizen”. As such, the main task of the Social Studies teacher is to ensure that students understand and make meaning out of whatever they learn in class. However, this depends on the experience, training, as well as the teacher’s perception of what Social Studies is or ought to be. Significantly, Social Studies curriculum models have been associated with four widely used models in many countries including Ghana. This includes Citizenship Education, Reflective Inquiry, Social Science Structure of Education and Unified Integrated as identified by DuBey& Barth (1980) and Konoye (1988). Teachers’ perception of Social Studies model is therefore important in Social Studies instruction since the mental image of teachers becomes the frame of reference as to why, how and what Social Studies is taught in the school system. The importance and relevance of Social Studies education, as a discipline in the Ghanaian educational system and especially in the basic education level, cannot be over emphasized. Its relevance lies in the fact that, it indeed, develops in the learner the relevant knowledge, attitudes, skills and values required for their personal enhancement as well as societal national development and progress. Thus, the main focus of Social Studies is citizenship education. This means that learners are equipped with needed tools necessary for solving personal, contemporary and societal problems of man’s survival. The purpose of teaching and learning social studies is to develop informed and responsible citizens.

A principal task of every Social Studies teacher, therefore, is to ensure that students understand and make meaning out of whatever they learn in class. Most teachers would agree however, that conveying information to pupils is not all that easy. Although, understanding lies at the heart of every teaching endeavor, most of the time, learners are unable to understand what they learn. One important way of helping students to understand concepts in Social Studies is to integrate information communication technology (ICT) in the teaching- learning process. The demand for ICT use in the teaching and learning of Social Studies, therefore, becomes more urgent in an effort to help learners develop their educational, personal and social aspirations. In fact, various aspects of human endeavors, particularly in the education sector, are being transformed by the advent of information and communication technology (ICT). ICT includes the use of hardware and software for the purpose of collecting, processing, storing, presenting and communicating information, mostly in digital form, dealing with how information can be represented and presented digitally, using different media such as text, audio, video, among others (Guan et al. 2018).

Many teaching methods, techniques and strategies have been adopted and utilized in teaching and learning of Social Studies since its introduction in the Ghanaian Basic Schools in 1972, where it

was called Environmental and Social Studies. Among them include role plays, fieldtrips, lectures, dramatizations, seminars, think-pair-and share, simulations, discussions, brainstorming inter alia. Also, Core and transferable skills such as Problem-solving skills, personal motivation, ICT literacy skills, team-work/ collaborative skills, analytical skills, critical thinking, creative and innovative skills and inquiry skills as well as Cross-cutting issues such as Gender, equity and inclusivity, professional attitudes and values, assessment strategies, action research, reflective thinking are all incorporated in the teaching and learning of the subject in Ghanaian Basic Schools.

It is increasingly clear that a core and transferable skill for making Social Studies teaching and learning very effective, engaging and real is through the utilization of Information Communication Technology (ICT) in the teaching and learning discourse. ICT in education improves engagement and knowledge retention: When ICT is integrated into lessons; students become more engaged in their work. This is because technology provides different opportunities to make it more fun and enjoyable in terms of teaching the same things in different ways. The use of technology in education contributes a lot in the pedagogical aspects in which the application of ICT will lead to effective learning with the help and supports from ICT elements and components (Jamieson-Procter et al., 2013). It is right to say that almost all ranges of subjects' starts from mathematics, science, languages, arts and humanistic and other major fields can be learned more effectively through technology-based tools and equipment. In addition, ICT provides the help and complementary supports for both teachers and students where it involves effective learning with the help of the computers to serve the purpose of learning aids (Jorge et al., 2003). ICT can be used in various ways where it helps both teachers and students to learn about their respective subject areas. A technology- based teaching and learning should involve educational videos, stimulation, guided discovery, World Wide Web (www). This makes teaching and learning purposeful. On the other hand, students will benefit from ICT integration where they are not bounded to the limited curriculum and resources, instead hands-on activities in a technology-based course is designed to help them to stimulate their understanding about the subject. It also helps teachers to design their lesson plans in an effective, creative and interesting approach that would result in students' active learning. Use of ICT in teaching will enhance the learning process and maximizes the students' abilities in active learning (Simin Ghavifekr & Wan Arthirah Wan Rosdy, 2015). Therefore, the use of ICT in particular subject area such as Social Studies that involved complex concepts, principles, generalizations and skills is to improve student's achievement and attainment. The review of curriculum is needed so that only related ICT resources and appropriate software will be installed for the main aims and objectives of curriculum to be achieved. ICT give great emphasis on the topic(s) introduced. For instance, Microsoft PowerPoint can be used to present the topic(s) in a very innovative and creative way that will lead into discussion and exchanging ideas and thoughts. Finally, ICT is used to aid and support student's learning. Students' learning and work are made easy with the use of ICT tools in teaching and make students more organized and efficient.

Social Studies teachers should however note that, infrastructure and facility of ICT is then needed to supply to the schools throughout the nation. A key factor in use of ICT is sufficient computer

labs and ICT equipment. This is to ensure that subject teachers can easily access ICT tools whenever needed (Hennessy, Ruthven, & Brindley, 2005). Lack of adequate ICT equipment and internet access is one of the key problems that schools specifically in rural areas are facing now. Some teachers are not able to utilize ICT to promote effective teaching and learning due to a number of factors/barriers such as negative attitudes of teachers towards the use of ICT to promote effective teaching and learning, access, time, support, resources, attitudes, beliefs, practices and resistance. Another classification is teacher-level barriers versus school-level barriers. Becta (2004) grouped the barriers according to whether they relate to the individual (teacher-level barriers), such as lack of time, lack of confidence, and resistance to change, or to the institution (school-level barriers), such as lack of effective training in solving technical problems and lack of access to resources. Similarly, Balanskat et al. (2006) divided them into micro level barriers, including those related to teachers' attitudes and approach to ICT, and meso level barriers, including those related to the institutional context. The latter added a third category called macro level (system-level barriers), including those related to the wider educational framework. Another perspective presents the obstacles as pertaining to two kinds of conditions: material and non-material (Pelgrum, 2001). The material conditions may be the insufficient number of computers or copies of software. The non-material obstacles include teachers' insufficient ICT knowledge and skills, the difficulty of integrating ICT in instruction, and insufficient teacher time. It is against this background that the researchers are challenged and well-motivated to conduct this study to examine the influence of teachers' variables for the utilization of ICT for Social Studies instruction in Basic Schools in West Mamprusi Municipality of the North East Region, Ghana.

Statement of the Problem

Social Studies is a subject that aims at inculcating into learners knowledge, skills, desirable attitudes and values needed in solving personal as well as societal problems. This view is shared by Bariham (2015) when he indicated that "Social Studies is the study aimed at inculcating desirable skills, attitudes, values and relevant knowledge among learners to enable them to participate effectively in the civic life of their communities".

This can be achieved by exposing learners to a practical interaction with ICT tools and equipment so as to observe, process, record and construct knowledge based on their own experience. This view is upheld by Yelland (2001) when she argued, that, traditional educational environments do not seem to be suitable for preparing learners to function or be productive in the workplaces of today's society. She claimed that organizations that do not incorporate the use of new technologies in schools cannot seriously claim to prepare their students for life in the twenty-first century. This argument is supported by Grimus (2000), who pointed out that "by teaching ICT skills in primary schools the pupils are prepared to face future developments based on proper understanding" (p. 362). On the account of this, there is the need on the part of Social Studies teachers to plan and use ICT in the teaching and learning process bearing in mind the essence of continuity and sequence to foster reiteration and widening of scope as well as catering for the depth of affective elements to be acquired Tamakloe (2008:46).

The relevance of ICT in Basic Schools in Ghana has made it imperative for teachers' to use the ICT as a source of resources inside the classroom. This can ensure students' involvement in learning events and in building their understanding. Several studies argue that the use of new technologies in the classroom is essential for providing opportunities for students to learn to operate in an information age. It is evident, as Bransford et al. (2000) reported that "what is now known about learning provides important guidelines for uses of technology that can help students and teachers develop the competencies needed for the twenty-first century" (p. 206). ICT can play various roles in learning and teaching processes. According to Bransford et al. (2000), several studies have reviewed the literature on ICT and learning and have concluded that it has great potential to enhance student achievement and teacher learning. Wong et al. (2006) point out that technology can play a part in supporting face-to-face teaching and learning in the classroom. Many researchers and theorists assert that the use of computers can help students to become knowledgeable, reduce the amount of direct instruction given to them, and give teachers an opportunity to help those students with particular needs (Iding et al, 2000 Shamatha, Peressini, & Meymaris 2004; Romeo, 2006).

While new technologies can help teachers enhance their pedagogical practice, they can also assist students in their learning. According to Grabe and Grabe (2007), technologies can play a role in student skills, motivation, and knowledge. They claim that ICT can be used to present information to students and help them complete learning tasks.

However, the researchers are yet to come across studies on the influence of teachers' variables for the utilization of ICT for Social Studies instruction in Basic Schools in West Mamprusi Municipality of the North East Region, Ghana. It is against this background that the researchers are challenged and well-motivated to conduct this study to examine the influence of teachers' variables for the utilization of ICT for Social Studies instruction in Basic Schools in West Mamprusi Municipality of the North East Region, Ghana.

Purpose of the Study

The purpose of this study was to examine the influence of teachers' variables for the utilization of ICT for Social Studies instruction in Basic Schools in West Mamprusi Municipality of the North East Region, Ghana.

Research Questions

For the purpose of this study, the following research questions were formulated to guide the study:

1. What is the extent (if any) of teachers' use (if any) of ICT in teaching and learning of Social Studies in Basic Schools in West Mamprusi Municipality of the North East Region, Ghana?
2. What ICT tools and equipment are mostly used by Social Studies teachers' and students for teaching and learning of the subject?

3. Is there any difference between experienced and less experienced Social Studies teachers' use of ICT tools in the teaching and learning of the subject?

LITERATURE REVIEW

The literature review of the study is largely premised along the following strands:

The Concept of ICT

The creation, storage and dissemination of diverse information for learning and teaching have been made possible by information and communication technology (ICT). This includes several core elements that can be combined or used as standalone learning resources (Benjamin, 2016). Information and Communications Technology (ICT) is an extension of Information Technology (IT) which focus on the work of a unified communications and the integration of wired and wireless signals, computers to collect, store, transmit, and manipulate information. This could also involve the use of Internet and mobile phone. ICT covers any product that will store, retrieve, manipulate, transmit or receive information electronically in a digital form; for instance, personal computers, digital television, among others. ICT as technological tools and resources are used to communicate, create, disseminate, store, and manage information (Ajayi, 2008).

The concept ICT in educational field is divided into two main approaches such as: ICT for education and ICT in education (Voogt & Pelgrum, 2005; Watson, 2006). ICT for education means designing information and communication technology for learning and teaching motive. Khaled (2014) also explains that ICT in education is the use of information technologies in different processes of education to aid and improve learning in educational institutions. This includes the use of ICT as a supplement to traditional classrooms, online learning or mixing both modes. ICT in education on the other hand, talks about the use of general components of information and communication technology in practical use in teaching and learning situations

ICT Tools Used for Teaching and Learning Process in Schools

ICT will be an important part of education for the next generation (Simin Ghavifekr & Wan Arthirah Wan Rosdy, 2015). ICT in education has the potential to transform teaching and learning. The invention and improvement in modern broadband communication services and convergence of telecommunication with computers have opened several possibilities to employ numerous modern technological tools for teaching and learning system. Incorporating computers and communications gives overwhelmingly opportunities to the education systems with its capacity to put together, improve and interact with each other over a wide geographic distance in a meaningful way to attain the learning objectives. The growth of these communication and computer systems allows teachers' and students' to get acquainted to a world beyond the boundaries of the classroom. The use of ICT tools in teaching has the potential to transform the nature and process of the teaching and learning environment and envision a new learning culture. Interactivity, flexibility and convenience have become the order of the day in the ICT supported environment. ICT tools give chances for learning because it would enables learners to access, extend, transform and share ideas and information in multi-modal communication styles and format. The use ICT tools

eventually promote learner-centered and collaborative learning principles and enhance critical thinking, creative thinking and problem solving skills among learners. ICT tools used in schools are computers, digital photocopy machine, digital Audio and Video devices, digital camera, scanner, DVD player, and multimedia projector among others.

The Importance of ICT in Education/Social Studies Instruction

Several studies argue that the use of new technologies in the classroom is essential for providing opportunities for students to learn to operate in an information age. It is evident, as Yelland (2001) argued, that traditional educational environments do not seem to be suitable for preparing learners to function or be productive in the workplaces of today's society. She claimed that organizations that do not incorporate the use of new technologies in schools cannot seriously claim to prepare their students for life in the twenty-first century. This argument is supported by Grimus (2000), who pointed out that "by teaching ICT skills in primary schools the pupils are prepared to face future developments based on proper understanding" (p. 362). Similarly, Bransford et al. (2000) reported that "what is now known about learning provides important guidelines for uses of technology that can help students and teachers develop the competencies needed for the twenty-first century" (p. 206).

ICT can play various roles in learning and teaching processes. According to Bransford et al. (2000), several studies have reviewed the literature on ICT and learning and have concluded that it has great potential to enhance student achievement and teacher learning. Wong et al. (2006) point out that technology can play a part in supporting face-to-face teaching and learning in the classroom. Many researchers and theorists assert that the use of computers can help students to become knowledgeable, reduce the amount of direct instruction given to them, and give teachers an opportunity to help those students with particular needs (Iding, Crosby, & Speitel, 2002; Shamatha, Peressini, & Meymaris 2004; Romeo, 2006).

While new technologies can help teachers enhance their pedagogical practice, they can also assist students in their learning. According to Grabe and Grabe (2007), technologies can play a role in student skills, motivation, and knowledge. They claim that ICT can be used to present information to students and help them complete learning tasks.

According to Becta (2003, p. 10), five factors influence the likelihood that good ICT learning opportunities will develop in schools: ICT resourcing, ICT leadership, ICT teaching, school leadership, and general teaching. Becta also indicated that the success of the integration of new technology into education varies from curriculum to curriculum, place to place, and class to class, depending on the ways in which it is applied.

Barriers to Integration of ICT into Teaching and Learning

The act of integrating ICT into teaching and learning is a complex process and one that may encounter a number of difficulties. These difficulties are known as "barriers". A barrier is defined as "any condition that makes it difficult to make progress or to achieve an objective"

(Schoepp, 2005, p. 2). Different categories have been used by researchers and educators to classify barriers to teacher use of ICT in social studies classrooms.

Several studies have divided the barriers into two categories: extrinsic and intrinsic barriers. However, what they meant by extrinsic and intrinsic differed. In one study, Ertmer (1999) referred to extrinsic barriers as first-order and cited access, time, support, resources and training and intrinsic barriers as second-order and cited attitudes, beliefs, practices and resistance; whereas, Al-Alwani, 2005 saw extrinsic barriers as pertaining to organizations rather than individuals and intrinsic barriers as pertaining to teachers, administrators, and individuals.

Another classification is teacher-level barriers versus school-level barriers. Becta (2004) grouped the barriers according to whether they relate to the individual (teacher-level barriers), such as lack of time, lack of confidence, and resistance to change, or to the institution (school-level barriers), such as lack of effective training in solving technical problems and lack of access to resources. Similarly, Balanskat et al. (2006) divided them into micro level barriers, including those related to teachers' attitudes and approach to ICT, and meso level barriers, including those related to the institutional context. The latter added a third category called macro level (system-level barriers), including those related to the wider educational framework.

Another perspective presents the obstacles as pertaining to two kinds of conditions: material and non-material (Pelgrum, 2001). The material conditions may be the insufficient number of computers or copies of software. The non-material obstacles include teachers' insufficient ICT knowledge and skills, the difficulty of integrating ICT in instruction, and insufficient teacher time.

METHODOLOGY

The researchers adopted the combined paradigm or the mixed research design. Mixed methods research is a research design with philosophical assumptions as well as methods of inquiry (Creswell et al 2013). As a methodology, it involves philosophical assumptions that guide the direction of the collection and analysis of data and the mixture of qualitative and quantitative approaches in many phases in the research process (Creswell et al 2013). As a method, it focuses on collecting, analyzing, and mixing both quantitative and qualitative data in a single study or series of studies. Its central premise is that the use of quantitative and qualitative approaches in combination provides a better understanding of research problems than either approach alone. Patton (1990) stated that when investigating human behaviour and attitudes, it is fruitful to use a variety of data collection methods. The researchers are of the view that using different sources and methods in the research process, aid them to build on the strengths of each type of data collection and reduce the weakness of any single approach. Mixed methods research provides strengths that offset the weaknesses of both quantitative and qualitative research (Creswell et al 2013). This mixed methodology was considered desirable approach because it was most suitable for the achievement of the objectives of this research. Descriptive survey was also used in an attempt to

describe some aspects of a population or an existing phenomenon by selecting unbiased sample of individuals to complete questionnaire and take part in interview. Descriptive survey was therefore, used by the researchers to seek and analyzed information from pupils and teachers' of Social Studies in the Basic Schools in West Mamprusi Municipality of the North East Region, Ghana.

Population and Sampling Procedure

The population for the study consisted of all the basic schools within West Mamprusi Municipality in the North East Region of Ghana. However, the targeted population consisted of Social Studies teachers' and pupils' in basic schools within West Mamprusi Municipality. Ten (10) basic schools were randomly selected for the study. Thirty (30) Social Studies teachers, one (1) each from basic seven (7), eight (8) and nine (9) as well as sixty (60) pupils, two (2) each were selected from basic seven (7), eight (8) and nine (9) using purposive and random sampling respectively. Data was collected using questionnaires and interviews. Two main types of data were used in this study. These are primary and secondary data. The primary data included those that came from the questionnaires and interviews which formed the basis for the analysis. The secondary data involved data that were collected from the review of relevant books, journals magazines, newspapers and websites. Several strategies were used to ensure data quality. The researchers provided remote guidance on data quality assurance by examining the data that had been collected from the field. The researchers ensured that data can be verified and changes to the data collection can be implemented when necessary. This ensured that primary information is collected for in-depth analysis of the problem. A better analysis can be done through the detailed questions that are asked during the administration of the questionnaires and interviews for high responses, especially when the interviewee is probed further.

DISCUSSION OF RESULTS

Background Data of Respondents

This section presents and discusses the background information of the respondents. Such information includes gender, subject and non-subject specialization, qualification and experience.

Table 1: Summary of Social Studies teachers

Variable	Sub-Scale	Number (N)	Percentage (%)
Gender	Male	20	67
	Female	10	33
Total		30	100

Source: Field survey, 2022

Table 2: Subject specialization of Social Studies teachers

Subject Specialization	Number (N)	Percentages (%)
In-field	25	83
Out-of-field	5	17
Total	30	100

Source: Field survey, 2022

Table 3: Academic/Professional qualifications of Social Studies teachers

Qualification	Number (N)	Percentages (%)
Diploma	08	27
BA/Bsc/B.Ed.	22	73
Total	30	100

Source: Field survey, 2022

Table 4: Teaching experience of Social Studies teachers

Years	Number (N)	Percentages (%)
1-3	4	13
4-6	5	17
7-9	6	20
10-12	5	17
12+	10	33
Total	30	100

Source: Field survey, 2022

Table 5: Summary of students

Variable	Sub-Scale	Number (N)	Percentage (%)
Gender	Male	32	53
	Female	28	47
Total		60	100

Source: Field survey, 2022

Table 1 presents a summary of the distribution of teachers by their background information. From Table 1, it can be observed that 30 teachers, 3 each were used across the 10 basic schools in the West Mamprusi Municipality. In terms of gender, out of the 30 participants, 20 (67%) were males while 10 (33%) were females. This means that most teachers teaching social studies in the basic schools in the West Mamprusi Municipality are males. With reference to subject specialization, it can be observed that 25 (83%) are teachers who have specialism in social studies, and 5 (17%) indicating that they have no specialization in the subject. This indicates that most of the respondents used for the study are specialist in Social Studies. The academic qualification of the respondents was also an aspect that was looked at (see table 3) and 22 (73%) have first degree in the Arts and Education, 08 (27%) diploma in basic education. This is an indication that a number

of teachers teaching Social Studies in the basic schools do have the required educational qualification since they are supposed to have first degrees to teach at that level. The teaching experience was also considered (see table 4) and 04 (13%) have taught for 1 – 3 years, 5 (17%) have taught for 4-6, 6 (20%) have taught for 7-9, 5 (17%) have taught for 10-12 whiles 10 (33%) have 12+ years teaching experience.

Q1. The extent teachers' use ICT in teaching and learning of Social Studies in Basic Schools in West Mamprusi Municipality of the North East Region, Ghana

Information Communication Technology use in teaching cannot be left out in the teaching and learning of Social Studies. Social Studies as a subject should not be treated in abstract hence the quest of the researchers to bring to the fore the use of ICT in teaching and learning of Social Studies.

Table 6 below presents a summary of responses from teachers.

Table 6: Social Studies teachers' use of ICT in teaching the subject

Sub-Scale	Number (N)	percentages	%
Yes	26	97	
No	04	13	
Total	30	100	

Source: Field Survey, 2022

From Table 6, it can be observed that majority, 26 (97%) of the participants indicated that they use ICT in teaching, while 4 (13%) stated that they have not used ICT in their lesson delivery. From the above, it can be deduced that most teachers in the various basic schools use ICT when teaching Social Studies. This buttresses (Bransford, Brown, & Cocking, 2000; Grimus, 2000; Yelland, 2001) that ICT in education has the potential to transform teaching and learning. The invention and improvement in modern broadband communication services and convergence of telecommunication with computers have opened several possibilities to employ numerous modern technological tools for teaching and learning system. As a result, when working within the formal education setting, ICT becomes relevant to the school's curriculum as they support state education standards and current reform efforts.

Q2. ICT tools Social Studies teachers' use in teaching and learning of the subject

The focus of this question was to identify ICT tools and equipment mostly used by Social Studies teachers' and students for teaching and learning of the subject. Table 7 presents a summary of the responses of both teachers and students.

Table 7: ICT tools mostly used by Social Studies teachers' and students in lessons

No	ICT Tools/Equipment	A N(%)	S N(%)	Ns N(%)
1.	Computers	21(70)	9(30)	0(0)
2.	Digital Photocopy Machine	09(30)	10(33)	11(37)
3.	Digital Audio and Video device	17(57)	12(40)	1(3)
4.	Digital Camera	9(30)	6(20)	15(50)
5.	Scanner	7(23)	11(37)	12(40)
6.	DVD player	16(53)	5(17)	10(33)
7.	Multimedia projector	16(53)	9(30)	5(17)
8.	Mobile phones	25(83)	4(13)	1(3)

Source: field survey, 2022

Key: Always (A), Sometimes (S) and Not Sure (NS)

From Table 7, it can be observed that 21(70%) indicated that they always use computers, 9 (30%) stated that they sometimes do use while 0(0%) were of the view that they are not sure. Use of digital photocopy machine recorded 9 (30%) as always used, 10 (33%) stated sometimes while 11(37%) mentioned that they are not sure. It can also be observed that 17 (57%) said they used digital audio and video devices always while 12 (40%) said they do so sometimes whereas 1 (3%) are not sure. Digital camera use, 9 (30%) said they use this ICT tool to teach, 6 (20%) use it sometimes and 15 (50%) are not sure of its use. 7 (23%) say they use Scanner, 7(23%) say they use it sometimes while 16 (53) were not sure of its usage in teaching the subject. In the case of DVD player, 16 (53%) have used it to teach, 5 (17%) sometimes use it and 10(33%) are not sure. As regards the use of multimedia projector, 16 (53%) do use it to teach the subject, 9 (30%) and 5 (17%) are not sure of using it. Finally, 25 (83%) use mobile phones, 4 (13%) sometimes use it in delivering their lesson and 1 (3%) are not sure of its use

Q3.Is there any difference between experienced and less experienced Social Studies teachers' use of ICT tools in the teaching and learning of the subject?

The idea that experience counts in the teaching profession was what motivated the researchers to find out if there is any significant difference between experienced and less experienced Social Studies teachers' use of ICT in the teaching and learning of the subject. Data from interviews showed that teachers with various characteristics were teaching Social Studies among which are in-field, out-of-field (These are teachers who have been assigned to teach Social Studies but were not trained as Social Studies teachers), experienced, less experienced, males and females. The use of ICT tools among the in-field and out of field teachers was not with much difference. This could be attributed to some workshops organized by Non-Governmental Organizations. Many of the out-of-field teachers were unwilling to be interviewed perhaps because they felt they were incompetent in the subject. Those who willingly submitted themselves were those who have attended Social Studies seminars or have done basic education with Social Studies as an elective. With regard to teaching experience, the results were mixed. There were teachers who taught the subject for over

ten years but did not show any peculiarity in their knowledge of ICT tools use in their teaching. However, one of the Social Studies trained teachers who taught the subject for eleven years in one of the basic schools showed striking difference in his responses to the questions posed to him especially, with regards to ICT tools usage in Social Studies lessons. It really showed his mastery of the subject. According to the teacher, there are a number of challenges militating against their frequent use of ICT in the teaching and learning process such as the large nature of the classes they handle, insufficient time for the organization of ICT tools and equipment, financial constraint to purchase these ICT tools and equipment for teaching and learning purposes, and lack of support from school administration for ICT use. The findings from the interviews also revealed that most of the Social Studies teachers irrespective of their characteristics teach the subject having in mind the use of ICT tools to enhance their pupils understanding. Teachers of the subject need to have these broader knowledge and ideas about ICT tools in mind as they teach it. It could, therefore, be inferred that most of the teachers teaching Social Studies do have some knowledge about ICT tools in teaching the subject; but, in most of the basic schools this research was conducted, most of the ICT tools mentioned by both teachers and pupils were not there to be used by both teachers and pupils. For instance, digital photocopy machine, digital camera, and scanner, were completely not available.

Students' Responses to Interview

The students were asked during the interview to what extent (if any) of teachers' use (if any) of ICT in teaching and learning of Social Studies, most of the students across the basic schools interviewed said that teachers use ICT in their lesson delivery. One of the students said this:

"Our social studies teachers often teach us using ICT anytime we have Social Studies lessons. This motivates us and makes us and improves our learning and understanding capacities." The view expressed by this student is supported by Grade and Grade (2007) who asserted that technologies can play a role in students' skills, motivation and knowledge. They claim that ICT can be used to present information to students and help them complete learning task

Two (2) students from basic seven and eight in two schools respectively said that their teachers used ICT to teach the Social Studies topics. They further asserted that ICT use should be encouraged and promoted in the classroom since it enhances learning. For instance, one of them said: *"Yes, our teacher use ICT tools to teach us in class and I like that because it gives me understanding of what he is teaching us"* When they were asked how often their teachers employed ICT in teaching Social Studies lessons, one of these students also said: *"Our teacher uses ICT but, not often because according to him, some topics are easy to understand."*

From further interviews conducted, some students said that anytime their teacher uses ICT in lesson delivery, internalization of lesson content becomes easy as the ICT use makes abstract topics real. They stated again that we can understand up to 90% of content taught with the use of ICT by our teachers in Social Studies lesson delivery, because it makes abstract topics real. They again said that the use of ICT such as video which is audio visual in nature, cater for all

the senses and that it should be used always. Many of the students however, said that they understood only up to 20% anytime ICT is not incorporated in the teaching and learning of social studies lessons.

On the question of ICT tools and equipment mostly used by Social Studies teachers' and students for teaching and learning of the subject, most of the students mentioned the computer, projector and the mobile phones as the ICT tools that their teachers mostly use in the teaching and learning of the subject, one of the male students said that: *"Our madam always use her mobile phone to surf for information on certain Social Studies lessons to teach us."* Others also maintained that their teachers used the computer and projector in delivering their Social Studies lesson. One of the female students in her answer to the above question said that: *"Our teacher always use the T.V and deck donated to us by Discovery Learning Alliance (DLA), a Non-Governmental Organization that supports basic schools learning in the west Mamprusi municipality."*

The practice of this Social Studies teacher is in line with Dawes (2001) assertion that technologies have the potential to support education across the curriculum and provide opportunities for effective communication between teachers and students in ways that have not been possible.

RECOMMENDATIONS

1. Teachers should be orientated on the use of ICT tools and equipment through attendance of seminars, workshops and conferences to enhance and sharpen their skills on ICT use
2. Teachers in the basic schools should be encouraged to use ICT as instructional resources to enhance the teaching and learning of Social Studies. This would promote effective teaching and learning.
3. The basic schools should formulate policies on the utilization of ICT in the teaching of social studies, so that the decision to utilize ICT is not left to the personal discretion of any single individual or individuals. P.T.A should set aside some funds to support the procurement of ICT tools and equipment to enhance effective teaching and learning.
4. Government through Teacher Education Division of Ghana Education Service should support Social Studies teachers in the basic schools within West Mamprusi Municipality financially for improved efficiency on their use of ICT to promote effective teaching and learning.
5. Government of Ghana through Ghana Education Trust Fund should periodically provide resources both monetary and logistics timely and adequately to Social Studies teachers in the basic schools for proper planning and execution of lessons that will be beneficial to the teaching and learning process.

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