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THE IMPACT OF MEDIA TECHNOLOGIES ON STUDENTS' LEARNING PROCESSES: A CASE OF JUNIOR HIGH SCHOOLS IN BOLGATANGA EAST DISTRICT

FRANKLIN AGUURI

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THE IMPACT OF MEDIA TECHNOLOGIES ON STUDENTS' LEARNING PROCESSES: A CASE OF JUNIOR HIGH SCHOOLS IN BOLGATANGA EAST DISTRICT

FRANKLIN AGUURI

A Dissertation in the Department of Information Technology Education, Faculty of Technical Education, submitted to the School of Graduate Studies, in partial fulfillment of the requirements for the award of the degree of Master of Science (Information Technology Education) in the University of Education, Winneba

MAY, 2020

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DECLARATION

STUDENT'S DECLARATION

I, **FRANKLIN AGUURI**, declared that this Dissertation except quotations and references contained in the published works which have all been identified and duly acknowledge, is entirely my original works, and has not been submitted, either part or whole, for another degree elsewhere.

SIGNATURE……

DATE……

SUPERVISOR'S DECLARATION

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

NAME OF SUPERVISOR: **DR. FRANCIS OHENE BOATENG**

SIGNATURE……

DATE……

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DEDICATION

I dedicate the work to my family.

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My ultimate appreciation goes to the Almighty God for his protection and guidance throughout my course of study. My sincere gratitude also goes to my supervisor, Dr. Francis Ohene Boateng for his generous supervision, constructive criticisms, motivation and encouragement which made this project work a success.

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ABSTRACT

Media Technologies in general, has become the order of the day; as Technology advances, the use of these media Technologies also increases day in day out. The use of the media technologies to learn negative things is the biggest problem affecting the learning processes in the lives of students. However, the media technologies have both positive and negative impacts in the learning processes of Junior High School Students hence the need to analyze how these Media technologies have impacted in the learning processes of Junior High School Students. The purpose of the study is to investigate the effect of media Technologies on students of Junior High School's learning processes in the Bolgatanga East District. The study adopted a survey study design. The study was conducted in Junior High Schools in Bolgatanga East District involving both Teachers and Students. A sampling weight procedure was used to select the sample of 227 students and 47 teachers from the population. Questionnaire was the main instrument used to collect data. Comparative and Quantitative data analysis methods were used with aid of statistical package for social science (SPSS) version 23.0 in the analysis of the data. The study confirmed that students use the media technologies both in school and at home. It also revealed that students spend a lot of productive time on the media technologies rather than their academic work.

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CHAPTER ONE

INTRODUCTION

1.1 Introduction

This chapter focuses on the introductory aspect of the study, which include the background of the study, statement of the problem, research objectives, research questions, significance of the study, delimitations, and limitations of the study and the organization of chapters.

1.2 Background of the Study

Media Technologies in general, has become the order of the day, as Technology advances, the use of these media Technologies also increases day in day out. Technology has become an integral part of life. At present Information Technology (IT), Communication, and Telecommunication have evolved rapidly to converge with the media technology era. This has affected the daily lives of people in various aspects, especially in terms of communication.

As a result, the number of new media Technology users in this era has increased quickly through various communication and telecommunication channels. While people in general currently have access to and take advantage of new media, there also are people with disabilities, the elderly and under privileged who still cannot fully access or utilize these technologies. Such people lack the chance to develop as individual and utilize this technology to improve their quality of life, due to economic constraints and lack of opportunities. This digital divide is a major problem in many countries, including Ghana.

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Ghana's rapid and continuous move into this technological era has been used as a tool to access information faster through communication channels. In order to promote this technology, a developed information and communication infrastructure is needed as well as encouragement for people to acquire knowledge and skills to use it. Technology is defined as the system of tool-using behavior, which has become "part of the fabric of daily life for young children (Thai Office of the National Broadcasting and Educ. Sci. 2019, 9, 57). Moreover, the Ghana Office of the National Communication Authority has said that the advancement of IT, communication and telecommunications has evolved rapidly and brought the people's way of life into the convergence technology media era [3] [6,7]. The emergence of new media technologies plays an unwitting role in the lives of people, for example, the use of mobile phones and tablets. Nowadays, mobile phones, and especially smartphones, are used commonly in various ways. Smartphones are more than just phones by being similar to a computer. The behavior of users has integrated into using smartphone or tablets, and it is said that we have entered the post-personal computer (PC) age, because people have less use for the PC and notebook. Today, mobile phone can be used for surfing the net, taking photographs, connecting to social media online, watching movies, listening to music, watching TV, listening to the radio reading online news, newspaper and magazine, conducting financial transactions, buying and selling , and conducting various services. This fusion of technology and media or services has come together and made daily learning easier than in the past.

Definition of the operational word 'Media Technology'

Media Technology is defined as any hardware, software, or tools that are used to compose, create, produce, deliver and manage media including audio, video, images,

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information, interactive media, video games, virtual reality and augmented reality environments.

Challenges of Defining Media Technology

Media has many definitions ranging from "a particular form of communication" as in "print versus video" to "the industry that provide news and entertainment" as in "the media." For the purpose of this report, media is defined as "all means of communication, whatever its format" (Reid, 1994). In this sense, media include symbol systems as diverse as print graphics, animation, audio and motion pictures.

Also, technology has many definitions i.e. "the application of scientific method to solve problems as in 'the technology of space exploration" to "the things or processes which embody knowledge within a culture as in 'the technology of writing." Within this report, technology is defined as "any object or process of human origin that can be used to convey media." In this sense, technology includes phenomena as diverse as books, films, televisions and the internet.

1.2.1 The Nature of Media Technologies in General

If we stop and think about them, the technologies that form the basis of our media can seem remarkable to those of us who are not engineers. How, exactly, is a book composed and printed? How do radio and television really work? How does not a text message get from where to there? Most of us will not be able to answer such questions, at least not in technical terms. We know very little about the technological aspects of printing presses, broadcast technology, computers, and mobile devices. And in many ways, it doesn't matter. We are still able to read a book, watch TV, surf the Internet,

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and use our smartphones. One important characteristics of media technology, then, is that it is so user-friendly that we often take it for granted. And by taking it for granted, we often overlook how technology helps shape our media experience (Bolter & Grusin, 2000; Lister et al., 2009).

1.2.2 Media Technologies in Ghana our Situation

The use of new media Technologies in Ghana like elsewhere is growing. The Information and Communication Technologies (ICT) sector, which is based on a free market approach, has promoted new media use. Most popular aspect of new media to Ghanaians is the Internet and its associated mobile and desktop applications for education, health, politics, business, publishing, governance and so on. Also popular is the use of mobile devices like smart phones and tablets and computer.

Ghana was among the first countries in Sub-Saharan African to have Internet access. As of December, 2012, and 4.2 million people or roughly 17% of the population used the Internet. Wireless technologies represent a significant area for expanding telecommunications access (Oxfordbusinessgroup.com. 4 June 2013. Retrieved 5 June 2013). According to Ghana population and Housing Census (2010), Information and Communication Technology (ICT), questions were asked for both individuals and households. Persons having mobile phones refer to respondents 12 years and older who owned mobile phone (irrespective of the number of mobile phones owned by each person). Persons using internet facility refers to those who had access to internet facility at home, internet café, on mobile phone or other mobile phone device. Internet access is assumed to be not only via computer, but also by mobile phones, PDA, game machine and digital television (Ghana Population Census, 2010).

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Households having Personal Computers/Laptops refer to households who own desktops/laptop computers. The fixed telephone line refers to a telephone line connecting a customer's terminal equipment (e.g telephone set, facsimile machine) to the public switch telephone network.

The Bharti Airtel, Huawei and Microsoft are involved in efforts to improve Ghana's telecommunications network. And these wireless technologies, though efficient and wide-reaching, come at an expense to the ordinary Internet user, even if in rural areas. Education indicators in Ghana reflect a gender gap and disparities drive public action against illiteracy and inequities in access to education. Eliminating illiteracy has been a constant objective of Ghanaian education policies for the last 40 years; the difficulties around ensuring equitable access to education are likewise acknowledged by the authorities. Public action in both domains has yielded results judged significant but not sufficient by national experts and international organizations. Increasing the place of vocational education and training and of ICT (information and communications technology) within the education system are other clear objectives of Ghanaian policies in education (Ghana Population Census 2010).

The Ministry of Education is responsible for the administration and the coordination of public action regarding Education.

Its multiple agencies handle the concrete implementation of policies, in cooperation with the local authorities (10 regional and 138 district offices). The state also manages the training of teachers. Many private and public colleges prepare applicants to pass the teacher certification exam to teach at the primary level. Two universities offer special curricula leading to secondary education teacher certification. Education

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represented 23% of the state expenditure in 2010; international donor support to the sector has steadily declined as the state has taken on the bulk of education funding. (Ghana Population Census 2010).

1.2.3 Good things Students learn through Media Technologies

Students are able to use the media Technologies to learn new things, through Television, students watch educative programs and quizzes using the Television, they also do exercises using the computer, they use Tablets and mobile phones to do research. Curriculum, Instruction, and Assessment: Teachers customize instruction, content and assessment on student to student bases to ensure mastery. Educators access professional resources and learning opportunities that can lead to improvements in student's academic success.

1.2.4 Challenges with the use of Media Technologies

1. Access; some students do not get access to the media technologies, students from the poor backgrounds hardly get the media technologies to use hence are deprived of the benefits associated with these media technologies.

2. Different social dynamics

Technology adds complexity to everything-support, teaching, learning, budgets, etc. It's inherently disruptive.

Take for example the added social dynamics of modern technology. Privacy, footprint, and digital citizenship are all as important as the content being learned and how learning is being measured. Even entirely new approaches like learning don't offer the same social benefits of a regular school. Without a classroom where students can form friendships and relationships with their peers, they may not learn the same social cues

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as regular students. Without any real face-to-face time with their teacher, they may take the classes less seriously (J Hazarika – 2016).

3. Distraction

Many students become distracted with their academic work. After using these media technologies, they become distracted with things they learn in the school. Many teachers believe that smartphones and tablets, with internet connectivity and text messaging services, can merely be a source of a source of distraction for students as opposed to a learning tool (Teach Though Staff- August 12, 2019 – Updated on September 10, 2019.

4. Social Isolation

Bickham et al., (2006), investigated the relationship between TV viewing time, content, context, and peer integration. As children spend more total time watching TV, they spend a significantly shorter amount of time with friends as compared to those who don't, thus, viewing television causes poor peer relationships and thereby increases the risk for social isolation, anxiety disorder, agoraphobia, and antisocial behavior, including aggression and gang involvement.

DS Bickham – 2006 found that the more time children spent watching TV, the less time they spent with their families. While TV may isolate children, the reverse causal direction is also plausible lonely children may turn to TV for entertainment and companionship. Children who are marginalized by their press use TV to escape the stresses of their lives and meet their social needs.

Conversely, children who are socially integrated spend less time watching TV. Thus, it can be argued that it is social isolation that it is social isolation that motivates excessive media use. Overall, it is most likely that both effects occur- children who watch more TV become more socially isolated, which leads them to spend more time

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watching TV. While TV viewing is often perceived as an isolating activity, it frequently occurs in the company of friends. Because socializing builds interpersonal skills, TV viewing with friends may provide a venue for these skills to develop. It is important to consider content whenever investigating the relationships between media use and behaviors. Violent television viewing may influence young children (Kunkel, Wilson & Links, et al., 2006).

5. Negative life style

Despite the good things associated with the student's use of the media above, children of the 21st century use the Media technology for other negative things. These include, using mobile phones to chat with their friends on the social media like WhatsApp, Facebook and discussion of negative things aside their learning. Students also use the media technologies to do soccer bet and attend dance for entertainment. Some use the media to watch pornographic material on pornographic sites. This influences them badly in their learning processes. Some use the media to indulge in betting, others stake lotto and others go to game centers to play games for money and some end up dropping out of school because of the bad influence on the use of the media (Primack et al, 2019).

1.3 Problem Statement

A smooth learning process helps students to acquire new knowledge and skills and ultimately influences their attitudes, decisions and actions. The trend of technology keeps changing every day, new media technologies emerges. The desire to engage in the use of these media increases. This therefore exposes students to the use of the media technologies. However, the problem of social vices also persists. Students therefore fall prey to these social vices. Students take advantage and learn new things out of these emerging media. However, these media technologies have some impact on students learning process.

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The use of the media technologies to learn negative things is the biggest problem affecting the learning processes in the lives of students. Because this problem arises, there is the need to analyze the impact it has on the learning processes. Students use the media such as Facebook, WhatsApp, Television and the internet to learn on their own and to do their homework. Others also use it to watch pornographic materials, my bet and this leads to many school drop outs. This challenge makes it difficult for some parents to allow their wards get exposed to the media. Students can use the media technologies anywhere they find themselves from schools, home and also with their friends. This makes monitoring your children on the use of the media technologies rather difficult.

However, the media technologies have both positive and negative impacts in the learning processes of Junior High School Students hence the need to analyze the level of impact in the learning processes of Junior High School Students. Even though research has been done on the problems stated in some parts of the world, in my locality, Bolgatanga East, no research is done on these problems and this created a gap that needs to be filled, hence this research.

Rationale of the study

This study examined the impact media Technology has on the students learning processes of Junior High School Students.

1.4 Research Objectives

The purpose of the study is to investigate the effect of media Technologies on the learning processes of students of Junior High School's learning processes in the Bolgatanga East District.

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The specific objectives are:

1. Identify the medial technologies commonly used by JHS students in Bolgatanga East District
2. Determine how these media technologies are used by the Junior High School students
3. Identify the impact these media technologies have on students' learning processes

1.5 Research Questions

1. What are the media technologies commonly used by students in the Bolgatanga East District?
2. How are the media technologies used among student in the Bolgatanga East District?
3. What impact does the media technologies have on the learning processes of students in the Bolgatanga East District?

1.6 Significance of the Study

Stake holders will be satisfied that their wards use the media technologies to improve their learning academically. They will also caution and monitor their wards to discourage them from using the media technologies to learn negative things that will affect their academic work.

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1.7 Organization of the Study

The study was organized into six chapters. Chapter one dealt with the background of the study, statement of the problem, the rationale of the study, research and specific objectives of the study, research questions and significance of the study and organization of the study. The chapter two dealt with the review of relevant literature on the study. Chapter three also addressed the method and instruments used to gather data from the field. In the chapter four, data gathered from the field were presented, analyzed. The chapter five discussed the results analyzed in chapter four. The chapter five gave a summary of findings of the study and drew the curtains down on the conclusion and recommendations.

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CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter discusses the past studies on technologies impact on learning. The diffusion of ICT is not the first of new media studies. There are several studies of new media, which have become traditional day. The major topics discuss under this chapter are learning, learning environment, evolution of technology in learning and the impact of media technologies on student learning process. A lot of literature available is produced by the researchers in the West and North America with little on Africa apart from what might have written by the foreign scholars.

2.2 Empirical Basics of the Study

A study in Bolgatanga East District of Upper East Region, one of the deprive District and closer to the capital. The time spent on media divide by Junior High School children between the adolescent age and its association with personal and socioeconomic factors. The research design was a qualitative cross-sectional survey, in which an interviewer administered recall questionnaire was used. Statistical analyses include repeated measures analyses of variance, analysis of covariance and structural equation models. Results showed students use the media technologies one or more both at home and in the school. Four significant predictors of media emerged. Firstly, the type of school spent time on them than their private schools counterparts. Secondly, older adolescents (above 14 years old) were more likely to use computer/video game and mobile phone than younger adolescents. Thirdly, the more accessibility to household technologies the more probable Television was used. Finally, Boys significantly more time in mobile phone than girls.

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Also, result revealed that adolescents spend more time on TV and computer/ videogames in dry season than the raining season, and more TV and mobile phone on weekends than on week days, especially among public schools. Findings from this study contribute significantly to the existing knowledge on adolescent; 2008 The Association for Professionals in Service for Adolescents. Published Elseier Ltd. All right reserved. Keywords: Adolescents; Television; Computer; Viderograme: Mobile Phone; media Technology usage.

2.3 Learning

This part is dedicated to the concept of learning, theories, history and evolution of learning. Before moving into the great details of mobile learning it is very important to understand the concept of learning and its different approaches. We describe the learning from different viewpoints because the learning has different dimensions i.e. Social, cognitive, and behavior, etc. It is of prime importance to know about learning theories and the history of learning as these all have contributed to construct the theme of media/mobile learning since its inception.

2.3.1 What is Learning?

Learning is a simple word but hard to define. There are several definitions by different researchers with respect to different philosophies and backgrounds. The simple definition of learning, fetched from Dictionary of Human Resource Management (2008) IS ‘’Learning is the process through which individuals acquire knowledge, skills, and attitudes. It may be achieved through experience, reflection, study, or instruction” Another good definition is “Acquisition of skills and concepts by a variety of processes. The oldest theories hold learning to be an associative process by which

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ideas; images and events become linked in the mind". According to Brown and Duguid (2000), cited by Kurti et al., (2007).

"Learning is a social process; it happens in collaboration between people and together with technology. So, when introducing technology, the view should be shifted from seeing it as a cognitive delivery system to considering it a means to support collaborative conversations about a topic" These definitions construct the understanding that learning is a multidimensional term that has roots from several disciplines. Learning comes in two forms formal and informal learning. Formal learning can be defined as a structured and defined mode of learning in controlled environment like schools. Informal learning can be defined as the unstructured learning with or without the help if an instructor and that does not lead to any certification. According to European Commission (2001; cited by Colley et al, 2002) "learning resulting from daily life activities related to work, family or leisure" other books add non-formal learning to the types of learning, where students or learners learn under a structure with the assistance of instructor.

2.3.2 What is Learning Process?

A process that people pass through to acquire new knowledge and skills and ultimately influence their attitudes, decisions and actions (Ambrose et al, 2010). Activities carry out to achieve educational objectives. They carried out individually, although this takes place in a cultural and social context, in which people combine their new knowledge with their previous cognitive structures. The completion of the learning cycle that includes active testing, concrete experiences, reflection observation, and abstract hypothesis. It is the process of in which an individual or group uses, adapt and

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reproduces structures or appropriates the structures. A process that consists of several mental processes. It results in changed behavior. This is the activities carried out by students to achieve educational objectives. They are carried out individually, although this takes place in a cultural and social context, in which students combine their new knowledge with their previous cognitive structures.

2.3.3 Learning Environment Model

The basic learning model discussed here consists of three major components: actors, the classroom and the extra classroom. The actors are the people in the learning environments that either directly interact or observe interactions (such as researchers). These actors interact or observe course method and media, usually within the physical classroom. For example, the classroom is a formal interface where students observe lectures and interact with the educator to gain knowledge germane to a specific subject. An informal interface provides the means for communication outside the control of the educator, and is referred to as the extra classroom in this dissertation. An example of an extra classroom interaction is one student asking another student about a specific subject occurs outside the classroom. Not all student activities are considered a part of the extra classroom, only those pertaining to a specific subject matter.

Actors: The actors in this model are the students, educators, and researchers. The goal of the educators is to transfer knowledge to the students. The goal of the students is to assimilate and understand the knowledge transferred from the educator. Interactions between the educators and students are direct and for the most part bidirectional. Students also interact directly with each other. This interaction can take place using the formal interface or without it. The goal of the researcher, however, is merely observed

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and evaluates the effectiveness of the material, methods and media used within the learning environment. As their goals merely to observe, there is usually no need for direct feedback to the students involved in the research.

In-Classroom Activities: In-classroom activities take place with total temporal or spatial proximity. All interactions between actors occur within this realm. Educators deliver lectures, examinations and other learning activities to student congregated in the same location. Students listen to, and to varying degrees participate in, lectures. Students and educators interact in such an environment usually with one goal: teaching and /or learning of a specific subject matter.

Researchers are also involved in this realm. Their goals, however differs from the other actors. Rather than directly participate, the researcher observe the activities between students and educators for the purpose of evaluation. Researchers do also indirectly participate. Their presence has a Heisenberg effect: they change the environment they seek to observe with their mere presence. Student may act differently when they know they are being observed. As most research in this area is done ethnically, students are likely to know they are being observed. In-classroom activities are easily observed. All actors present may observe the actions of the other actors. Second, participation and interaction are also easily achieved in the classroom. All actors can interact with one another with no hindrances other than typical classroom protocols. Both of these aspects are greatly affected, however, by educational technologies that allow the actors to change both temporal and spatial proximity.

Extra classroom Activities Extra classroom activities occur with shifts in temporal or spatial proximity or both. As stated earlier, more educational institutions are using distance learning with traditional learning models to supplement (and in some cases

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entirely replace) the classroom-learning environment. For example, a large number of classes use technologies as simple as occurs websites and as complicated as full CMS to deliver course media and allow for greater student interaction. Students are also using other communication channels to interact with current and past students of a specific course. Social networks such as Facebook that specifically cater to student users have given student new ways of finding information about a class they are taking or the subject matter for that class. Educators, too use the Internet and other communication technologies to participate in extra classroom activities. Educators can use live chats, forums and even instant massaging to hold virtual office hours. Researchers have also benefitted from these emerging technologies. CMS and other recorded student interactions help minimize the Heisenberg effect their presence can have while students may be aware they are being observed, they not change their behavior as dramatically if they are unaware of any direct observation taking place.

2.3.4 Evolution of the Learning Environment

To gain a better understanding of how technology affects the classroom we discuss the evolution of learning environments over time. From the traditional blackboard and lecture classroom to the mobile learning environments of today we see how materials, methods and media come together to create learning environments. While the material remains the same over time the methods and media change as educators introduce new technologies to provide richer learning environments to reach an increasing number of students.

The Traditional Learning Environment: The main focus of the traditional learning environment is the formal interface. Students and educators meet at the same time and in the same place for activities such as lectures and exams. Educators use very little

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rich media like we see today in this learning environment. Figure 1 illustrate such a learning environment, which resembles the traditional notion of a classroom. In this figure the classroom contains media as a blackboard a lecture represented by the person speaking into a megaphone. Students meet at the same time in the same place to interact with the education and listen to and from the lecturer.

Students also interact in the extra classroom through the informal interface. The extra classroom, however, plays a minor role compared to today. As the modes of communication are more limited the communication is usually through direct conversations outside the class or over the phone (or any mass media communication.

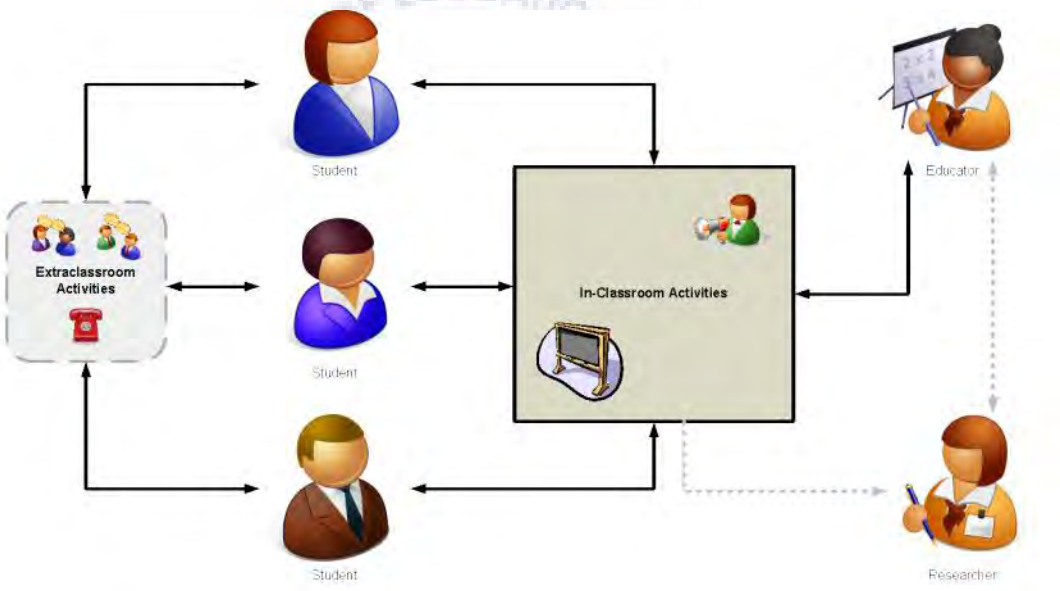

Figure 1: Traditional Learning Model

The modern learning environment: The modern classroom is similar to the traditional classroom but uses new learning technologies favored by the educator or educational institution. For example, while the blackboard maintains a prominent place in most learning environments, newer technologies are used to enhance the learning process. Educators now commonly use power point for instruction. This technology serve three main purpose: 1) to free the educator from constantly writing the same material on the

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black board, 2) allow educators to distribute the content of lecture notes more easily, and 3) provide a richer experience for teaching concepts(for example, animating concepts in the slides). While these and other technologies are supposed to enhance the learning experience, they do not replace the importance of a good educator, and nor do they make bad educators better.

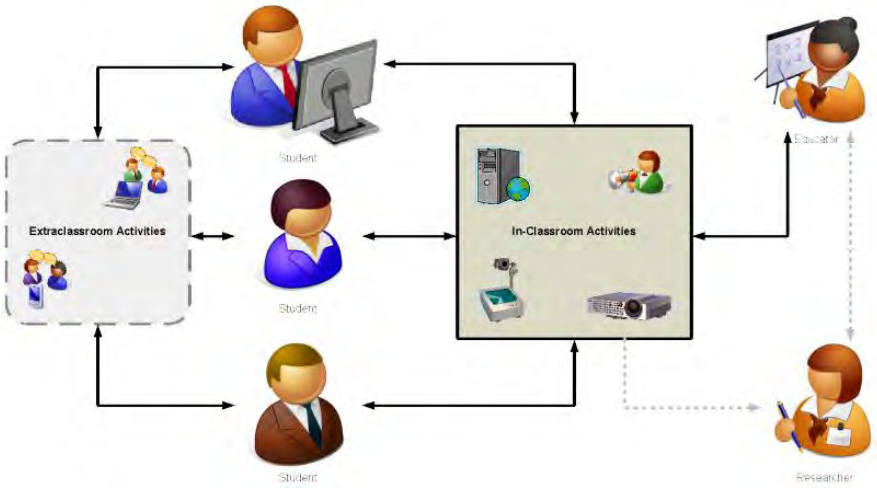

Figure 2: Modern Learning Model

Other technologies are also included in learning environments that were not previously possible. Increasingly classrooms are including wireless networking technologies or at least internet connectivity allowing students to view information beyond that presented in the learning environment as part of lectures. The problem with such technologies is that we do not fully understand their affect.

Figure 2 illustrates the ideas of the modern classroom. It includes much of the same materials and media of the traditional classroom and much more. The classroom now not only contains a blackboard, it also includes a rich set of media whose purpose is to improve the learning environment by reaching more students participating in learning activities. The overhead and LCD projectors as well as a web server for CMS functionality represent examples of richer media. The extra classroom takes on greater importance, as there are more opportunities for interactions with the addition of modern

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communication media such as the internet. Now students not only hold conversations in person and on the plain old telephone system (POTS), they also use chat, instant messaging, email and cell phones.

The figure learning environment: While the future of learning environments is not fully predictable, we can look at current learning environment trends and surmise at least the challenges faced by educators. We also view project such as OLPC and classmate PC as contributing to the increasing importance of the extra classroom.

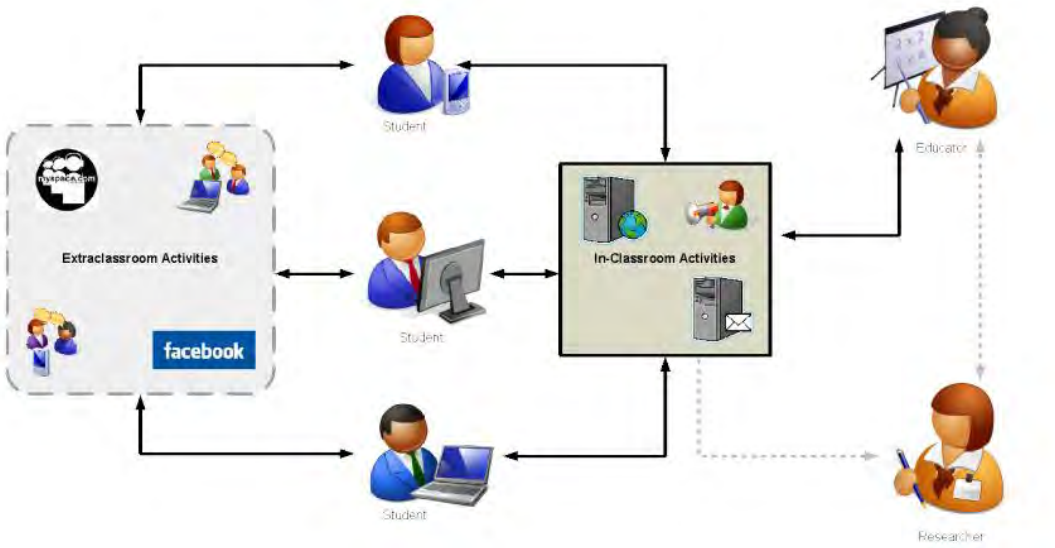

Figure 3: Future learning mode

Current, there are at least three technologies that have the potential to greatly affect learning environments: 1) mobile learning 2) augmented reality and 3) online social networks. All of these technologies current influence learning environments and expand the importance of the extra classroom and extra classroom activities as technology provides students increasing opportunities to interact and engage knowledge outside the confine of the classroom.

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What is Mead?

Media has many definition ranging from “a particular form of communication” as in “print versus video” to “ the industry that provides news and entertainment” as in “ the media” for the purpose of this report, media is defined as “ all means of communication, whatever its formal”(Reid, 1994, p.51). In his sense, media include symbol systems as diverse as print, graphics, animation, audio and motion picture.

Similarly technology has many definitions ranging from “the application of the scientific method to solve problems as in the technology of space exploration’’’’ to the things or processes which embody knowledge or craft within a culture as in the technology of writing’’ Within this report technology is defined as ‘’any object process of human origin that can be used to convey media’’ In this sense, technology includes phenomena as diverse as books, films, television, and the internet.

With respect to education, media are the systems that teachers and students use to represent knowledge technologies are the tools that allow them to share their knowledge representations with others. Unfortunately, it is common for practitioners and experts alike to confound the meaning of media and technology in education, and they are often used synonymously. The following quote from the fifth Edition of the Encyclopedia of Educational Research (Mitzel, 2982) illustrate the problem:

First although most educators are comfortable enough to use the term “media” and expect others to understand it meaning it lacks a commonly accepted definition instead there is a general somewhat vague understanding that it refers to various audio and /or visual communication technologies which have come to be used by educators, Book

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and other print materials are of course, media too yet is usually understood from the context – including the present context – that they are not part of the topic under discussion (Seibert & Ullmer, 1982).

Cognitive tools are important in both respects. Solomon et al (1991) maintain that "the cognitive effects with computer tools greatly depend on the mindful engagement of learners in the tasks afforded by these tools," and that educators should empower learners with cognitive tools and assess their abilities in conjunction with the use of these tools. Such a development will entail a new conception of ability as an intellectual partnership between learners and the tools they use. Although some worry that this partnership makes learners too dependent upon the technology, much performance (eg. Instrumental music) are meaningless without the technologies which enable them. Allowing students to demonstrate learning in collaboration with cognitive tools may be attacked by parties invested in existing assessment systems. However, who would assess the ability of an artist without allowing the use of brushes, paint, and other media? Contemporary intellectual abilities should not be assessed without cognitive tools, including books and computers (Salomon et al., 1991).

"Learning From "and Learning with "Media and Technology

There are two major approaches to suing media and technology in schools: students can learn from media and technology and they can learn with media and technology (Jonassen & Reeves, 1996). Learning from media and technology is often referred to in terms such as instructional television computer based instruction, or integrated learning systems (Hannafin, Hannafin, Hooper, Rieber & Kini, 1996; Seels Berry, Fullerton & Horn, 1996). Learning with technology less widespread than the 'from'

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approach is referred to in terms such as cognitive tools (Jonassen & Reeves, 1996) and constructivist learning environment (Wilson, 1996). Regardless of the approach media and technology have been introduced into schools because it is believed that they can have positive effects on teaching and learning. The purpose of this report is to summarize the evidence for the effectiveness and impact of media and technology in schools around the world (A limitation of this report is that the vast majority of the published research on the effectiveness of media and technology in schools was conducted in English speaking countries as Australia, Canada, the United Kingdom, and the United State of America). Research studies concerning the impact of these different approaches will be presented in the next two sections of this report. But first, it is necessary to clarify what is meant by the term media and technology within the context of education.

The Foundations for Using Cognitive Tools

The following principles sum up the foundation for using cognitive tools:

- Cognitive tools will have their greatest effectiveness when they are applied within constructivist learning environments.
- Cognitive tools empower learners to design their own representations of knowledge rather than absorbing representations preconceived by others.
- Cognitive tools can be used to support the deep reflective thinking that is necessary for meaningful learning.
- Cognitive tools have two kinds of important cognitive effects those which are with the technology in terms of intellectual partnerships and those that are of the technology in terms of the cognitive residue that remains after the tools are used.

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- Cognitive tools enable mindful, challenging learning rather than the effortless learning promised but rarely realized by other instructional innovations
- The source of the tasks or problems to which cognitive tools are applied should be learners guided by teachers and other resources in the learning environment.
- Ideally, tasks or problems for the application of cognitive tools will be situated in realistic contexts with results that are personally meaningful for learners.

Multimedia as a Cognitive Tool

Space does not allow full revelation of the effectiveness of a wide of cognitive tools, and therefore this report focuses on multimedia construction programs as intellectual partners to enable and facilitate critical thinking and higher order learning. Although there are many different types of computers-based cognitive tools, including databases, spreadsheets, semantic networks, expert systems, multimedia/hypermedia construction software, computer-based conferencing collaborative knowledge construction environment computer programming language, micro worlds, and interactive learning environments (Jonassen 1996a), multimedia construction software programs such as Hyper Studio (Milton & Spradley, 1996) are tools increasingly available in K-12 schools and therefore deserve attention.

Multimedia is the integration of more than one medium into some form of communication or experience delivered via a computer. Most often multimedia refers to the integration of media such as text, sound, graphic, animation video, imaging and spatial modeling into a computer system (Von Wodteke, 1993). Employing relatively inexpensive desktop computers users are now able to capture sounds and video manipulate audio and images to achieve special effects, synthesize audio and video, create sophisticated graphics including animation and integrate them all into a single

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multimedia presentation. Individuals with very little experience are becoming their own multimedia artist's producers and publishers. Multimedia presentations are engaging because they are multimodal. In other words, multimedia can stimulate more than one sense at a time and in doing so may be more attention –getting and attention-holding.

2.4 Web 2.0 Technologies

Web 2.0 technologies encourage active learning. According to Zhao and Kemp (2012) web 2.0 technologies are defined as the second generation of web technologies which allows users to connect and interact with one another (232). McLoughlin and Lee (2007) illustrate web 2.0 as a second generation, or more personalized communicative form of the World Wide Web that emphasizes active participation connectivity collaboration and sharing of knowledge and ideas among users.

Web 2.0 technologies tools and applications offer educators the tools to engage leaners within formal and informal learning environments in higher education. Chickering and Gamson (1987) anticipated seven principles for student engagement in higher education as follows:

- Student/faculty contact;
- Cooperation among students
- Active feedback
- Prompt feedback
- Emphasizing time on task
- Communicating high expectations
- Respecting diversity

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Additionally, Kuh (2009) pointed out engagement can be measured by implementing these seven principles in higher education. Tapscott (1998) emphasizes the importance of technology for the tech-savvy or the next general. Social media and web 2.0 technologies are used exchangeable by the net generation and instructors in higher education (Gikas & Grant, 2013). Social media as described by Greehow (2011) includes: 1 social network sites (Facebook, Twitter, Linkedin Ning & Myspace) 2.37.

Bookmarking, media sharing collaboration development and content organization (delicious; You Tube and Flickr; wikis and blogs and RSS feeds) Groseck (2009) has presented examples of sing web 2.0 technologies in higher education as shown in Table 1.

Table 1: Models of integrating Web 2.0 (Geosseck, 2009)

Web 2.0 Technologies	Educational Applications
Blogging	Online journals with information of interest Gather different learners based on a common topic Instant feedback from instructors or students in their writing assignment and homework
Microblogging	Source of information and links that support the learning material Communities in educational environment provide online decision.
Social networking	An announcement community of practice, flexible on line learning environment, links with people and creates accounts.
Instant Message	Real-time interaction between people using mobiles. It allows users to attach pictures and videos. Connects a group of people through video.

Islam (2012) and Garcia et al. (2013) highlight the increasing use of Web 2.0 tools by instructors in higher education and the benefit provided by these technologies. For example, the Ning platform was used to provide social exchange in a blended learning environment. Radrigo and Nguyen (2013) reported that 92 first year students and seven

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instructors from an interior Architecture programme participated in this study. The Ning network was used as an online studio environment that provided the latest activity, blog photo gallery, comments events individual user page and chat. The study found that 78% agreed that it helped their learning. 77% agree that it supported their communication on the course. They conclude that social networks have the potential to affect student interaction and behaviors. Moreover, they found that social interaction increases the student's learning experience through participation. There are numerous literature reviews on the implementation of social media/web 2.0 technologies such as Facebook. Twitter blogs and polls inside and outside the classroom in higher education; they will be examined below.

2.4.1 Facebook

The use of Facebook for student learning has been investigated by many authors, with mixed results. Junco (2012) found that use of Facebook resulted in a negative relation to student engagement and Suwanntthachote (2012) found no relationship between engagement of the group and the usage of Facebook. In contrast, there is a positive relation between engagement of the student on the Facebook use reported by Heiberger and Harper, (2008). Another study carried out by Barczyk and Duncan (2013) examines the use of Facebook as a supplement to four traditional business courses at two universities situated in California and Indiana, USA. The study found that students agreed that Facebook enhanced participation and is a convenient tool for enhancing discussion.

Moreover, Irwin et al., (2012) found that Facebook could be a useful tool for learning. Facebook was used as a replacement for a learning Management system, in a study by wang et al. (2011). The findings report that Facebook was a successful substitute to the

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system of learning management for the course. Schroeder and Greenbowe (2009) formed a Facebook group in order to compare the use of Facebook and the system of system of learning management.

The study found that the number of posts through the uses of Facebook was more than those in the learning management system. In addition, Li (2009) described the use of the virtual hours as a means for the students and the instructors to communicate through the instant messaging of the Facebook function. There were traditional and non-traditional students enrolled on the undergraduate MIS course. The study concluded that there was no significant difference between the face-to-face office hours and the use of virtual office hours, while the students who used the virtual office hours were more satisfied than students that were using the face-to –face hour hours' group.

It is however, argued that learning styles of students are different and therefore, the use of web 2.0 technologies such as Facebook cannot be generalized. Student can prefer a particular web 2.0 technology in a particular context and can escape the use of technologies in other contexts. The use of Facebook in education can be affected by different factors, such as the background of the student, age, gender, ethnic origin, expertise, learning objectives and level of learning but not by learning theories (Bennett et al, 2008). It is argued that learners may be aware of the differences within and across the culture and context and can exploit them. This presents a challenge for the teachers and educational institutions to use web 2.0 with caution. Although the current generation can be seen as enthusiastic Facebook users, they may avoid using it for a purpose forced on them that is, it for the educational purpose. This may be seen as a change in the perception of using Facebook and this change may be resisted (Kennedy et al; 2009).

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This kind of observation has been highlighted by various other studies including valjataga and Fielder (2009) and Lohnes and Kinzer (2007). These studies show that next generation learners are not able or willing to engage in an autonomous learning environment offered and needed by web 2.0, including Facebook. The use of Facebook and other such technologies require a level of independence and motivation that all the current generation students may not have (Valjataga and Fielder, 2009). The learners are not ready for the maturity and independence that are required for learning purposes using web 2.0 technologies such as Facebook and blogging (Caruso et al, 2005).

2.4.2 Twitter

Twitter is one of the applications of web 2.0 technologies. It allows users 140 characters to create a message (Ebner et al, 2010; Hsu &Chin, 2012). From the learning standpoint, Twitter was used for communication between students and staff, getter feedback and motivation. Junco, Heibergert, and Loken (2010) explored the use of Twitter as a medium of social media and engagement of student. The study conducted for 14 weeks included two groups in which there are an experiment group and a control group. With the experiment group of 70 students, Twitter was used for discussion and asking questions, course and events announcement, learner-teacher connections, facilitating as a guide for students and connections with tutor, and arranging volunteer services among students.

With the control group of 55 students, Ning was used to offer the learners with the course information. The study reported that using Twitter for educational purpose increases the students' engagement and it enhances the engagement in the learning process for both instructors and students. Hsu and Ching (2012) used Twitter activities in an online course in a mid-size state university. The study consisted of 16 students

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and technology specialists, military personnel and corporate trainers. The activities were ongoing for nine weeks, designed to continue the learning of the students from the classroom into their everyday life. The study concludes that the students have a positive perception of using mobile microblogging activities for supporting their learning and connecting them with their peers. Moreover, Ebner, Lienhardt, Rohs and Meyer (2010) carried out a study to explore the use of microblogs in a real-life setting in order to examine microblogs in informal learning and process-oriented learning. The use of Microblog and media Wiki helped to follow the students' improvements. The participants were 21 students who were full-time and 13 students who were part-time divided into eight groups and two lecturers, using the microblogging for six weeks. The results revealed the use of microblog was for private communication as well for learning. They conclude that the use of informal communication assists the informal learning. Another study was conducted by Elavsky, Mialan and Elavsky (2011) in which they studied the impact of using Twitter for Facebookin a big class in a university setting 240 students out of 300 students attended on most days. The result found that Twitter usage improves student impressions, involvement and interest in relation to the course.

Alexander (2006) noted that indeed the use of web 2.0 technologies such as Twitter and Wikis are helpful in creating an environment of collaborative learning and involve students in thoughtful deliberations and reflection; however, it does not offer guarantee of successful achievement of learning objectives. Kennedy et al (2009 p.6) found that simply matching a learning design a technology is unlikely to guarantee student engagement" furthermore Kennedy (2009) revealed that the use of Twitter or a Wiki does not offer the diversity that a classroom offers. That is, a typical classroom contains lots of diversity in the form of comfort levels in using a particular technology, people

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and their preferences. Moreover, it is hard to assume that all the university students' intake has similar expertise in the use of technology and has similar habits relating to technology use. There are also variations within the net-generation as far as their learning preferences and demographic features are concerned. Thus, there is a grave concern that the focus on web 2.0 and designing a pedagogy and policy based on web 2.0 technologies including.

Twitter and Wikis, may negatively affect a large number of students. Even if students have expertise in using web 2.0 assuming that they are equally interested in and comfortable with the use of technology may leave many students with achieving less than what they expected.

Valjataga and Fiedler (2009, p.64) sum up their findings as:

It was obvious that most students were not ready to take initiative and responsibility for their own learning. The main reason seemed to be a lack of experiences and rationale in this regard.

Thus, despite offering spaces for interaction, discussion and collaborative learning, Twitter is also argued to have deficiencies that can hinder learning. Learning does not only involve gaining subject knowledge and becoming better in reading and writing; rather in the current era of globalization learning is also mean to learn into diverse environments in term of language, ethnic and religious background, culture and so on (Valjataga & Fiedler, 2009). This kind of argument is not particularly about Twitter. Instead most of the web 2.0 technologies and platforms do not offer opportunities of diverse learning that suit the nature of current business and academic worlds.

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2.5 Home Computer

Student access to home computers was investigated as a form of supplemental access to technology. Various studies focused on the topic of technology inequities. Zhao et art's (2010) qualitative study focused on Internet inequality and how it related to the variable of student Internet use and academic achievement. Their first research question surveyed Internet inequality at home, in school and in Internet cafes.

The second question addressed the relationship between student access to the Internet and academic performance. The findings revealed that online access, without formal training on search techniques and research methods, would not help to improve Internet self-efficacy. For example, Britannica online is ranked as number 5,128 of the most trafficked sites on the internet (Rosen Carrier * Cheever) 2010). Instead of using Britannica student prefer Google and use the first few links that are generated when conducting research. Wikis rated as the 17th most trafficked sites on the internet, are over used as a reference and they do not have any peer review or authentication to validate the information posted.

A quantitative study about equity in access to computers examined the correlation between home computers and high school graduation rates (Fairlie et al., 2010 Metiri Group, 2009). The results showed that students with home computers were 6% to 8% more likely to graduate from high school than those without computers at home. These data support the need for students to have computers outside of school. Ore data is needed about the other influences in the home besides computers that may contribute to increased graduation rates. Students who have computers at home are not necessarily using computers to build their ICT skills. In addition, providing students with

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supplemental access to technology to build their skills is not measureable with student home computers (Zhao, Lu, Huang & Wang, 2010). Students will benefit from the guidance of educators for building digital skills and increasing their knowledge about ethical use and one component of ICT skill building is basic knowledge to use the computer effectively as a tool.

2.6 Mobile Phones

Mobile phones are popular and the most common used devices nowadays. According to Trinder (2005) mobile phones are probably the most popular and widely owned handheld device that may have a wide range of functionalities. A lot of research work has already been done on mobile phones for the use of mobile learning. Keegan (2002) describes the mobile learning on personal digital assistant (Compaq ipaq) and mobile learning on smart phones (Ericsson R380). ceLekt group of Linnaeus University is also working on mobile learning using Nokia 6630. A simple mobile phone can provide basic functionality like personal information management tools like Address Book and Calendars whereas advance mobile phones may have sophisticated technologies like camera, infrared Bluetooth etc to exchange content and information with other devices that can be mobile phones, PDA or laptop. A mobile phone may incorporate several features like e-mail, games, movie player, audio, video recorder, web surfing e-books, GPS compass, music or MP3 player etc (Trinder, 2005).

Another valuable feature of mobile phone is messaging service. It can be short messaging service (SMS) or Multimedia Messaging Service (MMS). Through SMS short text messages of 160 characters and small bitmap image can be sent to others. MMS provides the facility to send multimedia content such as photographs, audio/video clips etc. to be sent to other devices (Trinder, 2005).

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2.7 Personal Digital Assistance (PDA)

Personal digital assistants or PDA is a computing device used for the organization of personal and business information. This small device is now very popular among the businessmen and individuals due to rapidly expanding its capability in terms of small size, increasing battery life, multimedia functions, and special purpose applications like barcode reading, credit card transactions, and most importantly, wireless/mobile internet access. The palm operating system, windows pocket PC operation system, and the two-way pager-based PDA s are common nowadays (Metcalf & De Marco, 2016).

A basic PDA provides the functionality of personal organizer. A PDA is a combination of three main components that is hardware operating system and application program. Several hardware manufacturers are available while palm, Microsoft, and symbian are the three most popular operating system providers in the market. Currently PDA‘s are available with processing speed range from 105 to 400 MHZ with 21 to 64 MB of RAM. Usually PDA s have a wired interface but modern version of PDAs are also equipped with infrared, Bluetooth, and wireless fidelity (Wi-Fi) to communicate and exchange of information with other devices PDAs have battery timing varies from 5 to 15 days claimed by manufacturers though it looks a bit unrealistic since they consider only 30 minutes usage per day.

Salomon, Pekins and Globerson (1991) make an important distinction between the effects of learning with and of technology:

First, we distinguish between two kinds of cognitive effects:

Effects with technology obtained during intellectual partnership with it and the effects of it in terms of the transferable cognitive residue that this partnership leaves behind in the form of better mastery of skills and strategies.

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Cognitive tools are important in both respects. Solomon et al (1991) maintain that "the cognitive effects with computer tools greatly depend on the mindful engagement of learners in the tasks afforded by these tools" (p.2), and that educators should empower learners with cognitive tools and assess their abilities in conjunction with the use of these tools. Such a development will entail a new conception of ability as an intellectual partnership between learners and the tools the use. Although some worry that this partnership makes learners too dependent upon the technology, many performance (e.g instrumental music) are meaningless without the technologies which enable them. Allowing students to demonstrate learning in collaboration with cognitive tools may be attacked by parties invested in existing assessment systems. However, who would assess the ability of an artist without allowing the use of brushes, paint and other media? Contemporary intellectual abilities should not be assessed without cognitive tools, including books and computers (Salomon et al, 1991). The very conception of knowledge is changing with a move from a conception of knowledge as possession of facts and figures to one of knowledge as the ability to retrieve information from databases and use it to solve problem (Simon, 1987).

Our course, there are many important intellectual abilities that should be performed and assessed without the aid of cognitive tools. This is where Salomon et al's (1991) delineation of the learning effects of technology becomes so important:

Until intelligent technologies become as ubiquitous as pencil and paper – and we are not there yet by a long shot – how a person functions away from intelligent technologies must be considered. Moreover, even if computer technology became as ubiquitous as the pencil, students will still face an infinite number of problems to solve new kinds of knowledge to mentally construct, and decision to make for which no intelligent technology would be available or accessible.

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CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter is made up of the methodology that was used for the data collection and instruments that were used in conducting the study. The chapter explains the profile of the study area, research design and type, study population, study variables, sample size and sampling techniques, data collection methods and data analysis.

3.2 Research Design

The study adopted a survey study design. According to Trochim (2010) a survey is a method of gathering information from a number of individual, known as a sample, in order to learn something about the larger population from which a sample is drawn. Structured questionnaire help the researcher to obtain quantitative data to describe the impact of media technologies in the learning processes of Junior High Schools. Only quantitative data is gathered through the use of structured questionnaire.

3.3 Population and Sampling

The research was conducted in Junior High Schools in Bolgatanga East District. Both Teachers and Students took part in the survey. 98 Male students and 129 Female students. 32 Male Teacher and 15 Female Teachers. All the questionnaires were answered and returned. The survey conducted was 227 School children and 47 Teachers in Junior High Schools in the Bolgatanga East District in the Upper East Region of Ghana. I conducted regular surveys of various topics focusing on the impact of media technologies in the learning processes of Junior High School students in the Bolgatanga East District in the Upper East Region of Ghana. The data for this study

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comes from the children of school going age of Junior High School Students. The survey was conducted in July 2019. The purpose of this particular survey is to find out, the impact of media Technologies on students' learning processes. The survey covered an array of demographic and access questions, but also gathered detailed data about how children learn using the media technologies, and is particularly salient for this analysis. Descriptive statistics of the sample are provided.

In all analyses this study makes use of the sampling weight provided by the PIAL (see Methodology in Lenhart, Arafeh Smith & Macgill, 2008). The sample weights correct for oversampling of particular segment of the population and adjust the frequency tables to better match the population sample of the Ghana Census. After applying the weight, the total sample for this study is 274 (n=274).

3.4 Data Collection Procedure

The researcher personally administered the questionnaire in the selected Junior High School. Before administering the instrument, a letter was sent to the Bolgatanga East District Education Office in order to seek permission to do the research. The office then endorsed the letter and gave a photocopy of it to the head teacher of the school. The purpose of the study was stated in the letter and co-operation of the school's authorities and teachers were sought. The researcher distributed the questionnaires to the respondents. Respondents were also assured of anonymity with instructions on confidentiality of any information given by them on the questionnaire. After the distribution of the questionnaires, students were taken through to answer them appropriately on the same day.

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3.5 Data Analysis

The data collected were examined and analysed objectively to capture and present an excellent insight into the subject matter. Comparative and Quantitative data analysis methods were used with aid of statistical package for social science (SPSS) version 23.0 in the analysis of the data. By the use of this software, appropriate tables, frequencies and charts were generated which aid in easy understanding of the results of the study. The software was chosen due to its easy, appropriate and quality data analysis method.

3.6 Ethnical Consideration

In obtaining data from the field, prospective respondents were made to understand how significant their contributions to the study were, but were left to decide on whether to assist or not. With regard to administering questionnaires, respondents were not required to provide their names so as to ensure confidentiality and anonymity. Scholarly works that were resorted were duly acknowledged in order to avoid plagiarism or academic dishonesty.

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CHAPTER FOUR

RESULTS OF THE STUDY

4.1 Introduction

This chapter represents and discusses the results of the study. The study looks at the impact of media technologies among junior high School Students in the Bolgatanga East District. The research sought to find the level of impact media technologies have on the students learning processes. How students use the media technologies vis-a-vis their academics. The outcome of the thesis was based on quantitative approach of investigation.

The first section of this chapter contains the analyzed the socio-demographic characteristic and background information of the study area of the respondents on the impact of media technologies in their learning processes. The demographic properties of the respondents considered in this study include the gender, age and level of education.

4.2 Background Information of the Respondents

The sample size of the study respondents was 227 Junior High Students and 47 Junior High School Teachers in the Bolgatanga East District. The study gathered information on various aspects of respondents'' background, their gender, age and level of education.

4.2.1 Response Rate and Structure of the Instrument

Awata and Asiedu-Addo (2008) stated that, data analysis is the systematic approach of finding evidence to support an idea raised in the study with relationship between two or more variables. The Statistical Package for Social Sciences (SPSS) software version

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32 and Microsoft Office Excel 2016 for Windows were used to obtain graphs and tables was used in analyzing the data and finding out the statistical significance of different variables.

4.2.2 Analysis of Socio-Demographic

The background of the respondents was needed to aid the researcher to describe the peculiar characteristics of the respondents. Understanding the characteristics of the respondents is very helpful in finding out the impact of media technologies in the learning processes of students. The results presented in this chapter were the impact of media technologies among junior high School Students in the Bolgatanga East District. The research sought to find the impact media technologies has in the student's learning processes. How students use the media technologies vis-a-vis their academics. The outcome of the thesis was based on quantitative approach of investigation.

The demographic properties of the respondents considered in this study include the gender, age and level of education.

4.2.3 Distribution of Gender and Age by Students Respondents

The respondents were asked to indicate their gender and age and the results are presented in the table below.

This was for general information, not for the objective of the study and findings are indicated in the table below.

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Table 2a: Gender and Age of Students

		Gender and Age		
		Male	**Female**	**Total**
Age Range	Below 11 Years	2	1	2
	11-12 Year	3	8	11
	13-15 Years	54	84	138
	16-17 Years	30	29	59
	Below 17 Years	9	7	16
Total		**98**	**129**	**227**

From table 2a total respondents of 227, male respondents were 98 and Female respondents 129 and one respondent did not indicate the gender. Three respondents were below 11 years, 11 of them were between the ages of 11-12 years, 138 were between 13-15 years, 59 were between 16-17 years and 16 were below 17 years. This confirmed that students both male and female are engaged in the use of one or more media technologies for the purpose they may deem it necessary.

Table 2b: Gender * Age Range of Teachers

Count						
		Age Range(years)				**Total**
		20-25	26-30 Years	31-35	Above 35	
Gender	Male	1	8	12	11	32
	Female	2	7	4	2	15
Total		**3**	**15**	**16**	**13**	**47**

Table 2b, majority of respondents (16) had ages between 31-35, representing 34% and 15 respondents representing 31.9% were between the ages of 26-30. 13 respondents representing 27.7% were ages above 35 and 3 respondents representing 6.4% were between the ages of 20-25. Majority of the respondents were Males: This justifies that students both male and female use the media in technologies for different purposes. The

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teachers who teach in all levels in the JHS actually justify that the students uses one or more of the media technologies.

4.2.4 Level of Education

Respondents were asked to indicate their level of education in the School.

Table 3: What is your level of education in the School?

		Frequency	Percent	Valid Percent
Valid	JHS 1	105	46.3	47.5
	JHS 2	116	51.1	52.5
	Total	221	97.4	100
Missing	System	6	2.6	
Total		**227**	**100**	

From table 3, 227 respondents took part in the survey, 105 representing 47.5% valid are in JHS 1, and 116 representing 52.5% valid are in JHS 2. The findings revealed that, JHS students regardless of their level use the media technologies.

4.3 The Media Technologies commonly used by JHS students in the Bolgatanga East District

The study sought to know the media technologies that the JHS students in the Bolgatanga East District normally use. Table 4 displays the results from respondents.

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Table 4: Media Technologies normally used by students

	Frequency	Valid Percent (%)
Students		
Television	192	84.6
Computer	158	69.6
Mobile Phone	157	69.2
Game box	120	52.9
Internet	110	48.5
Facebook	99	43.6
Whatsapp	72	31.7
Teachers		
Computer	34	72.3
Television	31	66
Mobile Phone	30	63.8
Internet	21	44.7
Whatsapp	21	44.7
Facebook	18	38.3
Game box	12	25.5

From table 4, 227 respondents took part in the survey, 192 students which constitute the highest representing 84.6% valid use Television, 158 students representing 69.6% use Computer, 157 students representing 69.2% use Mobile Phone, 120 of them representing 52.9% use Game box, 110 students representing 48.5% use Internet, 99 students representing 43.6% use Facebook and 72 students representing 31.7% use Whatsapp. This confirmed that students use at least one or more of the media technologies for various reasons behind the usage.

From the table 4 respondents were 47 teachers and 34 were majority representing 72.3% chose computer, 31 representing 66% valid chose Television, 30 teachers representing 63.8% chose Mobile Phone, 21 representing 47.7% Internet, 21 representing 44.7%

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valid goes for Whatsapp, 18 teachers representing 8.3% chose Facebook and 12 teachers representing 25.5 % chose Game box. This confirmed that, students use the following media technologies mostly in various ways:

1. Television
2. Computer
3. Mobile phone
4. Game box
5. Internet

4.4 How the Media Technologies are normally used by Students

Respondents were asked how they normally used the media technologies. By indicating 1=Agree, 2=Strongly Agree, 3=Not Sure, 4= Disagree and 5=Strongly Disagree to these statements below:

Table 5: How the Media Technologies are normally used by Students

Statement	SA	A	NS	D	SD
I normally use the media technologies in the school	89(39.2)	49(21.6)	22(9.7)	28(12.3)	31(13.7)
I normally use the media technologies at home	92(40.5)	83(36.6)	18(7.9)	25(11)	5(2.2)
I normally use the media technologies at my friend's place	50(22.4)	57(25.6)	40(17.9)	51(22.9)	25(11.2)
I normally use the media technologies for entertainment /pleasure	75(33.8)	66(29.7)	27(12.2)	39(17.6)	15(6.8)
I normally use the media technologies to do home work	102(46.6)	68(31.1)	14(6.4)	22(10)	13(5.5)
I normally use the media technologies for news	98(45.2)	79(36.4)	9(4.1)	17(7.8)	14(6.5)
I normally use the media technologies for academic purposes	88(41.5)	64(30.2)	32(15.1)	23(10.8)	5(2.4)
I normally use the media technologies to watch a documentary	43(20)	60(27.9)	48(22.3)	49(22.8)	15(7)
I normally use the media technologies to play games	95(43.2)	77(35)	15(6.8)	16(7.3)	17(7.7)

Source: Field Survey, 2019, Percentages in bracket ( )

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From table 5, made up of 227 respondents, respondents who normally use the media technologies in the school, 89 of them representing 39.2% valid strongly Agree, 49 representing 21.6% valid Agree, 31 representing 13.7% valid Strongly Disagree, 28 representing 12.3%Disagree, 22 representing 19.7% Not Sure. From table 5, 227 respondents who normally use the media technologies at home, 92 of them strongly Agree representing 40.5% valid, 83 of them representing 36.6% valid Agree, 25 representing 11.0% valid Disagree, 18 of them representing 7.9% Not Sure, and 5 representing 2.2% valid. From table 5, made up of 227 respondents who normally use the media technologies at their friend's place, 57 of them representing 25.6% Agree, 50 Strongly Agree making 22.4% valid, 51representing 22.9%Disagree, 40 representing 17.9% Not Sure, 25 representing 11.2% Strongly Disagree.

From table 5, those respondents who normally use the media technologies for pleasure, majority of the respondents were 75 representing 33.8% Strongly Agree, 66 of them representing 29.7% valid Agree, 39 representing 17.6% Disagree, 27 representing 12.2% valid Not Sure and 15 representing 6.8% valid Strongly Disagree.

From table 5, 227 respondents took part in the survey, those who normally use the media technologies to do their homework, 102 of them representing 46.6% valid Strongly Agree, 68 representing 31.1% valid Agree, 22 respondents made of 10% Disagree, 14 representing 6.4% Not Sure and 13 representing 5.5% Strongly Disagree.

From the table 5, 227 respondents took the survey, they normally use the media technologies for News, majority made up of 98 respondents representing 45.2% valid Strongly Agree, 79 representing 36.4% Agree, 9 representing 4.1% Not sure, 17 representing 7.8% Disagree, 14 representing 6.5% valid Strongly Disagree. From table

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4.5, out of 227 respondents took part in the survey, those who normally use the media technologies for academic purposes, majority of 88 representing 41.5% valid Strongly Agree, 64 representing 30.2% Agree, 32 of them representing 15.1% Not Sure, 23 representing 10.8% Disagree, and 5 made up 2.4% Strongly Disagree.

From table 5, the respondents who took part in the survey were 227 those who normally use the media technologies to watch a documentary, 60 of them representing 27.9% Agree, 49 representing 22.8% Disagree, 48 representing 22.3% valid Not Sure, 43 representing 20% and 15 representing 7% Strongly Disagree.

From the table 5, 227 respondents took part in the survey, normally use the media technologies to play games, 95 respondents representing 43.2% valid Strongly Agree, 77 representing 35% Agree, 17 representing 7.7% Strongly Disagree, 16 of them representing 7.3% Disagree, and 15 representing 6.8% Disagree.

The findings confirmed that students use the media technologies at home, in their friends place, or in school. This can be for academic purposes, a game center for money, or engaging in social media that may lieu them to bad friends.

Table 6: How Media Technologies are used by students

	SA	A	NS	D	SD
Students normally use the media Technologies in the school	7	17	5	16	2
Students normally use the media Technologies at home	24	14	7	1	1
Students normally use the media Technologies in their friend's place	9	20	14	3	1
Students normally use the media Technologies for entertainment/Pleasure	25	16	5	0	1
Students normally use the media Technologies to do their homework	4	7	20	11	4
Students normally use the media Technologies for news	3	13	16	11	4
Students normally use the media Technologies for academic purposes	9	15	12	7	2
Students normally use the media Technologies to watch a documentary	3	15	18	7	4
Students normally use the media Technologies to play games	23	21	2	1	0

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From the table 6 a total of 47 respondents to the statement Students normally use the media Technologies in the school, 17 of the indicated Agree representing 36.2%, 16 Disagree representing 34%, 7 Strongly Agree representing 14.9%, 5 were Not Sure representing 10.6% and 2 Strongly Disagree representing 4.3%.

From table 6, a total of 47 respondents who responded to the statement Students normally use the media Technologies at home, 24 of the indicated Strongly Agree representing 51.1%, 14 Agree, representing 29.8%, 7 Not Sure representing 14.9%, 1 Disagree representing 2.1% and 1 strongly Disagree representing 2.1%.

From the table 6 a total of 47 respondents who responded to the statement Students normally use the media Technologies in their friend's place, the response indicated that, 20 of them Agree representing 42.6%, 14 respondents were Not Sure representing 29.8%, 9 respondents Strongly Agree representing 19.1%, 3 respondents Disagree representing 6.4% and 1 respondent Strongly Disagree representing 2.1%.

From the table 6, a total of 47 respondents to the statement Students normally use the media Technologies for entertainment/Pleasure, 25 of them representing 53.2% said they Strongly Agree, 16 of the respondents representing 34% Agree, 5 representing 10.6% Not Sure, 1 of them representing 2.1% Strongly Disagree. From the table 4.6, a total of 47 respondents to the statement Students normally use the media Technologies to do their homework, it is indicated that 20 respondents are Not Sure representing 43.5% valid, 11 respondents Disagree representing 23.9% valid, 7 respondents Agree representing 15.2% valid, 4 respondents Strongly Disagree representing 8.7% valid and 4 of the respondents representing 8.7% valid Strongly Agree.

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From the table 6, a total of 47 respondents to the statement Students normally use the media Technologies for news, it is indicated that, 16 respondents representing 34% Not Sure,13 respondents representing 27.7% Agree, 11 respondents representing 23.4% Disagree, 4 respondents representing 8.5% Strongly Disagree representing and 3 respondents representing 6.4% Strongly Agree.

From the table 6, a total of 47 respondents to the statement Students normally use the media Technologies for academic purposes, it is indicated that 15 of the respondents Agree representing 33.3%, 12 of them representing 26.7% are Not Sure 9 representing 20% Strongly Agree,7 representing 15.6% Disagree, 2 representing 4.3% Strongly Disagree.

From the table 4.6, a total of 47 respondents to the statement Students normally use the media Technologies to watch a documentary, 18 respondents are the majority, representing 38.3% are Not Sure, 15 respondents representing 31.9 Agree, 7 respondents representing 14.9% Disagree, 4 respondents, representing 8.5% Strongly Disagree and 3 of them representing 6.4% Strongly Agree.

From the table 6, a total of 47 respondents to the statement Students normally use the media Technologies to play games, majority of the respondents 23 representing 48.9% Strongly Agree, 21 of them representing 44.7% Agree, 2 of the respondents representing 4.3% Not Sure and 1 respondent representing 2.1% Disagree. The findings confirmed by the teachers who teach the students that, some students used either of the media technologies in the school, at home or a friend's place. This is either for academic purposes, homework, news, games or for pleasure. The media technology that makes a student happy, the effect comes at the long run. For those who use for academic

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purposes benefits at the long run. On the others hand to those who uses it the negative way gets the effect accordingly.

According to Andrianna Ruggiero March 18, 2019, with media technology, more and more prevalent in children's lives it is imperative to for us as parents, educators, policy makers and content creators to work together and help the next generation thrive and grow.

4.5 How the Media Technologies have Impact on the Learning Processes of Students

Respondents were asked to use 1=Agree, 2=Strongly Agree, 3=Not Sure, 4= Disagree and 5=Strongly Disagree to indicate how they normally use media technologies and the impact it has on their lives.

Table 7: How the Media Technologies have Impact on the Learning Processes of Students

	SA	A	NS	D	SD
I am able to do my homework easily	119(54.6)	80(36.7)	11(5)	7(3.2)	1(0.5)
I am able to submit home work on time	78(35.6)	79(36.1)	34(15.5)	21(9.6)	7(3.2)
I am able to contribute effectively in class	62(28.6)	80(36.9)	38(17.5)	24(17.5)	24(11.1)
I learn new things through the media Technologies	125(56.8)	66(30)	18(8.2)	9(4.1)	2(0.9)
I normally engage in soccer bet	31(14)	36(16.3)	45(20.4)	61(27.6)	48(21.7)
I normally spend a lot of time playing games	42(19)	48(21.7)	26(11.8)	61(27.6)	44(19.9)
I spend a lot of time on the Media Technologies	28(12.6)	54(24.3)	32(14.4)	56(25.2)	52(23.4)
I like watching pornographic materials	10(4.6)	20(9.2)	26(12)	54(24.9)	107(49.3)
I normally do my homework late	16(7.2)	26(11.7)	42(18.9)	86(38.7)	52(23.4)
I find it difficult doing my home work	14(6.4)	35(22.4)	53(24.2)	72(32.7)	45(20.5
I find it difficult to associate with my relatives and friends	27(12.3)	38(17.3)	53(24.1)	67(30.5)	35(15.9)
I am not able to contribute effectively in class	20(9.4)	39(18.4)	39(18.4)	69(32.5)	44(20.8)
I am not doing well in class	20(9.2)	27(12.4)	39(18)	61(28.1)	70(32.3)
I do not learn new things	20(9.3)	23(10.7)	41(19.1)	57(26.5)	74(34.4)

Source: Field Survey, 2019, Percentages in bracket ( )

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From the table 7, respondents were asked how the media technologies impacted on their learning processes. 227 respondents who took part in the survey that I am able to do my homework easily, 119 made up majority representing 54.6% Strongly Agree, 80 representing 36.7% valid Agree, 11 of them representing 5% were Not Sure, 7 representing 3.2% Disagree and 1 representing 0.5% valid Strongly Disagree. From table 7, 227 respondents who took part in the survey that I am able to submit home work on time, 79 of them representing 36.1% Agree, 78 representing 35.6% Strongly Agree, 34 representing 15.5% Not Sure, 21 representing 9.6% Disagree and 7 representing 3.2% valid Strongly Disagree.

From the table 7, 227 respondents in the survey, those who responded that I am able to contribute effectively in class, 80 respondents representing 36.9% valid Agree, 62 representing 28.6% Strongly Agree, 38 representing 17.5% Not Sure, 24 representing 17.5% Disagree, 24 representing 11.4% Strongly Agree and 13 of them representing 6% valid Strongly Disagree. From table 7, out of a total of 227 respondents, respondents who said that I learn new things through the media Technologies, more than half 125 representing 56.8% Strongly Agree, 66 of them representing 30% Agree, 18 representing 8.2% Not Sure, 9 made up of 4.1% Disagree and 2 representing 0.9% valid.

From table 7, made up of 227 respondents, those who said that I normally engage in soccer bet, 61 representing 27.6% Disagree, 48 representing 21.7% Strongly Disagree, 45 representing 20.4% Not Sure, 36 representing 16.3% Agree and 31 representing 14% valid Strongly Agree. From table 7, made up of 227 respondents, those who responded that, I normally spend a lot of time playing games, 61 representing 27.6% Disagree, 48

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representing 21.7% Agree, 44 representing 19.9% Strongly Disagree, 42 representing 19% Strongly Agree and 26 representing 11.8% Not Sure.

Table 7, made up of 227 respondents, those who responded to the statement I spend a lot of time on the Media Technologies, 56 representing 25.2% Disagree, 54 representing 24.3% Agree, 52 representing 23.4% Strongly Disagree, 32 representing 14.4% valid Not Sure and 28 representing 12.6% Strongly Agree. Table 7, presented 227 respondents for the survey on the statement I like watching pornographic materials, majority made up of 107 respondents 49.3% Strongly Disagree, 54 representing 24.9% Disagree, 26 representing 12% Not Sure, 20 representing 9.2% Agree and 10 representing 4.6% valid Strongly Agree.

The table7, 227 respondents who responded to the statement I normally do my homework late, 86 of them representing 38.7% disagree, 52 representing 23.4% Strongly Disagree, 42 representing 18.9% Not Sure, 26 representing 11.7% Agree, 16 of them representing 7.2% Strongly Agree. From the study in table 7, 227 respondents took the survey on the statement that I find it difficult doing my homework, 72 representing 32.7% Disagree, 53 representing 24.2% Not Sure, 45 representing 20.5% Strongly Disagree, 35 representing 22.4% Agree and 14 representing 6.4% Strongly Agree.

From the table 7, 227 respondents took part in the survey and responded to the statement I find it difficult to associate with my relatives and friends, 67 Disagree representing 30.5% valid, 53 representing 24.1% Not Sure, 38 representing 17.3% Agree, 35 representing 15.9% valid Strongly Disagree and 27 representing 12.3% Strongly Agree.

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In table 7, a total of 227 respondents who responded to the statement I am not able to contribute effectively in class, 69 representing 32.5% Agree, 44 representing 20.8% Strongly Disagree, 39 representing 18.4% Agree, 39 representing 18.4% Not Sure and 20 representing 9.4% Strongly Agree.

In the diagram 7, 227 respondents to the statement I am not doing well in class, 70 representing 32.3% Strongly Disagree, 61 of them representing 28.1% valid Disagree, 39 representing 18% Not Sure, 27 representing 12.4% Agree and 20 respondents representing 9.2% Strongly Agree.

From table 7, made up of 227 respondents in the survey I do not learn new things through the media technologies, 74 representing 34.4% Strongly Disagree, 57 representing 26.5% Disagree, 41 representing 19.1% Not Sure, 23 representing 10.7% Agree and 20 of them representing 9.3% Strongly Agree.

The study revealed that students are able to do their homework easily and on time, it also revealed that students are able to contribute effectively in class and learn new things. On the other hand, students spend a lot of time on the media technologies, by engaging in soccer bet and game playing, watching pornographic materials. By this, students end up not been able to associate well with their family and friends, the media become more of their family and friends. Instead of the media technologies improving their learning abilities in school, end up not learning any new things academically, they are not able to contribute well in class. This leads mostly to poor performance and school dropout.

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4.6 The Impact of Media Technologies in the Students

Table 8: Impact of media technologies in the students

Statement	SA	A	NS	D	SD
Students are able to do their homework easily	6	20	5	13	3
Students are able to submit their homework on time	4	17	6	19	1
Students are able to contribute effectively in class	6	21	2	14	1
Students learn new things through the media technologies	20	23	2	1	0
Students normally engage in soccer bet	13	11	19	4	0
Students normally spend a lot of time playing games	18	18	8	3	0
Students normally spend a lot of time on the media technologies	19	18	6	3	0
Students like watching pornographic materials	8	15	19	1	4
Students normally do their homework late	6	17	14	6	3
Students find it difficult doing their homework	2	15	7	22	1
Students find it difficult to associate with their relatives and friends	6	19	14	0	8
Students are not able to contribute effectively in class	2	14	2	22	6
Students are not doing well in class	3	8	3	27	5
Students do not learn new things	4	3	23	0	46

From the table 8,a total of 47 respondents to the statement Students are able to do their homework easily, 20 respondents representing 42.6% Agree, 13 of them representing 27.7% Disagree, 6 respondents representing 12.8% Strongly Agree, 5 representing 10.6% Not Sure and 3 representing 6.4% Strongly Disagree.

From the table 8, a total of 47 respondents to the statement Students are able to submit their homework on time, 19 respondents representing 40.4% Disagree, 17 of them representing 36.2%, Agree, 6 representing 12.8% Not Sure, 4 of them representing 8.5% Strongly Agree, and 1 respondent representing 2.1% Strongly Disagree. From the table 8, a total of 47 respondents to the statement Students are able to contribute effectively in class, 21 of the respondents representing 44.7% Agree, 14 respondents representing 31.8% Disagree, 6 of them representing 13.6% Strongly Agree, 2

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respondents representing 4.5% Not Sure, 1 of them representing 2.3% valid Strongly Disagree.

From the table 8, a total of 47 respondents to the statement Students learn new things through the media technologies, 23 of the respondents representing 50% valid Agree, 20 respondents representing 43.5% valid Strongly Agree, 2 respondents representing 4.3% are Not Sure, 1 respondent representing 2.1% Disagree. From the table 8, a total of 47 respondents to the statement Students normally engage in soccer bet, 19 of them representing 40.4% valid are Not Sure, 13 respondents representing 27.7% Strongly Agree, 11 respondents representing 23.4% valid Agree, and 4 of the respondents representing 8.5 Disagree.

From the table 8, a total of 47 respondents to the statement Students normally spend a lot of time playing games, 18 respondents representing 38.3% Strongly Agree, 18 respondents representing 38.3% Agree, 8 respondents representing 17% valid Not Sure, 3 respondents representing 6.4% Disagree. From table 8, 47 respondents to the statement Students normally spend a lot of time on the media technologies, 19 representing 41.3% valid Strongly Agree, 18 of them representing 39.1% Valid Agree, 6 representing 13% valid Not Sure and 3 representing 6.5% Disagree. From table 4.8, 47 respondents to the statement Students like watching pornographic materials 19 respondents representing 40.4% valid were Not Sure, 15 representing 31.9% valid Agree, 8 representing 17% Strongly Agree, 4 representing 8.5% Strongly Disagree and 1 representing 2.1% valid Disagree.

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From table 8, of 47 respondents to the statement Students normally do their homework late, 17 representing 37% valid Agree, 14 representing 30.4% valid Not Sure, 6 representing 13% Disagree, 6 representing 13% valid Strongly Agree and 3 representing 6.5% valid Strongly Disagree.

From the table, 8, 47 respondents to the statement Students find it difficult doing their homework, 22 representing 46.8% Disagree, 15 representing 31.9% Agree, 7 representing 14.9% Not Sure, 2 representing 4.3% Strongly Agree and 1 respondent representing 2.1% Strongly Disagree. From table 4.8, 47 respondents to the statement Students find it difficult to associate with their relatives and friends, 19 representing 40.4% were Not Sure, 14 representing 29.8% Disagree, 8 representing 17% Strongly Disagree and 6 representing 12.8% Agree.

From table 8, 47 respondents to the statement Students are not able to contribute effectively in class, 22 respondents representing 47.8% Disagree, 14 representing 30.4% valid Agree, 6 representing 13% Strongly Disagree, 2 representing 4.3% Not Sure and 2 representing 4.3% valid Strongly Agree. From table 8, 47 to the statement Students are not doing well in class by the use of the media technologies, 27 Disagree representing 58.7% valid, 8 Agree representing 17.4%, 5 Strongly disagree representing 10.9%, 3 Not sure representing 6.5% and 3 Strongly Agree representing 6.5%.From table 8, out of 47 respondents to the statement Students do not learn new things, 23 Disagree representing 50% valid, 16 Strongly Disagree representing 34.8%, 4 Agree representing 8.7% valid and Not Sure representing 6.5% valid.

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The findings of the study revealed that students are able to do their homework easily and on time, it also revealed that students are able to contribute effectively in class and learn new things. On the other hand, students spend a lot of time on the media technologies, by engaging in soccer bet and game playing, watching pornographic materials. By this, students end up not been able to associate well with their family and friends, the media become more of their family and friends. Instead of the media technologies improving their learning abilities in school, ends up not learning any new things academically, they are not able to contribute well in class. The teachers who teaches the students attest to the fact. This leads mostly to poor performance and school dropout.

This therefore affirms the study by Pertanika J. Soc. Sci. & Hum. 2(2):101-113 (1994), that media technologies such as computers and satellites applies to learning processes. The ability to read and apply numeracy skills. A person is considered literate when he or she has sufficient reading, writing and numeracy skills to continue to learn alone without the continuing guidance of a teacher. The word Functional on the other hand is the ability to function or being in possession of a certain skill to perform. Thus the concept "Functional Literacy" is used to show the ability to apply reading, writing and numeracy skills in a socio-economic situation required by a given environment (Hoesne, 1991).

Also, Campbell et al. (2009) note that "spam and spurious news" are some of the problems associated with the internet. This among other related cyber crises for effective media relations. In this age of new media, it is very possible for anyone to wreak havoc, create a controversy or mar the image of company or individual.

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Table 9: Correlation analysis

Correlations				
		Television	**I use the media technologies in the school**	**I am able to submit home work on time**
Television	Pearson Correlation	1	-0.021	-0.072
	Sig. (2-tailed)		0.777	0.323
	N	193	188	189
I use the media tech in the school	Pearson Correlation	-0.021	1	.320**
	Sig. (2-tailed)	0.777		0
	N	188	219	213
I am able to submit home work on time	Pearson Correlation	-0.072	.320**	1
	Sig. (2-tailed)	0.323	0	
	N	189	213	219

**. Correlation is significant at the 0.01 level (2-tailed).

A one-tailed hypothesis that more females spend longer time on media technologies and therefore have greater impact on their learning processes than their male counterparts. The higher learning processes was statistically tested using Pearson's correlation method. As shown in table 9, the test revealed that there was a highly statistically significant positive correlation between time spent on Media technologies, and students learning processes. Similarly, the hypothesis revealed that the higher the Media technologies use, the higher will be your impact will be, was also tested using Pearson's correlation method. As table 4.6 the result of the test was highly significant in confirming the hypothesis ($r = .320^{**}$; $n=227$; $p< 0.01$).There is correlation in the analysis.

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4.7 Conclusion

In summary, it is clear from the findings of the data gathered from the study that media technologies have impact on the learning processes of the students, both negatively and positively. It is also clear that, the more time you spend on the media technologies, the more the impact on their learning processes. Also, those students who use the media technologies to learn positive things learn new things on their academic work and are able to contribute effectively in class. On the other hand, those who use the media technologies to learn negative things, do not do well in class, their personal relationship is affected, and end up as school dropout.

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CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter was basically the summary, conclusion and recommendation of the study. The findings of the study were based on the objective of the study which was to determine the impact of media technologies on the learning processes of Junior High school students. The study targeted both Teachers and students in Junior High Schools in the Bolgatanga East district.

5.2 Summary of the Findings

This study focused on the Impact of media technologies in student's learning processes in Junior High Schools. It dealt with cross-sectional survey research design where selected schools were targeted for the study. Questionnaires were administered as a means of collecting data for the study. The Questionnaire came in two sets, some for students and some for Teachers all in Junior High Schools. Questionnaire were administered and returned. All Questionnaires were used to do data analysis. It was revealed by both Teachers and students that students actually use the media technologies for various reasons which are positive and negative. The data were analyzed using Statistical Package for Social Sciences version 25, Microsoft Office Excel 2016 for windows for descriptive and inferential statistics. The findings revealed that the respondents agreed that media technologies have an impact in the learning processes of Junior High School students.

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5.3 Conclusion

The study confirmed that students use the media technologies both in school and at home. It also revealed that students spend a lot of productive time on the media technologies rather than their academic work. Some students use the media technologies to assist in their learning processes whiles other students use the media technologies to engage in negative things, e.g soccer bet, games, and pornographic materials. It also revealed that others do not learn new things in using the media technologies. Others also learn new things in using the media technologies.

5.4 Recommendations

Based on the study findings recommendations are that parents and teachers should monitor students on the use of the media technologies. On the positive aspect they learn from the media technologies, the study confirmed that they actually improve their learning abilities and also learn new things through the media technologies. The study actually confirmed that students learn new things using the media technologies, Students also get carried away by the use of the media technologies to the neglect of their academic work.

Parents should monitor their children on the use of the media technologies; those who used the media technologies for academic purposes should be encouraged. Also, those who are engage in the negative aspects should be counseled and advised accordingly. Furthermore, parents would know the talents in their children based on the use of the media technologies and encourage them accordingly.

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APPENDICES

APPENDIX A

Dear respondent,

The following questionnaire forms part of the study being undertaken on the impact of Media Technologies in the learning processes of JHS students in the Bolgatanga East District. This is purely an academic work and your anonymity is guaranteed.

QUETIONNAIRE ID:…… FORM:……

SECTION A: RESPONDENT'S PROFILE

Please indicate your preference by ticking **(√)** *against your preferred option*

1. **Gender**

□ Male

□ Female

2. **Age Range**

□ Below 11 years

□ 11 - 12

□13 – 15 years

□16 – 17 years

□ Above 17 years

3**. What is your level of educational in the school?**

□ JHS 1

□ JHS 2

□ JHS 3

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SECTION B: The kinds of media Technologies used among students

Please respond to the following statements on the scale provided. T*ick* **(√)** *on the appropriate boxes. You may tick more than one*

4*. What are the kinds of media Technologies used among students?*

Television	
Mobile phone	
Computer	
Internet	
Facebook	
Whatsapp	
Game box	

SECTION C: How media Technologies are used among students

Please respond to the following statements on the scale provided ‘‘strongly agree (1), Agree while (2), Not sure (3), Disagree (4), Strongly Disagree (5)’’. T*ick* **(√)** *on the appropriate boxes.*

No.	**The use and purpose of media Technologies**	**1 Strongly Agree**	**2 Agree**	**3 Not Sure**	**4 Disagree**	**5 Strongly Disagree**
5.	I normally use the media Technologies in the school					
6.	I normally use the media Technologies at home					
7.	I normally use the media Technologies at my friend’s place					
8.	I normally use the media Technologies for entertainment/pleasure					
9.	I normally use the media Technologies to do homework					

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10.	I normally use the media Technologies for news					
11.	I normally use the media Technologies for academic purposes					
12.	I normally use the media to watch a documentary					
13.	I normally use the media Technologies to play games					

SECTION D: Impact of media Technologies among students

Please respond to the following statements on the scale provided ‘‘Strongly Agree (1), Agree (2), Not sure (3), Disagree (4), Strongly Disagree (5), *Tick* (√) *on the appropriate boxes.*

No.	**Impact of media Technologies on students**	**1 Strongly Agree**	**2 Agree**	**3 Not Sure**	**4 Disagree**	**5 Strongly Disagree**
14.	I am able to do my homework easily					
15.	I am able to submit my homework on time					
16.	I am able to contribute effectively in class					
17.	I learn new things through the media Technologies					
18.	I normally engage in soccer bet					
19.	I spend a lot of time playing games					
20.	I spend a lot of time on the media Technologies					
21.	I like watching pornographic materials					
22.	I normally do my homework late					
23.	I find it difficult doing my homework					
24.	I find it difficult to associate with my relatives and friends					
25.	I am not able to contribute effectively in class					
26.	I am not doing well in class					
27.	I do not learn new things					

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APPENDIX B

Dear respondent,

The following questionnaire forms part of the study being undertaken on the impact of Media Technologies in the learning processes of JHS students in the Bolgatanga East District. This is purely an academic work and your anonymity is guaranteed.

QUETIONNAIRE ID:…… FORM:……

SECTION A: RESPONDENT'S PROFILE

Please indicate your preference by ticking **(√)** *against your preferred option*

1. **Gender**

□ Male

□ Female

2. **Age Range**

□ Below 20 years

□ 20 – 25 years

□ 26 – 30 years

□ 31 – 35 years

□ Above 35 years

3**. What is your level of educational in the school?**

□ Cert 'A'

□ Diploma

□ Degree

□ Master's degree

□ PhD

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4. **What is the level of students that you are teaching?**

□ JHS 1

□ JHS 2

□ JHS 3

SECTION B: The kinds of media Technologies commonly used among students

Please respond to the following statements on the scale provided. T*ick* **(√)***on the appropriate boxes. You may tick* more than one.

5. ***What kinds of media Technologies students use?***

□ Television

□ Mobile phone

□ Computer

□ Internet

□ Whatsapp

□ Facebook

□ Game box

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SECTION C: How the media Technologies are normally used among students

Please respond to the following statements on the scale provided ‘‘Strongly Agree (1), Agree, Not sure (3), Disagree (4), Strongly Disagree (5)’’. T*ick* **(√)** *on the appropriate boxes.*

No.	**The use and purpose of media technologies**	**1 Strongly Agree**	**2 Agree**	**3 Not Sure**	**4 Disagree**	**5 Strongly Disagree**
6.	Students normally use the media in the school					
7.	Students normally use the media at home					
8.	Students normally use the media in their friend’s place					
9.	Students normally use media Technologies for entertainment/pleasure					
10.	Students normally use the media to do their homework					
11.	Students normally use the media Technologies for news					
12.	Students normally use the media for academic purposes					
13.	Students normally use the media to watch a documentary					
14.	Students normally use the media to play games					

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SECTION D: Impact of media Technologies among students

Please respond to the following statements on the scale provided ‘‘Strongly Agree (1), Agree (2), Not sure (3), Strongly Disagree’’ T*ick* **(√)** *on the appropriate boxes.*

No.	**Impact on students through the use of media Technologies**	**1 Strongly Agree**	**2 Agree**	**3 Not Sure**	**4 Disagree**	**5 Strongly Disagree**
15.	Students are able to do my homework easily					
16.	Students are able to submit their homework on time					
17.	Students are able to contribute effectively in class					
18.	Students learn new things through the media Technologies					
19.	Students normally engage in soccer bet					
20.	Students normally spend a lot of time playing games					
21.	Students normally spend a lot of time on the media technologies					
22.	Students like watching pornographic materials					
23.	Students normally do their homework late					
24.	Students find it difficult doing their homework					
25.	Students find it difficult to associate with their relatives and friends					
26.	Students are not able to contribute effectively in class					
27.	Students are not doing well in class					
28.	Students do not learn new things					

THANK YOU.