UNIVERSITY FOR DEVELOPMENT STUDIES

EFFECTIVE USE OF INSTRUCTIONAL TIME BY THE TEACHERS OF BUSINESS SENIOR HIGH SCHOOL: AN OPPORTUNITY TO ADD VALUE TO PROFESSIONAL DEVELOPMENT OF TEACHERS.

BY

MOHAMMED ISSIFU

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DISSERTATION SUBMITTED TO THE DEPARTMENT OF EDUCATIONAL FOUNDATIONS, FACULTY OF EDUCATION, UNIVERSITY FOR DEVELOPMENT STUDIES, IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER OF PHILOSOPHY DEGREE IN TRAINING AND DEVELOPMENT

MARCH 2019

DECLARATION

I, Mohammed Issifu, hereby declare that this thesis, "**Effective use of instructional time by teachers of Business Senior High School; an opportunity to add value to professional development of teachers**", is entirely my own work. To the best of my knowledge, no part of this work has been presented for another degree elsewhere, and this thesis has been examined and approved by my supervisors. I also declare that any quotation(s) or paraphrase(s) from published or unpublished works of any other author(s) has been duly acknowledged.

Mohammed Issifu …… ……

(UDS/MTD/0037/14) Signature Date

Supervisor's Declaration

I hereby declare that the preparation and presentation of the dissertation/thesis was supervised in accordance with the guidelines on supervision of dissertation/thesis laid down by the University for Development Studies.

Supervisor's Signature: …… Date: ……..

Supervisor's Name: Dr. Ibrahim Mohammed Gunu

ABSTRACT

This study investigated teachers' total utilization of instructional time and its' effects on students learning in Business Senior High School, Tamale. The main objective of the study was to assess teachers' utilization of instructional in the school setting. The specific objectives of the study were to identify factors responsible for teachers ineffective utilization of instructional time; examine effective strategies to improve the utilization of instructional time; and assess Ghana Education Service enforcement of teachers' utilization of instructional time. The study employed a case study research design which was qualitative in approach and used interview guide to collect primary data. Purposive sampling was used to select fifty-two (52) respondents comprising twenty-five (25) teachers, two (2) assistant headmasters and twenty-five (25) students of the school. Thematic and content analysis were used to analyse the pattern of responses.

The study found that factors that impede total utilisation of instructional time in the school include teacher absenteeism (including maternity and study leave) without alternative arrangement, inadequate preparation, poor teacher-student relationship, teacher involvement in social activities (including social ceremonies) instead of attending to the allotted instructional time, delays at school's events (including Headmaster's assembly), and teachers' attendance to school wide activities (including sporting activities, committee and board meetings). The study also found that effective strategies to improve total utilisation of instructional time include monitoring and supervision of teaching and learning, the use of sanctions, time recording devices, loud speakers and providing accommodation on campus for teachers. The study further revealed that enforcing rules on total instructional time utilisation by the Ghana Education Service (circuit supervisors) is weak as a result of inadequate logistics. The study therefore recommends effective planning process that accommodates teacher replacement in times of leave, ill-health and other natural phenomenon, intensifying monitoring and supervision, applying appropriate sanctions, payment of teachers based on instructional time utilization and providing adequate logistics for monitoring.

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DEDICATION

This dissertation is dedicated to my wives. Mohammed Adisa and Freeman E. Azara and my children Zaapayim, Yalsuma, Tipagya and Namzooya. Above all, I dedicate it to the Almighty for His grace and inspiration.

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LIST OF ACRONYMS

ALT - Academic Learning Time

BECE – Basic Education Certificate Examination

GES - Ghana Education services

MoE _ Ministry of Education

NGO – Non-Governmental Organisation

WAEC - West African Examination Council

WASSCE - West African Senior School Certificate Examination

OECD - Organisation for Economic Co-operation and Development,

GER – Gross Enrolment Ratio

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CHAPTER ONE

1.0 Introduction

This chapter presents the introduction to the research study. Section 1.1 and 1.2 presents background to the study and statement of the problem. Section 1.3 presents the research objectives and that of section 1.4 presents the research questions. Sections 1.5 and 1.6 presents the justification of the study and a background of the study area. Section 1.7 presents definition of pertinent terms as used in the study while that of section 1.8 presents organization of the study. Sections 1.9 and 1.10 presents delimitations and limitations of the study. Conclusions are presented in section 1.11.

1.1 Background to the Study

Globally effective teaching and learning are critical part of schooling (Kyriacou 2014, 2009; Hayes et al., 2011; Goodall et al. 2005). In order to ensure effective teaching and learning, teachers provide instructions using the designated curriculum content and allotted instructional time for the subject. An achievement of the student in assessment depends on both the learner and the teacher. This is in consonance with the vision of the pre-tertiary teacher education programme in Ghana which is to prepare teachers to enable them function effectively in the basic and second cycle schools and to develop and nurture them to become reflective and proficient practitioners capable of providing quality education to all Ghanaian children (Ministry of Education, 2012. P.8).The provision of instructions to students should be directed at ensuring students success. This is supported by the recommendations of Kuh, Bridges and Hayek (2006) that universities and colleges should focus their assessments on factors that influence student success.

The concept of time in schooling and teaching is one of the most important variables in improving educational outcomes and ensuring student success. The general notion is that, the exposure of students to good teaching (effective instructional time management) will result in improved academic performance. Lavy (2015) examined international gaps in student achievement, estimating the effects of instructional time using PISA 2006 data and found that instructional time has a positive and significant effect on test scores. Research conducted by Woessmann (2003), as well, shows that instructional time is positively related to student performance.

Berliner (1990), indicates that some scientists and educational scholars find the concept of instructional time to be intellectually unexciting and of such obvious importance that it only leads to trivial understandings and to findings that have the status of truisms (e.g., students who spend more time studying learn more). They are also of the view that findings from research on instructional time is valueless (Jackson, 1985) and so much of common-sense to the extent that it does not deserve to be researched. McNamara (1981) considers the results of research on instructional time as an ideology.

Some economically oriented persons conducted studies in the United States of America in the 1960s on the inputs and outputs of schooling and concluded that events in the classroom made little difference on the lives of children. However, later studies emerged that challenged this view. Rice's (1897) work on spelling capacities of children focusing on the time spent on "spelling drills" can be viewed as one of the earliest form of research on instructional time. Rice's findings indicated a positive correlation between drill time and achievement at early stages of pairing and negative correlation at latter stages of extended drill time and achievement.

Subsequent studies on school based learning conceptualized achievement as a combined outcome of two time variables: (a) the amount of time a learner is engaged in learning (i.e. the time a pupil is involved in learning tasks); and (b) an individual's learning rate (i.e. the amount of time needed for learning). Models developed in the study of mathematics also tried to show that optimal learning performance could be achieved by giving students sufficient time to learn.

Instructional time use is a variable that is challenging to measure, so it often escapes scrutiny. The importance of the measure and use of instructional time in schools cannot be underestimated. Studies have shown that learning outcomes are related to the amount of time students engage in learning tasks. However, observation of teaching and learning in schools, especially public schools seem to indicate that students are taught for only a fraction of the intended time. A World Bank report (2007) indicated that the percentage of time that students were engaged in learning vis-à-vis government expectations was approximately 39 percent in Ghana (World Bank report, 2007). Research suggests that merely financing the ingredients of instruction is not enough to produce learning outcomes; students must also get sufficient time to process the information.

1.2 Statement of the Problem

Abadzi (2007) in a study on instructional time loss observed variations in the rate of efficiency of time utilisation in four countries. The study indicates an engagement rate of 79% and 39% for students in Tunisia and Ghana respectively. In effect, Tunisian students gets twice the intended classroom time than Ghanaian students. Teachers' use of classroom instructional time can have significant impact on student learning. Grissom,

Loeb, & Master, (2013) notes that time-use decisions are important for effective teaching and learning. Teachers have the responsibility of planning and managing what takes place in the classroom and thus make daily decisions about how class time is used.

A typical school day is characterized by series of activities designed by curriculum developers and policy makers for the attainment of the educational objectives. The school day is regulated by school management who indicates the times students should be in school, for morning assembly, for lessons, for breaks and closing time for the day. A typical school day is regulated by the "school time" that indicates the time for the beginning and end of a typical school day. The "school time" is partly by convention and partly documented. The conventional portion of the "school time" mainly concerns the accepted practices of time use that have been practiced and accepted over the years, such as the time for "rising bell" in a boarding institution and the time for morning assembly. The documented portion of the "school time" is contained in the school "timetable".

A school timetable is a reference document created by professionals that clearly shows how school resources, such as teachers and classrooms, fit together with student schedules and school schedules, as well as with days of the week. School timetables are typically developed in a spreadsheet format and may be created manually using commonly available software, or may be generated by specialized software found online. The timetable clearly spells out the time duration for lessons, number of lessons/periods in a school day, time for breaks, teachers and subjects assigned among others. The timetable therefore indicates the instructional and non-instructional time. Among others, school time timetables help to ensure accountability especially in the utlisation of instructional

time in each subject area, ensuring that teachers are not scheduled for too many back-to-back classes and scheduling teachers for two or more classes at the same time.

McLeod, Fisher and Hoover (2003), defines instructional time as the time scheduled for purposes of instruction, examinations, and other student activities where direct student teacher interaction and supervision are maintained. In a study on instructional time utilisation, Appiah (2012) observed that lessons started very, very late and ended earlier than scheduled. It suggested that teachers used fewer time than the scheduled time for instruction. These attitude, accumulated over time, drastically reduces the instructional time and reduces the possibility of the completion of syllabus. Arguably, if teachers do not complete the coverage of the school syllabus within the three year stipulated time for secondary education, students would become deficient in content knowledge and therefore could engage in all forms of activities to enhance their performance in the final assessment. In desperation, students could resort to examination malpractices due to the inadequacies of teachers' performances in the classroom arising from their ineffective utlisation of instructional time. The lack of confidence and ability on the part of students could result in poor performance in external assessments. In the 2011 Basic Education Certificate Examination (BECE), out of the three hundred and seventy thousand, five hundred and eighty-two (370,582) candidates who sat for the examination, one thousand, one hundred and twenty seven (1,127) of them were involved in malpractices of different dimensions (WAEC, 2014). Similar trend prevails at the secondary school level. According to Emily et al (2014), Teachers play an instrumental role in improving learning outcomes, and it is important that they are aware of the impact their practice has on student learning (Timperley et al., 2007).

Also, poor students' performances in assessment conducted by the West African Examinations Council (WAEC), which is used as basis for the placement of students into the next grade/level of education in the country, could affect the number of qualified applicants to that level/grade. By implication, ineffective utlisation of instructional time affects students' performance in assessment and entry into higher institutions of learning. According to a World Bank report (2015), the average gross school enrolment rates in sub-Saharan African countries at the primary and secondary levels in 2010 stood at 99.6% and 39.6% respectively. The gross enrolment rate in secondary schools in Ghana is estimated to be two times lower than the gross enrolment rates in primary (Iddrisu, Danquah & Quartey, 2015). Statistics from 2012/2013 EMIS census shows that the gross enrolment ratio (GER) in Senior High Schools for 2011/2012 and 2012/2013 were 37.1 and 36.8 respectively indicating a decrease in enrolment in 2012/2013. Statistics shows that a significant number of Junior High School leavers fail to progress to Senior Secondary School, and a high proportion of Senior Secondary School leavers fail to continue their education to tertiary institutions (Haralambos & Holborn, 2004). In northern region, the gross enrolment rate and the completion rate in 2012/2013 for primary schools stood at 98.2% and 132.5% respectively while that of Junior High Schools were 72.6% and 65.6% respectively (GSS, 2014)

The researcher is of the opinion that the lower enrollment into higher levels/grades of education could possibly be attributed to teachers' ineffective utlisation of instructional time. The study focuses on teachers by investigating the effective use of instructional time as a means of adding value to the professional development of teachers by limiting

his work on Business Senior High School, a second cycle institution in Tamale Metropolis.

1.3 Research Objectives

The main objective of the study was to explore the effective use of instructional time for Continuous Professional Development of teachers. Specific objectives are to:

1. Identify factors that are responsible for teachers' ineffective utilisation of instructional time.
2. Examine effective strategies to improve the utilisation of instructional time by teachers
3. Assess Ghana Education Service (GES) enforcement of teachers' utilisation of instructional time.
4. To make policy recommendations to minimise interference of schools instructional time

1.4 Research Questions

1. What factors are responsible for teachers' ineffective utilisation of school instructional time?
2. What effective strategies are available to improve teacher utilisation of instructional time?
3. How is Ghana Education Service (GES) enforcing the rules on teacher utilisation of instructional time?

4. What policies can the school design to minimise interference on instructional time?

1.5 Justification for the Study

The study unearths teachers' utilisation of instructional time in the school. It is hoped that this study would prove to be of much value to teachers by helping them to use instructional time profitably and hence help to improve the quality of teaching and learning in schools. Moreover, it would assist school management to know the effectiveness level of instruction for proper planning in order to improve academic performance of students. It is expected that authorities will address issues which seriously impede effective instruction in the school as found in the study.

Also, the study would help in informing teachers and learners on the good use of instructional time to improve the quality of teaching and learning in schools. It would further be helpful to headmasters in organizing in-service training for teachers on proper utilization of instructional time.

Again, it would serve as a guideline to educational planners, policy makers in education, curriculum developers, teachers, students and learners in their quest to make sound and valuable policies concerning instructional time usage. It would also be valuable to the regional/metropolitan directorate of education in resourcing circuit supervisors to perform its function.

Furthermore, it is expected that the study would help in improving the pedagogical climate of classrooms to produce significant gains in students learning and achievement

through well-designed framework aimed at maximising the use of instructional time in schools.

Finally, the study would assist the Ghana Education Service in its policy formulation.

The study would also add to existing knowledge on the subject and serve as a guide for further studies on the subject.

1.6 Brief Background of Business Senior High School

Business Senior High School, Tamale, is a second cycle institution established on the 9th September, 1963 as a private institution by Mr. Samuel Benjamin Gogoe of Tarkwa. It is situated at Gbambaya, off the Nyankpala road about five (5) kilometers from Tamale. It is under the jurisdiction of the Tamale Metropolitan Directorate of Education and the Tamale Metropolitan Assembly and within the electoral area of Tamale South Constituency. From a humble beginning with a small student population, the school has risen to its present state. It started as a private commercial school and due to the unfamiliar nature of Business programmes in the North coupled with fee paying tuition, it initially had low patronage when it was established. The school has undergone a number of changes; geographically and structurally. From private residences at Sakasaka and Choggu, it was moved to its present location. It is a mixed public second cycle school.

Initially as a purely Business School, the management of the school, over the years, decided to introduce other programmes of study to meet the changing demands of the public and the job market. In this direction, Home Economics, General Arts and quite recently the introduction of General Science in the 2013/2014 academic year. The

student population for the past three years stood at 1,845, 1,884, and 1,971 for the 2013/2014, 2014/2015, 2015/2016 academic years respectively. Placement in the school is based on the Computerised School Selection and Placement System (CSSPS). Students in the school come from all over the country. The school teaching staff strength for the 2015/2016 academic year is eighty-five (85) permanent and one (1) national service personnel. The non-teaching staff comprises fifty-three (53) permanent staff and two (2) national service personnel.

Majority of the students in the school are living in the boarding house. Generally, a greater number of the student population is accommodated in the school. For the 2015/2016 academic year, 737 of the students are girls and 1,233 are boys. Day students commute daily to school and they are 226 out of the 1,971 student population.

The school has a number of accommodation for its staff as well. It has 16 bungalows and 8 semi-detached quarters. In all, 32 staff members are accommodated on campus with the other staff commuting daily to work.

1.7 Definition of pertinent terms

1.7.1 Definition of Instruction

Instruction, like any other concept, does not easily lend itself to a precise definition. It has a broad definition field. The Merriam-Webster dictionary defines instruction as the action, practice, or profession of teaching. That is, the action or series of actions employed by teachers for learning to occur. Moore (2000) is of the view that instruction is an action taken by teachers to create a stimulating learning environment for the purpose

of providing guidance along with the necessary instructional tools and carrying out activities that will facilitate learning and help develop behaviour appropriate for the gains students are supposed to have. From Canady and Retting (1996) perspective, instruction is also defined as procedures and activities planned for teaching. According to Şimşek (2011), instruction requires not only systematic guidance for learning but also a purposeful organisation of experiences to help students achieve the desired change in their performances. For the purpose of this study, instruction can be defined as the whole process applied for learning to occur and for the development of the target behaviuor that learners are expected to have.

Teaching and instruction is often used interchangeably. Teaching explains how something is done by using varied techniques, strategies and approaches to facilitate learning. Instruction simple involves giving direction. For the purpose of this work, teaching and instruction are used synonymously.

1.7.2 Definition of Learning

Learning, like many concepts, has varied definitions based on the discipline. Psychologist, neuron-scientist or behavioural ecologist would provide different definitions for the concept. However, the varied definitions can have a common "umbrella concept" that can be applied across board. Owing to the difficulty in having a single satisfactory definition, many prefer providing an explanation of the subtypes of learning. The term learning is mostly used in a narrow sense. In a general sense, learning is a method of adapting to current social condition, rules and cultural needs and that a person who is open to adaptation by nature is born in a social environment (Kaya, 2016).

According to Hall (2003), Learning refers to the process by which an animal (human or non-human) interacts with its environment and becomes changed by this experience so that its subsequent behaviour is modified. Manzur (2013) indicates that any process of change that occurs as result of an individual's experience is learning.

According to Bekoff (2004) any information retrieved that has the potential of affecting behaviour is learning. And according to Papaj and Prokopy (1986), learning can result in a reversible change in behaviour. Okano, et al. (2000) regards learning as a process for acquiring memory. Menzel (2013) emphasises that new behavior should make the individual better adapted to the changed conditions of the environment.

One cognitive psychologist says "Learning and memory involve a series of stages. Processes occurring during the presentation of the learning material are known as 'encoding' and involve many processes involved in perception. This is the first stage. As a result of encoding, some information is sorted within the memory system. Thus, storage is the second stage. The third (and final) stage is retrieval, which involves recovering or extracting stored information from the memory system". Eysenck and Keane (2010).

Learning generally involve a process by which a person profits from past experiences. It is manifested in a more or less permanent change in behaviour resulting from exposure to the environment, experience or practice.

There are several schools of thought about how learning takes place. Rationalism (Chomsky) and associationism (Pavlov & Skinner) are earlier schools of thoughts on learning. Cognitive and social theories are the most used in the twenty first century and constructivism being the most well-known. Constructivists such as Piaget (1950) tells us

that we learn by fitting new understanding and knowledge into and with, extending and supplanting, old understanding and knowledge. Teachers should therefore be considering how to bring about change or transformation to the pre-existing knowledge of their learners (Mezirow, 1991).

1.7.3 Definition of instructional time

Time is a scarce resource, and as such, time-use decisions are important for effective teaching and learning (Grissom, Loeb, & Master, 2013). Instruction in the school setting cannot be effected haphazardly. Time is an important element in the scheduling of learning activities for learners (Claessens et al, 2007). To make good use of time, curriculum developers and policy makers specifically needs to designate appropriate times for instructional and non-instructional purposes in any teaching and learning environment. The time allotted for instructional purposes should, ideally be sufficient enough to enable learners benefit from the content of activities designed for them for the years of study specified for the programme.

In the Ghanaian situation, the syllabus is structured to cover the three years of Senior High School. Each year's work has been divided into units and unit topics for each year have been arranged in a suggested teaching sequence. The arrangement is deliberately structured to cater for the rate of progress of students in each year. Moreover, the syllabus developers discourages teachers from forcing the instructional pace but rather advises teachers to ensure that students progressively acquire a good understanding and

application of the material specified for each year's class work (SHS SYLLABUS, 2010). The structuring of the instructional time therefore allows teachers to schedule and organize themselves for the teaching and learning activities (Claessens et al, 2007).

Time for instructional activities is designed in line with the syllabus to cater for the entire school life of students at each level. The daily instructional time at the SHS is three hundred and sixty (360) minutes and the academic year covers a period of forty (40) weeks (SHS SYLLABUS, 2010). The structuring of the instructional time would therefore not make room for unutilised instructional time by teachers in the classroom setting. Teachers are therefore expected to make effective utilisation of the instructional time to facilitate the achievement of the learning objective.

Instructional time represents the actual contact hours when teachers and learners interact. Instructional time can therefore be defined as time scheduled for purposes of instruction, examinations, and other student activities where direct student teacher interaction and supervision are maintained (McLeod, Fisher & Hoover (2003). Kraft (1994) stated that the length of the official school year, the number of hours allotted to subjects and the amount of time lost as a result of school closure, teachers' absence and other interruptions influences students learning. It therefore becomes essential for teachers to effectively use the allocated instructional time to the maximum. There is therefore the need to awaken the consciousness of teachers' on the use of instructional time to promote effective teaching and learning. Effective utilisation of instructional time is an important factor in teaching and learning since effective time spent in learning is frequently found to contribute to learning (Adelman, Haslam, & Pringle, 1996).

It is expected that the effective utilisation of instructional time would ease off pressure on teachers thus creating a congenial atmosphere for effective teaching and learning.

Konover (2003) believes that good use of instructional time reduces stress, increases productivity and makes teaching in the classroom a lot easier. This means that, when teachers' makes good use of time on the time table, it spares them the pressure of organising extra tuition to cover up for the lost time. It therefore behooves on teachers to

aim at achieving an effective use of time by performing certain goal-directed activities (Claessens et al., 2007, p. 262)

1.7.4 Definition of time concepts associated with learning

Time is a very important element in learning. In emphasizing its importance, Fisher *et al* (1978) states that time acts as the fundamental regulator of learning. Allotted/Allocated time and Academic learning time are time concepts that needs further elaboration as used in the research.

Allotted/Allocated Time is the maximum time allotted for instruction and learning. It is the time that the state, district, school, or teacher provides for instruction. Allotted time in public schools is prescribed in state laws covering the number of school days per year and the length of the school day. That is, the time block set aside for a lesson. The duration of periods in Senior High Schools (SHS) is 40 minutes and the duration of the school year is 40 weeks (Annual Senior High School Academic Calendar, 2017/2018). For example, in Second Cycle institutions, mathematics is allocated five periods a week and 40 minutes is allocated for each period/lesson (SHS SYLLABUS, 2010). Therefore, 200 minutes becomes the weekly allocated time for core mathematics at the Senior High level in Ghana.

The actual time available for instruction, however, varies widely. The allotted number of days per year for instruction is often reduced by acts of nature such as heat and rain or unanticipated events. The school year is sometimes shortened by teacher strikes. Financial difficulties may interfere with keeping schools open for the allotted number of days (Suarez et al, 1991) especially in the northern parts of this country. According to Phay (1991), absenteeism reduces the number of days available for instruction by an

estimated 7% per year to 157 of 180 available days. Absenteeism reduces the time a student is exposed to instruction and also results in loss of instructional time when teachers must reintegrate absent students into the classroom.

Researchers, such as Carroll (1989), are of the view that any measure of allocated time derived from any source other than direct observation of teachers invariably overestimate the actual time provided in schools for instruction in a curriculum area. In Carroll's "model of school learning," (Carroll, 1963, 1989), allocated time was called "opportunity to learn."

Academic learning time (ALT) focusses on utilised allocated time in subject areas. Fisher & Berliner, (1985) defines Academic Learning Time as the amount of time during which students are actively, successfully, and productively engaged in learning. It refers to that portion of engaged time that students spend working at an appropriate level of difficulty for them and experiencing high levels of success. Academic learning Time can therefore be defined as the part of allocated time in subject areas where students are successfully engaged in activities or learning materials they are exposed to and are related to educational goals and values. That is, skills and knowledge they will later be tested on.

According to Fisher et al., (1980), it excludes engaged time that is spent on tasks that are too easy or too difficult. Academic learning time embodies engaged time and time-on-task concepts. In direct classroom instruction, the amount of time a student pays attention or is engaged in the instruction affects learning (Suarez, Torlone, McGrath, & Clark, 1991). Studies have found that students pay attention to instructional activities about seventy to seventy-five percent of the time and that engagement in instruction by students is also affected by their ability and sex. Students with greater ability have higher percentages of

engaged learning time (Karweit, 1983). Engagement rate is the proportion of instructional time in which students are engaged (actively and /or passively) in learning. In a normal class room setting, disparities exist among students in their level of engagement though they have equal learning opportunities. Time-on-task focuses on time engaged on a particular learning material or activity. Girls, at least in elementary school, have been found to be on-task more than boys (Karweit, 1983). Organisational and instructional factors that most influence the variation in time-on-task are teacher managerial competencies, the composition of the classroom, and mode of instruction (Fisher et. al., 1980).

1.7.5 Definition of professional development

The term professional development can well be understood by getting a clear understanding of the derivative words ‘professional’ and ‘development’. Agyeman (1993, p. 92) defines profession as an occupation based on specialised intellectual training, the purpose for which is to give skilled service to clients for a definite fee or salary. A professional is therefore an individual trained to acquire skills requisite of his/her work and working within the standards established by the profession. Development, on the other hand, is defined by the Cambridge dictionary as ‘the process of growing or changing and becoming more advanced’. The Business dictionary defines it as ‘the systematic use of scientific and technical knowledge to meet specific objectives or requirements’. Development involves a positive change.

Fullan and Hargreaves (1992) comments that little systematic attention has been devoted to understanding the topic of professional development. Day (1999), focusing on teaching

defined professional development as the process by which, alone and with others, teachers review, renew and extend their commitment as change agents to the moral purposes of teaching; and by which they acquire and develop critically the knowledge, skills, planning and practice with children, young people and colleagues through each phase of their teaching lives. Evans (2008) is of the view that professional development may be conceived of as an enhancement to the status of the profession as a whole, exemplified by the evolution of an all-graduate profession, and it may also be conceived of as improvement to knowledge, skills, and practice. Evans (2008) defines professional development as the process whereby people's professionality and/or professionalism may be considered to be enhanced.

Evans (2008) identified two constituent elements of professional development: functional and attitudinal development. She further elaborates that functional development has two constituent change features: procedural and productive. She indicated that procedural development relates to development resulting from procedures utilized while productive development focusses on what and/or how much people 'produce' or 'do' at work. On attitudinal development, she indicates it also comprises of two constituent change features: intellectual and motivational and that it respectively refers to individuals' development in relation to their thinking, thought processes and ideas, and their motivation. Evans indicates that the external introduction (deliberate or inadvertent) of new service level requirements to occupational groups is likely to target and focus much more on functional development than on attitudinal development (Evans, 2008).

Formats for professional development may range from a one-day conference to a two-week workshop to a multiyear advanced degree programme. They may be delivered in

person or online, during the school day or outside of normal school hours, and through one-on-one interactions or in group situations. Professional development programmes may be led and facilitated by educators within a school or provided by outside consultants or organisations hired by a school or district. Professional development helps build and maintain morale of staff members, and is thought to attract higher quality staff to an organisation.

1.8 Organization of the Study

This study is organized into five chapters. Chapter one presents the problem statement, objective of the study and justification of the study and limitations of the study. Finally, the chapter highlights delimitation, limitations and ethical considerations of the study. Chapter two reviews the literature and comprises theoretical framework (theories of education), definition of terminologies associated with time in teaching and learning. It also looks at the concept of instructional time in education and its importance, the link between effective utilisation of instructional time and students' performance.

Chapter three presents the research methodology of the study. It presents the research design adopted for the study, determination of the sample size and the sampling technique used in selecting the sample, sources of data, tools for data collection and the methods for analyzing the data. Chapter four presents results and discussions of the study while Chapter Five presents a summary of findings, conclusions and recommendations of the study.

1.9 Delimitation

The study is limited to Business Senior School, Tamale, a second cycle public institution in the Tamale Metropolitan Assembly in the northern region of Ghana. Furthermore, the focus of the study was on total utilisation of instructional time and not on quality utilisation of instructional time which could be the scope of another research. The information in the study is relevant only to the school within the period of the research.

1.10 Limitations

The data collected looked into how teachers effectively utilise instructional time in teaching and learning. It did not, however, address the quality of instructional time used and thus the knowledge generated is specifically limited to the school where this study was conducted.

Secondly, the study did not, address the quality of instruction provided. As such, the conclusions are limited to the total utilisation of instructional time with little regard for quality of delivery or breadth and depth of content. The research was intended in part to determine whether teachers at the school really utilise time effectively in the teaching and learning process. Thus, this research is restricted to the usage of total instructional time by teachers in the school.

The sample used in the research cannot be concluded to be a representation of all teachers in the school. Though purposively sampled, participants volunteered to take part in the interview. The study attempts to show the views of participants on how teachers make use of allocated instructional time in the teaching and learning process.

Furthermore, the study does not allow the researcher to determine what the effects of effective utilisation of instructional time has on teaching and learning in the classroom, or

the extent to which it enhances learning. In the study, there was no independent measure of teaching practice or student learning; nor did the researcher attempt to design an impact study with random assignment to evaluate teachers' lesson. Both independent measures and a more rigorous design would be necessary to make claims about the impact of using the instructional time on student learning and engagement.

The study is purely qualitative and adopted the case study design approach and "because it occurs in the natural setting it is extremely difficult to replicate" (Wiersma, 2000, p. 211). Also, one cannot make causal inferences from case studies, because we cannot rule out alternative explanations. The research findings in the study may be suggestive of what may be found in other schools but additional research would be needed to verify whether the findings from this study would be generally applicable in other schools.

Finally, thematic analysis was done to arrive at the findings. Therefore variations in findings of similar studies are possible depending upon the data analysis method adopted.

1.11 Conclusions

The study focused on the full utilisation of the allocated instructional time in Business Senior High School, Tamale. The study revealed several factors leading to the wastage of instructional time key among them include teacher absenteeism, lateness, inadequate preparation, laziness and delays at school unprogrammed functions. It is hoped that the rates of non-utilisation of instructional time would be minimised if the teachers are paid based on the utilisation of the allocated instructional time, preventing continuous absentee teachers from drawing salaries, monthly validation of salary payment from the schools, making alternative staff arrangements for teachers who cannot be present for classroom lessons, allowing school committees and board meetings to be held after class

hours, organising Continuous Professional Development (CPD) programmes on effective instructional time utilisation for teachers and planning of the academic calendar mapping out noninstructional hours for school-wide activities (like sporting activities, headmaster's Assembly etc.).

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews the previous works that have been done on instructional time. A lot of research has been written on cognitive development, learning and instructional management. Section 2.2 and 2.3 presents the theoretical and conceptual frameworks for the study. Section 2.4 presents the concepts of teacher education and the concept of teacher professional development is presented in section 2.5. Trends of students' academic performance and utilisation of instructional time is presented in Sections 2.6 and 2.7 respectively. Section 2.8 outlines the factors influencing instructional time utilisation and learning outcome while section 2.9 presents strategies for effective instructional time utilization.

2.2 Theoretical Framework

This study is guided by the theory of internal locus of control (Rotter, 1966 & Bandura, 1977) and Covey's (1989) method of time management. Rotter's (1966) theory of internal locus of control provides a fertile ground for effective instruction by teachers. His theory became a foundation of teacher efficacy research and was utilized by the Rand

Corporation researchers to investigate the effectiveness of reading instruction (Goddard, 2000). The researcher viewed motivation and performance as the foundation of the teachers' reinforcement and contend that reinforcement motivates and encourages teachers. And consequently contributes to a higher teacher's self-efficacy in the classroom. Teachers who were confident in effecting students" success and inspiration in learning were thought of by Goddard et al. (2000) as managing their activities and possessing a higher degree of efficacy. Teachers have also reported that motivation and performance of students depends on his or her home environment" and "If I try hard, I can get through to even the most difficult or unmotivated students" (Cheung, 2008, p.104).

Teachers with high self-efficacy reported students' families had more of an influence on "motivation and performance" than the school teachers. Teachers who responded positively to the statement 'If I try hard, I can get through to even the most difficult or unmotivated students' perceive themselves as having control over issues that sometimes have a negative impact on learning (Tschannen- Moran et al. 2007). Cheung (2008) reported that Rand Corporation researchers employed in their original study were interested in general teaching efficacy and personal teaching efficacy. Armor et al. (1976) conducted research that helped define the terminology of efficacy as a broad notion of a teacher's sense of efficacy and later shortened to teacher efficacy (p.752).

Bandura's (1977) theory provided the second theoretical framework on efficacy of instruction by teachers. The theory proposed that teacher's instructional efficacy is a type of self-efficacy which he defines as the outcomes of cognitive process in which people

construct beliefs about their capacity to perform at a given level of competence" (Bandura, 1977, p. 480). He suggested that teachers' beliefs have an effect on their efforts particularly their determination or flexibility when encountering problems, and the ways they cope with anxiety they experience in dealing with challenging situations in the classroom (Bandura, 1977). Bandura (1977) suggested that teacher instructional efficacy consists of personal teaching efficacy and professional teaching efficacy (as cited in Cheung, 2008). Personal teaching efficacy refers to an individual's accountability, how a teacher acknowledges student learning. On the other hand, professional teaching efficacy is the teacher's conviction that every teacher possesses the capabilities to affect what Wheatley termed "external factors" (as cited in Cheung, 2008).

Rotter (1966)'s theory of internal-external locus of control explores underlying beliefs and associations between actions and outcomes, not with personal efficacy (Rotter, 1966, p.481). An individual may hold the belief that a specific outcome is "internally controllable caused by actions of people" (Rotter, 1966, p.481) though he or she may still lack confidence in achieving the desired actions (Goddard, Hoy, & Woolfolk, 2000).

Rotter's and Bandura's notions about self-efficacy on school-based instruction are indistinguishable from earlier theories. For example, Bandura mentioned mental abilities with which people can formulate their beliefs. Rotter investigated teachers' internal and external beliefs, those definitions that address thinking alone does not show much difference from earlier theories. Goddard et al. (2000) contend some educators have assumed that Rotter's internal locus of control and Bandura's perceived self-efficacy and locus of control are roughly the same (Rotter, 1966, p. 481). Although some of his definitions about mental abilities did not differ greatly with previous research by Bandura

(1977, 1986, and 1997), it has become a major contributor among researchers in the area of teacher self-efficacy theory. The model of self-efficacy theory is characterized by connections of the self to the community (triadic reciprocal causation) and involves behavior, internal personal factors (cognitive, affective, and biological events) and the external environment as reciprocating factors (Dellinger et al. 2008). Self-efficacy model is vital in that it helps us to understand how instructional time utilization in learning setting, such as the classroom, be influenced by the environment, as well as by biological factors of the individual teacher and/or student. For example, some Botswana teacher trainees chose teaching in response to the shortage of teachers in their country rather than from having an actual passion to help students learn. This decision shows the influence of culture on some individuals.

The biological part of the model helps us to understand that learners also acquire certain skills from their parents. In a related sense, some students could be intelligent or low performers because of genetic make-up and teachers ought to aim to understand factors that exist both within and beyond the learner for judicious use of instructional time. The environment and biological factors can affect both teachers and students positively or negatively during instruction. Therefore, teachers with a high teacher efficacy will not be discouraged when they interact with low achieving learners because they realized their genes play some role. They can employ different strategies of helping students to learn rather than disengaging with students for teaching and learning activities. Personal factors and the environment do have an effect on behavior, and personal factors may be influenced by the behavior and environment (Dellinger et al. 2008).

Covey's method of time management is a development of Eisenhower's (Dwight David Eisenhower, the 34th president of the United States of America, from 1953 to 1961) method of time management. It is the other theoretical framework used in this research. The theory classifies task based on importance and urgency and advocates that individuals should focus on task that are urgent and important to make good use of time. The theory indicates that when time is wasted on unimportant and non-urgent tasks, there would not be sufficient time to do the urgent and important tasks. In effect, time must be used judiciously. Teachers, like any other professional live in a time pressured world where it is common to have multiple overlapping commitments that all require immediate attention. Time is one of the most pervasive sources of pressure in the classroom as there is too much to do, in too little time. The teacher needs to deliver his/her lesson by focusing on the things that are essential to having an effective lesson delivery.

Eisenhower recognized that great time management means being effective as well as efficient. In other words, we must spend our time on things that are important and not just the ones that are urgent. To do this, and to minimize the stress of having too many tight deadlines, we need to understand that Important activities have an outcome that leads us to achieving our goals, whether these are professional or personal and that urgent activities demand immediate attention, and are usually associated with achieving someone else's goals. They are often the ones we concentrate on and they demand attention because the consequences of not dealing with them are immediate (Covey, 1989). When we know which activities are important and which are urgent, we can overcome the natural tendency to focus on unimportant urgent activities, so that we can clear enough time to do what's essential for our success. Covey's book, *7 habits of highly effective people (1989)* gave much

publicity to Eisenhower time management concept. As such, literature on time management is mostly in reference to covey.

Literature suggests that better time management skills, which include the ability to set achievable goals, identify priorities, monitor one's own progress, and remain organized (Claessens et al., 2007) can lead to more effective time use and ultimately more positive individual outcomes in some settings (Britton & Tesser, 1991). High demands on one's time are characteristic of many professions. As Britton and Glynn (1989, p. 429) put it, "intellectually productive people usually have more things that they would like to do, or need to do, than they have time." This description certainly applies to the job of school teachers, who have the responsibility of overseeing instructional programs and ensuring student success (Horng, Klasik, & Loeb, 2010). In teaching, just as in other professions, becoming more productive means finding ways to accomplish more given limited time resources. Managing one's time more ably is one way to fulfill this goal.

Time management means those behaviors "that aim at achieving an effective use of time while performing certain goal-directed activities" (Claessens et al., 2007, p. 262). The researcher draws on large literature available on the concept of time management of organizations in describing the characteristics of positive time management behaviors in schools and developing expectations about the role of time management among teachers in affecting their capacity to promote academic improvement.

Managing time or making effective use of time requires techniques and good planning behaviors. Past studies suggest that one can use time efficiently and productively by setting short-term and long-term goals, keeping time logs, prioritizing tasks, making to-do lists and scheduling, and organizing one's workspace (Claessens et al, 2007; Macan,

1994). These time management techniques and behaviors tend to share some underlying traits in common and can be classified into several groups. Britton and Tesser (1991) proposed three facets of time management: short-range planning, long-range planning, and time attitudes. Short-range planning is the ability to set out and organize tasks in the short run (e.g., within a day or a week). Long-range planning is the capacity to manage tasks over a longer time horizon (e.g., in a quarter or a year) by setting goals, keeping track of important dates and limiting procrastination. Positive time attitudes indicate that a person is oriented towards using their time constructively and maintaining agency over how their time is spent.

Similarly, Macan (1994) identified three components of time management: (1) setting goals and priorities, (2) mechanics (i.e., making lists and scheduling), and (3) preference for organization. The first includes such behaviors as setting goals one wants to accomplish and prioritizing tasks to achieve these goals. The second includes behaviors associated with managing time such as making to-do lists and scheduling. The final factor includes one's preference for organization in his or her workspace and approach to projects. While this categorization differs somewhat from Britton and Tesser's (1991), the themes of goal-setting, prioritization, and organization are common to both schemas. People vary in their time management behaviors and techniques. For example, Macan et al. (1990) indicates that while time management behaviors did not differ by race, older and female subjects were more likely to be good time managers. Researchers have also explored the relationship between time management and other dispositional characteristics such as self-esteem, sense of purpose in life, polychronicity (i.e., multi-tasking), and impatience, and propensity to procrastinate (Francis-Smythe & Robertson,

1999). For example, Lay & Schouwenburg (1993) found that students prone to procrastination exercised fewer time management techniques while also tending to be further behind on work and to study fewer hours.

Several studies demonstrate that time management predicts job performance. College students with better time management skills report higher grade point averages (Britton & Tesser, 1991; Macan et al., 1990). To understand the association between time management and job performance, researchers have investigated a series of possible linkages. Most clearly, time management helps improve job efficiency by enabling professionals to allocate adequate time to their job's most important tasks (Orpen, 1994). This greater attention to high-priority work areas improves worker outcomes. The expectation that increased time management will increase worker productivity by enabling employees to "work smarter" has driven widespread investment in time management training in the private sector (Green & Skinner, 2005). An important source of job stress in the workplace is the perception for an individual that what he or she needs to accomplish outpaces the time available (Schuler, 1979).

Macan (1994) found that subjects with better time management skills perceived that they had greater control over their time and how they spend it, which was in turn associated with both reduced feelings of job-induced tension and lower reports of *somatic tension*, or physical symptoms of stress, such as insomnia and headaches. Job-induced stress was then negatively correlated with self-assessed job performance. Claessens et al. (2004) documented similar paths from time management to perceived time control to reduced work strain and higher job performance in a study of engineers in a semiconductor

manufacturer. Other studies have documented the positive association between time management and employee health, mediated by other factors such as perceived control and conflicts between the demand between work and family (e.g., Adams & Jex, 1999). Time management is also predictive of other factors that might influence job performance. Professionals who manage time better report lower emotional exhaustion, the most important dimension of job burnout (Peeters & Rutte, 2005). They also report higher overall job satisfaction (Macan et al., 1990). Participants in time management training also report greater work/home balance (Green & Skinner, 2005). A long literature shows that satisfaction and satisfaction-related factors are contributors to employee performance (see Judge et al., 2001).

Moreover, behaviour change requires intent (Ajzen, 1991). If workers do not intend to engage in new behaviours or do not know which behaviors will be more productive, we would not expect better time management to enhance performance. Increasing job performance requires engaging in more productive behaviors. According to Ajzen (1991), human behaviour is a function in part of how much control one perceives he or she has over that behaviour. Control is constrained by resources, including time and skills; time management increases perceptions of control by relaxing some of these constraints (Macan, 1994).

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job burnout (Peeters & Rutte, 2005). They also report higher overall job satisfaction (Macan et al., 1990). Participants in time management training also report greater work/home balance (Green & Skinner, 2005). Developing on the Eisenhower's principle, Covey (1989) developed the time management grid, which is widely cited as an effective method of organizing one's priorities and scheduling of activities for effective achievement. He is of the view that effectiveness, which brings about the maximum long term results possible, depends not only on how much effort we expend but also on whether the effort we expend is in the right direction to yield the expected results. Most importantly, it involves maintaining a balance between production of desired results and the production capability of the individual. Covey states that pro-activeness, a unique human endowment of self-awareness, is essential to being effective and that our ability to expand our proactivity and to exercise personal leadership in our lives are imagination and conscience. Covey indicates that in developing our own self-awareness many of us discover deeply embedded habits that are totally incongruent with the things we really value in life and we are responsible to use our imagination and creativity to write new ones that are more effective, more congruent with our deepest values and with the correct principles that give our values meaning. The most effective way is to develop a personal mission statement or philosophy or creed. It focuses on what you want to be (character) and to do (contributions and achievements) and on the values or principles upon which being and doing are based. We use our conscience as a compass to help us detect our own unique talents and areas of contribution and also our imagination to mentally create the end we desire, giving direction and purpose to our beginnings and providing the substance of a written personal constitution. The effectiveness to which an individual is

able to manage one's self depends on the independent will of the individual. Independent will is the ability to make decisions and choices and to act in accordance with them. It is the ability to act rather than to be acted upon, to proactively carry out programs.

In Covey's perspective, the best thinking in the area of time management can be summarized as: Organize and execute around priorities. This phrase represents the evolution of generations of time-management theory, and variety of approaches emerged expatiating on how best do it. The third generational thought on time management adds to those preceding generations the important idea of prioritization, of clarifying values, and of comparing the relative worth of activities based on their relationship to those values. In addition, it focuses on setting goals; specific long term, intermediate, and short-term targets toward which time and energy would be directed in harmony with values. It also includes the concept of daily planning, of making a specific plan to accomplish those goals and activities determined to be of greatest worth. While the third generation has made a significant contribution, people have begun to realize that "efficient" scheduling and control of time are often counterproductive. The efficiency focus creates expectations that clash with the opportunities to develop rich relationships, to meet human needs, and to enjoy spontaneous moments on a daily basis. The fourth generation is different in kind. It recognizes that "time management" is really a misnomer; the challenge is not to manage time, but to manage ourselves. It extrapolates that satisfaction is a function of expectation as well as realization. Expectation (and satisfaction) lie in our Circle of Influence.

It recognizes that the first person you need to consider in terms of effectiveness rather than efficiency is yourself. It encourages you to spend time to understand and center your

life on principles, to give clear expression to the purposes and values you want to direct your daily decisions. It helps you create balance in your life, helps you rise above the limitations of daily planning, organizing and schedule in the context of the work. And when a higher value conflicts with what you have planned, it empowers you to use your self-awareness and your conscience to maintain integrity to the principles and purposes you have determined are most important.

Table 2.1: Covey's quadrants of activities based on importance and urgency

	URGENT	NOT URGENT
IMPORTANT	Quadrant I Important and Urgent	Quadrant II Important but Not Urgent
NOT IMPORTANT	Quadrant III Not Important but Urgent	Quadrant IV Not Important and Not Urgent

Source: Covey (1989), *7 Habits of Highly Effective People*

The essential focus of the fourth generation of management can be captured in the Time Management Matrix diagrammed above. Basically, we spend time in one of four ways. The two factors that define an activity are urgent and important. Urgent means it requires immediate attention and involves important deadlines. Urgent things act on us. In most instances, people respond immediately to urgent issues such as a ringing phone. Most people can't stand the thought of just allowing the phone to ring. You could spend hours preparing materials or delivering a lesson but if the phone were to ring in the process, it would generally take precedence over the other activities. Urgent matters are usually

visible, right in front of us and often insist on action but so often they are unimportant. Importance, on the other hand, has to do with results. Important things contributes to your mission, your values, and your high priority goals. While we react to urgent matters, important matters that are not urgent require more initiative, more proactivity and we must act to seize opportunity, to make things happen. If we don't have a clear idea of what is important, of the results we desire in our lives, we are easily diverted into responding to the urgent.

In the Time Management Matrix, Quadrant I is both urgent and important. It deals with significant results that require immediate attention. We usually call the activities in Quadrant I "crises" or "problems." We all have some Quadrant I activities in our lives. But Quadrant I consumes many people. They are crisis managers, problem-minded people, and the deadline-driven producers. As long as you focus on Quadrant I, it keeps getting bigger and bigger until it dominates you. It's like the pounding surf. A huge problem comes and knocks you down and you're wiped out. You struggle back up only to face another one that knocks you down and slams you to the ground. Some people are literally beaten up by the problems all day every day. The only relief they have is in escaping to the not important, not urgent activities of Quadrant IV. So when you look at their total matrix, 90 percent of their time is in Quadrant I and most of the remaining 10 percent is in Quadrant IV with only negligible attention paid to Quadrants II and III. That's how people who manage their lives by crisis live. There are other people who spend a great deal of time in "urgent, but not important" Quadrant III, thinking they're in Quadrant I. They spend most of their time reacting to things that are urgent, assuming they are also important. But the reality is that the urgency of these matters is often based

on the priorities and expectations of others. People who spend time almost exclusively in Quadrants III and IV basically lead irresponsible lives. Effective people stay out of Quadrants III and IV because, urgent or not, they aren't important. They also shrink Quadrant I down to size by spending more time in Quadrant II. Quadrant II is the heart of effective personal management. It deals with things that are not urgent, but are important. It deals with things like building relationships, writing a personal mission statement, long-range planning, exercising, preventive maintenance, and preparation -- all those things we know we need to do, but somehow seldom get around to doing, because they aren't urgent.

Quadrant II activities have the kind of impact on people's personal and professional life to the extent that if they did such activities on regular basis, it would make a tremendous difference in their lives. Our effectiveness takes the quantum leaps when we do them. When one focus on Quadrant II activities and cultivate the proactivity to go after it, your crises and problems would shrink to manageable proportions because you would be thinking ahead, working on the roots, doing the preventive things that keep situations from developing into crises and your effectiveness would increase dramatically. 'The objective of Quadrant II management is to manage our lives effectively; from a center of sound principles, for a knowledge of our personal mission, with a focus on the important as well as the urgent, and within the framework of maintaining a balance between increasing our Production and increasing our Production Capability. A Quadrant II organizer will need to maintain coherence of vision and mission, balance in life, flexibility in work and portability of tool' (Covey, 1989 p. 111). As you go through your work, there will undoubtedly be times when your integrity will be placed on the line. The popularity of reacting to the urgent but unimportant priorities of other people in Quadrant III or the

pleasure of escaping to Quadrant IV will threaten to overpower the important Quadrant II activities you have planned. Your principle center, your self-awareness, and your conscience can provide a high degree of intrinsic security, guidance, and wisdom to empower you to use your independent will and maintain integrity to the truly important activities. Covey's time management matrix is important in that it helps us to understand how teachers can plan and prioritize instructional content and methodology to ensure effective and efficient time utilization in any learning situation.

2.3 Conceptual Framework for the Study

In order to build the conceptual framework for the current study, the researcher referred to the Creemers (Creemers, 1994) and the Scheerens (Scheerens, 1990) models. The research adopted the Creemers model to explain variance in outcomes in terms of essential factors of learning theory vis-à-vis time, opportunity, and quality. The model is comprehensively explored as it forms the main basis of the research framework. The Scheerens model outlines the factors associated with student outcomes in school in terms of education production function. The research also consulted the Shavelson, McDonnell, and Oakes model (hereafter referred to as the Shavelson et al. model). Shavelson et al. (1989) formulated a model to ascertain the state of science and mathematics education in school and to improve student outcomes. The model accounts for the relationship among clusters within the educational system.

The Creemers' model has often been used in researches aimed at exploring the relationship between students achievements on the one hand and quality instruction, teachers' behavior, students' attitude and curriculum and has been modified to reflect the context of various studies including the current study (Kyriakides & Charalambous,

2006). Kyriakides and Charalambous (2006) pointed out that the Creemer's model attempted to find factors likely to influence achievement in a student-classroom and teacher-school context is in line with the multilevel models of school effectiveness. They proposed that international comparative studies could be based on educational effectiveness research, e.g., Creemers‟ model, although the limitations of the model lie in testing final outcomes rather than valued-added progress, with a lack of prior knowledge. Using the multilevel modeling and identified factors based on Creemers‟ model, the results showed that the school-level factors had a greater effect than the student-level and teacher-level factors, as seen in the international comparison. This means that more attention should be paid to the vast differences between the various educational systems rather than the results of this study highlighted in a perspective of summative assessment ranking orders.

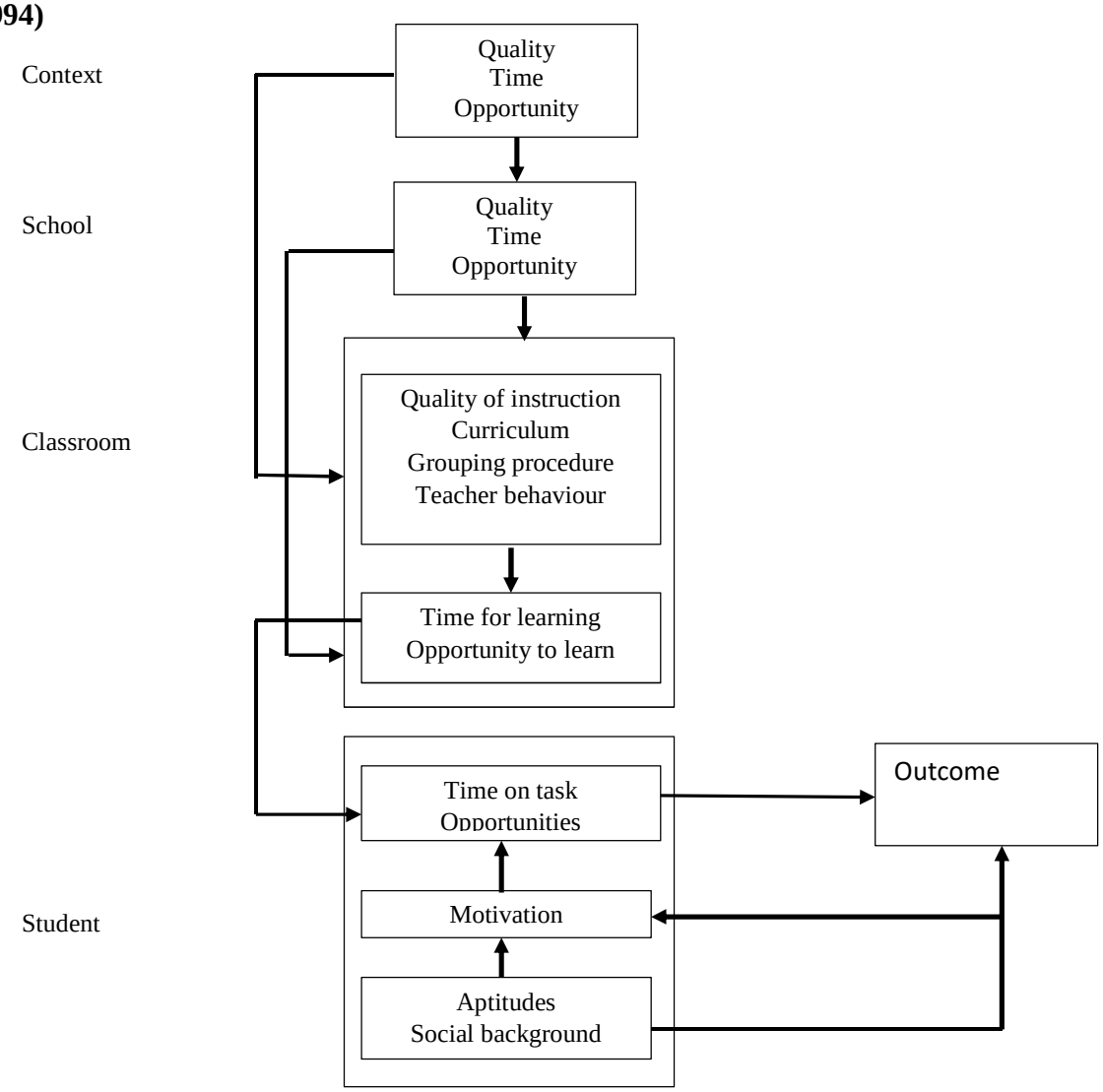
The Creemers comprehensive model of educational effectiveness (1994) was developed from a review of the empirical research on effective instruction and consideration of Carroll's learning model. The scope of the two models, those of Creemers and Carroll, differ (De Jong et al., 2004), but they do both attempt to explain variances in student outcomes by the same factors of aptitude, time on task, and opportunity to learn. Placing more emphasis on the classroom and teacher, Creemers (1994) focuses on the teaching-learning process in the classroom, where all factors or variables that contribute to educational outcomes exist. The quality of instruction in the classroom depends on three components, namely curriculum, grouping procedure and teacher behaviour, as shown in Figure 3.1. Amongst them, the most important factor is teacher behaviour, because all those factors depend on how a teacher runs his or her lesson. In other words, it is how

teachers implement the curriculum that determines student outcomes, not the curriculum itself, and even grouping which positively influence outcomes can be realized by the teacher's capacity.

Another feature of the model is the three components, viz., quality, time and opportunity, all of which influence achievement across levels. These components emerged from Carroll's (1963) five factors, namely students" aptitude, perseverance, ability to understand instruction, quality of instruction and opportunity to learn. While Carroll attempted to consider these as time required and explain student learning in terms of individual factors, Creemers places more focus on educational factors, especially quality of instruction within class, which in the form of curriculum, grouping procedure, and teacher behaviour at the classroom level influences time and opportunity at classroom level. They in turn influence time on task and opportunity to learn at the student level and eventually student outcomes. Furthermore, school-level and context-level factors are defined in terms of quality, time, and opportunity, and they in turn influence the classroom level. This attempt can lead to consistently viewing educational effectiveness from a teaching-learning point of view.

In attempting to account for the variance of achievement among students of the Business Senior High School, this study assumes that the students sampled are learners who grow up through common psychological development, although their contexts such as culture and socio-economic situation are different. Therefore, the Creemers model, based on teaching-learning theory, suits the current research. The different levels of the educational system accounted for by Creemers are student, classroom, school and context, all related to each other and contributing to educational outcomes.

Figure 2.1: Creemers' comprehensive model of educational effectiveness (1994)



Source: Creemers, 1994

2.4 Teacher Education

The development of teacher education in Ghana dates back to pre-independence. European merchants helped in the training of people to become teachers so that they could help with interpretation to facilitate their businesses (Antwi, 1992) in the Gold Coast era. Missionary activity in teacher preparation was to support the spread of the gospel and as such, they trained teachers to be catechists. In effect, teachers were therefore trained to conform to the demands of the European traders or missionary masters and so were the students. After independence, governments in Ghana have pursued teacher education in an attempt to improve education quality to enable students to become useful individuals who can fit and function well in the society.

Teacher Education, can be considered in three phases: pre-service, induction and -in-service. These three phases are now considered as part of a continuous process (Landsheere, 1987).

According to the Institute of Education (2013), initial teacher education preparation (Diploma in Basic Education) were offered in 38 public and 3 private Colleges of Education (CoE) in Ghana. Although the colleges run the Diploma in Basic Education (DBE) program, examinations are conducted by the University of Cape Coast's Institute

of Education. Apart from the Colleges of Education, the University of Cape Coast, through the various departments under the Faculty of Education, offers bachelor's degree programs to teachers to teach at both basic schools and Senior High Schools. In addition, the University of Education, Winneba, trains teachers for pre-tertiary schools through its departments, schools, and faculties. Aside these teacher training institutions, it is worth mentioning that some graduates from other universities and tertiary institutions also enter the classroom as nonprofessional teachers (Anamuah-Mensah & Benneh, n.d.). Anamuah-Mensah and Benneh (n.d.) reported that at present, Ghana runs pre-service teacher education programs. One of such programs is the Four-year bachelor's degree from the University of Cape Coast and University of Education, Winneba, which prepares teachers for first and second cycle schools. In-service programs and distance education programs are also developed to improve qualifications of serving teachers in Ghana.

In a Green Paper on teacher education in Europe, the European Union Thematic Network suggests that "...teaching as knowledge transmission or teaching as a craft may well have become obsolete. There are many cogent arguments that these new conceptions will have to be replaced by more dynamic conceptions oriented on a new professionalism in general and pedagogical professionalism in particular" (Green Paper on Teacher Education in Europe, 2000). The dynamics of the of the 21st century will certainly require more pragmatic approach to making teaching and learning much purposeful and useful to individuals and the state at large. There is therefore the need for "state of the art" knowledge as part of more dynamic career-long teacher education.

The European commission (2012) indicated that the teaching profession now face rapidly changing demands, which require a new set of competence. It implies that high quality teaching is key to successful learning and this in turn requires skilled and well-educated teachers who continue to grow and develop professionally throughout their careers. The challenge is to be clear about what we mean by good teaching and good teachers and to create suitable tools to support consistent high quality across the teaching force. Teaching should be recognized as both complex and challenging, requiring high standards of professional competence and commitment.

The qualification of entrants to teacher training institutions will, to a large extent, determine the quality of teachers produced.

These developments warranted the raising of the entry qualification to teacher training institutions and change in the structure and curricula of colleges. ILO/UNESCO (1984, para 14) stated that:

> *"Admission to teacher preparation should be based on the completion of the appropriate secondary education, and the evidence of the possession of personal qualities likely to help the persons concerned to become worthy members of the profession".*

It further indicates that

> *"Steps should be taken with the view of achieving international recognition of teaching credentials conferring professional status in terms of standards agreed to internationally"(para, 18).*

Curriculum content is another factor needing attention in coping with the social, cultural and economic changes in societies. In recent times, emphasis in teacher training is being shifted from general education and mastery of subject disciplines onto the teachers' professional training in dealing with changes and innovation in the society. Landsheere (1987) describes general education/subject study as less valid and narrowly conceived.

The new roles of the teacher has been made more difficult as a result of the decline in employment opportunities for pupils on leaving school, and the undermining of the teacher's authority as a teacher by the highly visible competition of television, computers and other new technological devices. In 1987 at Helsinki, it was proposed that "Initial training (at least three years and at University level) should be based on broad and sound education. It should give teachers the intellectual basis needed to meet new challenges in their future work in schools and to select what is essential knowledge from the mass of available information. This need received much attention in Europe. The European Commission, for example, in a 2004 statement (Common European Principles for Teacher Competences and Qualifications, 2004) identified the need for teachers to have extensive subject knowledge, a good knowledge of pedagogy, the skills and competences required to guide and support learners, and an understanding of the social and cultural dimension of education.

The approaches used in teaching will have an impact on teacher competence. Díaz-Maggioli, (1996) indicates that three factors greatly influence teaching styles: the teachers' learning styles, their experience as learners, and the theories about teaching and learning to which they adhere to. When making decisions, teachers should ideally have the students as their main focus. Too often, however, they teach according to their own preferred learning methods, rather than according to what is best for the students (Díaz-Maggioli, 1996). Similarly, teachers tend to emulate the teachers who helped them to learn best when they were in school, though in most cases they don't know why the model teachers taught the way they did (Díaz-Maggioli, 1996). Teachers need to be aware of these personal influences and refocus their actions to benefit the students. To do

this, they need space to develop their own theories about teaching and learning through professional development.

Writing on Ghana, Akyeampong (2003) reflected on a number of approaches used in teaching the contents of the various subjects which has an impact on teacher learning. He mentioned,

(a) Transmission of knowledge; where "tutors lectured their students" (p. 51),

(b) Student-centered teaching; whereby "students engaged in discussions and debates on topical issues, with tutors acting as facilitators" (p. 51), and

(c) Question and answer approach; in which case, "tutors mainly asked questions and used students' answers to further develop the lesson" (p. 52).

Other methods tutors use in teaching trainee teachers are discovery learning process, brainstorming method, individualized method, project method, and problem solving method. In addition, tutors used role-play and demonstrations (simulation methods), educational visits and field experiences, and deductive and inductive methods in their teaching (Ghana Education Service, TED, 2004). Students are also taught by means of the following methods: expository teaching process, drills, teacher-led discussion, and case studies.

Despite the array of methods of teaching used by teachers in a variety of ways, it has been found that "the dominant pedagogical stance remains one where trainees are largely regarded as 'empty vessels,' with little knowledge or experience of teaching" (Lewin & Stuart, 2003, p. 171).

2.5 Teacher Professional Development

The need for a continuous professional development of teachers for effective and efficient education delivery cannot be over emphasised. In Scotland, a major review of teacher education (Donaldson, 2010) concluded that there was a need for a concerted and aligned approach to career-long professional learning supported by a clear framework of standards for novice and experienced teachers. In view of this, many countries have developed policies that clearly gives direction to the professional development of teachers. In 1987, the United States formed the National Board for Professional Teaching Standards to oversee the certification of teachers. It is on record that over 102,000 teachers achieved certification following the establishment of the Board (Thorpe, 2013). In Scotland, the General Teaching Council had in place a set of standards for qualification as a teacher since 2002 (Donaldson, 2010) and has been revised to create a stronger focus on career-long learning. These bodies and other similar ones in other countries provide criteria for assessing professional and personal growth of teachers and bringing about change in teaching which is the focus of teachers' professional development.

Teacher professional formation and growth has gained an increasing policy for countries across the world as well as international bodies such as the European Union (Eurydice 2012). The various policies of countries on teacher education paves the way for the teaching profession and have direct implications for the selection, initial education and career-long learning of a potential and serving teacher (Thorpe, 2013).

Barker, Kagen, Klemp, Roderick, and Takenaga-Taga (1997) define a true teaching professional as "a teacher who is engaged with a career path that encourages, fosters, and

rewards constant professional growth that reflects directly and positively back on classroom practice." They conclude by stating that the engagement of teachers depends upon the teacher's professional identity: the way he or she relates to the norms and values of the profession. Sachs (1999) indicates that teacher professional development is not the mere acquisition of traits that allow teachers to claim membership in the profession but that it reflect the "cooperative action between teachers and other stakeholders".

Students, parents/guardians, government and other local and international bodies have vested interest in the development of education and practices in ensuring attainment of goals in the sector. Technological changes have brought about drastic change in the activities of most professions in line with societal needs and demands in a competitive environment. The ability to adapt to the changing trend can best be achieved through professional development.

Evidence suggest that people are resistant to change. Hattie, (2009) indicates that up to eighty-five per cent of teachers are resistant to changing their existing practice and that an individual teacher's past and current experience is very powerful in determining their day-to-day practice in the classroom. He concludes that moves to use accountability, government pressure and other forms of compulsion are rarely effective in producing the desired change. Strategies for teacher learning may be integral to sustained improvement in education. However, it is observed that much of what a teacher does in the class room is rooted in tradition, experience and context. Teaching styles are greatly influenced by the teachers' own idealization of themselves as teaching professionals. Those who equate professionalism with adherence to external norms will tend toward relatively directive

and ethnocentric teaching styles; on the other hand, those who perceive themselves as existing in a dialectical relationship with other professionals, working collectively to build their professional identities, will necessarily have more constructivist styles (Hattie, 2009).

In Ghana, the 2008 Education Act established the National Teaching Council, responsible for establishing frameworks around teachers' employment, continuous professional development (CPD) and periodic review of professional practice and ethical standards. The council is legally mandated with the overall responsibility to license teachers in Ghana. The standards set out by the council define the minimum levels of practice expected of student teachers and teachers in order to be licensed. The National Teachers' Standards has been developed as a professional tool to guide teacher educators, teachers, teacher trainees and other stakeholders in education to identify in clear and precise terms what teachers are expected to know and be able to do, qualities they are expected to possess and some behaviors they are supposed to exhibit. It must be noted that during the training and the period of induction, the standards continue to define the level of practice at which all qualified teachers are expected to perform. In a sense, the Standards set the minimum set of knowledge, skills, values, attitude, conduct, rights and obligations expected of a teacher working in early childhood, Primary, Junior High School and Senior High School. These standards inform teacher development and set out levels of practice of teachers (Education Act, 2008).

The teacher's standards set out is in three main domains as follows:

1. **Professional Values and Attitudes:** Professional Development and Community of Practice.

2. **Professional Knowledge:** Knowledge of Educational Frameworks, Curriculum, And Knowledge of Learners.
3. **Professional Practice:** Managing the Learning Environment, Teaching and Learning, and Assessment.

These three domains and aspects encompass what teachers should value, know and do, and intersect with one another to develop a teacher competent enough to teach at the end of their three year initial teacher training. The acquisition of these skills, knowledge, values and attitudes is much instrumental in accommodating change and ensuring development.

The researcher focuses more on values and attitudes of teachers as it centers on the perspectives of teachers and influences their performance in the classroom. Values are whatever the individual subjectively considers, at the time and in the circumstances, to be right or important. For some time, there have been calls for schools to teach values. In March 1998, UNESCO organized summit dubbed "Values in Education Summit" purposely to encourage schools to review their charters in terms of values education. Values include honesty and truthfulness, kindness, consideration and concern for others, compassion, obedience, responsibility, respect, duty. These universal values build character, which produces behavior that is beneficial for the individual, others and the community. They enhance the wellbeing of all; prevent harm to both the individual and society; are the essence of healthy relationships and are essential for the conduct and preservation of a democratic society. Values builds character and morals.

The school system must help students (and teacher trainees) develop good character to become good people by inculcating in them objective values and attitudes. According to

Eagly and Chaiken, (1993), attitudes are the result of experience or upbringing, and they can have a powerful influence over behaviour. The design and development of curriculum for teacher education and development should contain training models which focusses on functional and attitudinal development of teachers and educational managers. Evans, et al (1994) indicates that the introduction of a national curriculum in England and Wales with the intention of changing teacher professionalism was met with a range of behavioural patterns that reflects the diverse professionality orientations of teachers. They categorised these behavioural patterns as the 'head-in-the-sand', 'common sense', 'paying lip service', and 'by the book' approaches and that only one of these reflected a perceived 'enacted' professionalism consistent with the government's requirements. Hoyle and Wallace (2007) states that deviations from prescribed practice represent wide spread 'ironies of adaptation' and 'ironies of representation'.

Attitudinal change of teachers will often occur over time through a combined process of gradual erosion of resilient attitudes and the continual regenerative process of replacing established staff with newcomers who have never known anything other than the 'new' practice, until the 'new' eventually becomes the familiar norm that defines the comfort zone within which people are happy to work (Evans, et al, 1994).

2.6 Trends of Students' Academic Performance

The goal of Education for All by 2015 has galvanised many countries in sub-Sahara Africa into confronting their historically low rates of enrolment. They have been remarkably successful in attracting many more children into schools (UNESCO, 2008). The campaign for children to be sent to school in Ghana seem to gain enormous grounds as the enrolment of children at the basic level has increased (Adu-Yeboah, 2011).

Statistics from the ministry of education in Ghana indicates that the number of out-of-school children (aged 6 to 11) fell from 513000 to 278000 from 2006 to 2011. (Ministry of education, 2013). Entry statistics for Basic Education Certificate Examination (B.E.C.E) by the West African Examination Council (W.A.E.C), from 2009 to 2014 generally show an increase in the number of candidates registered for the examination. Candidates registered for the B.E.C.E stands at 395,637, 350,899, 372,826, 376,859, 391,079 and 422,946 for the year 2009, 2010, 2011, 2012, 2013 and 2014 respectively (W.A.E.C, 2014).

However filling the classrooms is not enough; education for all, if it is to have positive social and economic consequences, must involve children learning at least the basic minimum competences of literacy and numeracy that will enable them to benefit from and contribute to their society‘s future. UNESCO (2008:2) report indicates a relatively low and unequal learning achievement in language and mathematics in many countries especially in sub-Sahara Africa. Children‘s early experiences with learning shape their attitudes and commitment to education and so, more than at any other stage, what happens in the early grades, determines their educational future. Unless they make sufficient progress at this stage they are liable either to cease coming to school entirely, relapsing into illiteracy and innumeracy, or to become the silently excluded who are not able to access the increasingly demanding work of the later grades (Liddell & Rae 2001; UNESCO 2010).

Research examining teacher quality confirms the logical conclusion that poor quality of students’ learning correlates strongly with poor quality of teachers teaching. Effective student learning and achievement is hampered by weaknesses in teachers ‘pedagogical

content knowledge (PCK) and classroom practice (Pontefract & Hardman 2005; Akyeampong, Pryor & Ampiah 2006).

Teacher education has been identified as both part of the problem and the solution. Increase in pupil enrolment has meant a huge demand for more teachers and the priority has been to find ways of increasing the numbers appointed either by recruiting more trainees onto established courses, by creating new routes into teaching or by a combination of both strategies (UNESCO 2005). Educational policy and plans often assume that initial teacher education and continuing professional development make a difference to teachers 'pedagogical knowledge and skill which in turn will be reflected in enhanced student learning outcomes (Dembélé & Lefoka.2007). However, in many countries in Sub-Saharan Africa, there is little systematic insight into the content and process of knowledge and skill acquisition by Initial Teacher Education students and newly qualified teachers and even less evidence that relates inputs to outcomes in terms of improved pedagogy and greater learning achievement. Not enough is known about how teachers working in different educational environments and contexts adopt and adapt the knowledge and skills they have acquired through formal training to address the particular learning needs of young students in their actual schools.

The essence of the enrolment drive is among others to enhance the quality of the labour force of Ghana. The mission of the Ministry of Education, Ghana, states that:

> *"The Ministry of Education is to provide relevant education to all Ghanaians at all levels to enable them to acquire skills that will assist them to develop their potential to be productive so as to facilitate poverty reduction and promote socio-*

economic growth and national development". (National Report of Ghana at the 47th ICE, June 2004 p.1).

The quality sought for can be attained depending upon the number of the literate population. The number of students who make it beyond the second cycle institutions is definitely a booster to the labour force.

For the past years, the number of candidates registered for the May/June WASSCE has consistently increased from 2007 to 2014. The candidature for 2007, 2008 and 2009 stood at 134,031, 136,936, and 157,998 respectively. Students were not registered for 2010 due to the introduction of the four year program. It increased to 149175, 174385, 409832 and 262157 for 2011, 2012, 2013 and 2014 respectively (WAEC, Ghana, 2014). The astronomical increase in the figure for 2013 was due to the fact that the four year program had phased out and replaced by the three year program in the 2009/2010 academic year resulting in two batches seating for the examination in that year.

The number of qualified entrants to tertiary institutions for the past years has been declining. Enrolment into public universities decreased from 115452 in 2010/11 to 109278 in 2011/12. (Education sector performance report, 2013). However, enrolment into polytechnics, colleges of education and private universities increased. In 2014, out of the 242,157 candidates registered for the 2014 May/June West African Senior School Certificate Examination (W.A.S.S.C.E), 68,062 candidates had between grades A1 to C6 in six or more subjects, representing 28.11% who are eligible for entry into tertiary institutions. The researcher believes that with improved teaching and learning practices, candidates eligible for entry in to tertiary institutions will rise. It is on this basis that the

researcher picked on the topic to improve on the success of students by focusing on the utilization of instructional time.

2.7 Utilisation of Instructional Time

Research has documented significant variation across schools and classrooms in the amount of time allocated for instruction (Anderson & Walberg, 1993). Countries worldwide have varied instructional times. Even the Organization for Economic Co-operation and Development (OECD) countries have different 'intended instruction time' for the various levels of education in their respective countries. Total instruction time for students aged 15 (which can be likened to Senior Secondary level in Ghana) has an average time of 948 hours among OECD countries. In 2010, France, Germany and England had 1147, 933 and 950 instruction time respectively for students aged 15 (OECD, 2012).

Allocated instructional time concept is primarily used in reference to "within school" time as contained in the time table for each class. However, students allocate time for self-studies "out of school" time table. Differences in allocated time for self-studies can lead to variations in achievement of students. Gettinger, (1989) indicated that differences in allocated time alone account for only a small amount of variance in students obtained achievement.

In second cycle institutions in Ghana, an average of three hundred and sixty minutes (360 minutes) instructional time per day is specified. The 360 minutes is further broken down into 40mns per lesson/period comprising an average of nine (9) lessons/periods in a day. On weekly basis, it comprises an average of five (5) lessons/periods per week for each subject in each class. (SHS FINAL SYLLABUS, 2010). For example, time allocation for

English Language and mathematics for Senior High Schools states 'The course is designed to be taught in forty weeks for each of the three years. English has five periods of 40 minutes each per week. Four of the periods should be devoted to English Language while the remaining one period should be used for ―Literature in English'. Mathematics is allocated five periods a week, each period consisting of forty (40) minute. In addition, it specifies that extra time should, however, be made available to adequately complete the syllabus in good time. (SHS FINAL SYLLABUS_2010).

In all countries, the school calendar is comprehensively constructed with provision made for school/class days and scheduled holidays. Inevitably, some days will be lost due to unforeseen reasons, such as weather. Smith (2000) indicates that pupils and teachers are effectively in class up to 85% of the recommended time, a degree of efficiency which is difficult to exceed. It therefore suggests that 100% utilization of instructional time is not possible. In higher income countries, schools are prepared for loss of school days/hours resulting from such unforeseen events. Abandzi (2007) indicates that school districts in the United States may build into the school year four days due to snow buildup and extend the school year if snow lasts longer. Advanced countries also make provision for substitute teachers when needed. However, in lower-income countries, there are no provisions made for disruptions in school days and money for substitute teachers is rarely available. As a result, schools may operate fewer days than expected. In Mali, schools were found to function 70% of the official time. In Burkina Faso, a minimum of 16% of the official allocated time was lost due to breaks and examination periods (Abandzi, 2007). In Senegal, findings show that out of a total of 188 official working days allocated

per year, the Senegalese student is offered on average 108.3 days (57.6%) of schooling while 79.7 days (42.39%) stand out as not taught (Niang, 2017).

2.8 Factors Influencing Instructional Time Utilisation and Learning Outcome

Carroll's ideas on achievement as an outcome of the amount of time a learner is engaged in learning and an individual's learning rate generated a wave of research on instructional time and learning (Fisher & Berliner, 1985). Researchers such as Smyth, (1985) were preoccupied with establishing statistical associations between time variables and pupil achievement. Other researchers are much focused on comparing time constructs in different instructional settings, and assesses the loss of learning time due to disrupting factors such as inadequate educational policies and poorly organized or delivered class lessons (Wang, 1998; Smith, 2000). Documented evidence suggest that reduced instructional time accumulated over time places low-income students at higher risk of underachievement and dropout. Walberg (1984, 1988) characterizes this phenomenon as the Matthew effect: while the academically rich get richer, the academically poor fall further behind. There is a fairly consistent association between instructional time (utilisation) and pupil achievement.

A study in Pakistan found that, while instructional time in itself was a poor predictor of student achievement, the effective use of time was a more accurate predictor (Reimers, 1993). Research in the Philippines (Tan, Lane & Couste`re, 1997) and Ethiopia (Verwimp, 1999) also found that the quality of classroom time, especially when accompanied by more pupil-oriented teacher behavior, had a significant impact on learning processes and resulted in higher achievement levels. Effective utilisation of

instructional time is important in student achievement (learning outcomes). Studies conducted in the past note the following factors as significantly reducing instructional time and invariably learning outcomes. These factors are much prevalent in Africa and other less developed countries. They are teacher absenteeism, the school's physical condition and poor infrastructure (Njie, 2001). Other factors include teacher attrition and co-curricular activities among others.

Teacher absenteeism affects the utilisation of instructional time in schools. Absence occurs whenever a person chooses to allocate time to activities that compete with scheduled work, either to satisfy the waxing and waning of underlying motivational rhythms (Fichman, 1984), or to maximize personal utility (Chelius, 1981). Research shows that when a teacher is absent from the classroom, student learning is disrupted. Finlayson (2009) finds that when a teacher is repeatedly absent, student performance can be significantly impacted negatively. In one region of Kenya, teachers were absent from school 28% of the time, and absent from class (but in school) a further 12% of the time when they were supposed to be teaching (Glewwe, Kremer & Moulin, 1999). In a study of 120 schools in rural Ghana, it was reported that, on average, teachers attended schools four days a week, implying that 5.5 instructional hours were lost each week. When researchers visited sampled Ghanaian schools, almost one-fifth of the teachers were absent (EARC, 2003).

In a research conducted to assess the effects of teacher absenteeism on quality teaching and learning in public primary schools in Northern Ghana, the result showed that an average of 30% of teachers were absent during at least four visits of the research team and that teacher absenteeism is higher at the end of the week (60% on Fridays) compared to the

beginning of the week (20% on Mondays) (IBIS/NNED, 2010). Research in a Kumasi sub-metro district in Ghana, finds that when a teacher is absent from the classroom, student learning is disrupted (Obeng-Denteh et al, 2011). More specifically, Obeng-Denteh sought to determine whether student and teacher absenteeism affect the performance of students on Ghana's basic education certificate examination (BECE). The analysis indicated that student absenteeism was not significant, but that teacher absenteeism had an impact on the performance of the students on the BECE. Obeng-Denteh, (2011) concluded that the higher the teacher absenteeism rate, the lower the student mean score of students.

Also, a school's physical condition and infrastructure is another factor that could have an impact on learning outcome. Research over the past century has consistently found that school facilities has profound impact on teaching and learning. There is some evidence that the condition of classroom roofs, walls, and floors increases student learning. The classroom physical environment is essential for effective learning. Comfortable environment promotes safe and healthy relationship between and among teachers and learners. It also promotes active participation and increased academic excellence. The absence of comfortable environment leads to loss of interest and learner drop out (Ainscow, 2004). School infrastructure includes classroom level infrastructure and other classroom characteristics (natural light, temperature, acoustics), as well as school level infrastructure, which includes school utilities (availability of electricity, potable water, and the condition of the building) and other features of the school (such as the existence of a library, a computer lab, or science labs) (Glewwe et al, 2015). Classrooms with ample space are more conducive to providing appropriate learning environments for

students and it is associated with increased student engagement and learning. The availability of blackboards, flipcharts or chalk in the classroom increase students' test scores at both elementary and secondary school levels (Glewwe & Jacoby, 1994)). Also available research suggested that the availability of school libraries (Fehrler et al., 2009) and the provision of electricity (Bacalod &Tobias, 2006) increase student learning.

Another factor is teacher attrition. In pointing out the importance of teachers, Svenska Dagbladet, a Swedish education minister is reported to have said in 2010 that 'Teachers are the most important professionals in a country that wants to invest in the future (Lindqvist et al, 2014). This reasoning requires the availability of trained and skilled teachers to provide students the needed guidance to achieving the national objective. The UNESCO Institute for Statistics (2009) claims that half of the world's countries need to expand their teaching forces in order to be able to enroll all primary school-age children by 2015. However, statistical findings also indicate that the major problem for schools is not a shortage of teachers coming into the system. The real problem is that, even in countries where sufficient numbers of teachers are trained, it appears as if many of the newly graduated teachers choose not to go in to teaching at all (Luekens, Lyter, & Fox, 2004) or to leave after just a few years (Cooper & Alvarado, 2006). Data from GNAT/TEWU indicates that whereas only 9,000 teachers come out from the colleges of education every year, about 10,000 teachers also leave the classroom for various reasons; and many more intend to leave teaching before they retire (GNAT/TEWU, 2010). In a research conducted in the Tamale Metropolis, Aziz (2014) indicated that while about 9,000 teachers come out from the Colleges of Education every year to join the GES,

about 10,000 teachers leave the classroom and that it creates an annual net attrition of about 1,000 teachers. He further indicated that over 1200 teachers left the classroom in 2005/06 academic year, and that 620 out of these figures came from Senior High Schools (SHS).

Ingersoll (2007) made similar observations on teacher attrition and hints at a different kind of measure to remedy the shortage of teachers. The alternative it suggests is that, it may be a more efficient strategy to put in an effort to retain and support active teachers, or to attract teachers who quit or never started teaching to return to the profession. The image that comes to mind on teacher attrition is of a bucket rapidly losing water because of holes in the bottom. Pouring more water into the bucket will not be the answer if the holes are not first patched (Ingersoll, 2007). Knowledge about teacher attrition is an important issue for both policy and research. Such knowledge could help policy makers invest in initiatives to identify the teachers most at risk of quitting or most likely to return to teaching and to change the conditions that appear most crucial for the decisions to stay, leave or return to the teaching profession. Research data indicates that both younger and older teachers (retirement excluded) are all more likely to leave the teaching profession (Ingersoll, 2001). Teacher attrition is important to policy makers as it has costs implications for governments and schools and also has effects on large number of students. Research indicates that teacher turnover has a harmful effect on student achievement, especially in poorly performing schools, and that turnover also negatively affects the students of those teachers who remain in the same school from one year to the next (Lindqvist et al, 2014).

Furthermore, co-curricular activities affect utilisation of instructional time and learning outcomes. Participation in co-curricular activities is widely thought to play a key role in students' academic success (Huang & Chang, 2004). Co-curricular activities are those, not directly related with the prescribed curriculum such as sports, athletics, scouting, excursions, literary societies, dramatics, debates etc. to bring social and physical adjustments in the child (Singh, 2017). According to Tan and Pope, (2007) co-curricular activities enhances and enriches the regular curriculum during normal school days. They are also referred to as extracurricular, extra-class, non-class, school-life, and student activities.

Co-curricular activities play an important role in students' academic success (Chambers & Schreiber, 2004). Millard, (1930, pp. 12) indicates that co-curricular activities should grow out of curricular activities and return to curricular activities to enrich them. In fact, before the 1900's, educators were skeptical of participation in co-curricular activities, believing that school should focus solely on narrowly defined academic outcomes. Non-academic activities were viewed as being primarily recreational and therefore were detrimental to academic achievement, and consequently were discouraged (Marsh & Kleitman, 2002). In later years, researchers particularly studied the relationship between co-curricular activities and academic performance in adolescents. Darling, Caldwell and Smith, (2005) found that adolescents who participated in co-curricular activities reported higher grades, developed more positive attitudes toward school, and had higher academic aspirations and that students who did not participate in any co-curricular activities showed the poorest adjustment as far as grades, attitude toward school, and academic aspirations are concerned.

2.9 Strategies for Effective Instructional Time Utilisation

The heterogeneous nature of today's classrooms places a huge responsibility on teachers for teaching an increasingly diverse group of students. Teachers are not only required to meet rigorous curriculum standards, but also to respond to the individual needs of the students in their classrooms. It is therefore expected that the activities of the teacher will have lots of impact on student learning and achievement. The effectiveness with which instructional activities are carried out will, to a large extent, enhance student learning and achievement.

Educational effectiveness research which focusses on what works in education and why has enjoyed rapid expansion in many countries (kyriakides et al, 2014) and according to Goldstein (2003), methodological and technological advances have improved the power of estimation of teacher and school differences in student achievement. Research available has not specifically pinpointed a particular strategy as the most effective strategy for instructional effectiveness and student achievement. However, the following strategies have been tested as effective in enhancing time utilization and student achievement.

Teacher effectiveness is a strategy of enhancing instructional time utilization and student achievement. Teachers' behaviour in the classroom significantly influences student achievement as it has a bearing on how effectively time is utilized. It is as a result of the causal link between teacher behaviours and student achievement that has caused some researchers to focus on teacher behaviours as predictors of student achievement in order to build up a knowledge base on effective teaching. Research in this direction has led to

the identification of a range of behaviours that are positively related to student achievement (Creemers, 1994; Muijs & Reynolds, 2000).

Literature from Educational Effectiveness Research provides a dynamic model that indicates eight factors that describes teachers instructional role that are associated with student achievement as; orientation, structuring, questioning, teaching-modeling, application, management of time, teacher role in making classroom a learning environment, and classroom assessment (Kyriakides et al, 2014).

Teacher effectiveness studies maintain that introductions facilitate students' learning by communicating the nature and purpose of the activity, connecting it to prior knowledge, and cueing the kinds of student responses that the activity requires. In the views of De Corte (2000), the orientation process can make tasks and lessons meaningful to students, which in turn encourages the active participation of students in the classroom. Research indicates there is immense value of establishing a learning orientation by beginning lessons and activities with advance organizers or previews. The lesson opening should clearly communicate what students are going to learn, why it is important, how it relates to what they already know, and how it is going to happen. Therefore, orientations tasks should take place in different parts of a lesson or series of lessons (e.g., introduction, core, and ending of the lesson) and in lessons that are expected to achieve different types of objectives. Moreover, orientation tasks are considered appropriate according to whether they are clear to students, whether students are encouraged to identify the purposes that can be achieved by carrying out a task, and whether all student views are taken into account.

According to Rosenshine and Stevens (1986), student achievement is maximized when teachers actively present materials and structure them by: (a) beginning with overviews and/or review of objectives, (b) outlining the content to be covered and signaling transitions between lesson parts, (c) calling attention to main ideas, and (d) reviewing main ideas at the end. Brophy and Good (1986) maintains the provision of summary reviews enhances student achievement since it integrates and reinforce the learning of major points and facilitate memorizing of information and recognition of the relationships between parts. It is worth noting that teachers' should structure their lessons by increasing the difficulty level of their lessons or series of lessons gradually (Creemers & Kyriakides, 2006).

It is expected that teachers develop questioning skills and offer a mix of product questions and process questions (Askew & William, 1995). Also, the length of pause following questions, question clarity, the appropriateness of the level of difficulty of questions are important in classroom management of questions. Brophy & Good (1986) indicates that most questions should elicit correct answers and most of the other questions should elicit overt, substantive responses (incorrect or incomplete answers), rather than failure to respond at all. Handling of students responses is equally as important as the management of questions. Correct responses should be acknowledged as such, acknowledge parts of partly correct or incorrect responses and try to elicit an improved response (Rosenshine & Stevens, 1986). Effective teachers are able to sustain the interaction with the original respondent by rephrasing the question and/or giving clues to its meaning, rather than terminating the interaction by providing the student with the answer or calling on another student to respond.

Findings of effectiveness studies reveal that effective teachers are expected to help pupils use strategies and/or develop their own strategies that can help them solve different types of problems (Grieve, 2010). Students are expected to develop skills that help them organize their own learning and devise problem-solving strategies (Aparicio & Moneo, 2005). Lessons must therefore include application activities to facilitate the development of this skill in students. Borich (1992) concludes that teachers are expected to use seatwork or small-group tasks to provide students with practice and application opportunities. Brophy & Good (1986) argue that once the students are released to work independently, effective teachers circulate to monitor progress and provide help and feedback.

Classroom environment research has shown that teacher-student interaction, student-student interaction are important components of measuring classroom climate (Harjunen, 2012). Teacher initiatives on establishing relevant interactions in the classroom through establishing rules, persuading students to respect and use the rules, and the teacher's ability to maintain them in order to create and sustain an effective learning environment in the classroom is a good mark of an effective teacher. An effective classroom environment enhances time management and maximizes engagement rates.

Effective teachers assess students to identify their needs and as well evaluate their own performance. Assessment is seen as an integral part of teaching (Stenmark, 1992), and formative assessment, in particular, has been shown to be one of the most important factors associated with effectiveness at all levels, especially at the classroom level (Kyriakides, 2008). Teachers needs skills in planning/construction of assessment tools,

administering assessment, recording, and reporting assessment results (Black & William, 2009).

Instructional explanations, which are the descriptions of cause-and effect systems designed specifically to elicit learning (Leinhardt & Steele, 2005) is another strategy of enhancing instructional effectiveness and student achievement. Instructional explanations is defined to include an explanation which makes learners get familiar with a topic; *presentation* and those in response to an observed or anticipated misunderstanding; *clarification* (Acuna, Rodicio & Sánchez, 2009). Instructional explanations provide learners with correct, complete and coherent information at the right time especially when learners are aware of the limitations in their ongoing understanding but cannot generate repairing explanations by themselves. Renkl (1997) indicates that learners who detect problems in their emerging understanding generate inadequate repairing explanations.

There is evidence that instructional explanations adapted to suit learners' needs are better than those not adapted. Nückles, Wittwer and Renkl (2005) concludes that learners receiving explanations from informed tutors learned significantly more. According to the mental model repair view (Chi, 2000), in instructional explanation, learners have to monitor their ongoing understanding to detect gaps and flaws and then generate explanations to repair these gaps and flaws. Presenting instructional explanations in a responsive manner may be considered an aid to the process of detecting, as pointing out learners' misunderstandings before providing the explanation to help them in monitoring their emerging mental representations. Similarly, adapting explanations to learners' needs may be seen as an aid to the process of repairing, as adapted explanations provide

learners with the building blocks necessary to revise their emerging mental representation. A practical implication of the findings presented here is that, in order to be effective, instructional explanations have to be given after the misunderstandings they are intended to revise are identified. Chi (2000) concludes that to make explanations effective, teachers should include devices that makes learners' problems of understanding explicit.

Principal effectiveness is also another strategy of enhancing instructional effectiveness and student achievement. Research documenting the substantial variation in principal effectiveness across schools highlights the importance of identifying the behavioural factors that lead some principals to be more effective than others (Branch, Hanushek, & Rivkin, 2012). Literature on educational administration considers instructional leadership as one of the most important in school management. Murphy (1988) defines instructional leadership as the class of leadership functions that support classroom teaching and student learning. The connection between instructional leadership and classroom instruction or student achievement is indirect, potentially mediated by a large number of school processes such as curriculum, coordination, how students are grouped and intermediate outcomes, such as high teacher expectations and a school climate focused on instruction (Hallinger & Heck, 1998).

An obvious challenge for a concept as broad as leadership functions that support teaching and learning is distilling which behaviours count as instructional leadership and which do not. Without such specificity, practitioners have little guidance for how they might develop or improve instructional leadership within their schools. Documented literature

emphasize different components involved in the activities of an effective instructional leader(principal) and the most common involves; setting goals, monitoring classrooms, supervising instruction, evaluating progress, coordinating the curriculum, planning professional development, and protecting instructional time (Hallinger, 2005). Horng and Loeb (2010) indicates that strong instructional leaders are "hands-on leaders, engaged with curriculum and instruction issues, unafraid to work directly with teachers, and often present in classrooms". Effective principals are able to perform based on frequent visit to classrooms to obtain first-hand information. Most effective principals use walkthroughs or informal evaluations in assessing classroom teaching.

Eisener (2002) indicates that walkthroughs or informal evaluation has become a particularly popular identifier of instructional leadership. Walkthroughs are described as data-gathering vehicles wherein principals collect information about teaching practice or implementation of school programs to learn what teachers need but not to evaluate them (David, 2007). When used frequently, proponents suggest that short, informal walkthroughs can help build a more positive instructional culture, gauge the school climate, and demonstrate the value they place on instruction (Downey et al., 2004).

Other research of efficiency of use of time uses the analysis of procrastination, which results from individuals' inability to manage time. Steel (2007) defined procrastination as voluntarily delaying an intended course of action despite expecting to be worse off for the delay. Procrastination is quite common among students, though it equally apply to others, including teachers. Procrastination has been described as a common but dysfunctional phenomenon. Studies have shown that procrastination is associated with depression (Van

Eerde, 2003), guilt (Blunt 2000) and anxiety (Fritzsche, Young, & Hickson, 2003). Accelerated learning before a deadline has been found to be less successful than studying at an even pace (Perrin et al. 2011), likewise teacher preparation.

The behaviour pattern of people who procrastinate is such that they invest only a little time to complete a task until it becomes urgent, although there might have been weeks or months before the deadline to work on the task (Moon & Illingworth, 2005). This phenomenon has also been called deadline rush (König & Kleinmann, 2005). Moon and Illingworth (2003) indicates that academic procrastinators tend to delay working until the last minute. Procrastination has been described "as a failure of self-regulation" (Howell et al. 2006). Howell and Watson found strong associations between disorganisation and procrastination underlining the assumption of procrastination as self-regulation failure.

Time management is an effective intervention to avoid procrastination. Setting deadlines fosters self-regulatory skills. A popular claim to improve self-regulatory skills is to learn and practice better time management (Lynch, 2008). Time management behaviour can be described as a combination of different strategies to achieve one's goals over time and that time assessment, planning and monitoring one's daily work are essential elements of time management behaviour (Häfner & Stock 2010). According to Covey (1989), humans have unique endowments of the power of imagination, conscience, independent will and self-awareness that enables us to adapt and modify inappropriate behaviour to achieve the desired change. The exercise of independent will toward becoming principle-centered makes us effective and efficient. Teachers with conscience would value the impact they make on student lives and as such would prepare adequately for lessons,

become time conscious and innovative in delivery. Covey (1989, p. 92), notes that the human will is an amazing thing. Time after time, it has triumphed against unbelievable odds. Teachers can therefore manage time effectively and become efficient if they have the will to do so.

Social Persuasion is also a source in collective efficacy and it can strengthen the beliefs people have with regard to being successful. The findings of Tschannen-Moran and Woolfolk Hoy (2007) reported verbal persuasion as important in regard to the feedback and support the trainee teachers receive from others, like, colleagues, administrators, parents, and society. Individuals who are convinced that they have abilities for and control over given tasks may exhibit more effort and embrace self-doubt when facing challenging situations, rather than concentrating on their failures (Bandura, 1995). According to Goddard et al. (2000), for teachers, talks, workshops, occasions for professional development and evaluations about accomplishments can collectively inspire the teaching staff to the possibility that, as a group, they can work together cooperatively. Bandura (1995) says tasks that include potency and energy, people's judgment, fatigue, aches, and pains as signs of physical debility. Moods can have an effect on individuals' evaluations with regard to their personal efficacy. Bandura (1995) maintains that a positive mood encourages perceived self-efficiency and decreases despondency. The other ways to modify efficacy beliefs is to enhance physical status, reduce stress and negative emotional proclivities, and correct misinterpretations of bodily states" (Bandura, 1995, p. 5).

2.10 Conclusion

The study reviewed literature relevant to the topic. It was guided by theories of internal locus of control and time management by Rotter (1966), Bandura (1977) and Covey (1989).

The theories focused on teaching efficacy and time management behaviour for effective instructional time utilisation. The study adopted Creemer's (1994) conceptual framework which draws a link between student learning outcomes and instructional time utilisation. The study draws on teacher education, teacher professionalism and values of the of the teaching profession and links it to teacher conduct in relation to instructional time usage and its effects on student performance.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the methodology for the study and the procedure used for data collection and analysis. The discussion is centred on the following areas; the study design, the target population, sample size determination, data collection, method of data collection, data processing and analysis, trustworthiness and ethical issues.

3.2 Research Design

A research design provides the plan and flow of a research project (de Vaus, 2001). According to Yin (2018), it connects the empirical data to a study's initial research question to its conclusions and that it deals with a logical problem and not a logistical problem. The issue of time management especially as related to instructional time is complex and may be made easy if appropriate methodology such as the case study method is applied. In this regard, case study design was used for the research.

3.2.1 Case Study

The case study research is a research method that allows the exploration and explanation of complex issues especially in education (Gulsecen & Kubat, 2006). Case study method enables a researcher to closely examine the data within a specific context. Case study helps to explain both the process and outcome of a phenomenon through complete observation, reconstruction and analysis of the cases under investigation (Tellis, 1997).

Yin (2018, p.15) defines the case study research method "as an empirical method that investigates a contemporary phenomenon in depth and within its real-life context; especially when the boundaries between phenomenon and context may not be clearly evident." Yin maintains that the method copes with distinctive situations involving more variables of interest and theoretical prepositions to guide design, data collection and analysis from multiple sources of evidence and that it is an all-encompassing mode of inquiry. It is a preferred method of examining contemporary events, especially as the relevant behaviour cannot be manipulated. Gomm, et al, (2000) suggests that case studies investigates few cases in considerable depth.

According to Baxter and Jack, (2008, p.556) case study research design principles lend themselves to including numerous strategies that promote data credibility or "truth value." An advantage of the case study method is its unique ability to deal with a variety of evidence; documents, interviews and observations. In line with Knafl and Breitmayer (1989), the collection and comparison of data enhances data quality based on the principles of idea convergence and the confirmation of findings on the effective use of instructional time on teachers' professional development in Business Senior High School, Tamale.

3.2.2 Qualitative Approach

This research used the qualitative approach in dealing with the data. Denzin and Lincoln (2005) views qualitative research as a situated activity that locates the observer in a real world. Qualitative research methods are characterized by its aims, which relate to an aspect of understanding social life, and its methods which generate words, rather than

numbers, as data for analysis. Qualitative methods generally aim to understand the attitude of subjects in a research. It aims to answer questions about what, how, or why of a phenomenon. Shank (2002) defines qualitative research as a form of systematic empirical inquiry in to meaning. Ospina (2004), in providing further explanation on Shank's definition explains *systematic* as 'following rules agreed upon by members of the qualitative community', *empirical* as 'being grounded in the world of experience' and *inquiry in to meaning* as 'researchers trying to understand how others make sense of their experience'. Ospina (2004) indicates that Denzin and Lincoln (2000) claim that qualitative research involves interpretive and naturalistic approach which implies that qualitative researchers study things in their natural settings, attempting to make sense of , or to interpret , phenomena in terms of the meanings people bring to them.

Everet and Louis (1981) views qualitative research as an inquiry from the inside. Ospina (2004) indicates that in qualitative research, the researcher aims for a holistic picture from historically unique situations, where idiosyncrasies are important for meaning. Morse (1999) is of the view that ".qualitative research methods not only provides us with the means to explore such complex and chaotic real-life situations, but also provide us with the methodological choices-multiple options about how to tackle such a sething according to one's identified research problem and long term research goals."

3.2.4 Sources of data

Data for the study were collected from secondary and primary sources.

3.2.4.1 Secondary Source

Multitudes of documented materials were consulted for information related to the subject of instructional time. This ensured broad understanding and conceptualization of the subject matter under consideration. Text books, magazines, journals, articles, reports, and periodicals among others in the process of the research were consulted.

3.2.4.2 Primary Source

A combination of data collection techniques was employed to gather primary data on the research topic. Techniques that were used was the structured and semi structured in-depth interviews.

3.3 Target population

A population is all the individuals or units of interest (Hanlon & Larget, 2011). It is any well-defined set of units of analysis. This may include individuals, groups, organizations, events, etc (Yin, 1994). The target population for this study consisted of teachers and students of Business Senior High School, Tamale, for the 2016/2017 academic year.

3.4 Sampling and sample size determination

A sample is a subset of the individuals in a population. Sampling is the process of selecting a few from a bigger group to become the basis for estimating or predicting the prevalence of an unknown piece of information (Kumar, 2011). According to Kannae (2004), sampling is the method of selecting some part of a group to represent the whole or the total group. Sampling is procedural and according to Kumekpor (2002) it is the use of definite procedure in the selection of a part for the express purpose of obtaining from its description or estimates certain properties and characteristics of the whole. Gentles,

Charles, Ploeg and McKibbon (2015) defines sampling as the selection of specific data sources from which data are collected to address the research objectives. In sampling, the total group is the population whiles the part is the sample. The selection of the sample is important since it is difficult to cover the entire population. It also helps cut cost in data collection, quicker in data collection and reduces the length of time needed to collect data (Brukum, 2005).

To assess the effective use of instructional time by the teachers in Business Senior High School, Tamale, a sample size of fifty-two (52) was chosen. It covered twenty-five (25) teachers, twenty-five (25) students and two (2) assistant headmasters.

3.5 Sampling strategy

The researcher resorted to purposive sampling in the sample selection. Palys (2008) notes that purposive sampling is virtually synonymous with qualitative research and that one well-placed articulate informant will often advance the research far better than any randomly chosen sample. Patton (2015) prefers using 'purposeful sampling' to 'purposive sampling' in that the former lies in selecting information-rich cases for in-depth study and concluded that information-rich cases are those from which one can learn a great deal about issues of central importance to the purpose of the inquiry and that it yields insights and in-depth understanding to the study. In the study, fifty-two (52) respondents were purposefully selected. It comprised of two (2) assistant headmasters, twenty-five (25) teachers and twenty-five (25) students.

The two assistant headmasters were selected as respondents because they are directly involved with supervision of teaching and learning, more especially the assistant headmaster in charge of academics who have a direct job description of supervising

instructional teaching and learning in the school setting. The teachers selected were based on their perceived commitment to duty as indicated by general staff and students. The students selection were based on positions held, perceived level of seriousness on studies, and level/grade of student. Position held specifically focused on class prefects and other school leadership positions. According to Kumekpor (2002), where it is known that certain individual units by their very characteristics will provide more and better information on a particular subject , then such units are purposefully picked up for study. The selection does not involve intricate procedures of random sampling. It simply involves picking units on the basis of their known characteristics (Nachmias, 1996).

3.5 Data Collection

The term data, refers to the kinds of information researchers obtain on the subject of their research (Duodu, 2006). This information is collected by the help of some technique to enable researchers achieve their objectives for their studies. In technical usage, data are observable facts of phenomena. Data could either be qualitative or quantitative. Quantitative data refers to a phenomenon that is measured in numeric values/numbers/figures. The qualitative data on the other hand refers to a phenomenon that is measured by description or label. The data collection steps include setting the boundaries for the study, collecting information through the structured or (semi structured) observations and interviews, documents and the visual materials as well as establishing the protocol for recording information (Creswell, 2003).This study mainly considered the qualitative data gathering and processing method.

3.6 Data Collection instrument

Qualitative research method refers to data collection techniques that are aimed at providing full description of the phenomenon being studied (Nukunya 1992). The data collection instrument employed for this study was in-depth interviews.

3.6.1 Interviews

An interview may be defined simply as a conversation with a purpose. Specifically, the purpose is to gather information (Bruce, 2007). Ely *et al* (1991), maintains that qualitative researchers chose interviews because they want those who are studied to speak for themselves, to provide their perspectives in words and other actions. Interviews have been described as a person to person conversation initiated by the interviewer for the specific purpose of obtaining research–relevant information and focused on content specified by the research objectives (Fisher, 2007). According to Burns (1997, p. 329), 'an interview is a verbal interchange, often face to face, though the telephone may be used, in which an interviewer tries to elicit information, beliefs or opinions from another person. Yin, (2018, p.118) suggests that interviews can especially be helpful by suggesting explanations of key events as well as the insights reflecting participants' relativist perspective. An interview may be structured or unstructured.

One strength is the ability of the researcher to use their motivation and personal interest to fuel the study. Interviews are very useful because highly specific data can be obtained in a very short space of time. It is also useful in providing a general overview of people's thoughts. Also, interviews allows interviewees to offer their own response without being

influenced by set responses. Furthermore, the relaxed structure supports interviewees to be open and honest in responses.

In addition, interviews allows the researcher to change focus as the interview progresses. Finally, the researcher can ask further questions to gain more in-depth information in the course of the interview and it is also relatively inexpensive.

According to Kannae (2003) the main strengths of in-depth interview are that it is flexible, thus, permitting adaptation to changing conditions and/or new insight; in-depth inquiry, and open to all aspects of the situation under investigation.

However, some limitations on the instrument are that: the researcher's presence may influence bias response from respondents, it is time consuming and labour intensive (Creswell, 2014) and some interviewee's may not stick to the line of questioning.

3.7 data collection procedure

This research employed the unstructured interview format with standardized, open-ended questions. This was chosen because of its flexibility. This was chosen to obtain information from the selected teachers and students. The researcher visited the school under investigation personally to take prior permission from the Headmasters of the school for collecting the necessary data. Subsequently, the researcher discussed in detail about the investigation with the respondents (Teaches and Students) and further explained the nature and purpose of the study.

In the first phase, the researcher established good rapport with the subjects. Instructions in the interview were made clear to the respondents. In order for respondents to give the right responses to the questions free, frankly, honestly and sincerely, they were made

aware that there are no right or wrong answers to these questions and that their professional career as teachers or relations with teachers would not be affected as it was only an exercise for research purpose and their responses would be kept strictly confidential. Respondents were given sufficient time to respond to the interview and in some circumstances, agreed time or date had to be rescheduled.

The second phase involved administering the interview through the interview guide.

The interview was carried out face to face by the researcher through the interview guide in order to elicit relevant information about the topic. Explanation of key words within the questions contained in the interview guide was done. The respondent's answers were then recorded (not audio) as they answered the questions.

3.7 Data Processing and Analysis

The researcher used thematic analysis in processing and analysing data collected.

3.7.1 Thematic analysis

Braun and Clarke (2012) Argued that thematic analysis should be considered a method in its own right (Braun & Clarke, 2012). Thematic analysis is the process of identifying patterns or themes within qualitative data. It is a method for systematically identifying, organising, and offering insight into patterns of meaning (themes) across a dataset (Maguire & Delahunt, 2017). Through focusing on meaning across a dataset, thematic analysis allows the researcher to see and make sense of collective or shared meanings and experiences (Maguire & Delahunt, 2017). The thematic analysis method is a way of identifying what is common to the way a topic is talked or written about, and of making sense of those commonalities (Braun & Clarke, 2012). Alhojailan (2012) indicates that

thematic analysis is used to analyse classifications and present themes (patterns) that relate to the data and that it is considered the most appropriate for any study that seeks to discover using interpretations.

Thematic analysis is a flexible method that allows the researcher to focus on the data in numerous different ways. With thematic analysis you can legitimately focus on analysing meaning across the entire dataset, or you can examine one particular aspect of a phenomenon in depth (Braun & Clarke, 2012).

There are many different ways to approach thematic analysis (eg. Alhojailan, 2012). The study adopted Braun & Clarke's (2006) 6-step framework which is arguably the most influential approach since it offers a clear and usable framework for doing thematic analysis. Braun & Clarke (2006) distinguish between two levels of themes: semantic and latent. In general, semantic themes deals with explicit or surface meanings of the data as said or written by participants while the latent themes looks beyond what has been said or written. The study used both semantic and latent levels in data processing and analysis.

As indicated earlier, the study adopted Braun & Clarke (2006) six-phase guide in conducting analysis of the study. Braun & Clarke's six-phase framework is provided in the table below.

Table 3.1: Braun & Clarke's six-phase framework for doing a thematic analysis

Step 1: Become familiar with the data	Step 4: Review themes
Step 2: Generate initial codes	Step 5: Define themes
Step 3: Search for themes	Step 6: Write-up

3.7.2 Phases in Braun and Clarke's framework

The phases outlined in Braun and Clarke's framework is presented below:

3.7.2.1 Step 1: Become familiar with the data.

To become familiar with the data, the researcher (assisted by others) had to read and re-read the interview extracts. In the process of reading and re-reading the extracts, the team appropriately took note and jotted down impressions made from the reading.

3.7.2.2 Step 2: Generate initial codes.

In this phase, the researcher organised the data in a meaningful and systematic way and assigning codes. The coding reduced the data into small chunks of meaning. The researcher adopted a theoretical thematic approach since the focus were on addressing specific research questions and the data were analysed with this in mind. Also, the researcher used open coding system which made room for developing and modifying codes in the process of coding.

The researcher (and the team) set out coding each transcript/extract individually, specifically looking for text that addresses the research questions. When the team were done with the coding on a research question, they compared codes, discussed them and modified them before moving on to the next. It must be noted that the processes were done manually using pens and papers.

3.7.2.3 Step 3: Search for themes.

A theme, as stated earlier, is a pattern that captures something significant or interesting about the data and/or research question. Braun & Clarke (2006) explained that there are no hard and fast rules about what makes a theme. A theme is characterised by its significance. The team examined the codes to assess the extent to which it fitted into the themes. For example, the broader code that related to factors for teachers ineffective utilisation of instructional time were organised into specific themes (eg. Absenteeism, inadequate preparation etc). The themes predominately described the patterns in the data relating to a research question. The themes were therefore descriptive in nature

3.7.2.4 Step 4: Review themes.

This stage is focused on reviewing, modifying and developing preliminary themes that were identified in Step 3 to assess the extent to which the themes make sense. Review is conducted by putting together all data that are relevant to each theme. The team read data associated with each theme to establish the extent to which the data really supported it and the extent to which it worked in the context of the entire data. The team ensured that themes were coherent and quite distinct from each other.

3.7.2.5 Step 5: Define themes

Braun and Clarke (2006) notes that defining the theme is the final refinement stage and that it is aimed at identifying the essence of each theme. At this stage, the team clearly

had to be certain about the idea in each theme, identify subthemes, establish how it relates to a main theme and also establish how the main themes are related.

3.7.2.6 Step 6: Writing-up

The final stage is the presentation of the findings as a research document as presented in this dissertation.

3.8 Trustworthiness

The trustworthiness of qualitative research assesses the concepts of validity and reliability in naturalistic work. Guba (1981) proposes four criteria that he believes should be considered by qualitative researchers in pursuit of a trustworthy study. The criteria are; credibility, transferability, dependability and confirmability.

Lincoln and Guba (1985) argue that ensuring credibility is one of the most important factors in establishing trustworthiness. To promote confidence in the study, the following measures were taken:

The study adopted the most suitable methods in data collection and analysis to arrive at the findings as Yin (1994) recommends that the correct operational measures for the concepts being studied should be used. Thus, the study utilised a well-structured interview guide to obtain information from respondents and thematically analysed data to arrive at its findings. Also, the researcher developed early familiarity with the institution and participants to gain full understanding of the institution and to establish a relationship of trust especially with the respondents. However, the researcher was conscious in getting immersed in the culture of the institution to limit the influence of professional

judgements. Furthermore, respondents were purposively selected as Palys (2008) notes that one well-placed articulate informant will often advance the research far better than any randomly chosen sample. In addition, the researcher did not record any observable behaviour of participants as a representation of their responses. Though respondents may seek to reveal themselves in the best possible light or withhold or distort certain information, the researcher appealed to participants to be honest with their responses and assured them that the study is purely academic and cannot be used against them. Finally, there were series of debriefing sessions with the supervisor. The discussions with the supervisor enabled the researcher to benefit from the formers experience as he pointed out flaws in the work and offered appropriate steps to remedy them.

Transferabity concerns the extent to which results of a study can be applied to a wider population. Shenton (2004) notes that findings of a qualitative project are specific to a small number of particular environments and individuals, and it is impossible to demonstrate that the findings and conclusions are applicable to other situations and populations. On the other hand, Denscombe (1998), suggest that, although each case may be unique, it is also an example within a broader group and, as a result, the prospect of transferability should not be immediately rejected. Shenton (2004) indicates that to ensure transferability, it is important for researchers to provide sufficient description of the phenomenon under investigation to allow readers to have a proper understanding of it, thereby enabling them to compare the instances of the phenomenon described in the research report with those that they have seen emerge in other situations. Also, the boundaries of the study should be clearly spelt out. In this direction, the study focuses on teachers by investigating the effective use of instructional time as a means of adding

value to the professional development of teachers by limiting the work on Business Senior High School, a second cycle institution in Tamale Metropolis. The data relates to the school for the 2015/16 academic period. A sample size of fifty-two (52) was chosen and it covered twenty-five (25) teachers, twenty-five (25) students and two (2) assistant headmasters. The respondents were purposively selected and in-depth interview was the data collection instrument used in the study.

Dependability addresses the issue of reliability in research work. It establishes that, if the work were repeated, in the same context, with the same methods and with the same participants, similar results would be obtained. To address the dependability issue, the processes within the study was reported in detail, thereby enabling a future researcher to repeat the work. The study stated the research design used, how it was executed and how data were collected. Specifically, the study adopted a case study design, purposively selected participants and obtained information by means of interviews and analysed results thematically to obtain its findings.

Finally, confirmability concerns the researcher's comparable concern to objectivity. Necessary steps were taken to ensure that the findings are the result of the experiences and ideas of the informants, rather than the characteristics and preferences of the researcher. Possible tendencies of researcher bias were eliminated. The researcher, in some instances probed further for clarifications rather than record responses based on his assumptions.

3.9 Ethical Issues

Ethics in research is aimed at making some analysis of moral issues which are a matter of concern when people participate in research. This is to ensure that the rights of participants in a research are not infringed upon. The respondents were given equal opportunity in terms of selection for inclusion in the study. Thus, the researcher did not discriminate in the choice of the respondents to participate in the research. In addition, research scholars whose works had been used in this study were acknowledged through proper in-text citation and referencing (eg Abadzi, 2007, Agyeman, 1993, Berliner, 1990, Yin, 2018).

The ethical issues considered by this study include confidentiality, deception, informed consent and right to privacy.

Informed consent - the respondents were accurately informed as to the nature of the research, the information sought for and the purpose for which it is to be used to enable them give their consent. The researcher ensured that respondents of this study were debriefed about what the research aim was and what it entailed before conducting the interview. Respondents voluntarily gave the researcher the needed information regarding the subject being investigated.

Confidentiality - respondents were assured that any information given with respect to the study would be kept confidential. To ensure this, names and addresses and any traceable identity of respondents were not required of them during the interview. The assurance given to respondents to keep information confidential helped the researcher to obtain the needed information.

Deception - the researcher did not hide his identity as a researcher from respondents with the view of tricking them for information. The researcher ensured that no deception was used in order to obtain any information from the respondents. The researcher was tactful in the data collection.

Right to Privacy - the right of respondents was respected and there was no attempt to study respondents without their knowledge.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 Introduction

This chapter presents the results and discussions of data analysis. The discussions were organized to address the following; the socio-demographic characteristics of respondents (school administrators, staff and students) and teachers' use of instructional time. The chapter has been chronologically structured in order of the study objectives. In this analysis, TA is used to mean a teacher respondent in management position (Assistant Headmasters), T is used to refer to a classroom teacher and S represents a student respondent. In the analysis, it therefore implies that TA1 refers to the first teacher respondent in management position, T1 and S1 refers to the first classroom teacher respondent and the first student respondents respectively. The results and discussions are presented below;

4.2.1 Socio-demographic Characteristics of Respondents

The socio-demographic characteristics of respondents considered in this study are sex, years of teaching, educational level, professional status, and marital status. The 52 respondents selected for this study consists of 2 assistant headmasters, 25 teaching staff

and 25 students. Find below in Table 4.1 the socio-demographic characteristics of respondents.

Table 4.1: Socio-Demographic Characteristics of respondents

Demographic Characteristic	Assistant Headmasters	Teachers	Students
Sex: Male	1	17	13
Female	1	8	12
Marital status			
Single	0	5	25
Married	2	18	0
Divorce	0	0	0
Widow	0	2	0
Teacher Professional Status			
Trained	2	23	0
Untrained	0	2	0
Teaching Experience			
1 – 5 years	0	4	0
6 – 10 years	0	13	0
11 – 15 years	0	5	0
Above 15 years	2	3	0

Source: Field data, 2016

4.2.2 Sex and Marital Status of Respondents

From table 4.1, it can be seen that out of the 52 respondents, 31 of them are males and 21 are females. The 31 male respondents, is made up of 13 students, 17 teachers and 1 assistant headmaster. The other 21 female respondents comprise of 12 students, 8 teachers and 1 assistant headmistress respectively.

The table indicates that 5 of the 25 teachers are single, 18 of the teachers are married and 2 are widows. Furthermore, it can be seen from the table that the two administrative staff are both married. In a research, Akiri & Ugborugbo (2008) concluded that there is no difference in the productivity of male and female teachers. However, participants in this research predicted that married women's job performance and commitment levels would decline (see Jordan & Zitek (2012). Research by Etaugh and Birdoes (1991) shows that single people are perceived as less responsible. Also, Padmanabhan and Magesh (2016) concluded that unmarried employees can perform well than married employees since their commitment towards their family and other circumstances are considerably less when compared to the married employees.

4.2.3 Teacher Professional Status and Teaching Experience

From table 4.1, it can be observed that 23 out of the 25 teachers interviewed were trained (professional) and 2 untrained (non-professional). The years of teaching experience of the teacher respondents varied. Out of the 25 teachers, 4 have between 1 – 5 years' of teaching experiencing, 13 have between 6 – 10 years' experience, 5 have between 11 – 15 years and 3 have above 15 years of teaching experience. The implication is that the staff is youthful enough to energetically carry out their responsibilities including teaching of students and are experienced enough to employ best teaching practices for effective instruction of lessons with students.

4.2.4 Teachers educational attainment

Table 4.2 depicts the level of academic qualification attained by teachers. Find below the presentation.

Table 4.2: Educational Level of Staff

Qualification	Number of Teachers
HND	2
1st Degree	18
2nd Degree	3
Others	2

Source: field data, 2016

Table 4.2 it shows that majority of the staff interviewed for this study attained tertiary level education with first degree. It can be seen that18 teachers, out of the 25 teachers are 1st degree holders. Also, 3 teachers' furthered their education to acquire 2nd degrees and two each of the other teachers possesses an HND and other recognized certificates respectively. The professional status and level of education of respondents is in congruence with the ILO/UNESCO (1984) standard of professional status of teachers internationally. Whereas higher educational attainment is needed for subject content knowledge, teacher training is to equip teachers with the best instructional skills required by teachers for proper classroom management and effective teaching and learning.

Professional skills on teaching is required by teachers in handling learning challenges (Shaddock, 2007).

4.3 Factors Responsible for Teachers' inability to Utilize Instructional Time Effectively

The factors listed below have been identified as factors responsible for teachers' inability to utilize instructional time effectively. The factors are; teacher absenteeism, work load on teachers, inadequate preparation, family demands and child bearing and interruptions/disruptions.

4.3.1 Teacher Absenteeism and Loss of Contact Hours

The nature of teacher absenteeism

The study found that teachers were absent in class which results in loss of contact hours. Interactions with school management revealed that teachers' absent themselves in school and therefore miss their lessons. A member of school management indicated that

> *" … sometimes, teachers are unable to honor their lessons …" (TA2).*

Also, when teachers were asked if they do miss some lessons at school, 13 of the teacher respondents (T1, T3, T4, T5, T6, T11, T12, T14, T15, T16, T17, T18, and T23) out of the 25 admitted to have missed some lessons with students in the past four weeks. The other 12 teacher respondents (T2, T7, T8, T9, T10, T13, T19, T20, T21, T22, T24 and T25) stated they did not miss lessons within the period stated. The views of student respondents were not different from those of the teaching and school management

respondents with 22 of the 25 students interviewed accentuating to the view that teachers' miss lessons. The study revealed that 10 out of the 25 students (S2, S3, S4, S5, S12, S15, S18, S20, S23, and S25) mentioned social studies teachers as subject teachers who often missed their lessons. This is followed by Physical Education (S4, S7, S10, S12, S13, S14, S19 and S25) and Economics (S7, S8, S11, S12, S16, S22, S24, and S25) teachers respectively.

Loss of contact hours

Moreover, to determine the number of contact hours lost as a result of teacher absence in the classroom, teacher respondents were asked to state the number of lessons missed within the stated period. Per the statements of the respondents, it was clear that respondent T1, T3, T4, T6, T17 and T23 lost 40 minutes of instructional time respectively. Respondents T11, T12, T14, T15 and T18 each lost 80 minutes of instructional time while the remaining two respondents, T05 and T16 lost 160 minutes of instructional time respectively.

From the above, it is clear that a total of 840, minutes of contact time representing 14 hours of instructional time was lost by the 13 teachers who missed their lessons within the 4 weeks reference period. By implication, 56 contact hours would be lost in an academic term. This consist of 16 weeks of allotted learning time. The lost contact hours resulting from the absence of the teacher in class could have negative impact on student learning. The loss of instructional time by teachers could be responsible for students' low

academic performance. Denteh et al (2011) finds that when a teacher is absent in class, student learning is disrupted. This is supported by Finlayson (2009) that when a teacher is repeatedly absent, student performance can be significantly impacted negatively. On the other hand, Gerard (2002) is of the view that management of instructional time can increase effective and efficient teaching and learning and reduce stress.

Reasons Given for Teachers' Absenteeism

Teachers who absented themselves in school and in class gave reasons to that effect. The following are some of the reasons teachers gave for being absent; breakdown of means of transport, ill-health, attendance of social occasions such as funerals, and naming ceremonies; attendance of workshops and other school meetings, among others. Responses of students on reasons offered by teachers for being absent in class were similar to those given by teacher respondents.

Specifically, three teachers stated they were sick (T11, T17 and T18), five explained they were engaged in school activities (T2, T4, T5, T12 and T16), four of them stated they attended meetings and/or workshops (T1, T6, 14 and T15), two of the teachers cited breakdown of means transportation (T12 and TT23). Excerpts of teacher respondents as well as students are presented below:

Sickness

The extracts of teachers' responses regarding the fact that they were sick are presented below:

"I fell Sick …" (T11)

Similarly, a student respondent stated that:

"Social studies mistress explained she was sick…"(S2).

Additional school schedules

Some teachers were also absent in class because they attended to other duties emanating from additional schedules assigned to them. Below are excerpts of teachers in this category:

"… I attended to Schedules that required urgent attention as Senior Housemaster" (T4).

"I was engaged in emergency counselling services…" T3.

"I was engaged in invigilating an examination conducted in the school …" (T16).

Responses of students were in conformity with teachers responses in the statements above. A student categorically stated that:

"… The chemistry teacher went to Accra with students for the national science and mathematics quiz competition" (S10).

It therefore suggest that additional schedules assigned to teachers affects their core duties in the classroom.

Workshops, seminars and interviews

It was also found that teachers were absent in class because of workshops, seminars and interviews. In this direction, a teacher stated that:

"I attended a workshop …" T14.

A student also mentioned that:

"*The teacher attended an interview on that day" (S15).*

The study therefore revealed that when teachers attend workshops, seminars and interviews, there are no substitute teachers to take up the duties of the regular teachers.

Transportation challenges

The study also revealed that teachers are absent in class due to transportation challenges and breakdown. A teacher stated that:

''I had a problem with my motorbike and missed the lesson'' (T23)

The findings of the study is in tandem with Lee *et al* (2015) that "… reasons teachers in the Pacific Region were absent were personal illness, funeral leave, family member illness, meetings and workshops, and vacation".

4.3.2 Work Load on Teachers

To assess Teachers' instructional work load, teacher respondents were asked to state the number of classes they are assigned to teach. Based on the number of contact periods per class in a week, the work load on teachers was then derived. From the responses of the teachers, respondent TO7 weekly work load was 10 instructional hours. Respondents (T4, T5, T8, T13, T14, T15, T16, T17, T19, T21, T22, and T25) each have 13.3 instructional hours in a week. The third group of respondents with 16.6 weekly instructional hours comprised of T1, T2, T9, T11, T12, T18, T20, T23 and T24 respectively. The group of respondents with the highest weekly instructional hours was made up of respondents T3, T6 and T10 with a weekly work load of 20 instructional hours.

According to the Ghana Education Service regulations, a teacher in a second cycle institution is required to teach a minimum of 16 hours (24 periods) and a maximum of 21 hours (32 periods) in a week. From the above information, respondents T4, T5, T7, T8, T13, T14, T15, T16, T17, T19, T21, T22, and T25 are teaching below the minimum weekly instructional workload. Three respondents (T3, T6 and T10) are teachers teaching close to the maximum weekly load. Teachers work load also depends on the number of students in class. According to Walberg (2000), a significant and consistent relationship exists in the academic achievement of students in small classes of 1 – 20 students. Large class size could therefore increase teachers work load and thereby affect teachers' utilization of instructional time. Chirimi (2016) concludes that teachers' workload is a contributing factor to poor teacher effectiveness.

Poor time-tabling as a contributory factor

Teachers could also have much work on specific days resulting from poor time tabling. The results showed some teachers were unable to utilize the instructional time effectively due to work load resulting from time table deficiencies. The following is an excerpt of a teacher's response:

> *"I could not utilize the whole period due to fatigue resulting from continuous teaching…" (T12).*

Also, the response of a student indicates poor time-tabling puts much load teachers. The response of the student is provided below:

> *"Economics teacher has more than the normal periods with our class and sometimes he says he is tired and leaves the class before the lesson ends"(S16).*

It therefore suggest that poor time-tabling could lead to much work load on some teachers.

4.3.3 Inadequate Preparation

Dorovolomo, Phan, and Maebuta (2010) is of the view that thorough and correct lesson planning that is based on the learner's needs help ensure effective teaching. The study established that inadequate preparation for lessons on the part of teachers also accounted for teachers' ineffective use of instructional time. Four respondents (T1, T4, T9, and T12) out of the twenty-five respondents stated that teachers are not able to fully utilize instructional time allotted to lessons as a result of inadequate preparations and laziness. Responding to the question why teachers are not able to utilize allotted instructional time to lessons, two teachers stated:

> *"… due to inadequate preparation for lessons" (T4 and T9)*
>
> *"… laziness". (T1 and T12)*

According to Levine (2006), this deficiency results from the fact that " … education programmes are not adequately preparing students (teachers) in competencies they need"

4.3.4 Family Demands and Child Bearing

The study revealed that teachers' inability to utilize instructional time effectively were also influenced by demands on teachers as parents and child bearing mothers. In the views of some respondents, teachers with children of school going age often send their children to school before coming to school to honor their lessons. In such instances, teachers who have morning lessons mostly miss their lessons or come to the class late.

General family demands

The study revealed that teachers' utilisation of instructional time were affected by teachers' responsibilities to their families. A respondent stated that some teachers are not able to utilize the instructional time fully because of:

> *"… Sending and picking their wards to and from school" (T6)*

The statement of another respondent indicated that besides sending their wards to school, teachers' full utilization of instructional time were also affected by attending to the health needs of their family members. Excerpts from a respondent is provided below:

> *"Teachers' send their wards or wife's to hospital and...".(T11)*

It therefore suggest that family depends on teachers such as sending/picking children to school and sending family members for health care affects teachers presence in class and therefore affects the utilisation of instructional time.

Child bearing and maternity leave

Child bearing and maternity leave were other factors identified in the study as affecting use of instructional time. A nursing mother on maternity leave is hardly replaced by Ghana Education Service (G.E.S)/school management. This view is supported by statements of students. A student stated that:

> *"Our food and nutrition teacher gave birth, … since then, no teacher has come to honor her lesson …." (S10).*

Excerpts of the responses of teachers also supported the findings that maternity leave affects instructional time use. A respondent stated that:

"… frequent maternity leaves affects teachers utilisation of instructional time" (T7)

The research findings suggest that the demands of child bearing on female teachers and the granting of maternity leave to teachers without replacing the regular teacher on maternity leave affects student learning.

4.3.5 Interruptions / Disruptions emanating from other school activities

From the study, it was found that other activities in the school affects the use of instructional time. These factors include delays at assembly on Mondays, delays during break periods, sporting activities and other un-programmed activities that takes teachers or students out of the class during instructional hours. Excerpts of responses confirming the effect of such interruptions on instructional time use is presented below:

Delays at morning assembly

The study showed that delays at assembly, especially on Mondays, affects the utilisation of instructional time. An excerpt of a teacher's response is provided below:

"Monday morning assembly consumes part of the time …"(T10).

Responses of students that indicates the effect of morning assembly on their lessons are provided below:

"Monday morning assembly consumes much of the time …" (S9).

"Monday morning assembly affects biology lessons and …"(S21)

Excerpts of responses by teachers and students suggest that delays at assembly, especially on Mondays, affect the use of instructional time in the school.

Late return from break

Also some teachers stated that most students do not return from break in time for teachers to begin their lesson at the time they are supposed to and by so doing some time is lost. On delays at break periods and time spent in getting settled for lessons, a teacher stated that:

> *"Students do not return immediately to class after break …." (T12)*

This section has provided an insight into the kind of disruptions that affect effective utilisation of instructional time.

4.4 Effective Strategies to Improve the Utilisation of Instructional Time by Teachers

The researcher is of the opinion that effective utilisation of instructional time is partly a time management behaviour and partly a strategy adaptation and usage behaviour. Zafarullah et al (2016), citing David (1999) defines time management as the management of time in order to make the most out of it. Simply put, time management is the use of time to increase efficiency, effectiveness and productivity at the workplace. From the perspective of George et al (2010), effective time management in the context of education reduces academic stress, improves problem solving ability, improves academic performance and that the skill is highly valued by employers.

According to Nickols (2016), strategy is a term that refers to a complex web of thoughts, ideas, insights, experiences, goals, expertise, memories, perceptions, and expectations that provides general guidance for specific actions in pursuit of particular ends. Citing

Silver et al (1996), Akdeniz (2016) regards instructional strategies as methods that include specialized instructional phases in line with the particular purposes of the subject and the features of the content area so that learners can gain the target behavior. Akdeniz (2016) indicates that instructional strategies point to the ways and approaches followed by teachers to achieve the fundamental aims of instruction. Citing Marzano (2003), Akdeniz observed that instructional strategies influence learners' achievement and allow teachers to diversify the instructional applications. According and that the effectiveness of instruction can be achieved mainly by preventing the random or mysterious occurrence of this process. Akdeniz (2016) maintains that the instructional process should be structured, applied and evaluated in a purposeful, planned, and systematic way.

According to OECD (2016), teachers' classroom practices highlights the existence of three underlying teaching strategies: these are referred to as active learning, cognitive activation and teacher-directed instruction. Whereas active learning strategy focuses on promoting the engagement of students in their own learning, cognitive activation center's on the use of practices capable of challenging students in order to motivate them and stimulate higher-order skills, such as critical thinking, problem solving and decision making. Teacher-directed strategy, on the other hand focusses on teaching practices that rely, to a great extent, on a teacher's ability to deliver orderly and clear lessons. The study is focused on teacher directed strategies.

McKenzie (2006) recommends that teacher efficiency of time utilisation could be enhanced by clearly defining the objective for each class/lesson and remaining focused on it, reviewing and rehearsing learning content, allowing time for difficult

topics/concepts, prioritising task to ensure the coverage of important task/concepts and keeping the classroom dynamic and organised.

Naz (2009) defines instructional objective as a clear and unambiguous description of instructional intent and that an objective is not a statement of what ones plan to put into the lesson (content) but instead a statement of what his/her students should get out of the lesson. Instructional objectives generally makes the whole teaching-learning process specific and goal directed. Moore (2000) indicates that objectives set the framework for evaluation. A well stated objective include four components: the performance, a product, the condition, and the criterion (see Mager 1984). Performance is expressed in terms of what students are expected to do, the product is what students will produce by their action, the condition includes the information, tool or equipment, and materials that will or will not be available to students and the criterion is the level of acceptable student performance. A well stated objective would clearly put a classroom teacher on a good pedestal to effectively utilise instructional time.

Popescu (2014) established that adequate planning of lessons is an effective instructional time management strategy. Zafarullah, et al (2016) recorded variations among government and private school teachers on time management. The study, for instance, revealed that 13% of government school teachers do advance preparation of lesson plans as compared to 89% of private school teachers. Also, the preparation and usage of teaching/learning aids were 11% and 78% for government and private school teachers respectively. Advance preparation for class schedules were 10% and 91% for government and private school teachers respectively. Findings of this research indicated that inadequate preparation on the part of teachers were a factor in the ineffective

utilisation of instructional time in the study. For instance, teacher respondent T4 indicated that teachers are not able to utilise all the instructional time for lessons as a result of inadequate preparation. Excerpt of the teacher's response is provided below.

"… due to inadequate preparation for lessons" (T4).

Popescu (2014) citing McLeod, Fisher, and Hoover (2003), indicates that the most important role of the teacher is that of instructional leader. Therefore, for the teacher to be successful, they have to pay heed to the social, intellectual, as well as physical structure and organisation of the classroom.

Also, content knowledge and presentation is another strategy of enhancing teacher utilisation of instructional time. Content knowledge includes knowledge of the subject and its organizing structures (see also Grossman, Wilson, & Shulman, 1989; Wilson, Shulman, & Richert, 1987). Drawing on Shulman (1986), Ball et al (2008) indicates that knowing a subject for teaching requires more than knowing its acts and concepts. Teachers must also understand the organizing principles and structures and the rules for establishing what is legitimate to do and say in a field. According to Ball et al (2008), the teacher need not only understand *that* something is so; the teacher must further understand *why* it is so, on what grounds its warrant can be asserted, and under what circumstances our belief in its justification can be weakened or denied. Studies have demonstrated that students can benefit more in their learning process when content is presented based on their individualised learning system (see Ong & Ramachandran, 2000; Kinshuk, 2002).

Pedagogy and andragogy are instructional approaches/models of content presentation to learners. Pedagogy and Andragogy models are crucial assumptions about the

characteristics of learners that consider the whole-person perspective in term of diagnosis of needs, learning climate, and role of their experience (see Delahaye et *al*, 1994).

Citing Magnusson, Krajcik, and Borko (1999), Ball et al (2008) defined pedagogical content knowledge as being a teacher's understanding of how to help students understand specific subject matter and that it includes knowledge of how a particular subject matter, topics, problems, and issues can be organised, represented and adapted to the diverse interests and abilities of learners, and then presented for instruction. Ball et al (2008) indicates that teachers' orientations to content influenced the ways in which they taught that content. For example, a teacher having biology background would teach 'biology' differently than another teacher with agricultural science background.

Another strategy is supervision and monitoring of instructional is another strategy of enhancing the utilisation of instructional time. Baffour-Awuah (2016), from the perspective of Burke and Krey (2005) defines supervision as instructional leadership that relates perspectives to behaviour, focus on processes, contributes to and supports organisational actions, coordinates interactions, provides for improvements and maintenance of instructional programme, and assesses goal achievements. Instructional supervision is usually carried out by the head teachers, subject heads, and other assigned supervisors in a school with the aim of providing guidance and support to teachers (see Tesfaw & Hofman, 2014). Malunda et al (2016), citing Zepeda (2010), defined instructional supervision as the continuous monitoring of classroom teaching with the aim of not only promoting professional practices, but also to enhance professional development in a collegial and collaborative style. Baffour-Awuah (2016) indicates that the focus of instructional supervision is to provide teachers with information about their

teaching so as to develop instructional skills to improve performance. Baffour-Awuah (2016) notes that supervision requires commitment, trust, and high level of leadership on the part of principals.

Hallinger and Murphy (1985) maintains that principals can have a discernible effect on a school's level of productivity. The findings of Malunda et al (2016) revealed that instructional supervision generally brings about little improvement in the quality of teaching and learning within schools. The study indicated that management of the school supervises instruction though some respondents indicated supervision can be improved further. Excerpts of respondents are provided below:

> *"School management supervises and monitor's daily teaching and learning activities" (T1)*
>
> *"Usually, we go round the classes to monitor several things during instructional hours. During such monitoring, we check on both teachers and students' class attendance, broken students' furniture, complains from students regarding teachers' conduct in class and other problems bedeviling teaching and learning".(TA2)*
>
> *"The monitoring of teachers by the head master and his assistants has been very helpful. The teachers do not frequently miss their lessons since they are aware that this can be noticed by the administration during monitoring" (S10).*

Furthermore, providing extra time is another strategy of enhancing utilisation of instructional time. Extra time, for purposes of this discussion, refers to time made for instruction outside school instructional time. Extra time is often arranged to make up for

lost time during instructional hours or arranged to cover intended instructional content. In effect, extra time is an extension of the instructional time.

This study revealed that teachers organize extra tuition to make up for missed lessons. Out of the 25 students, 17 of the respondents confirmed teachers organize extra tuition for missed lessons. However, eight of the student respondents (S4, S7, S16, S18, S20, S23, S24 and S25) indicated that none of the teachers organized extra tuition to make up for their missed lessons. Some excerpts of respondents in response to the question 'which subject teachers are able to make up for missed lessons' are presented below:

> *"… Financial Accounting teacher arranged an extra tuition to make up for the missed lessons" (S1*)
>
> *"Elective mathematics, core mathematics and biology …" (S9)*
>
> *"… English language and social studies" (S3)*

4.5 School Management Enforcement of Rules for Effective Instructional Time Utilisation

The study revealed that the following measures were adopted by the school to enforce maximum use of instructional time. They are: Monitoring and supervision, provision of teaching and learning materials, the introduction of lesson monitoring book, issuance of queries to teachers, mounting of siren/loud speakers.

All the 25 teacher respondents indicated that the school has measures aimed at ensuring teacher presence in class. Specifically, respondents mentioned monitoring and supervision undertaken by school management especially the assistant headmaster

academic. Also, respondents mentioned the provision of teacher lesson monitoring book in addition to class attendance register. The teacher lesson monitoring book is a book designed to record the daily attendance of teachers and students to classes based on the number of periods/lessons per day for a class. The class prefect/monitor records the subject for specific lesson/period for each day. S/he also records student absentees for the lesson and respective teachers sign at the end of the lesson delivery. The teacher attendance monitoring book is complimentary to the class attendance register.

The respondents also mentioned that defaulting teachers are called to respond and appropriate measures taken against them. Specifically, the respondents stated the issuance of queries to such teachers.

Monitoring and supervision of teaching and learning

All the 25 teacher respondents confirmed school management monitors and supervises teacher and learning in the school. Excerpts of the interview are presented below:

One teacher specifically stated:

> *"… Enforces the rules on effective teaching and learning in the school" (T22)*

> *"School management supervises and monitor's daily teaching and learning activities" (T1)*

The two teacher administrators affirmed that school management have instituted certain measures that seek to maximize the use of instructional time in the school. One of the teacher administrators enumerated the following measures:

1. *Management monitors class attendance of teachers*
2. *Teachers who miss lessons regularly are issued queries*

3. *Existence of teacher attendance monitoring book under custody of class prefects (TA1)*

> *"Usually, we go round the classes to monitor several things during instructional hours. During such monitoring, we check on both teachers and students' class attendance, broken students' furniture, complains from students regarding teachers' conduct in class and other problems bedeviling teaching and learning". (TA2).*

Students attested to that fact that the Assistant Headmasters, especially the one in charge of academics, visits them regularly during school hours to check on teaching and learning. One student stated that:

> *"The monitoring of teachers by the head master and his assistants has been very helpful. The teachers do not frequently miss their lessons since they are aware that this can be noticed by the administration during monitoring" (S10).*

Research indicates that supervision and monitoring improves classroom learning (Glickman, et al, 2004). School principals are expected to supervise and monitor instruction to improve upon student learning. Hoy and Hoy (2006) observes that the key to improving student learning rests with what happens in the classroom. Dufour (2002) states that state legislature mandates principals to serve as instructional leaders. Management by walk around is a supervisory strategy adopted by principals in performing its mandated duty of instructional leadership. Principals uses management by

walk around as a means of improving classroom instruction and reducing student discipline problems (Downey et al. 2004).

The research findings is in conformity with Glickman, et al (2004) which points out that instructional supervision practices have the potential to improve classroom instruction.

The use of attendance monitoring book

The study revealed that the use of attendance monitoring book is a useful strategy in enhancing the use of instructional time in the school. Eight respondents (T2, T4, T6, T7, T10, T12, T13 and T20) stated that the attendance monitoring book is very effective in tracking teachers who are absent in class. Testimonies of respondents are presented below:

> *"The introduction of the attendance monitoring book has been helpful in monitoring teacher absenteeism and lateness to claas"T6*

One of the respondents focused on the using attendance monitoring book to regulate late entry or early exit of teachers from the classroom if it used effectively.

> *"… Attendance monitoring book can control late entry and exit to a class if class monitors actually record the time of entry and exit of teachers"T2.*

> *"… also class monitors are also tasked to call teachers when their lessons are up" T19.*

Use of siren/loud speakers

From the study, three respondents (T3, T19 and T20) mentioned the use of siren/loud speakers is an appropriate strategy adopted in enhancing the use of instructional time in the school. Loud speakers are mounted in the school and connected to a programmed device that announces the daily scheduled activities at specific time periods. In a statement, a teacher mentioned that, the mounted

> *"Siren announces time for lessons and other daily activities through loud speakers. It is appropriate in prompting teachers and students to be responsible" (T3).*

A respondent commented on the awakening of time consciousness as a result of the use of loud speakers. Expressing his/her view, the respondent stated that:

> *"Using loud speakers to announce time for scheduled activities helps in better time management by teachers and students" T20.*

Discounting on the issue of forgetfulness on the part of teachers, a respondent was emphatic that teachers present within the school environment cannot be excused on grounds of forgetfulness in missing a lesson. According to him/her

> *"… Also, a siren announces (through loud speakers) the time for lessons and change in lessons" (T19).*

Sanctions and rewards

From the study, it was discovered that management of the school uses sanctions to enforce utilization of instructional time. Sanctions are methods used to address staff misconducts. Statements of respondents confirmed the application of sanctions on staff misconduct in the school. Statements to the effect of using sanctions in the school is presented below:

"… Defaulting teachers are sanctioned" T15

Respondent T05 specifically mentioned the use of queries as a method of imposing sanction on staff who misconduct themselves. S/he said:

"… Defaulting teachers are queried" T5

The Public Services Commission Report, (2016), reported a 57.4 % absenteeism of staff misconduct recorded in the public service of Ghana and that 61.2% of these misconduct attracted queries or warning letters.

Kenya instituted a performance rewards and sanctions framework for the public service in 2016 to establish basis for rewarding exemplary performance and administering sanctions for poor performance. The framework underscores the importance of rewards and sanctions as a strategy for improved work performance.

4.6 Respondents' Recommendations towards ensuring Effective Utilisation of Instructional Time

Respondents' recommendations towards ensuring effective utilization pf instructional time are as follows: Regular monitoring of teachers in class, issuance of queries to

absentee teachers and imposition of sanctions, reducing interferences on lessons and putting in measures to ensure full coverage of termly scheme of work, class test, exercises and project work per term.

- Out of the 25 teachers, 10 respondents (T1, T2, T3, T4, T6, T8, T9, T11, T12 and T14) recommended intensive/constant monitoring and supervision as the most effective tool in enforcing the effective utilisation of instructional time in the school. Some of the recommendations of respondents are presented below:

One of the teacher respondents stated that full time utilization can be improved by

"…Enhancing monitoring of teachers and students in class" T2

In the view of a teacher respondent, s/he stated that

"Supervision of teachers should be regular…" (T3)

- Some of the teachers recommended placing the responsibility of monitoring on students. Their recommendations are presented below:

"…Class monitors should be tasked to monitor teachers and report to school management" T6

"…Students should be engaged to monitor teacher attendance" T12.

- One of the respondents suggested the introduction of technology in monitoring teacher attendance and performance. The respondent stated that:

"Designing a system to capture time of entry and exit of teachers in classrooms and also by installing cameras in classrooms to record teaching and learning for effective monitoring and evaluation of teaching

and learning in classrooms'. … The existence of video and time records will make teachers effective as they are conscious of regular monitoring" (T10).

- From the study, respondents also recommended the use of official queries for teachers who fall foul of the code of teacher conduct in delivering their duty. In most cases, teachers' who completely miss their lessons, being late to class or leave the classroom earlier than the scheduled time, without reasonable excuse, are often queried by the Headmaster or his Assistant in charge of academics. Such teachers would have to answer such queries. According to the administrative staff, any teacher who has been queried for more than three times without any convincing response is reported to the Metropolitan Directorate of Education for appropriate sanction. In an interview with a teacher, she said that:

  "I was queried for missing my lesson. Now, I always make sure I honor my lesson or seek for permission before the lesson if I know I cannot honor the lesson" (T23).

- One of the respondents indicated that much power must be given to school management to sanction teachers who miss their lessons without tangible reasons. S/he stated that:

  "School management must be given enough power to sanction defaulting teachers who miss their lessons without tangible reason" (TA1).

- One of the teachers stated that much punitive measures should be taken against absentee teachers. The respondent was emphatic that

  "*Missed contact hours should be calculated and deducted from the salary of affected teachers" T8*

- One of the teachers also suggested a positive sanction (see also Baldwin, 1971) in the form of determining the promotion of teachers. The respondent stated that:

  "School management should have the power to determine promotion of staff"T2

- Some of the teachers recommended rewarding hardworking and dedicated teachers. They indicated that rewarding hardworking teachers would be a motivating factor for other teachers to strive for better performance. The following are excerpts of responses made to that effect.

  "… also hard working teachers should be motivated" (T2).

  "The school management should motivate teachers who are regular and committed to their work" (T15)

- The study revealed that, interferences on lessons leading to waste of instructional time can be minimized by tasking agencies that seek to interact with the school to obtain permission or clearance from the Regional/Metro Directorate of Education; such interactions should be pushed to non-instructional hours, committee meetings should be held after class hours, all zonal and super zonal sporting

activities should be organized during school holidays so as not to affect instructional hours. In an interview with one of the teachers, he mentioned that:

> *"When outside bodies require to interact with either the staff or students, they must be referred to the Regional Education Directorate for permission before they are given audience. Also, club meetings can be held at weekends or after school hours and sporting activities should be held during holidays when no instructions are expected" (T20).*

- The study also showed that accommodating teachers on campus can enhance full time utilization as inconveniences associated with transport challenges would be eliminated. A teacher stated that the utilization of instructional time can be improved by:

  "Providing accommodation on campus for teachers" T6.

- One of the teachers laid much focus on classroom environment and effective monitoring of lessons as being very essential in improving utilization of instructional time. He indicated that effective utilization of instructional time can be improved by:

  "… providing conducive classroom condition for teaching and learning' T9

This section deals with appropriate recommendations for effective utilisation instructional time. In 4.7, enforcement of G.E.S policies on effective utilisation of instructional time is examined.

4.7 Enforcement of Ghana Education Service Policies and Standards on Utilization of Instructional Time

Inspection as a component of the school system is essentially a quality control mechanism for ensuring standards in schools and the education they provide (Dunford, 1993). It is the inspectorate division of the Ghana Education service that has the responsibility of conducting school inspection. The National Inspectorate Board, established under the Education Act 2008, Act 778, mandates the Board to undertake inspection of schools, evaluate, set and enforce standards to be observed at pre-tertiary educational levels in the country. Its mandate includes among others assessing the quality of teaching and learning in educational institutions.

According to Ormston and Shaw (1993), improving the quality of teaching and learning is the main focus of the inspection process. Lillis (1990) notes that by systematically monitoring and objectively evaluating instructional processes in schools, inspectors' guide teachers to adopt good teaching practices that promote learner achievement. The Regional and Metro/District directorates of the Ghana Education Service have units responsible for inspection of schools. Circuit supervisors are the established units responsible for monitoring teaching and learning at the basic and secondary schools. Statistics available at the Tamale Metropolitan Directorate of Education for 2017/2018 academic year indicates that there are 173, 79 and 7 public primary, Junior High and Senior High Schools respectively within its jurisdiction and it has a staff strength of 15 circuit supervisors.

The research also focused on the units responsible for enforcing educational policies and standards at the Metropolitan Directorate of Education and how effectively it has been able to execute it function with specific reference to observations made by the teaching staff of Business Senior High School, Tamale. Circuit supervisors are responsible for, among others, enforcing the effective utilisation of instructional time in pre-tertiary schools. The research sought to find out from respondents how often inspectorate teams visit the school. Majority of the respondents indicated they had seen an inspectorate team just once for a period of 1 to 5 years. Excerpts of the interviews with teachers are presented below:

> *" … I have only seen an inspectorate team once for more than 5 years now" (T2).*
>
> "*There was an inspectorate team from the Regional Education unit recently" (T22).*

The data on the number of public pre-tertiary institutions in the metropolis paired against the available circuit supervisors indicates an inadequate number of supervisors to effectively perform its legitimate duty. Effective education delivery depends to some extent the quality of supervision. Statements of teacher respondents is indicative of the fact that monitoring educational delivery, especially secondary education, with specific reference to Business Senior High School, by the responsible unit(s) at the regional and metro level has fallen short of expectation. Considering the nature of the metropolis, other factors, besides the number of available circuit supervisors could be a contributory factor to the limited supervision performed by the officers. Respondents' response to how the supervisory unit could be made effective produced similar responses. Among others, respondents indicated that the units should be well resourced, provided with reliable

means of transport, the number of supervisors should be increased and allowances due supervisors be paid promptly. One of the respondents stated that

> *"… means of transport and other logistics should be provided for circuit supervisors' to enable them perform their duty".*

Focusing on the number of circuit supervisors, one of the respondents stated that

> *"… more circuit supervisors should be recruited".*

Staff of the school indicated that for the unit responsible for enforcing instructional time to be effective, the unit should be provided with an effective and reliable means of transport and fuel, and the school should be assigned a regular or permanent inspection team to monitor teaching activities of teachers and sanction those who are found not to be complying with the rules.

4.8 Implications of the findings on the professional development of teachers

The following implications could be drawn from the findings on the professional developments of teachers:

- The study revealed that the allotted instructional time in school is not fully utilised. Therefore, time and the monitoring of effective teaching time should be taken seriously. Teacher professional development programmes should therefore focus on the effective utilisation of instructional time and effective supervisory skills programmes.
- Teacher professional development programmes should include courses aimed at stimulating an achievement-oriented school culture in teachers that builds and

develops positive practices in teachers and have the capabilities of transforming students into good academic achievers.

- To enhance the supervisory and leadership roles of school management and inspectors, time tested and relevant skills training programmes should be organised for them to stimulate and effect good school leadership practices.
- Emphasis should be placed on professional values, morality and attitudes of teachers as professionals in education delivery and the need to uphold the ethics of the profession.
- School promoted or facilitated professional development programmes should be designed to address specific challenges identified in the school.
- Schools should develop effective networking system that facilitates the sharing of knowledge and skills gained from professional development programmes among teachers to ensure holistic implementation.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the findings, conclusions and recommendations of the study. Summary of findings of the study is presented in section 5.2, while conclusions emanating from the summary of findings and policy recommendations based on the findings and conclusions are presented in sections 5.3 and 5.4 respectively. Suggestions for future research are presented in section 5.5

5.2 Summary of Findings

The study used primary data collected from 25 students, 25 teachers and 2 school administrative staff to assess the effective utilization of instructional time among teachers in Business High School in Tamale. The specific objectives of the study were to identify factors that are responsible for teachers' inability to utilize instructional time effectively, examine effective strategies to improve the utilization of instructional time by teachers, assess Ghana Education Service (GES) enforcement of teachers' utilization of instructional time, to make policy recommendations to minimize interference of schools instructional time; and recommend policies for effective utilization of instructional time.

The following were the research questions and related findings regarding effective utilisation of instructional time in Business Senior High School, Tamale, which needed to be answered in order to achieve the aim of the study. The research questions and the summary findings are presented below:

1. What factors are responsible for teachers' inability to utilizing schools instructional time effectively?

   i. The findings suggest that teacher absenteeism is a major factor to teachers' inability to effective utilization of instructional time in schools. From the study, it showed that 13 out of the 25 teachers interviewed (T1, T3, T5, T6, T11, T12, T14, T15, T16, T17, T18, and T23) confirmed to have missed some lessons with students in the past four weeks. Students confirmed the prevalence of teacher absenteeism in the school. Out of the 25 students interviewed, all except 3 (S1, S13 and S16) accentuated to the view that teachers missed lessons in the school. Furthermore, the study revealed the following as the reasons teachers' put forward for being absent in school/class; breakdown of means of transport, ill-health, attendance of social occasions such as funerals, and naming ceremonies; attendance of workshops and other school meetings, among others.

   ii. Work load on teachers were also identified as contributing to teachers' inability to effective utilization of instructional time. From responses of teachers interviewed, it showed that the minimum weekly instructional work load on teachers were 10 instructional hours (T7) and a maximum of 20 hours (T3, T6 and T10). The study further revealed that some teachers' (T4, T5, T7, T8, T13, T14, T15, T16, T17, T19, T21, T22, and T25) teach below the minimum of 16 hours (24 periods) (GES code). Observations from the study showed that the work load on teachers were more related to

class size (Walberg, 2000) and sequencing of the teaching time table of teachers as indicated by respondent T12.

iii. The study established that inadequate preparation for lessons on the part of teachers also accounted for teachers' ineffective use of instructional time. Four respondents (T1, T4, T9, and T12) out of the twenty-five respondents stated that teachers are not able to fully utilize instructional time allotted to lessons as a result of inadequate preparations and laziness.

iv. The study revealed that demands on teachers as parents and child bearing mothers' affects effective instructional time utilization. In the views of some respondents (T6, T11 and T13), married teachers do send their sick dependents to hospital and teachers with children of school going age often send their children to school before coming to school to honor their lessons. Also, child bearing and maternity leave, as stated by some respondents (T7 and S10) were other factors identified in the study as affecting use of instructional time. The study further showed that nursing mothers' on maternity leave are hardly replaced by substitute teachers (S10).

v. The last but not the least, factors such as delays at assembly on Mondays, students' delay during break periods, sporting activities and other un-programmed activities were also found to affect the effective utilization of instructional time in the school. Four of the teacher respondents (T8, T20, T24 and T25) cited Monday morning assembly, 8 respondents (T1, T3, T7, T9, T10, T13, T14 and T23) mentioned sporting activities, 3

respondents (T3, T5 and T6) mentioned workshops and 7 respondents (T1, T4, T11, T15, T17, T21 and T22) cited other forms of interference/interruptions that affects effective instructional time utilization.

2. What effective strategies are available to improve teacher utilization of instructional time?

The following were the main findings;

i. All the 25 teacher respondents confirmed that the most effective strategy to improving teacher utilization of instructional time were school management monitoring and supervision of teaching and learning in the school. Statements of the school administrators as well as the student respondents were testimonies to the efficacy of monitoring and supervision as an effective strategy in improving utilization of instructional time. A respondent (T10) suggested the introduction of time recorders and video recorders in monitoring teacher attendance and performance.

ii. From the study, it was found that the use of attendance monitoring book is a useful strategy in enhancing the use of instructional time in the school. Out of the 25 teachers interviewed, 8 of them (T2, T4, T6, T7, T10, T12, T13 and T20) stated that the attendance monitoring book is very effective in tracking teachers who are absent in class.

iii. Loud speakers mounted in the school and connected to a programmed device that announces the daily scheduled activities at specific time

periods. In a statement, a teacher mentioned that, the mounted. From the study, three respondents (T3, T19 and T20) mentioned the use of siren/loud speakers as an appropriate strategy adopted in enhancing the use of instructional time in the school.

iv. From the study, it was discovered that management of the school uses sanctions to enforce utilisation of instructional time. Sanctions mentioned by respondents are queries (T23) and deduction of missed contact hours from affected teachers' salary. A respondent (TA1) also recommended that school management should have more power to sanction defaulting teachers. Furthermore, the use of rewards to motivate hard working teachers were suggested as effective strategies for others to emulate.

3. How is Ghana Education Service (GES) enforcing the rules on teacher utilization of instructional time?

The following were the main findings;

i. The study revealed that circuit supervisors are the established units responsible for monitoring teaching and learning at the basic and secondary schools. However, statistics available at the Tamale Metropolitan Directorate of Education for 2017/2018 academic year indicates that the unit has inadequate personnel to conduct effective monitoring and supervision. Testimonies of teachers interviewed suggest supervisors seldom come to the school.

ii. Staff of the school opined that for the Metropolitan Educational Unit responsible for enforcing instructional time in the school to be effective, the

unit should be provided with effective and reliable means of transport and fuel, as well as resourcing the unit with adequate funds. In addition, schools should be assigned regular or permanent inspection teams to monitor activities of teachers.

4. What policies can the school design to minimize interference on instructional time?

The following were the main findings;

i. In the view of respondents, interferences on lessons leading to waste of instructional time can be minimized by tasking agencies that seek to interact with the school to obtain permission or clearance from the Regional/Metro Directorate of Education; such interactions (when approved) should be pushed to non-instructional hours, committee meetings should be held after class hours. Also, all zonal and super zonal sporting activities should be organized during school holidays so as not to affect instructional hours.

5.3 Conclusions of the Study

The following conclusions could be made from the study:

- Most teachers agreed that they sometimes miss their lessons and often do not fully utilize their lessons due to lateness or leaving the classroom early before the end of the lesson. Averagely, teachers miss one lesson within four weeks. The reasons for missing lesson

by teachers include breakdown of teachers means of transport, ill-health, maternity leave, sporting activities, attendance of social occasions, workshops, and school meetings.

- The study also revealed that most teachers do not make up for missed lessons.
- The result of the study showed that the behavior of most teachers suggest they are not accountable to students and so do not owe students any explanation for their absence in class.
- The study attributed the ineffective utilization of instructional time by teachers to teacher absenteeism and some interference that impede smooth lesson observation. These interference are the factors responsible for the ineffective utilization of instructional time and include school's sporting activities, activities of other bodies seeking audience with staff and students, students' delay at break-fast, delays at Headmaster's assembly, disciplinary committee and academic board meetings' and club activities. Also, maternity leave and too much teaching load on teachers, inadequate preparation, and lack of commitment to the values of the teaching profession are responsible for teachers' inability to effectively utilize their instructional time.
- The strategies to improve effective utilization of instructional time are regular monitoring of teachers' class attendance, the use of sanctions and rewards, and effective use of the teacher attendance monitoring book.
- The study revealed that the School management team enforces the rules on effective teaching and learning in the school. This is done through regular monitoring and supervision of the activities of teachers and students by the school's monitoring team.
- It can be concluded that external supervision of teaching by the regional and metropolitan directorates of education is low.

5.3 Recommendations of the Study

In the light of the findings of the study and the conclusions made, the following recommendations are made:

- The study found that some teachers are unable to effectively make full utilization of instructional time in classrooms. To overcome this challenge, teachers should set achievable goals for each lesson, identify priorities in method and in content, and remain organized in the classroom. In effect, teachers should adequately plan and prepare for each lesson. S/he should identify classroom activities based on urgency and importance and do away with activities that will not have meaningful results in the classroom. The more effective use of time ultimately leads to more positive individual outcomes on the part of teachers and students.
- The study found that some teachers fail to effectively use their lessons with the mindset that very little punishments will be applied on them by school authorities. To curb this perception among teachers, a team responsible for monitoring teachers' activities in class must sanction those teachers who miss their lessons without tangible reasons. This will let teachers begin to take the work of the unit serious and do what is expected of them. In addition, teachers should be made to make up for missed lessons. Also, the monitoring units at the regional and metropolitan directorates of education should be well resourced and equipped to conduct regular monitoring in schools.
- Given that poor teacher attendance and instructional time utilisation could affect teacher-student relationships, study recommends that teachers should endeavor to devise and use strategies to increase attendance and instructional time utilisation in order to motivate

students to endure and enjoy classroom interactions. Thus, an enabling environment for learning should be created by teachers as opportunities for students to develop positive relationships with teachers to enhance students' participation in class.

- Teacher licensing be implemented after thorough consultation with the various stakeholders to inject professional conduct in the teaching profession. Teachers cannot be doing the same old things and expect to have different results. In Ghana, it can be argued that individual teacher's effort at adding quality to their professional practice is very limited. In most instances, teachers furthers their education to receive higher qualifications to enhance their promotions. The impact of teacher innovation, efficiency, versatility, and competitiveness to improved classroom practices, teaching, and student learning is negligible. Teacher education authorities in Ghana need to pursue teacher licensure as a measure to encourage teachers to seek ways to improve their practice and enhance their promotion. Authorities in education must establish and communicate to teachers' benchmarks for renewing licenses such as research, conference attendance and participation, workshops, and other continuous professional development activities. In this case, the teacher licensing authority in partnership with all bodies and institutions engaged in teacher development activities must ensure that continuous professional development schemes and activities become an all-year round affair, with clear time tables for accessing each of them. This would enable teachers to make personal arrangements to attend sessions that meet their circumstances without loss of contact hours. All of this must be pursued against the backdrop that change is not always welcomed.

5.5 Suggestions for Future Research

This study employed qualitative analytical method in examining instructional time utilization in secondary schools using Business Senior High School, Tamale as a case study. In the future, similar study should employ qualitative and quantitative methods and also sample respondents from more than one school so as to be able to generalize the findings to all secondary schools in the metropolis.

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APPENDIX

Appendix A: Interview Guide for Teachers

This interview guide is designed to solicit information for the conduct of a post graduate study by a student of the University for Development Studies on the research topic "**Effective use of instructional time by teachers of Business Senior High School: An opportunity to add value to professional development of teachers"**.

You have been purposely selected, however, you reserve the right **TO** or **NOT TO** participate in this interview since participation is voluntary rather than mandatory. Your participation in this interview will only require your time, but no cost. Conversely, there is no direct benefit accruable to respondents for participation. I would appreciate your time for participation in this interview.

The expected duration for this interview is about 20 minutes and will solicit responses on personal characteristics, teachers' utilisation of instructional time, strategies for effective utilisation of instructional time, Ghana Education Service enforcement of rules on instructional time utilisation, and other issues pertinent to the study.

Reports of findings emanating from this study would be treated confidential and analysis of responses would be based on aggregates of all responses, without mentioning names of individual respondents.

SECTION A

1. How many periods/lessons do you teach in a week per class?

2. How many classes do you teach?
3. How many minutes do you teach per period/lesson
4. Have you ever missed your lesson(s)?
5. For the past four weeks, how many of your periods/lessons have you missed?
6. Is 5. above on a particular class or classes?
7. In percentage terms, how effective are your students engaged during lessons?
8. What are the things you do to justify the percentage above?

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9. Are you able to utilize the entire time for the periods/lessons in a class always?
10. For the past four weeks, how many periods/lessons have you not been able to utilize fully?

SECTION B

1. What reasons can you give for missing your periods/lessons

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2. What reasons can you give for your inability in using the full time allotted to a period(s)?

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3. Are there any other reasons why you or other teachers miss their lessons?

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4. Are there any other reasons why you or other teachers do not fully utilize the time for their lessons/periods?

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5. Are there any measures in your school that seeks to maximize use of instructional time? Yes/ No

6. If yes, what are they? …….

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   …….

7. What do you suggest as measures to ensure full utilization of instructional time?

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SECTION C

1. Are there any occasional interference on your lessons? Yes / No
2. What are some of these interferences you can identify?

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3. Which of these interference is much rampant in your school?

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4. Is there any measure your school authorities have instituted to minimise interference / interruptions on lessons? Yes/ No

5. If yes, what are these measures?

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6. What other measures can be put in place to eliminate or reduce these interferences?

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SECTION D

1. Is there any unit responsible for enforcing the use of instructional time in schools within the G.E.S? Yes / No
2. How often do such units visit your school?
3. How can these units be made much effective?

Appendix B: Interview Guide for Students

You have been purposely selected, however, you reserve the right **TO** or **NOT TO** participate in this interview since participation is voluntary rather than mandatory. Your participation in this interview will only require your time, but no cost. Conversely, there is no direct benefit accruable to respondents for participation. I would appreciate your time for participation in this interview.

The expected duration for this interview is about 20 minutes and will solicit responses on personal characteristics, teachers' utilisation of instructional time, strategies for effective utilisation of instructional time, Ghana Education Service enforcement of rules on instructional time utilisation, and other issues pertinent to the study.

Reports of findings emanating from this study would be treated confidential and analysis of responses would be based on aggregates of all responses, without mentioning names of individual respondents.

SECTION A

1. Which class/form are you?
2. How many periods/lessons do you have in a day per class?
3. How many minutes do you have per period/lesson?
4. Do teachers occasionally miss their lesson(s) in your class?

5. For the past four weeks, which subject teachers have missed their lesson(s) in your class?
6. What reason(s) is/are given for the missed lessons?

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7. Which subject teachers are able to make up for the lost periods?
8. Are teachers able to utilize all the time for their lessons? Yes / No
9. If no, which subject teachers are usually affected?
10. What reasons account for these?

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11. Are there any activities that often interfere with your lessons? Yes / No
12. If yes, what are these interferences?

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Appendix C: Interview Guide for Assistant Headmasters

You have been purposely selected, however, you reserve the right **TO** or **NOT TO** participate in this interview since participation is voluntary rather than mandatory. Your participation in this interview will only require your time, but no cost. Conversely, there is no direct benefit accruable to respondents for participation. I would appreciate your time for participation in this interview.

The expected duration for this interview is about 20 minutes and will solicit responses on personal characteristics, teachers' utilisation of instructional time, strategies for effective utilisation of instructional time, Ghana Education Service enforcement of rules on instructional time utilisation, and other issues pertinent to the study.

Reports of findings emanating from this study would be treated confidential and analysis of responses would be based on aggregates of all responses, without mentioning names of individual respondents.

SECTION A

1. Do teachers occasionally miss their lessons in your school? Yes / No
2. If yes, what reasons account for the missing of lessons

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3. Are teachers always able to utilize the entire time allotted to periods? Yes /No
4. If no, any comment.

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SECTION B

1. Are there any measures in your school that seeks to maximize use of instructional time? Yes/ No
2. If yes, what are they? …….

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3. What do you suggest as measures to ensure full utilization of instructional time?

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SECTION C

1. Are there any occasional interference on lessons in your school? Yes / No
2. If yes, what are some of these interferences you can identify?

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3. Which of these interference is much rampant in your school?

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4. Is there any measure your school authorities have instituted to minimise interference / interruptions on lessons? Yes/ No
5. If yes, what are these measures?

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6. What other measures can be put in place to eliminate or reduce these interferences?

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SECTION D

1. Is there any unit responsible for enforcing the use of instructional time in schools within the G.E.S? Yes / No
2. How often do such units visit your school?

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3. How can these units be made much effective?

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