

UNIVERSITY OF EDUCATION, WINNEBA

**INFLUENCE OF CONTINUOUS PROFESSIONAL DEVELOPMENT
ACTIVITIES ON SENIOR HIGH SCHOOL TEACHERS' JOB
PERFORMANCE IN BIRIM CENTRAL MUNICIPALITY**



KENNETH AGYEI

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UNIVERSITY OF EDUCATION, WINNEBA

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**A thesis in the Department of Educational Administration and
Management, Faculty of Educational Studies, submitted to the
School of Graduate Studies in partial fulfillment
of the requirements for the award of the degree of
Master of Philosophy
(Educational Administration and Management)
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JANUARY, 2022

DECLARATION

Student's Declaration

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

Signature:.....

Date:.....



Supervisors' Declaration

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

..... (Supervisor)

Signature:.....

Date:.....

DEDICATION

To Gladys Asantewaa, Lawrence Ahenkorah and Asare Solomon for their support and guidance towards the successful completion of this work.



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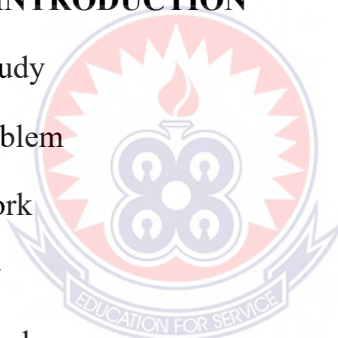
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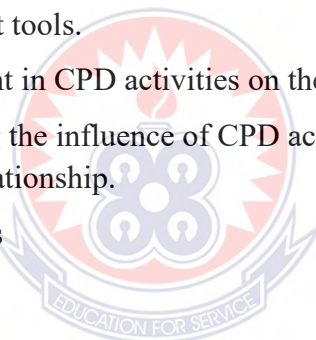
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GLOSSARY

CME	Continuous Medical Education
CPD	Continuous Professional Development
CPDD	Continuous Professional Development Day
CPP	Common Core Curriculum
GES	Ghana Education Services
GNACOPS	Ghana National Association of Private Schools
MANOVA	Multivariate of Variance Analysis
MoE	Ministry of Education
MTL	Master in Teaching and Learning
NAB	National Accreditation Board
NABCO	Nation Builders Corps
NTC	National Teaching Council
OECD	Organization for Economic Cooperation and Development
PLC	Professional Community Learning
RCOG	Royal College of Obstetricians' and Gynecologists'
TALIS	Teaching and Learning International Survey
WAEC	West Africa Examination Council

ABSTRACT

Continuous professional development activities are the means to update and improve the competencies, knowledge and skills of teachers in every education. The research study aims to find out the influence of Continuous Professional Development activities on SHS teachers performance in Birim Central Municipality in Eastern region of Ghana. The data was collected using questionnaires. The research design was a cross-sectional survey. Descriptive statistics like frequency, percentage, bar chart, pie chart, mean (M) and standard deviation (SD) and inferential statistics like regression were used. The research study employed census as sampling technique. The total population was 330 but 196 questionnaires were completed and returned. The data were collected within two months after appropriate permissions were taken from the Department of Educational Administration and Management and the Heads in the selected Senior High Schools in the Birim Central Municipality. The questionnaires were self-administered. The key finding focus on the influence of Continuous Professional Development activities on SHS teachers' performance in relation to classroom management, assessment tools, instructional delivery and teachers' students relationship. The study revealed that CPD activities is a good predictor of teacher job performance. Major Continuous Professional Development activities engaged by S.H.S teachers are self-learning; School based workshop and conferences, and taking training courses or formal study like Sandwich, Regular courses, and distance courses. The Continuous Professional Development activities engaged by SHS teachers' influence their classroom management practices like control of behaviour and creating of conducive learning environment. Also, SHS teachers get the competencies in the usage of appropriate pedagogy to deliver the content knowledge in the classroom. The research study concluded that Continuous Professional Development activities have positive influence on SHS teachers' performance in terms of classroom management, good usage of assessment tools, subject contents, classroom instructional strategies and building good relationship students. It was also revealed that CPD activities was (Sig. 0.87) a good predictor of SHS teacher performance in Birim Central Municipality. The study recommended that the SHS teachers must be encourage to engage in CPD activities since it has positive influence on their performance in the classroom.

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Education is considered to be the cornerstone and pillar of a country's development, the key variable for achievement and survival in this competitive global economy is quality education. This is envisaged as quality education for all has emerged countries in the last few decades have been seriously concerned with the quality of their educational system as one of the most desirable goals throughout the world (Dilshad & Iqbal, 2010). The teaching profession involves a lot of activities and tasks that are very complex and very challenging which need people of high knowledge and competencies. The activities in the teaching field change frequently and the teachers must be trained to meet the changes in the classroom. The activities in the classroom are subject to change including subject content and pedagogical knowledge which demand teachers who are ready to respond to these changes (Belay, 2016). The dynamic nature of classroom teaching and learning has made it more challenging for teachers to learn new things to perform to an acceptable level in the classroom (Hoge, 2016). The difficulty for teachers to engage in CPD activities may decrease their chance of meeting the current trends in education.

Teacher performance is an indication of the outcome or output of the efforts that have been in classroom teaching and learning. In order to achieve acceptable teachers' performance in the classroom, Ghana Education Service (GES) introduced CPD policies to stimulate the knowledge and skills of teachers. One of them is the teachers' workshop on the new education curriculum called Common Core Programme (CPP) which contains information slightly different from the old curriculum and focuses on training teachers to apply the curriculum content in the classroom. There is the need

for constant training programmes that must prepare the teachers in SHS to meet the complex teaching activities aside their main professional qualification (Mensah, 2016).

Teachers' continuing professional development (CPD) has become a major focus within school reform and school improvement in Ghana because of the belief that student learning and success are influenced by the quality of the teacher who leads the learners in the classroom. This implies that the quality of education is not above teachers since they lead the learner to learn. That is the teachers' impact on what they have and they cannot teach the learners what they do not know. This is why teachers have to continuously improve their teaching skills and knowledge in the classroom.

It is through teachers' CPD workshops that CCP as education reform can be materialized in the schools. CCP workshop as a form of CPD activities introduces teachers to the new pedagogy, assessment, classroom management, and subject content knowledge, creating a supportive, inclusive, cooperative learning environment that embraces effective teaching and learning in the school. The knowledge of this influences teachers' performance in the classroom. Activities based on high-quality meaningful teacher professional development can affect teachers' skills and attitudes in the classroom, further increasing the quality of the education that the students received (Beavers, 2011). This CPD training aims to develop the teaching skills and the ability of teachers to create an atmospheric environment for problem-solving, communication of ideas, deploying good assessment tools, creative teaching and learning, and another learning mechanism that improve teachers' productivity in the classroom.

Mensah (2016) stresses the need for government to recognize the training and development of quality human resources for implementation and achievement. Cobbold (2007) confirmed Mensah's (2016) report by saying that it is good for the government to employ an adequate number of well-qualified, highly competent, stable, and dedicated teachers to achieve the aims of educational policies. Human resource development professionals should be integrated into school management practices such as assessment management, classroom preparedness, and new instructional strategies should focus on teacher professional development activities in Ghanaian schools which affect their performance. According to Guskey (2005), notable improvement in education rarely takes place in the absence of continuous professional development (CPD). Teachers are the producers of future leaders and the workforce in every nation including Ghana. Constant Continuous Professional Development activities in any form are the very vital strategies and policies that helped to materialize the CCP.

In Africa, quality education is now crucial in the strategic plans for economic development. The quality of this education can be achieved through teacher engagement in CPD activities. Continuing professional development (CPD) is defined by Sachs and Day (2005) as a term used to describe all the activities in which teachers engage during a career that is designed to enhance their work and performance. Life-long learning has been defined by the OECD (2014) as: "All organized systematic education and training activities in which people take part to obtain knowledge and/or learn new skills for a current or a future job, to increase earning and to improve job and/or career opportunities in current or other fields" (p. 403).

According to Mekonnen (2014), the concepts of Continuous Professional Development (CPD) originated from self-reflection and collaboration which are the critical ingredients essential for improving teacher competence and performance. Gray (cited in Oduaran, 2015) opines that CPD activities embrace the idea that individuals aim for continuous improvement in their professional skills and knowledge beyond the basic training initially required to carry out the job. CPD activities are how people maintain the knowledge and skills related to their professional lives (Collins, VanderHevden & Lewis, 2012). CPD activities are the only possible way where teachers to have systematic and valid information about their capabilities, that is to say, if they can form accurate self-perceptions, carefully identify the qualities they need for future career success, and they can adapt their behavior (Van et al. as cited in Kurtén & Henriksson, 2021). The overall general commonalities are that CPD activities purport to improve and update the workers in SHS schools on the new information and knowledge in their profession.

In the classroom, CPD activities may improve SHS teachers' performance on teaching skills by giving them the current skills and knowledge on classroom instruction and management strategies (Gray, 2005). The CPD activities allow the teachers to update themselves with new concepts, instructional strategies, and how to relate with students and other staff in their profession which is prone to increase in performance (Van et al. as cited in Kurtén & Henriksson, 2021). CPD activities may organize formally, unstructured/informal, and Community of Practice (CoF) (CPD Institute, 2015). These CPD activities offer specialized training for workers in every organization which can be formal or informal; it aims to improve knowledge, skills, and competencies; it encourages collaboration in learning; it stresses career growth and improves performance and must be job-related behaviours. A well-structured and

appropriately organized CPD can lead to successful changes in teachers' practice, improvements at the institutional level, and significant improvements in teachers' performance which reflect in students' achievement (Bolam & Winding, 2006). According to Mertler (2016) improving the quality of teachers has a positive influence on the quality of learners' achievement and the overall performance of the education system which can be improved by improving the quality of teachers through professional development activities.

Lee, (2014) encourage new teachers to build their skills and knowledge to perform to an acceptable standard and create an image for themselves in the teaching profession. Teaching experience and intensive participation in CPD activities have a positive effect on teachers' performance (Shahzad, 2021). According to ITAL, teachers can build their competencies in so many ways. Other researchers like Robson and Mtika (2017) also affirmed that there are so many ways teachers in SHS can update themselves and sharpen their competencies in their area of teaching. They disclosed that CPD available to teachers includes workshops, in-service training, conferences, seminars, distance learning, and graduate courses. According to Mekonnen (2014), CPD is a critical condition for improving SHS teachers' competence and performance.

Mclendon, McCall, Hinton, and Weston (2006) found that personal, school, and context systems accounted for professionals engaging in Continuous Professional Development (CPD) activities. It is evident that there is the need and a place for teachers' CPD in particular for the growth and improvement of our educational establishments, most teachers would acknowledge the classroom practice, assessment, and updates on educational policy (Dandy, Antor & Peter, 2018). Many works on

CDP activities have been proven on having an impact on teachers' performance. Teachers' CPD activities may allow SHS teachers to educate themselves while they are still in the teaching profession. Some parts of the countries like Singapore, Finland, and South Africa have made provisions for teachers to upgrade and update their competencies and skills in the teaching profession. As the knowledge and competencies of teachers' increases so are their level of confidence, self-efficacy, and the development of effective teaching delivery strategies.

The CPD grants the teachers the current knowledge needed to prove one's competencies and skills in the profession. The teachers with the right knowledge get the confidence to stand in front of the students which is prone to building trust in their teachers. Abubakari, (2020) confirmed that teachers also tend to gain and develop self-efficacy, self-cultivation, confidence, self-esteem, classroom management, and good behaviours as they improve themselves. This helps to mitigate classroom instructional loss. Well-structured and informal teacher CPD has been associated with changes in teachers' practice, pedagogical skills improvement, and assessment skills in the classroom which improves teacher's output (Bolam & Weindling 2006). CPD activities have a significant contribution to the improvement of teachers' classroom practices and professional competence, cooperativeness, sense of responsibility, and motivation in their CPD practice (Belay, 2016).

Research has shown that there is a significant improvement in teachers' instructional practices which can take place as a result of teachers' active participation in professional learning programmes. The relationship between quality teaching, effective professional learning, and improved student achievement seems clear enough to make each part a priority for schools (Hoge, 2016). Teachers becoming

aware of new teaching methods, how to manage students, how to relate with the students, and how to create a good learning atmosphere are signs of good teachers' performance (Powell, Terrell, Furey & Scott-Evans, 2003). Given that Mensah (2016) argued that human resource development professionals should integrate into school management practices such as assessment, classroom management, classroom preparedness, and new instructional strategies. It should then focus on teachers' continuous professional development programs in Ghanaian schools.

CPD has gotten the attention of many countries in this world of which the Western world and African countries like Ghana are not exempted. Western world countries like Singapore and Finland have now become one of the best world-performing countries in terms of education (OECD, 2009). These countries have become exemplary countries to many countries like Ghana. Singapore has been tagged as a country with little or no natural resources but it has developed its human capital which has helped them to attain its current position they are now (Gopinathan, 2012). The sensitive part of the economy of Singapore was the development of working and the labour force in the country. Due to that Singapore has made consistent efforts in enhancing the quality of its education system. This indicates that constant improvement in the teachers' performances has been reflected in the high teachers' performance in international competitions.

In Ghana, there have been a lot of CPD activities but it seems that it has not been fully utilized to the benefit of teachers. This might be the result of a lack of knowledge of the changes CPD activities inflict on SHS teachers' performance in Birim Central Municipality. The CPD activities are not well understood by education stakeholders and teachers which has curtailed the SHS teachers to take advantage to improve their

performance. Also, there are few pieces of research conducted on the effects of CPD on teachers' performance. These may be the results of teacher engagement in CPD activities. There is a likelihood that this research study may conform or oppose the findings from other research works that CPD activities result in changes in SHS teachers' classroom management, instructional delivery, usage of classroom assessment tools, and teachers' student-relationship in the classroom.

1.2 Statement of the problem

The performance of teachers in the classroom cannot be understated in educational institutions in Ghana. The outcome of the teacher indicated their performance but there was a fall in performance among the SHS teachers in Birim Central Municipality. The low performance of teachers has one way or the other reflected in the performance of the students' grade in the schools. This has created panic among the parents whose children were in the school. Due to this abysmal performance of teachers, parents and students have been complaining and charging the teachers with not providing better instructions in the schools. This has become an emotive issue in the Municipality. This poor performance among the SHS teachers has been there for a very long time and appropriate remedy must be devised to mitigate its occurrence.

Although, the government of Ghana through the Ministry of Education (MoE), Ghana Education Service (GES), National Teaching Council (NTC) and NACCA has made policies and reforms to build the competencies of the teachers in the classroom. This has forced government of Ghana to provide some funds to assist teachers in enhancing their abilities. Aside that government agencies like MoE, GES, NACCA and NTC in collaboration organized teachers' CPD workshops on the new Common Core Programme (CCP) which introduce teachers to the new pedagogy, assessment,

classroom management, creating a supportive, inclusive, cooperative learning environment that embraces effective teaching and learning in the school. However, despite the government efforts to build the SHS teachers competencies, there was still an evidence of poor performance among the SHS teachers in Birim Central Municipality. There have been low quality delivery which is an indication of low teacher performance. This abysmal performance may be attributed to the incapacity building of SHS teachers in Birim Central Municipality.

This also might be related to less CPD activities organized for the SHS teachers or old CPD activities organized for the teachers were not given them the right competences and knowledge to deliver effectively in the classroom. Recent CPD activities must be made available to the SHS teachers to alleviate them from poor performance to high performance. In Ghana, several secondary schools are facing the same problem. Since teachers' capacity building influence their job performance, there was the need to seriously investigate this current problem at hand. It might be possible that underutilized or old CPD opportunities contributed to this SHS instructors' generally mediocre performance.

Studies conducted on CPD programmes and teacher performance revealed that there was a substantial influence of CPD programmes on the teachers' performance but this was not in the case of Birim Central Municipality. There have been some form of CPD programmes organize for SHS teachers in Municipality but it does not conformed to the new trend of CPD which positively influence teacher performance. There have been changes in the trends in CPD activities organize for teachers. The old CPD programme were not leading to better changings in the performance of the SHS teachers. The old CPD programme for the SHS in Municipality has made them rely

on their teaching experience. This underwhelming performance of SHS teachers in Birim Central Municipality has resulted into ineffective CPD programme.

Literature recognizes the contribution of CPD towards building the capacities of teachers which leads to high performance. Teachers give what they know and cannot teach what they are ignorant of. Fullan (2007) stresses that the agent for change is CPD, since all the years it has been helpful to teachers in relation to knowledge acquisition, skills attainment, attitude building, values, commitment, creativity in education, and collaboration. CPD helps to improve teachers' confidence, self-efficacy, classroom management development, assessment capacity building, and improvement in instructional focus etc. (Abubakari, 2020).

Abbassi and Arulraj (2021) conducted a study on the influence of continual professional development on teachers' performance. Their study found a substantial influence of continued professional development on bettering teacher performance. Rebecca (2018) undertook a study to investigate the advantages of ongoing professional development for teachers in the Sagnarigu District. The study demonstrated that CPD programmes aided instructors in improving their performance and increasing their level of competence. The teachers who struggle with classroom management and behaviour control were frequently ineffective in the classroom and frequently show signs of stress and burnout (Browers & Tomic as cited in Oliver, Reschly, Wehby, & Lipsey, 2009). Also, a study was conducted by Arraela, Theall, and Aleamoni (2013) which asserted that teacher performance can be measured without concentrating on student performance following participation in CPD events. The content mastery, instructional delivery, instructional assessment, communication, interpersonal skills, and classroom management of the instructor indicate their

performance. They said effectiveness in the above can be used to judge teachers with high performance or low. This current study focused on four (4) indicators which included classroom management, instructional delivery, usage of assessment techniques and teacher-students relationship which were applicable in determining the teacher performance. The study purported to find out whether CPD activities organized for the SHS teachers in Birim Central Municipality has influence on their performance.

1.3 Theoretical Framework

The theory appropriate for this research study is Campbell Model of job performance. This theory stress the idea that possession of knowledge and set of skills that are important to complete particular tasks is a critical indicators of determine individual performance (Campbell, & Russell 1996). The theory emphasis the fact that teacher with the right skills and knowledge have the confidence in teaching and learning in the classroom and able to deliver to improve their teacher performance.

1.3.1 Campbell's theory of job performance

Task performance in any organization demands certain knowledge and skills of the executors. It is not possible for teachers to carry out effective teaching in the classroom without possessing the requisite current knowledge. Outdated knowledge makes teachers less efficient and stressed when it comes to meeting the demands of the classroom. Campbell argued that for teachers to execute their responsibilities well in the classroom, they must possess the necessary knowledge and skills. He is of the view that updated knowledge and skills improve their competencies, which positively impacts their performance. The depreciation and diminishing in the knowledge of teachers is prone to poor performance in the classroom. Campbell, Glaser, and

Oswald (1996) identified the possession of knowledge and the set of skills that are important to complete particular tasks as the critical indicators of teachers' performance. It stresses the knowledge teachers must have in order to perform their current job. The Campbell theory has three sets of dimensions, which include explanatory knowledge, procedural knowledge and aptitudes, and motivation (Campbell et al. 1996), but the study utilizes the first two with less focus on the motivation aspect of the theory.

Firstly, definitive or explanatory knowledge includes a set of knowledge about facts, standards, objectives, and the self. It is thought to be an element of a person's capacities, identity, vocation, education, preparedness, background, and ability to collaborate (Campbell et al., 1996). This is in line with knowing and mastering the current trends in content and instructional pedagogy in the teachers' discipline and also how to develop collaborative skills in the classroom. Campbell encourages schools and education authorities to make provision for additional knowledge in the teaching profession and build bonds with the students they teach in the classroom.

Procedural knowledge and aptitudes, on the other hand, include psychological and psychomotor abilities; physical abilities; self-control; relational and honed skills (Campbell et al., 1996). This aspect of this theory stresses teachers' behaviour, how to control the students' attitudes, and how to build a positive teacher-student relationship. This stresses the teachers' competencies to control students' behaviour without negatively affecting their learning. The state of a teacher's psychology influences their performance and affects how they can treat and control other teachers and students in the school. There is short-term variability in performance which is due

to changes in an individual's psychological physiological state, including processing capacity across time (Kahneman, 1973).

Also, the motivation aspect of the theory emphasizes the inner beings of teachers' willingness to participate in CPD activities. Some of the literature review indicates that some of the teachers want additional or more education not for any purpose but for the level of satisfaction gained after graduating. Many of the teachers who accept teacher professional development programme because of the motivation attached to the knowledge, competencies, and self-efficacy they gain. Campbell et al. (1996) identified the possession of knowledge and a set of skills that are important to completing particular tasks as the critical indicators of individual performance. This aspect may not be utilized much in this study.

In applying the theory to the research study, teachers may be energized to possess all the necessary latex knowledge and competencies in their area of teaching to enhance effective delivery in the classroom. The teachers in selected SHS can teach to the accepted level if they have all the necessary knowledge and competencies in the areas of teaching and learning, students' assessment methods, classroom instructional focus, classroom management, and student learning. Teachers who are up to date on discipline content and classroom instruction strategies may outperform those who are not. Teachers with current pedagogical knowledge are more likely to deliver the subject to the students' understanding. For this to be achieved, they must participate in relevant CPD activities, which are a way of assisting teachers to acquire the new knowledge needed to perform marvelously in the classroom.

In every school, there is a need for teachers to model for students by displaying professional behavior in the classroom. The growing complexity in the teaching field

and the high competition in the profession in the country challenge one to have a continuous professional education development programme in order to be maintained. The right knowledge possessed by the teachers in SHS teachers is very relevant for them to deliver and transfer the core content knowledge with the use of appropriate pedagogy in the classroom.

Sichei, Harmse and Kanfer (2005) argued that showing high performance, which is above standard or meets standard in accomplishing tasks, results in satisfaction, feelings of self-efficacy and mastery. This motivates and encourages teachers to improve their competencies. The Campbell performance theory emphasizes proficiency in one function in the teaching profession. This theory encourages teachers to continue their education to update and obtain the current knowledge in their discipline area. Employees are the lifeblood and necessary component of every educational institution, and they are hired by organizations like schools to offer their best skills and knowledge to achieve both short-term and long-term goals. The teachers are expected to display specific behaviors in their functioning in the classroom in order to boost their performance, which is reflected in the students' academic work. Campbell et al. (1996) identified the possession of knowledge and a set of skills that are important to completing particular tasks as the critical indicators of individual performance.

The theory stresses that teachers in schools should update themselves with knowledge and skills that improve their performance in the classroom. It stresses the teachers' ability to master the content taught with the use of appropriate teaching pedagogies, control of students' behaviour, establish positive relationships, and implement

appropriate classroom management strategies to create a good climate for teaching and learning in the classroom.

1.4 Purpose of the study

The purpose of the study is to find out the influence of CPD activities on SHS teachers' performance in Birim Central Municipality.

1.5 Objectives for the study

The study sought to:

1. To find out the influence of CPD activities on SHS teachers' classroom management practices in Birim Central Municipality.
2. To investigate the influence of CPD activities on SHS teachers' instructional delivery in the classroom in Birim Central Municipality.
3. To investigate the influence of CPD activities on SHS teachers' on the usage of classroom assessment tools in Birim Central Municipality.
4. To find out the influence of CPD activities on SHS teachers-student relationship in Birim Central Municipality.

1.6 Research questions

1. What is the influence of CPD activities on SHS teachers' classroom management practice in Birim Central Municipality?
2. What is the influence of CPD activities on SHS teachers' classroom delivery in Birim Central Municipality?
3. What is teachers' involvement in CPD activities influencing their usage of classroom assessment tools in Birim Central Municipality?
4. What is the influence of teachers' involvement in CPD activities on teacher-students' relationship in Birim Central Municipality?

1.7 Research hypothesis

H1: There is statistically significant influence of SHS teachers' involvement in CPD activities on their job performance in Birim Central Municipality.

Ho: There is no statistically significance influence of SHS teachers' involvement in CP D activities on their job performance in Birim Central Municipality.

1.8 Significance of the study

In the first place, the study will contribute to the essence of organizing the CPD activities teachers' in Birim Central Municipality and among others. It will train SHS teachers to get the current knowledge on classroom management practices, assessment techniques and how to develop a positive relationship with the students in the classroom. Also, the policy makers in the Birim Central Municipality and other Municipalities may use it to make relevant CPD policy for teachers which may positively influence their capacity building and teaching job. Besides, the research findings may be used by Head teachers and teachers to take relevant decisions on CPD activities that might have positive influence on their performance. Also, the results will make SHS teachers to embrace the teachers CPD activities available to them and participate in CPD activities organize for by authorities in the school and the Municipality. The study will contribute to the literature on the influence of CPD activities on teachers' performance and provide basis for further studies in a related topic for future researchers. It might helped to create interest for further exploration. The study will therefore contribute to filling the gap in literature to help other researchers undertaking similar study in that area.

1.9 Delimitation of the study

The study was conducted in Birim Central Municipality in the Eastern Region of Ghana. It was conducted on the influence of continuous professional development on SHS teachers' performance in Birim Central Municipality. The study further finds out the influence of CPD activities on SHS teachers' classroom management practices, instructional delivery, usage of assessment tools, and building of a teacher-student relationship. The data was provided by the permanent teachers in the three selected public SHSs in the Birim Central Municipality.

1.10 Limitation of the study

Like many studies, this current study is not without limitations. Firstly, the research study was carryout in Birim Central Municipality in the Eastern Region of Ghana. The research study was limited to only three public SHS in the Birim Central Municipality and the permanent teaching staff in the selected schools. Therefore, the findings from the research study were generalized among the three selected public SHS in the Municipality but not all the schools in the Eastern region of Ghana. Also, some of the school heads were very for granting the research permission to administer the questionnaires. This resulted in the late submission of the final work to the Department of Educational Administration and Management. The study used questionnaires and there were instances' where the respondents failed to give accurate information which might affect the findings. Despite these, the result of the study was not affected.

1.11 Operational definition of terms.

Professional development is a term referring to a plurality of formal and informal, efforts and activities that workers undertake to enhance individual and institutional capacities to teach and serve students.

Continuing professional development (CPD) is continuing education to maintain knowledge and skills of teachers in order to offer acceptable and standardize teaching in the classroom.

Performance is the action or process of performing a task or function. It indicates how well or bad a person does his or responsibility.

Teachers' job performance is defined as the output and outcome of the teachers specifically on classroom management, classroom instructional focus, usage of classroom assessment tools and teacher-students relationship.

Teacher-students relationship is the academic relation between teachers and their students that create climate for teaching efficiency.

Classroom management is defined as a set of activities through which the teacher seeks to promote the desired behaviors of students, arrangement and creating conducive environment for teaching and learning. Its components include conduct management and classroom design.

Instructional delivery refers to the interaction in the classroom that focuses on the pedagogical and content knowledge needed to achieve effective teaching and learning. It consists of teaching pedagogy and subject content.

Assessment tools refers to the ways of collecting and evaluating information about learners and using that information to make decisions to improve their learning

1.12 Organization of the study

This study consists of five chapters. Chapter One (1) consist of the background of the study, statement of the problem, purpose of the study, objectives of the research, research questions, significance of the study, delimitations, definition of terms and organization of the study. In this contemporary research in University of education, Winneba, this chapter included the theory underpinning and conceptual framework of the research study. Chapter Two (2) focuses on the related relevant literature on the topic for research study but exclude the theory underpin the study and conceptual framework. It included concepts, variables and empirical review of the study. Chapter Three (3) is the methodological study of the research. It consists of the research paradigm , research approach, research design, population, sample size , sampling techniques, data collection instruments, data collection procedures, data analysis procedures, and chapter summary. Chapter Four (4) focused on the actual data analysis, results and discussions. The last is Chapter Five (5) which summarize the findings of the study, conclusions, recommendations and suggestions' for further study.

CHAPTER TWO

LITERATURE REVIEW

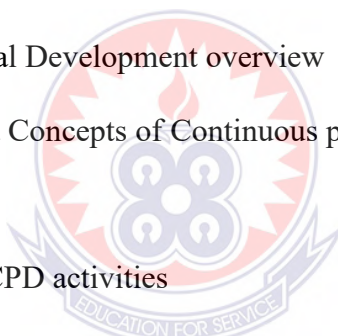
2.1 Introduction

The chapter focused on the key concepts and the empirical review on the research topic. The variables are the teachers' continuous professional development (CPD) activities and SHS teachers' performance in Birim Central District of Eastern region of Ghana. The study also reviews literature on CPD activities in Singapore, Finland and Africa including Ghana, South Africa, Benin and other Africa countries.

Also, the review of the key themes raised in the research questions. These are:

1. Concepts review

- a. Professional Development overview
- b. Nature and Concepts of Continuous professional development (CPD) activities
- c. Teachers CPD activities
- d. Characteristics of quality teacher CPD activities
- e. Classroom management practices
- f. Instructional delivery
- g. Assessment tools
- h. Teacher students relationship
- i. Dimension of CPD
- j. CPD Activities in Africa



2. Empirical review

- a. Influence of CPD activities on teacher job performance
- b. Influence of CPD activities on SHS teachers classroom management practices
- c. Influence of CPD activities on SHS teachers instructional delivery
- d. Influence of CPD activities on SHS teachers usage of assessment tools
- e. Influence of CPD activities on SHS teachers-students relationship

3. Summary of the literature review

2.2 Concept of professional development and CPD activities

2.2.1 Performance

Performance has been defined and explained in so many contexts, but there are some commonalities between the concepts and their definitions. Performance is the indication of the outcome or output of the efforts that have been made in one place of work. Bernardin and Russell (as cited in Mohanty , 2014), argued that performance is the account or the record of outcomes produced on a specified job function or activity during a specified time period by an individual worker like a teacher, nurse, accountant, etc. Armstrong describes performance as doing work and the results of that work. The author emphasized the effort of the teachers' sacrifice towards the achievement of educational goals and objectives within a stipulated time. In the business realm, those who are engaged in the production of tangible products, performance is the reflection of the number of goods and services produced for a certain period of time. Measurement of performance in the business realm is relatively easy as we compare with education settings which engage in the production of human beings, specifically students. This is because the performance of a business is

measured by the product they produce at the end of the day, a week, monthly or yearly. In education, performance is measured in the service rendered in relation to the application of strategies in teaching and learning.

2.2.2 Teachers' job performance

Job performance is a very broad term that consists of all employees, including those in education, industry, manufacturing, and other sectors. This study focuses on teachers' job performance, but the researcher looked at the general ideas of job performance. Job performance is used to define employees' ability and competency to accomplish and complete assigned duties and responsibilities according to an organizational set of rules and procedures, which are constrained by the scarce resources in the universe (Ogunleye & Osekita, 2016). Staff job performance is the staff outcome of his/her assigned duties in the organization. According to Mohanty (2014), teacher performance is one of the most crucial inputs in the field of education and cannot be compromised. This implies that teachers are part of the input resources in an educational setting that inflict changes in the learning style of the learners under their care and utilize the other resources to promote teaching and learning. Some specific job tasks necessitate that employees have a high level of technical knowledge and discipline to carry out the tasks successfully, and one such job is the teaching occupation. Infer from the above scholars' ideas on job performance, teachers' performance is defined as the teachers' ability and competencies to utilize the educational resources and teaching and learning mechanisms to achieve standard results and outcomes in the classroom. Measuring the services provided by teachers is far more difficult than measuring the services provided by workers who produce tangible products. It is not easy to measure teachers' performance in the classroom,

but some educational scholars have made it cool by constructing criteria for performance measurement. Mintel argued that students' test scores are the measure of teachers' performance. The students' readiness and willingness to learn are vehemently influenced by the teacher's level of competency in the subject matter, attitude, and classroom delivery strategies. The output of teachers is what students can achieve in school and post-school. Mintel limited his study only to students' performance as a basis for evaluating teachers' performance without looking at other areas. Students' innate ability influences their learning, and so students' test achievement cannot only be used to measure teachers' effectiveness and performance.

Arraela, Theall, and Aleamoni (2013) disclosed some weaknesses associated with Mintel (2011). According to Arraela, Theall and Aleamoni (2013), there are five criteria that can be used to measure teacher output after participation in CPD activities. The criteria are content expertise, instructional delivery skills, instructional assessment skills, and classroom management. This may help to determine whether a teacher's engagement in CPD activities has improved their style or ways of doing things in their teaching profession. The end product digested from the expert views on teacher job performance revealed that teachers' performance is not only measured in students' text scores but also how the teachers effectively deliver, manage the students, use teaching methods, apply appropriate teaching resources, use appropriate assessment appropriate to assess students, employ appropriate classroom management strategies etc. to facilitate teaching and learning (Arraela, Theall & Aleamoni, 2013). It is the teachers that lead students to learn in the classroom. Students' readiness and willingness to learn are heavily influenced by the teacher's subject matter expertise, attitude, emotional maturity, and classroom delivery strategies.

2.2.3. Professional development (PD)

The original meaning of the term "profession" was derived from the Latin word "prefiteri," which means "to declare publicly. This is because professionalism involves the public declaration of skills and knowledge. According to White (2012), some sociologists believe that teaching is not a profession, but educational experts such as Hoyle (as cited in Vilegas-Reimersm, 2013) disagree. According to Vilegas-Reimersm (2013), teaching is a profession because it is a mixture of pedagogy, subject matter, and practice and has international recognition and acceptance. In the 21st century, teaching is one of the professions that demands professional development in order to articulate skills and knowledge publicly to the benefit of many. It is through professional development that teachers can use effective teaching skills, change attitudes, and improve their own performance (Guskey, 2005).

There are a lot of scholars and authors' definitions of professional development (PD), but the study employed a few that are related and relevant to the study. Professional development (PD) and CPD have been used interchangeably, but this study discloses the difference between the two terms. Aside from the differences, there are similarities between the terms. Thus, they all aim to give knowledge and develop workers' competencies and abilities to perform efficiently in the classroom and outside the classroom. Professional development for teachers is a key mechanism for improving classroom instruction (Angelo & Cross, 2012). To allow professional development to proceed successfully, it should be a continuous process, contributing to the general improvement of education (Angelo & Cross, 2012). PD is defined as the process by which teachers review, renew, and improve their commitment as agents in the profession of teaching (Day & Sachs, 2005). It is the initial form of education and training given to teachers. Professional development is the initial

learning to earn or maintain professional credentials such as academic degrees, formal coursework, attending conferences, and informal learning opportunities situated in practice.

Desimone (2009) professes that PD affects a teacher's ability to decide on and implement valued changes in teaching and leadership behaviours so that they can educate their students more effectively. Teachers' growing confidence can also be seen from their ability to clearly articulate personal views on educational matters (Angelo & Cross, 2012). This professional development is very broad and cuts across different professions like teaching, health, business, and other areas. There are a lot of varieties of approaches to professional development, including consultation, coaching, and communities of practice; lesson study; mentoring; reflective supervision; and technical assistance.

Continuing professional development (CPD) or continuing professional education (CPE) is continuing education to maintain knowledge and skills. Rogan and Grayson (2003) argued that CPD is a process that encompasses all activities that promote professional career growth. The education and training the teachers receive after their initial training (degrees and diplomas). Examples are the CCP workshop on the new curriculum, in-service training on teaching pedagogy, and subject content knowledge. CPD has been defined as "the continuation of a teacher's professional development beyond their initial training, qualification, and induction" (Stevenson, 2010). This definition suggests that professional development takes place during initial teacher training, and CPD is the extension of such development after the award of a qualification.

Rafael Mitchel (cited as in Fraser, Kennedy, Reid & Mckinney, 2007) argued that CPD results in specific changes in the professional knowledge, skills, attitudes, beliefs, or actions of teachers, but professional development refers to "broader changes that may take place over a longer period of time". It is through teachers' CPD that CCP as education reform can materialize in the classroom. CCP workshops, as a form of CPD, introduce teachers to new content knowledge, pedagogy, assessment, and classroom management tolerance; and assist them in creating supportive, inclusive, and cooperative learning environments in the school that embrace effective teaching and learning. The purpose of CPD activities is to meet globalization and internationalization, which enables teachers to be adaptive to the unstable nature of society like Ghana, but CPD stresses a lifelong learning agenda.

2.3 Nature of Continuous Professional Development (CPD) Activities

Continuous Professional Development (CPD) has been increasingly getting attention since the early nineties, in the 21st century and will continue in the centuries to come. There are so many views on CPD all over the world, including developed and underdeveloped countries. This is an indication that CPD practices have been adopted in many countries like Ghana, Finland, Singapore, and other countries. Neil & Morgan (as cited in Crawford, 2009) argued that there are some other terms used to replace CPD, including staff development, lifelong learning, and continuous professional education (CPE). Due to modernization and frequent changes in the education system, teachers are now learning-oriented, adaptive experts who are able to teach diverse sets of learners to become productive in this complex environment (Darling-Hammond, 2019). According to the literature review, CPD activities influence teachers' knowledge, skills, and attitudes rather than pre-service education

programmes. CPD is no longer an option but rather compulsory for all professionals, including teachers (Day & Sachs, 2005).

Due to the importance of CPD activities, Velkovski (2016) argued that teachers are required to devote at least 40 hours to CPD activities in the course of three years, followed by at least 20 hours of accredited training programs from recognized institutions in Ghana. Annually, each teacher should devote at least 13–14 hours to CPD, and 6–7 hours of it should be allocated for accredited training programs. CPD in general has two main categories, according to the Ghana National Association of Private Schools (GNACOPS) training manual. The GNACOPS training manual indicates that there are two categories of CPD activities, which are Professional Learning Community (PLC) and Continuous Professional Development Days (CPDD). These are mostly done within schools, with sometimes resource personnel coming from outside the school. PLC occurs while the school is in session and is mostly done at weekends, but CPDD is done when the students are on vacation. Though this may not be the focus of the study, it aims to look at the influence CPD activities have on teachers' performance in Birim Central Municipality in Ghana (Eastern Region).

Mensah (2016) argued that capacity-building activities should be promoted regularly to build basic schoolteachers' capacity for effective teaching. This means that CPD activities should be carried out just once in a while, but they can also be done frequently. In general, change is not an episodic event or activity but requires continuous effort. The CPD activities may influence teachers to learn about new trends in their teaching profession. The contributions and the effects have been felt,

and therefore, many countries like Ghana have formulated professional development reforms that include CPD.

Such a reform was implemented in Ghana, but most teachers did not appreciate or embrace it. Due to the increasing importance of CPD activities, the government of Ghana under the New Patriotic Party (NPP) has made provision for teachers' continuous professional development allowance, though it is not adequate since the government made it available for a few but not all teachers in the SHS and basic schools. Southworth, Connor, and Bradley (2016) emphasize that the world of education has undergone rapid change and point to in-service training as an example of continuing professional development activities. It is paramount that these changes are of benefit to teachers and do not pose further challenges to teachers in the undertaking of this requirement. CPD activity is oriented towards maintenance, improvement, or change in tasks in the teaching profession (Day & Sachs, 2005). These concepts stress the need for constant improvement in knowledge in one's teaching field, though there is no indication of individual and school needs. Stoll, Bolam, McMahon, Mallace and Thomas (2006) indicated the relationship between individual organizational needs like schools, which include shared values, student learning, collaborative and collective responsibility.

In Cambodia, CPD activities refer to a wide variety of specialized training, formal and informal education, or advanced professional learning intended to help classroom and specialist teachers and school directors improve their professional knowledge, skills, competence, and effectiveness. CPD activity is described as a process that encompasses all activities that promote professional career growth (Rogan & Grayson, 2003). According to Guskey (2005), CPD activities are a way to change the

professional practices, beliefs, and understanding of school teachers toward an articulated end, with the end being student learning. CPD consists of all natural learning experiences and those conscious activities which are intended to be of direct or indirect benefit to the individual, group, or school and which contribute, through these, to the quality of education in the classroom. It is the process by which, alone and with others, teachers review, renew, and extend their commitment as change agents to the moral purpose of teaching and by which they acquire and develop the knowledge, skills, and emotional competencies essential to good professional thinking, planning, and practice with children, young people, and colleagues throughout each phase of their teaching lives (Day & Sachs, 2005).

According to Day and Sachs (2005) CPD is defined as a term used to describe all the activities that teachers engage in during the course of a career which are designed to enhance their work. CPD refers to any activities aimed at enhancing the knowledge and skills of teachers by means of orientation, training, and support (OECD, 2009). According to Mekonnen (2014), the concepts of continuous professional development originated from the belief that self-reflection and collaboration are critical ingredients essential for improving teacher competence. Gray (cited in Oduaran, 2015) opines that CPD embraces the idea that individuals aim for continuous improvement in their professional skills and knowledge beyond the basic training initially required to carry out the job.

Velkovski (2016) indicated that CDP should be designed for both employed and unemployed teachers and can be conducted in any form, whether formal or informal, provided there will be a positive impact on the participants. This implies that CPD can be structured by planning; i.e., setting an agenda, specific date indicated, and

information circulated to all participants, and well-defined venues. The informal lacks the qualities indicated above, which can be done without proper planning. Mann and Watson (2015) see teachers as professionals taking responsibility for their own learning and development and exercising their own professional autonomy, enabling them to embrace change and better meet the needs of the students they teach. Bartleton (2018) confirmed that CPD activities have significant benefits in terms of updating subject knowledge, sharing good practice, and the opportunities they provide for collaboration, reflection, and future progression. CPD should make people thirsty for more knowledge, teach them new skills, and provide opportunities for them to build on what they already know (Wong & Bautita, 2016). Good teacher professional development is characterised by containing key ingredients encompassing a clear and agreed vision, taking into account a participant's previous knowledge and promoting continuous enquiry and problem solving.

In education, the term "CPD activities" may be used in reference to a wide variety of specialized training, formal education, or advanced professional learning intended to help administrators, teachers, and other educators improve their professional knowledge, competence, skills, and effectiveness (Hidden Curriculum, 2014). The National Staff Development Council proposed a set of nine criteria that should form the basis for all CPD activities. Continuous professional development (CPD) may include content knowledge, quality teaching, research-based, collaboration, diverse learning needs, student learning environments, family involvement, evaluation, data-driven design, and teacher learning. Also, Garet, Porter, Desimone, Birman, and Yoon (2001) argued that there are three core features of continuous professional development (CPD) activities which have shown significant positive effects on teachers' self-reported increases in knowledge and skills and changes in the

classroom. These focus on content knowledge, opportunities for active learning and coherence with other learning activities.

The relevant literature review from the above reveals some features of CPD activities for teachers. These are:

1. CPD offers specialized training for workers in every organization.
2. It can be formal or informal.
3. It aims to improve knowledge, skills and competence.
4. It encourages collaboration in learning.
5. It stresses career growth.
6. It improves performance and must be job-related.

In all, CPD is the formal or informal structured activities that stimulate teachers to meet current trends in education, which facilitate growth and improve their performance. In general, CPD activities are the process of providing additional learning opportunities to build the capacities of the teachers in order to improve their overall performance as facilitators in the classroom. It is a policy that must be promoted since there is nothing that is constant. CPD activities that appear paramount include lesson-related content such as subject matter, general pedagogical knowledge, or pedagogical content knowledge (Van Eekelen, Vermunt & Boshuizen, 2006).

2.4 CPD's Brief History

The University of Management and Technology draws significant attention to the usage of the phase "Professional Development" from 1857 onwards, which is 100 years before Ghana gained independence. In the training of school staff in the United States (U.S.), stresses the need for professional development, which came to the

forefront in the 1960s. Researchers review that the concept of CPD is said to be traced to World War II, when institutional bodies recognized the need for structured further post-learning formal qualification. Some researchers and historians argue that the CPD certification service started in the UK construction industry. There was a need for CPD certification because there were frequent changes in the technologies used at the work place and the only way to keep up with the dynamic changes in the technologies was to embark on CPD training.

Before 1900, physicians were trained and returned for further training in the apprenticeship system. They learned mainly from observing their masters. In most parts of the last century, formal continuing medical education (CME) took place in large classrooms in hotels. The American Medical Association was the first to set educational standards and, by 1960, had developed a credit system to reward physicians for attending. Some US states have adopted mandatory Continuing Medical Education (CME), making it necessary for physicians to earn 150 credits every three years in order to maintain a license to practice. The outcomes revealed that CME was shown to have a limited impact on helping physicians change their behavior and even less impact on health outcomes. The results from the research showed the need to move from CME, which was simply updating doctors' practices with advances in medicine, to CPD activities, which involved helping physicians to acquire skills such as communication and collaboration in order to better serve their patients. Due to the weakness of Continuing Medical Education (CME), the USA moved to CPD and it has been in the system till now. According to Corno (2008), the first workshop on CPD was held in Peshawar at the International Conference on Psychiatry in February 2003.

Following the realization of the significant improvements CPD brought to the performance of staff in the health profession, educators adopted CPD in education, where Africa, specifically Ghana, is not exempt. Asare and Nti (2014) revealed that CPD activities in Africa took place through workshops, seminars, colloquia, demonstrations, simulations, and micro-teaching. These are the approaches and modes of CPD in Africa. In Africa, countries do not embark on CPD online as it has been in developed countries like Japan, England, Singapore, and Finland. Currently, CPD has been recognized in education systems in many countries all over the world (Asare & Nti, 2014).

2.4.1 Qualities of high-quality teacher continuing professional development activities

There are a lot of professional development activities organized for teachers all over the world, from which Ghana is not excluded. There are some qualities that such development activities must possess in order to have a good impact on the teachers. The planning of such activities must be capable of strengthening the teacher in the classroom; otherwise, the effort will be futile. "Some believe that teacher CPD activities should be based on the current needs of the school, teachers, and students, as well as changes in external environments such as industry and the labor market" (Guskey, 2005). There are many qualities of a good teacher's continuous professional development, and these qualities have been disclosed by Guskey. This is labelled as the Guskey qualities of teachers' professional development. The Guskey qualities for CPD activities include content focus, extended, collaborative, ongoing, and coherent integration, inquiry-based, teacher-driven, self-evaluation, and informed by teacher performance. These Guskey qualities of CPD activities do not include communication, emotional competencies of the teachers and students' thinking. But

few of them will be discussed in this research study. Guskey quality can serve as the criteria for measuring teachers' performance in Birim Central Municipality.

Guskey's quality of continuous professional development is content-focused. This stresses the content aspect of CPD. It is about the knowledge, skills, and competencies needed in the subject taught in any organized program that help to improve understanding. Garet et al. (2001) argued that teachers' skills and understandings are directly related to the degree that professional development experiences focus on subject matter content. Cohen, Hill, and Kennedy (2002) stress that content-focused also means the in-depth knowledge of the teacher about the subject being taught and the application of teaching methods related to the topic. This is about what to be learned by the learners, the key ideas that must be acquired in order to improve the learners' learning and understanding. Collaborative is another quality to be considered. It is the association or assembly of teachers to work in schools to improve their teaching and learning. This strategy helps to improve teachers' performance in the school. The teachers with weaknesses in an area are covered by others. This involves teachers learning from each other in the school. This can be done by teachers within the school or outside the school, whether they are from the same discipline or not, provided it will improve performance. Teacher learning is most likely when teachers collaborate with professional peers, both within and outside of their schools, and when they gain further expertise through access to external researchers and program developers (Killion, 2002). "Continuous professional development (CPD) activities that include collective participation, that is, where teachers from the same department, subject, or grade exchange experience" (Garet et al., 2001).

The next quality is inquiry-based. The term inquiry-based is derived from the word inquiry. It is a strategy used by facilitators to pose questions, problems, issues, and illustrations to get learners' ideas on the topic under discussion. It is the opposite of traditional education, where the teachers are seen as all-knowing and present everything to the students. This makes learners inactive. Garet et al. (2001) stipulate that "Active learning encourages learners to become engaged in meaningful discussion, planning, and practice as part of the professional development activity". Professional development should promote continuous inquiry and reflection through active learning. It has a link with the brainstorming and discussion methods of teaching in the classroom. Teachers' Continuous Professional Development (CPD) activities must make use of enquiry-based delivery to deliver knowledge to the participant in order to promote learning.

Continuous Professional Development (CPD) for teachers must be teacher-driven. The CPD for teachers must focus on the needs and demands of the profession of teaching and not on other professions. The CPD must be designed to meet the needs of the participants. Failure to do that may affect the credibility and integrity of the program. Killion (2002) challenges the idea that CPD should respond to teachers' self-identified needs and interests in order to support individual and organizational improvements. CPD is more meaningful to teachers when they exercise ownership of its content and process. Then another quality to consider is that professional development should be informed by student performance. That is, student performance should inform professional development (Guskey, 2005). This implies that CPD organizers should consider its effects on the students' outcome. It should improve the teachers' performance, which will be reflected in the students' classroom achievement. It should not only improve teachers' performance but also the students'

teachers teach. According to Mintel (2011), teachers' output is measured in terms of students' performance.

Lastly, teachers' CPD must be self-evaluative. This indicates that teachers should be evaluating the activities after the attendance. Guskey, (2005) CPD should include procedures for self-evaluation to guide teachers in their ongoing improvement efforts. This evaluation can be done by teachers considering how it affects their efficiency of teaching and learning and students' achievement.

2.5 Classroom management practice

Classroom management is very vital in a teacher's teaching life. It is not only about physical and seating arrangements. It stresses the teachers' ability to create a climate for learning in the classroom. Classroom management refers to the ability of teachers to use skills and techniques that keep students organized, focused, attentive, on task, and academically productive during lessons (Sieberer-Nagler, 2016). This implies that classroom management is the effort of the teacher to maintain order in the class. Classroom management is defined as a set of activities through which the teacher seeks to promote the desired behaviors of students and works to cancel and delete their unwanted behaviors. From the above, classroom management involves the teacher's ability to lead students to create good classroom settings that facilitate positive behavior. Creating a good learning environment is the responsibility of both teachers and students, but is led by the teacher in the classroom during the instruction period. Appropriate classroom management strategies reduce disruptive behaviors in the classroom (Egeberg, McConney, & Price, 2019). Classroom management refers to teachers' attitudes that facilitate classroom teaching and learning. A well-managed classroom increases learning because students spend more time on task. Classroom

management refers to a set of activities that teachers plan and provide a classroom atmosphere that is conducive to positive social relations between the teacher and his students in the classroom. It is seen as both science and art. Classroom management aims at encouraging and establishing students' self-control through the process of promoting student achievement, teacher efficiency, and student teacher behavior.

Emmer and Saborine (as cited in Davis, 2017) suggested good qualities in classroom management. Effective classroom management must

1. students' expectations for behavior and learning.
2. to promote active learning and students' participation in class.
3. Identify relevant students' behavior for classroom success.
4. create a positive learning climate.

Rabadi and Ray (2017) argue that for teachers to achieve effective classroom management, they must be ready to follow five (5) principles while teaching in the classroom. The five Rabadi principles include:

1. self-control and control of students.
2. focus on building relationships in the classroom.
3. Establish rules, boundaries, and expectations for yourself and the students.
4. utilized a strength-based approach.
5. Involve parents and guardians when necessary.

Classroom management focuses on four major components, which are content management, conduct management, covenant management, and classroom design.

Conduct management focuses on shaping and controlling the behavior of the students through the establishment of discipline protocols in the class. This helps to create an environment for learning and improve students' attitudes and commitment towards the lesson. Froyen and Iverson (1999) argued that conduct management is "an orderly, task-oriented approach to teaching and learning" (p.217), which leads to students' greater independence and autonomy through socialization.

Covenant management stresses the classroom as a social system. Both the teachers and students are expected to build an environment that is conducive for learning. The culture of every school setting is different from other schools. The school culture is strongly influenced by their geographical location and the communities around them. The classroom should be diverse in order to strengthen classroom social dynamism. The teacher's effectiveness and the students' achievement are under the auspices of building strong interpersonal relationship skills. Thus, teacher-student relationships are essential to ensuring a positive classroom atmosphere.

Content management focuses on learning instructions and the preparedness of the teacher in the classroom. This is not a specific subject but cuts across all disciplines (Froyen and Iverson (1999)). Research revealed that classroom disciplinary difficulties have a significant influence on the teachers' performance. This occurs when teachers fail to plan and design appropriate instruction tasks. It stresses the teacher's ability to master the content to be delivered and how to deliver it. Doyle stressed that the core of instructional management is gaining and maintaining students' cooperation in learning activities. It stresses instructional management skills, sequencing, and dealing with instruction-related discipline problems. Teachers in class have the mandated responsibility to design and prepare lessons that are exciting to get students'

focus and increase their participation. Teachers need to adequately prepare and decide what to teach, when to teach and how to teach a concept to the understanding of the students. Literature reveals that teachers who go to class to teach with thorough preparation positively affect their delivery in the classroom. This attitude affects their performance.

Classroom design is all about the physical arrangement and space of the classroom. These include how you set up your desk, your students' desks, devices, and other aspects of your classroom. Thoughtful classroom design can help create a safe and welcoming learning environment. The physical space in the class includes the seating structure, lighting, air circulation, temperature and board placement. The seating arrangement has an influence on the teacher's output in the classroom. The physical arrangement in the classroom can be done in so many ways, but row and column seating arrangements are employed in the classroom. According to researchers, classroom design improves teacher productivity and efficiency and ensures teacher ease of movement. Also, teachers are able to supervise the students' learning and control disruptions in class.

2.6 Instructional delivery

Instructions are directions which involve the teacher giving the students the guidance and principles for them to follow, which is prone to understanding. The instructions in this research combine both teaching methods and content to be delivered in the classroom. According to literature, learning instructions are influenced by students' achievement, teacher experience, and feedback from class assessment. Instructional delivery refers to the interaction in the classroom that focuses on the pedagogical and content knowledge needed to achieve effective teaching and learning (Council of

Chief State School Officers, 2013). These stress two main components, which are very pertinent for delivery in the classroom. The components are content or subject-specific and pedagogy, which drive students to learn. In view of that, instructors must be competent in teaching pedagogies and content to be taught in the classroom. The instructor's ability to communicate subject ideas to the student through appropriate teaching strategies may influence the teacher's performance.

Instructional delivery also involves the application of instructional strategies to inflict remarkable changes in teaching and learning. Avion School came up with four instructional strategies that can be utilized in teaching and learning. Avion School (2009) instructional strategies include project-based learning, blended learning, flipped learning, and online learning.

Instructional strategies are techniques teachers use to help students become independent, strategic learners (Alberta, A., 2013). These strategies become learning strategies when students independently select the appropriate ones and use them effectively to accomplish tasks or meet goals. Alberta A. (2013) suggested some instructional strategies that can lead to teaching and learning. This motivates students and helps them focus attention, organize information for understanding and remembering, and lastly, monitor and assess learning.

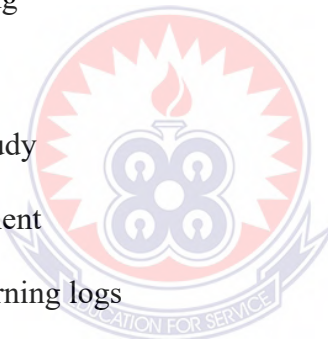
To become successful strategic learners, students need:

1. step-by-step strategy instruction
2. a variety of instructional approaches and learning materials.
3. appropriate support that includes modelling, guided practice and independent practice.

4. opportunities to transfer skills and ideas from one situation to another.
5. There are meaningful connections between skills and ideas and real-life situations.
6. opportunities to be independent and show what they know.
7. encouragement to self-monitor and self-correct.
8. tools for reflecting on and assessing their own learning.

Effective instructional and learning strategies can be used across grade levels and subject areas and can accommodate a range of student differences. Instructional strategies that are especially effective in the health education program include:

1. cooperative learning
2. group discussion
3. An independent study
4. portfolio development
5. In journals and learning logs
6. role-playing
7. Cognitive Organizers
8. literature response
9. Service learning
10. Issue-based inquiry



Instructional delivery CPD activities direct teachers to select subject area content and authentic CPD that are relevant to their teaching in the classroom. The following Nina instructional delivery activities can be inculcated into classroom teaching and learning. These are:

1. The students' personalities
2. Use teaching technology from the twenty-first century.
3. cooperative learning
4. utilize current, relevant teaching methods.
5. Inclusion, outbound teaching

Such teaching strategies stimulate teaching and learning in the classroom. There is a general view that in-depth teacher knowledge and how to use appropriate teaching strategies are very paramount to the success and good performance of the teacher. Teachers with good content knowledge predict teachers' performance in the classroom (Wabule, 2016). Teachers' engagement in CPD activities builds their competencies in subject content and delivery strategies that facilitate their performance in the classroom (Wabule, 2016).

2.7 Classroom assessment tools/techniques

Teachers' knowledge and competencies in classroom assessment tools are foundational to overall good teaching practices which improve their performance. "The central purpose of classroom assessment is to empower both teachers and their students to improve the quality of learning in the classroom" through an approach that is "learner-centered, teacher-directed, mutually beneficial, formative, context-specific, and firmly rooted in good practice" (Angelo & Cross as cited in Tabuena, 2020).

Assessment is a process of collecting and evaluating information about learners and using that information to make decisions to improve their learning (Mertler, 2016). Classroom assessment is the systematic approach used by teachers to evaluate the level of students' learning and achievement to inform classroom decision-making (Wang et al., 2016). Assessment is the process of collecting information or evidence

of learning and achievements and using it to improve teaching and learning (NaCCA, 2020). The assessment used in the classroom includes the various activities used by teachers to gauge learners' understanding of the lesson taught in the classroom. The traditional goal of assessment techniques is to measure students' level of comprehension of the lesson, but 21st century assessment goes beyond that. Assessment tools are also used to gauge the prior knowledge of the learners before a course or program.

Assessment may be formative, summative, diagnostic or norm-reference assessment, or criterion-reference (Shepard, 2019). Formative assessment refers to assessment techniques that are employed by teachers to understand and know the learning progress of their students. These help the teacher to devise remedial strategies and inform decisions on instructional strategies to be used in the next lesson. It is more of a matter of tracking the improvement of students' knowledge and changes occurring in learning in the classroom. It can be done through group projects, progress reports, class discussions, short quizzes, etc. There are two main types of formative assessment, which are: assessment for learning (Afl) and assessment as learning (Asl). The assessment of learning (Afl) is the continuous and frequent activities done at all stages of the instructional process to monitor the progress of learners. Through the feedback, the teachers determined the teaching strategies to improve students' achievement. The outcome of this assessment is used by both teachers and learners. The teachers lead and guide the learners and involve them in planning. The second form of formative assessment is assessment as learning (Asl). Assessment as learning (Asl) stresses the development of learners to appreciate and accept their responsibility for learning. It places the students at the highest level of learning. It aims to develop

students' efficiency in learning. It develops students' competencies to achieve a high in-depth understanding of the content taught in the classroom.

Teachers also assess learners on a termly basis; this is called summative assessment. It is mostly done at the end of a topic, term, or semester. It is also known as an assessment of learning. It provides a standard way of assessing the teacher and learning at the terminal stage of learning. Teachers use such information to take educational decisions such as grading, selections, school placement, promotions, certification, and others. It is not done in the course of the lesson as it happened at formative assessment.

Also, diagnostic assessment is also employed in so many settings in education. It is a form of pre-assessment where teachers can evaluate students' strengths, weaknesses, knowledge, and skills before the instructions. It is the type of assessments that stimulate a teacher to identify the nature of the students with which to develop strategies to improve student learning in the classroom. Through the exercise, the learners' strengths and weaknesses are brought before the table. The feedback from the assessment is used in decision-making.

Norm-reference assessment (NRA) involves the measuring and comparing of different groups of students with a given norm. It is interpreted in relation to the scores of other students rather than using specific criteria (Mrunahni, 2013). This type of assessment has no standard or cutoff point to compare different students' performances. Criterion-referenced assessment, unlike NRA, has criterion that the performance of students is compared with. It has two aspects. The first is about subject matter taught, and the second is about standards or cutoff points for decision making in relation to selection and promotion. The performances of different students

are evaluated against a common agreed standard or criterion in the classroom. The Criterion-referenced assessment determines the level of proficiency and mastery of content taught in the classroom by the teachers. This kind of assessment is very good for comparing students' learning since it uses common criterion or cutoff points. It is possible to do so through the SAT, IQ test, exams, and other means.

Assessment is when students' responses to occurring stimuli are collected to draw conclusions on students' knowledge and skills level in a particular lesson (Turner, 2013). Classroom assessment is a feedback strategy designed for or by teachers to trace the level of students' learning and focus on what to do to help the weak learners' progress in learning (Saeed, Tahir & Latif, 2018). Teachers with knowledge of assessment tools create a learning environment that makes students feel less anonymous and provides an avenue where their voices are heard (Hanson & Florestano, 2020).

There are so many assessment strategies employed by teachers to facilitate teaching and learning in the classroom. The research study considered only a few of them. These are minute papers, think-pair shares, muddiest points, focus listings, concept mapping, etc.

Focused Listing. The teacher makes the students pay attention to a single important term, name, or concept from a class lesson and directs students to list ideas related to the "focus list."

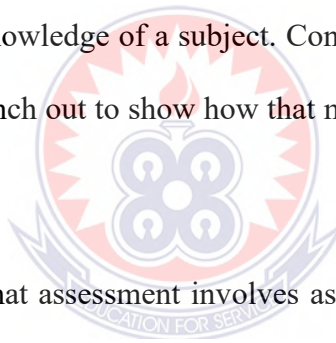
Minute Paper The teacher poses one to two questions in which students identify the most significant things they have learned from a given lecture, discussion, or

assignment and gives the students one or two minutes to write their responses on a card. The feedback helps to decide if the students are on track for learning or not.

Muddiest Point. It is considered by many as a simple assessment tool. The teacher asks the students to respond to questions like "What was the most unclear or confusing point in lecture, homework, or discussion?"

Think-Pair-Share . Think-Pair-Share is a quick and easy technique that energizes students to work in pairs to answer questions that are posed or written on the board by their teachers in the class.

Concept mapping Concept maps are drawings or diagrams used to help students organize and represent knowledge of a subject. Concept maps begin with a main idea (or concept) and then branch out to show how that main idea can be broken down into specific topics.



In CCP, it is suggested that assessment involves assessment for learning, assessment of learning, and assessment as learning. These have been categorized into two main ways of assessment that are commonly employed by teachers, which are formative and summative (Hanson & Florestano, 2020). CPD in the form of CCP education training builds teachers' competencies in the application of appropriate classroom assessment strategies that bring remarkable change in the learner. The CCP curriculum indicates classroom assessment strategies such as homework, project work, oral presentation, portfolio development, debates, community engagement conferencing, shared writing, and process writing. Such strategies are mostly stressed at the initial stage of learning. These assessment tools are used by teachers to engage the learners and understand the current learning of the learners in the classroom.

Teachers with good knowledge of assessment tools are able to decide on the classroom instruction delivery strategies to be employed at the appropriate time and organize remedial lessons for weak learners in the classroom.

According to Boyle et al. (2004), changes in planning, teaching style, and assessment practices as a result of long-term CPD. Cordingley (2015) confirmed that CPD activities improve specific aspects such as knowledge of scientific concepts, problem-solving, mathematical or literacy skills, and reasoning skills. Desimone (2009) professes that CPD activities also impact the teacher's ability to decide on and implement valued changes in teaching and leadership behaviors so that they can educate their students more effectively. Research revealed that teachers with assessment competencies are able to influence their students' learning in the classroom. Teachers with CPD activities are able to apply divergent assessment skills to check the progress of learners (Hanson, 2020).

2.8 Student-teacher relationship

A teacher-student relationship is the academic relationship between teachers and their students as one person occupies a teaching position and the other person is seen as a learner who is enrolled in an educational institution (Free Dictionary). Teachers foster positive bonds with students by creating a constructive classroom climate, treating students with respect, having high expectations for all students, and maximizing success for each student. This creates a positive relationship between teachers and students and increases receptivity to instruction (Fan, 2012).

Research shows a category of teacher skills known as personal competencies, which influence teacher effectiveness in the classroom. The most important of a teacher's personal competencies is the teacher-student relationship. There is research evidence

which proves that teachers who have a positive relationship with their students have a high effect on their achievement, fewer classroom discipline problems, and increased student participation in class. The qualities of teachers' personal competencies include being consistent; showing empathy; exhibiting warmth; encouraging learning; setting high standards; and displaying awareness of students' (Bear, 2020). Teachers who lack such qualities are likely to fail and be inefficient in the classroom. Building and developing such a strong bond necessitates a complex combination of teacher personal competencies. A seminar on this is very important to help teachers deliver effectively in the classroom.

2.9 CPD activities engaged in by the SHS teachers

Teachers in the 21st century may participate in CPD activities in so many ways, as suggested by some notable researchers and authors in the field of CPD. They suggested that teachers in Ghana and outside Ghana can participate in CPD through distance learning, regular courses, self-learning through online, workshops, conferences, seminars, in-service training, and others (Asare & Nti, 2014). These CPD activities may improve teachers' performance in the classroom.

Workshops. The teacher can attend workshops which provide a reliable, practical dimension to the discussion on the various aspects of a particular topic and problems encountered by the group of participants. They adopt a practical approach to formulating solutions for multiple issues. This will help the teachers get current knowledge in their area of teaching.

Formal Learning/Courses. Teachers can upgrade their knowledge and competencies in the classroom by taking courses or programs at any recognized institution in Ghana and beyond. Formal learning can be done through regular courses, distance courses,

sandwich courses, online courses and other formal means. The CPD activities create room for teachers to improve their competence in the classroom, which helps to improve their performance. Teachers can take a course in their area of specialization to improve their content knowledge, delivery skills, assessment skills, classroom control skills, among others.

Seminars/Conferences. This allows the teacher to present and exchange ideas on a topic as well as how to handle classroom problems. This creates a platform for discussion on how to improve efficiency in the classroom. An experienced teacher or expert may present on the content knowledge of a subject and how to deliver the knowledge to the level of the learners' understanding.

Monitoring and coaching. Teachers are monitored by head teachers, experienced colleague teachers, and other experts on their teaching performance and make remarkable suggestions that improve their teaching performance in the classroom. Teachers with deficits in handling subjects and other challenges may seek help from their mentors and monitors. Monitors and mentors can organize specialized training for such teachers to perform well in the classroom.

Self-Learning. Teachers can update their content knowledge, pedagogical skills, assessment skills and others through reading relevant textbooks, journals, online courses etc. Self-learning is the self-undertaking responsibility of learning in order to improve their performance.

Peer Learning. This is when an expert or colleague teacher introduces a teacher to current teaching knowledge in a subject. It can be done by the exchange of knowledge

between teachers or groups of teachers. Experienced teachers help other teachers in their school improve their performance.

Moreover, research work has revealed that teachers who have participated in CPD have the ability to create climates that are conducive and supportive for learning. Such climates generate situations that encourage teachers to continuously renew and/or update their existing knowledge and skills and consequently contribute positively to their own employability (Ouweneel et al., 2009). According to Bartleton (2018), research work, the teachers' experience has significant benefits in terms of updating on instructional focus, sharing of good classroom practice, assessment improvement, and more opportunities for teachers to develop collaboration skills. The quality of education does not go beyond the quality of the teachers. Continuous improvement and development of teachers is prone to efficiency in teaching and learning, which in the short and long run affects students' performance positively. Beavers (2011) confirmed that high-quality teacher CPD may affect teachers' skills and attitudes in the classroom, further increasing the quality of the education that the students receive. Empirical evidence shows that teachers who participated in and experienced CPD have positive changes for both teachers and students in relation to teaching and learning (Pedder & Opfer, 2011). Teachers must move away from the technical strategies of CPD activities towards more practical strategies and use critical reflection by the conclusion of their own experience, where their transition moves from descriptive within the technical paradigm towards a more dialogic or critical form of reflection (Antonio, 2020). According to Bartleton (2018), teachers who gain new knowledge are able to use new technology to pass information to students. This embraces the new ways of doing things in the classroom. Getting new knowledge is attained through teachers' participation in well-structured CPD.

2.10 Different types of CPD activities

There are many kinds of CPD activities that may be used by employees and owners of capital to improve their job competencies, though they have geographical limitations. Nassira (as cited in Richards & Farrell, 2005) indicated that there are two main kinds of CPD, which are individual continuous professional development and institutional continuous professional development. Nassira (as cited in Hattie, 2009) also argued that there are five major types of teachers' professional development, which are all embedded in the two main continuous professional development identified by Richard and Farrell. To compare the two, the five major types of teachers' continuous professional development reflect the two main types suggested by Richard and Farrel. They are all very paramount for teachers' growth and development. These are In-House Continuous Professional Development; district wide or organizational wide CPD; institutional-based continuous professional program; continuous professional inquiry group; and coaching.

In-House Continuous Professional Development is a type of professional development offered for teachers at the site of the schools. It occurs within the comfortable environment of the teachers, which does not involve too much transportation, feeding, or accommodation. This implies that each of the selected schools can organize CPD activities without involving teachers from other schools from the selected SHS. There is a likelihood for teachers in the SHS in Birim Central Municipality to engage in the activities since the cost and transport risk involved are very low. This type of CPD activity takes place mostly weekly, and a member of the staff in a given school may lead the activities that are in line with PLC.

Also, district-wide or organizational-wide professional development is the next type to consider in these studies. This type of CPD activity occurs within the district or Municipality, unlike the in-house CPD. This means that participants like teachers are limited to particular schools within the district. It involves collaboration among teachers of the same discipline or from different backgrounds from the SHS like ODASCO, FRANSTECH, and ASTECH to exchange ideas, and they must be within a district or Municipality. Teachers get the opportunity to learn from other teachers not only within the school but also outside the school, which falls within a selected district or Municipality. Because it involves teachers from the same district but from different schools, the teachers are in a better position to learn new ways of teaching that are impactful on teaching and learning in the classroom from each other. Its duration may be half-day, full-day, or even multiple-day professional development. Such educational events usually involve the presence of a guest speaker who is an expert on the topic under discussion.

The next is institution-based continuous professional development, which is one of the types suggested by Richard & Farrel (2005). Institution-based professional development is a long-term one, and it usually centers on a common theme or content, like assessment or teaching methods. It is mostly used by teachers who are often related to a university, non-profit organization, or research institution and can be used at the SHS level. Such programs are sponsored, and participants may receive a stipend both for time and for participation. This type of CPD can be done by teachers in basic schools and SHS due to its nature.

Continuous professional An Inquiry Group is another type. Groups of teachers, whether within the school, district, or national, can come together to exchange ideas

that are in the interests of the grouped teachers. The groups of teachers from the selected SHS can meet on a regular basis for an extended period of time, and they can work in a collaborative manner in order to learn new things and share new teaching experiences. For instance, teachers from the selected SHS can organize themselves to share ideas on how to improve their teaching skills and their students' performance.

Coaching is one of the five identified CPD types. In this type of continuous professional development, emphasize on-site coaches and district coaches for their teachers. The role of these coaches is to help and support teachers in different ways. Novice teachers will also have a new teacher coach, and this latter has an assigned job aimed at helping the new teacher acquire the necessary credentials. CPD is needed for both old and new teachers. The old teachers in the selected schools will serve as guides and coaches for the new teachers in their daily work or responsibilities.

2.11 Importance of teachers' CPD activities

According to Fullan (2007), change may occur in two ways: either imposed on the teachers or they voluntarily participate in or even initiate change when they find dissatisfaction, inconsistency, or intolerability in their current teaching profession. This implies that change can occur as a result of internal or external factors. Fullan (2007) stresses that the agent for change is CPD, since all the years it has been helpful to teachers in relation to knowledge acquisition, skills attainment, attitude building, values, commitment, creativity in education, and collaboration (Angelo & Cross, 2012). The primary purpose of CPD is to improve the knowledge of teachers in relation to classroom activities (Angelo & Cross, 2012). According to Abubakari (2020), there are eight (8) reasons for the importance of CPD for teachers in the education sector. CPD helps to improve teachers' confidence, self-efficacy, classroom

management development, assessment capacity building, and improvement in instructional focus, teachers' emotions development, and teachers' classroom emotional control, which leads to improvement in learning and educational outcome.

Bredeson (2005) argued that CPD activities keep teachers up-to-date on their teaching methods and give them the opportunity to learn new techniques and strategies that have to keep with colleagues who have recently graduated from school. Also, teachers can use simulation training to improve classroom management and good interaction with the learners. Bredeson (2005) indicated that CPD has shown a continuous increase in teachers' motivation, confidence, and commitment to teaching and learning, which are prone to improvement in teachers' performance and student achievement.

Others, such as Vivian Kloosterman, have argued that CPD enables teachers to make meaningful contributions to their schools. The teachers' performance effectively in the workplace helps other teachers, coach, and mentor them to perform to their expected standard. Teachers who have participated in CPD tend to have a better understanding of what it means to be a professional and value the application to classroom instruction.

2.12 Teachers' continuous professional development

CPD activities can be organized for a variety of organizations, including schools, health care, and businesses. But this research study focuses on only CPD activities for schools which specifically deal with teachers in SHS. Teachers' CPD activities have been the focus of many countries, but they are a subset of continuous professional development (CDP). It emphasizes the development of teachers in all areas like subject matter or content, pedagogy, communication, behavior, and others that help to

improve the effectiveness of teachers in the classroom learning activities. Such development helps the teacher to fill their deficiencies in the classroom, which is tantamount to improvement in teachers' productivity. Teachers need to open their classroom doors rather than evaluating each other, and begin studying their practices as a professional responsibility common to all (Mukan, Yaremko, Kozlovskiy, Ortynskiy & Isayeva, 2019).

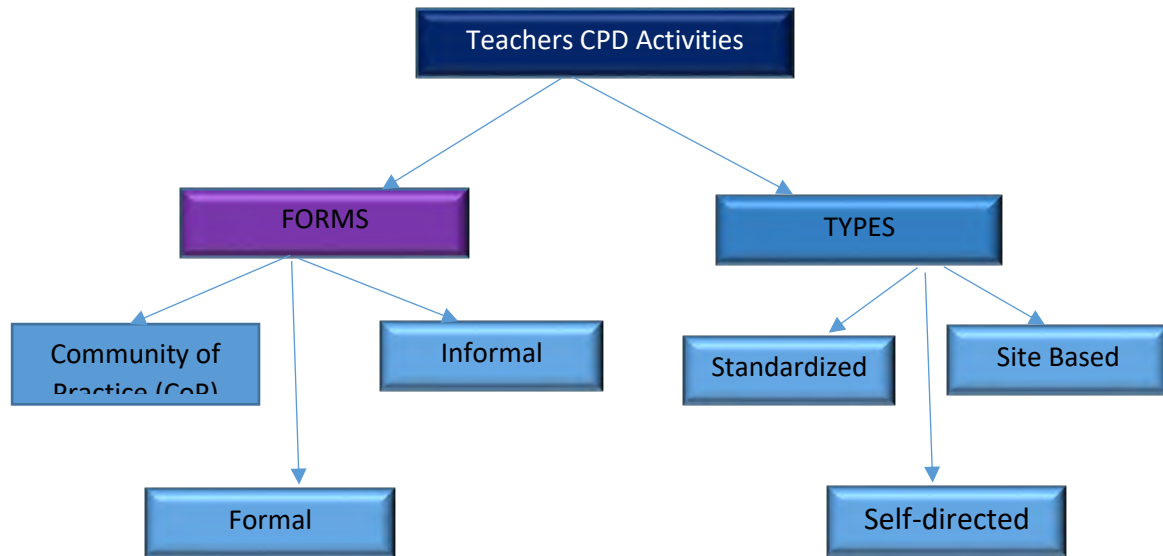
There are many definitions of teachers' continuous professional development, but there are some commonalities among them, though they are not easy to define. Pedder and Opfer (2011) define teacher continuous professional development as a facilitated teaching and learning experience that is transactional and designed to support the acquisition of professional knowledge, skills, and dispositions as well as the application of this knowledge in practice. According to (OECD, 2009), teachers' CPD is defined as "activities that develop an individual's skills, knowledge, expertise, and other characteristics as a teacher." Learning forward also views professional development as a comprehensive, sustained, intensive, and collaborative approach to improving teachers' and principals' effectiveness in raising teacher performance (Mukan et al., 2019).

According to Slabine (2011), teacher CPD activities are also called teacher forward learning. Continuous Professional Development for teachers is recognized as a vital component of policies which specifically focus on enhancing teaching and learning. Whether students are high, low, or average achievers, they will learn more if their teachers regularly engage in high-quality professional development "(Mukan et al., 2019). Generally, teacher CPD activities refer to ongoing learning opportunities available to teachers to enhance an individual's skills, knowledge, expertise, and other

characteristics as a teacher (OECD, 2009). Teachers' professional development in general aims at sharpening the skills, knowledge, competencies and abilities in the content, methods of teaching, assessment, communication, classroom management, and classroom behavior skills that are the true reflection of teachers' performance. Building teachers' competencies is key to classroom teaching and learning. Scholars in the field of CPD activities indicate that building the capacity of teachers may later positively affect their teaching skills and improve their performance (Mukan et al., 2019). This occurs in three stages. First, continuous professional development enhances teachers' knowledge and skills. Second, better knowledge and skills improve teaching in the classroom (Marzano & Toth, 2013). Third, improved teaching raises student achievement. If one link is weak or missing, better student learning cannot be expected (Marzano & Toth, 2013).

On these occasions, practicing teachers update their content knowledge and teaching skills to adjust to the introduction of new curricula, new research findings on teaching and learning, and changes in the needs of the student population. Interesting, significant interaction was found between teachers' participation in professional development activities (Darling-Hammond 2019).

2.12.1 Forms of CPD activities.



Source: Fieldwork data (2021).

Figure 2.1: Forms of CPD activities

CPD is not fully understood by many teachers in the teaching professions. Most of the teachers thought that CPD connotes formal activities like formal courses, training workshops, conferences, in-service etc., but they totally ignored other informal and community practice activities which also contribute to the development and building the competencies of the teachers in the classroom. As cited in Antonio, 2020), Kosnik et al. (as cited in Antonio, 2020) argued that there are three forms of CPD activities, which include formal, informal, and community of practice (CoP).

According to Kosnik et al. (as cited in Antonio, 2020), formal CPD activities are those activities that are structured or formalized and may or may not be optional. It includes formal courses like regular, distance, and sandwich; research mentoring and supervision; conducting or engaging in action research; and engaging in and

completing formal studies. Due to its nature, certification is awarded to people who successfully complete the programme, which usually does not happen in informal CPD activities. On the other hand, informal CPD activities as described by Kosnik et al. (2015) are not mandatory and may occur individually or alongside others and include reflective practice, dialogues with professional colleagues, and/or team planning and teaching. They further explain that CoPs are "formalized and structured but not institutionally mandated" (Kosnik et al., 2015, p. 56). In my estimation, these would involve groups engaging in networking activities, online blogs and forums, to name a few, which are of mutual interest to participants, learning collectively and sharing (Wenger as cited in Pretorius & van der Merwe, 2020). Murray expounds on the idea of formal and informal learning opportunities (Murray as cited in Antonio, 2020). She argued on the premise that much learning occurs informally among colleagues as they work with each other, as opposed to formal learning, which may generate qualifications from universities. Similarly, Boud and Hager (2012) contend that learning for the professional should be "situated" (p. 27) that is, located in the professional's day-to-day practice but related to their needs.

They further claimed that although formal CPD activities have great value, informal CPD activities enable the professional to develop within the context of the work environment through the application of knowledge and skills gained from formal CPD activities. On the other hand, CoPs engage professionals in social practice through commonly shared enterprises over time, where the participants not only challenge and consolidate their learning but also gain professional identity and meaning (Wanger et al., 2014). In the absence of particular documentation about CPD in my context, I have chosen to adopt Kosnik et al.'s. (2015) identification of these three CPD categories and label them "Forms" of CPD activities because they align well with my

experiences of CPD activities. It also helped in the development of my conceptual framework and research tools. The expectation, therefore, is for SHS teachers to embrace professional growth that includes and resembles a spectrum of lifelong learning engagements throughout their careers (Karagiorgi & Nicolaidou as cited in Antonio, 2020). Nevertheless, CPD activities must be tailored to meet the needs of the teacher and the divergent needs of the students. CPD activities must be blind to assist teachers in handling various courses and programs in order to be effective and solve class problems and challenges. All these issues bring different responses to CPD participation and outcomes.

2.13 Types of teachers CPD

Gaible and Burns (2005) put teacher CPD into three broad categories: standardized teacher CPD, site-based CPD, and self-directed teacher CPD.

2.13.1 Standardized teachers' CPD activities

This form of teacher CPD emphasizes the introduction of new principles, theories, content, teaching methods, or new curriculum. It focuses on the disseminating of new information or knowledge to a group of people. If MOE wants to introduce changes to accounting standards or changes in the mathematics syllabus or to implement the Core Curriculum Programme (CCP), it will be prudent to employ standardized teachers for CPD. The shift from objective-based Standard Curriculum to CCP, the best type of teacher CPD, is the standard type of CPD. Gaible and Burns (2005) argued that standardized teacher CPD typically represents a centralized approach, involving workshops and training sessions and, in many cases, the cascade model of scaled delivery, and also focusing on the exploration of new concepts and the demonstration

and modeling of skills. A typical example is the introduction of the CORE curriculum for JHS and SHS, which took effect in 2021.

Training is organized for the teachers to become aware of the new curriculum. It is employed to disseminate new information or knowledge about changes in policy or curriculum, distributing information throughout the region and nation at large. These one-time sessions can certainly help introduce and build awareness about computers, learner-centered instruction, or new curricula. It makes use of the cascading model.

2.13.2 Site-based teachers' CPD activities

Site-based approaches require locally-based teachers. CPD activities provide skills in facilitation, instruction, content, curriculum, assessment, and technology (Gaible & Burns, 2005). Site-based teacher CPD takes place in schools, resource centers, or teachers' colleges. Teachers work with local in-house facilitators or master teachers to engage in more gradual processes of learning, building mastery of pedagogy, content, and technology skills. Site-based CPD often focuses on the specific, situational problems that individual teachers encounter as they try to implement new techniques (Gaible & Burns, 2005). For instance, a teacher in an accounting department who finds it difficult to teach depreciation due to inadequate knowledge may participate in this form of CPD since it is more specific to meet the specific needs of the teacher.

Some attributes are indicated by Gaible and Burns (2005). Site-based teachers' CPD includes it's specific, encouraging collaborative learning, flexible and local problem-centered. This should not consider the entire region, but rather the problem of local interest. Site-based teachers' CPD faces the challenges of extending over a longer period and taking place in many locations. Initiations in specific regions may be

disrupted by civil conflict, disease (HIV/AIDS, cholera, etc.), or changes in school and administrative leadership (Gaible & Burns, 2005).

2.13.3 Self-directed teachers' CPD

It is the teacher who finds a solution to his own problem by participating in CPD activities that will help to improve teaching and learning. This self-assisted form teaches CPD. Gaible and Burns (2005) confirm that self-directed teachers' CPD involves the teacher initiating and designing their own professional development goals and selecting activities that will help them attain these goals. They would share materials and ideas as well as elaborate on the challenges and solutions (Hooker, 2017). This can be done by watching examples of classroom videos, reading books on education or a field of study, keeping journals, performing case studies, taking online courses, or observing classes taught by colleagues. There are online programs like Alison, Edx.org, and others that may help teachers get a program to read that will help to eradicate teaching and learning deficits in the classroom. Many teachers already participate in informal learning by seeking out an experienced colleague for advice, for example, or searching for lesson plans on the Internet (Gaible & Burns, 2005). This can be formal or informal. The problem associated with this form of teacher CPD is that school leadership directs a teacher to develop expertise in a certain area without providing resources or guidance.

2.14 Dimensions of teachers' CPD activities

CPD activities have many dimensions, which emanate from CPD experts, authors, and specified institutions in CPD activities. There are so many dimensions propelled by researchers, which include reflective, collaborative, growth, educational and disciplinary, teachers' personalities, communicative, subject-content, pedagogical and

emotional and other dimensions (Mann & Walsh, 2015). These dimensions of CPD are embedded in RCOG (2019), which summaries the ideas and concepts of the dimension CPD suggested above. This research will adopt RCOG (2019) since it is in line with the research study.

RCOG (2019) also came up with three dimensions of CPD. These dimensions are appropriate because they relate to the concepts and theories in the research study. The dimensions give a minute view of the idea and concept of CPD and its applicability in this research study. The three dimensions that were disclosed by RCOG (2019) are professional, clinical, and expanded role dimensions.

2.14.1 Professional dimension

This dimension from RCOG (2019) focuses on the professional skills, attitudes, and behaviors that are expected from SHS teachers in the selected study areas. It stresses more on the characteristics and personalities of the teachers in the profession. The professional dimension does not have any relationship with the main knowledge, skills, and competencies that are specifically related to a discipline of work, thus the content and pedagogical knowledge. The professional dimension stresses the code and ethics in the teaching profession. Each profession in Ghana has its own codes and ethics, which everybody must follow in their area of work. Teachers are role models to many citizens in Ghana, especially the students, and they are expected to be disciplined so that they can direct the learners towards positive ways in life. It is good for teachers to explicitly promote a good moral attitude or characteristics and behaviors that will affect the students positively. According to RCOG (2019), teachers must demonstrate an attitude and behaviors that are highly supportive of teaching and learning. RCOG (2019) suggested the following attitudes for teachers

with the notion that they will help to achieve goals and specific indicators in teaching and learning. These are team work, communication competencies, conflict resolution skills, multisource feedback, good knowledge of professional skills, discipline, usage of information technology and other cherished characteristics. Teachers' attitudes and behaviors like commitment, punctuality, discipline, etc. influence students' learning. They must show professional behavior in the classroom and external environment.

2.14.2 Clinical dimension

The RCOG (2019) clinical dimension stresses the content, pedagogy, and other classroom instructional knowledge, skills, and competencies that relate to the specific discipline of the teachers. This means that teachers must be up to date on current information in their field in order to meet the standards set by the MoE, GES, NTC, and other recognized educational bodies in Ghana. This is about the content and pedagogical competencies required for teachers in the teaching area. This dimension requires SHS teachers to constantly update themselves in order to relearn. The concepts and theories in education constantly change to meet this dynamic environment. RCOG (2019) suggests that teachers from divergent backgrounds and areas can converge at a place to learn from themselves in a collaborative manner, while participating in educative activities, undertaking formal learning, participating in specialty meetings and courses, and committing towards CPD activities.

2.14.3 Dimension of the extended role

Aside from the main teaching tasks, there are some other responsibilities in the school the teachers can perform after getting the knowledge to perform the extra responsibilities. This RCOG (2019) dimension focuses on the additional roles that many SHS teachers undertake in addition to their primary teaching responsibility. The

additional roles of teachers include reviewing of manuscripts for publication, thesis examining, research and development, editorial activities, statistics training, church presentation invitations, regional or national responsibilities like the PHC 2021 Census, Electoral Commission Exercise, etc. This means that teachers' responsibilities go beyond their primary teaching responsibilities. This indicates that teachers who may participate in CPD take extra responsibilities in the organization of work. RCOG (2019) reveals that many teachers engaged in CPD perform their daily responsibilities better but are also willing and ready to support the administration and other departments in the school. Some even provide supportive service to the external environment like the church and other organizations while still within the teaching profession. The effects of CPD on teachers do not only bring changes in the teacher's performance in the school but also in the external world, like the church, community organization, etc.

2.15 Models of teacher CPD activities

There are models that are related to teacher CPD, but the most relevant and applicable of them were used in this research study. The research study employed Kennedy (2005) Models (2005) and Margret (2004) Models.

2.15.1 Kennedy models of teachers' CPD activities

These models have three components, which include the transitive, transformative, and transitional models.

2.15.2 Model of transitivity

The transitive model of Kennedy (2005) stresses that teachers develop and improve their competencies through external delivery, expert and tuition, as cited in Kennedy, 2005. It focuses on the technical aspects of teachers' jobs rather than on teaching

values, beliefs, attitudes, and behaviors. These models are more collaborative and share ideas to solve problems that emerge in the schools. It encourages the teachers to come up with their views, arguments, and compliance and conformity. The models are contrary to the professional dimension of the CPD of RCOP (2019) and seriously against professional autonomy and monopoly. This model is more of a building cognitive domain than the other bloom taxonomies.

2.15.3: Transformative models

This model of Kennedy (2005) says that the ideas and theories of study through CPD activities must be applicable and able to address the needs and problems of teachers in the school. As the name implies, whatever new good things the teachers learn from CPD training must be transferred to the teaching in the physical classroom. The CPD participants must be capable of giving new or current knowledge that is applicable to classroom teaching and learning. There should be no gap between what has been learnt and what is being practiced in the classroom. There is more room for autonomy and monopoly. It stresses bridging the gap between the theoretical realm and the physically challenging realm. For instance, the concepts and theories in CPP learnt during training must be applied in the course of teaching and learning in the classroom. It must be relevant to promoting and solving physical classroom teaching and learning. The CPD organized for SHS teachers must be relevant to their teaching and capable of applying the theory they have learnt to handle classroom issues. This is more confirmatory and requires more obedience.

2.15.4 Transitional models

Bridge was evoking a Kennedy (2005) model concept. The transition model focuses on what internally occurs in the mind of teachers' minds as they go through CPD activities, though it is not the change itself. Change is more external, but transition is more internal development in the brain. The mode points out that some teachers' are resistant to change and they must be convinced to accept CPD, which may help them to improve their competencies, which are prone to high performance. The stakeholders of education, like head teachers, GES, and MoE, should understand the emotions of the teachers and show them how to apply the new knowledge in their teaching profession and teaching discipline. There are stages in this model which are ending what is currently being used as the neutral zone and a new beginning. The modern education system is very demanding and demands high-performing teachers to work in the teaching profession. Teachers who do not participate in CPD activities perform poorly and are likely to lose their jobs as a result. This is a model that includes coaching, monitoring, and community practices. According to Kennedy (2005), the model has the choice of supporting either a transformative or transitive model.

2.15.5 Margaret's CPD model

The other model to be considered is the Margaret and Steve (2004) model. Margaret and Steve (2004) indicated three models for teachers' CPD. These are the mentoring model, the Content-Based Collaborative Inquiry (CBCI) & Cognitively Guided Instruction (CGI) model, and the Lesson Study model.

Mentorship is one of the three models suggested by Margaret and Steve (2004) in their CPD model. Monitoring is a tool to help new and old teachers get new

knowledge and competencies to improve their function in the school. It is mostly used for new teachers and those who perform below standard. It is more of an established relationship where one with expertise in a particular discipline helps the weaker one to develop their present and future jobs. It involves the encouragement and motivation given by the mentor to the mentee to improve and develop their classroom teaching and learning skills and knowledge and to improve performance. This will help the mentee to understand the behavior expected from them as professionally trained teachers. Eric Paesloe argued that mentoring is to give support to and encourage teachers to manage their own teaching and learning in order to maximize their potential to develop skills, improve performance, and become the teachers the school wants them to be. It has a capability for collaboration or integrative learning. That is, each teacher in the selected public SHS in the selected area can learn from each other, and this may help each to overcome their classroom challenges. Mentorship can have dramatic effects on teachers that include decreased retention, improved attitudes, increased feelings of efficacy and control, and experience using a wider range of instructional strategies (Smith, 2002).

Content-Based Collaborative Inquiry (CBCI) and Cognitively Guided Instruction (CGI) are the next models to consider in this research study. CBCI and CGI are strategies that encourage teachers to work together in order to create deeper understandings of their students, their thinking level, and their performance in particular subjects. In CBCI, teachers in SHS used questions to determine students' understanding by collecting and analyzing data through quantitative or qualitative methods, sharing the results with their colleagues, and collaborating to create instructional techniques to solve the students' challenges in classroom teaching and learning. Belay (2016) argues that CBCI and CGI support teachers in SHS to build

understandings of content and pedagogy that facilitate student learning. In CGI, teachers create models of how students think and solve problems. Teachers use these models of student thinking to develop instructional materials that address students' learning needs. CGI provides opportunities for teachers to deepen their own understandings of subject matter while they develop ways of teaching in order to become more effective in the classroom.

The Lesson Study is the last model of the three models suggested for the study. Lesson study is a multi-step process in which teachers work together to create, study, and improve their lessons. In this approach, one member of the study group teaches a lesson while others make detailed observations. After the lesson, all members of the group meet to discuss their observations and to consider how the lesson might be improved. The lesson is taught again to a different group of students, and the process of observation, collaborative data analysis, and lesson revision is repeated (Fernandez & Chokshi, 2002). Lesson study is another model of using collaborative self-study of teachers' practices as a means to support teacher growth and instructional improvement. This helps to improve and develop the teachers and indicates areas where each teacher performs well or not. Through the discussions among the group teachers, appropriate CPD may be recommended to improve their performance. It is more focused on the teacher.

2.16 Gaps of the study

There are a lot of researchers in the area of CPD activities, specifically teachers' continuing professional development on teachers' functionality in the school and teaching and learning environment. Menash's (2006) research work was solely on the CPD of the teachers at the basic schools in the basic schools in Kassaena-Nankana

West District in Ghana. Though it stresses assessment strategies, instruction skills, classroom management, and classroom preparedness without looking at it at a high level. The study did not explicitly indicate the CPD activities' impact on teachers' performance at the SHS level.

The existing literature does not pay critical attention to CPD activities in teachers' performance in relation to their classroom management, assessment skills, instructional delivery, and building good relationships with the students in the classroom. It focuses on only basic teachers, with no provision for SHS teachers. This will make it impossible for the findings to apply to teachers in SHS. It is not only basic school teachers who need teachers' CPD.

There are a lot of research studies on CPD in different areas in Ghana, but it seems that most of the researchers' attention is not in the area of Birim Central Municipality. The literature review indicates that very few studies have been conducted in Birim Central Municipality. There is a geographical gap and bias in the study conducted since their studies are at the lower level. In view of that, it is difficult to comment on the influence of CPD activities on the teachers within the Municipality. This motivates the researcher to find out the influence of CPD activities on teachers' performance in the public SHS in Birim Central Municipality.

2.17 Continuous professional development in Singapore

Tripp (cited in Kasemsap, 2017) states that teaching is a continuous and everlasting learning profession, and that teachers must learn in various ways and reconstruct themselves as advanced specialist practitioners of learning with their students as their apprentices. Singapore is one of the world's top-performing countries in education. It is a country with no natural resources. Singaporeans widely believe that the survival

of their nation is hinged on the development of "human capital." Gopinathan (cited in Robson & Mtika, 2017). Singapore has nothing in terms of natural resources as compared with other countries like Ghana, but it has been able to utilize its human resources to achieve national growth and development. The sensitive part of the economy of Singapore is the development of work and the labor force in the country. Due to that, Singapore has made consistent efforts to enhance the quality of its education system (Killion, 2002).

Literature reviews indicate that the quality of education depends on the quality of the teachers in a school. Singapore is a country that values and respects its teachers and constantly improves its teaching force performance, which has been helpful in creating goodwill. The Ministry of Education (MoE) has enacted a law that requires every teacher in the country to embark on CPD activities that positively affect teaching and learning in the school. Goh (2016) argued that the country brought about "Thinking Schools, Learning Nation" initiatives which put stress on teacher Continuing Professional Development (CPD) activities. Before these initiatives, there was a traditional conception that positioned teachers as technicians; the new initiatives conceived teachers as reflective professionals (Gopinathan, 2012). Subsequent initiatives launched by MOE, such as "Teach Less, Learn More" (MOE, 2005) or the current professional development model, called "Teacher Growth Model" (MOE, 2012), and emphasized the key role that teacher CPD activities play in the improvement of education. Chong and Fong (2000) confirmed that CPD activities are the continuum that begins with initial preparation and induction, continual development and growth, and milestone programs for lifelong careers.

The Teacher Growth Model indicated and suggested many alternative ways of learning after being employed to teach as a teacher in any school in the country, whether public or private. This model can be employed in other disciplines like business since human capital development is vital to every employer and employee, not only those in the education sector but other areas. The model indicates that teachers update themselves through the following approaches: face-to-face and online courses; workshops; and postgraduate programs like Masters and PhDs; professional conferences, conventions, and symposiums; action-research; mentoring and coaching; and school-university partnerships (MOE, 2012). Many studies show that Singapore teachers participated in far more CPD activities than teachers in other countries such as Ghana. This is because CPD is fully subsidized by the MoE (Wang, Kim, Lee, and Kim, 2014). The financial constraints and challenges for teachers have been supported by the government through the MOE. Research conducted by the Organization for Economic Cooperation and Development (OECD, 2014) with the use of 34 nations reveals that participation rates in different types of CPD activities are much higher in Singapore than in other countries. For example, considering the 34 nations that participated in the study, higher proportions of teachers at lower secondary levels participated in courses and workshops in Singapore (93% of teachers as compared to the average of 71%), mentoring, peer observation, and coaching (65% in Singapore as compared to 29%), seminars and conferences (61% as compared to 44%), networked learning (53% as compared to 37%), and individual or collaborative school-based research (45% as compared to 31%). The current initiatives and support of teachers' CPD have positively affected the performance of teachers. Currently, Singapore is ranked among one of the world's top-performing countries in education, based on indicators such as students' test scores in international comparisons, graduation rates,

and percentage of students pursuing higher education (Schwab, 2015). This extraordinary performance is the result of the teachers' CPD activities, which in the long run, impacted the students' performance and productivity. The teachers' CPD activities include both structured or formal and informal or unstructured initiatives like action research and lesson study. The CPD activities are tailored to meet the divergent levels of expertise in the teaching field. Most CPD activities are subject-specific and provide teachers with opportunities for networked learning, collegial sharing, and collaboration. Due to the importance of CPD and accessibility, the MoE has turned all MoE schools into Professional Learning Communities (PLC) (Killon, 2002). This is to increase the teachers' chances and opportunity to enhance their teaching knowledge in all aspects of teaching and learning.

The Singapore Ministry of Education (MOE) designed its own education system by examining best practices of other exemplary and successful countries schools, education policies, curriculum, pre-service education, professional and leadership development programs, which have contributed to radically transforming the educational landscape in a short time-span (Gopinathan, 2012). This implies that no country is self-reliant not only in terms of resources but in education policy as well. Other countries can learn from others through constant evaluating and analyzing of other countries' education policies, like Singapore and other countries with the best education practices that will help to achieve growth and development in the teaching field. Ghana can learn from Singapore's exemplary management.

2.18 Africa's provision for continuing education activities

The growth of education in Africa as a whole has been seen and felt all over the world. There are many training education systems established in all African countries,

including Ghana, Togo, Benin, South Africa, Kenya, and others. Kach argued that though there are many training schools established in Africa, still one-third of existing teachers in Sub-Saharan countries are untrained and under-qualified, whether in academic or professional terms or both. African countries have learnt that the quality of education does not go beyond the quality of teachers employed to deliver it in various SHS in the continent. Due to that, many African countries, like Nigeria, South Africa, and Ghana, among others, have made provision for CPD activities for their teachers in order to perform to the accepted teaching standards in the country. This helps to produce teachers and students that can meet global competition. A literature review revealed that CPD activities in Africa take place through workshops, seminars, colloquia, demonstrations, simulations, and micro-teaching. These are the approaches and modes of CPD in Africa. In Africa, countries do not embark on CPD online as it has been in developed countries like Japan, England, Singapore, and Finland.

In Benin, additional training is given to teachers in order to improve their quality education and their performance in relation to classroom assessment, collaboration learning, behavior control, communication building, good relationship building skills and other competencies. The Benin form of CPD is external source, which means that the education authorities invite or import experts from France to come to the country to educate their teachers about modern trends in education. Their CPD emphasis is on the development of lesson plans, but much of the focus is not on teaching and learning approaches. CPD in Benin is compulsory.

In South Africa, there is a professional body that has been ordained with the sole responsibility of providing, ensuring and maintaining professional standards in the teaching and other professions. CPD in South Africa is compulsory for all workers,

including teaching staff. Teachers' are to obtain a minimum score of 20 and to update their competencies every five (5) years. In South Africa, not all CPD activities are recognized, but there is an institution and bodies that allow teachers to organize CPD training. The teachers' participation in CPD is supported by section 8 of the Act 2019. Their CPD is regulated by appropriate authorities.

Due to the importance of teachers to the development of the economy, the Ministry in charge of education has introduced mandatory CPD activities for all registered teachers in 2006 and beyond. They believed it assisted them in achieving an acceptable level of competence and commitment in their teaching profession. Nigeria's education system resembles that of South Africa where both countries have strategies for regulating CPD activities in order to avoid poor training that may not have a significant effect on the teachers. The Nigerian education system has mandated institutions like universities, colleges of education, National Teaching Institute (NTI), TRCN, and Universal Basic Education Commission. CPD is a key element of quality education. Also, there is a Master in Teaching and Learning (MTL) program that was introduced in 2019 to help to ensure quality teachers and continuous improvement in all areas of teaching.

In Ghana, the education system has made provisions that give teachers the opportunities to participate in life-long learning activities that will help to build their current knowledge of teaching and learning in the classroom. Owing to that, the MoE, on behalf of the government, to introduce a teachers' continuous professional development allowance for some teachers in the classroom. GES of Ghana has made an effort to improve the pedagogical skills of teachers to enhance teaching and learning in the classroom.

Other institutions like National Teachers Standards (NTS) and the National Teaching Council (NTC) have established baseline standards for teachers in the country. These two bodies aim to improve the professional skills in education. The NTS has indicated the standards of qualified teachers, which include the professional values, practices, and knowledge of the profession. The NTC shall be responsible for providing details of competency-based teachers' standards. It shall also establish a set of standards for regulating the delivery of INSET and other types of teacher development programs, such as sandwich courses and distance learning programs, for the purpose of upgrading teacher qualifications. However, the National Accreditation Board (NAB) shall be responsible for the accreditation of teacher education programs in collaboration with the National Council for Tertiary Education "(Ministry of Education, 2013). The local policy on CPD aims to develop the competency, classroom communication skills, leadership skills and technical skills needed to be effective in the classroom. They believe that CPD activities help to improve teachers' quality and meet good standards in delivering in the classroom. In view of that, Ghana education also has made provisions for teachers' continuous professional development programs.

The above literature shows that Africa as a continent has made enough effort to improve their education systems and the quality of teachers in the continent. There are a lot of CPD policies that have been formulated in Africa, specifically Ghana. CPD in Africa, like Ghana, is also compulsory for teachers in Western countries but not in Ghana. The CPD in developed countries like Singapore, Finland, and England is more mature and patronized by the teachers than in developing countries like Ghana due to inadequate finance to support the CPD implementation processes. Some teachers in African countries like Ghana still have the same attitude and do not want to

participate in any form of CPD. Singapore is one of the world's top-performing countries in education. It is a country with no natural resources. Singaporeans widely believe that the survival of their nation is hinged on the development of "human capital" (Gopinathan, 2012). Singapore has nothing in terms of natural resources as compared with African countries like Ghana, but it utilizes their human resources to achieve national growth and development. This was achieved through the availability of subsidized CPD activities (Killion, 2002). Due to the lack of or inadequacy of CPD activities in Africa, like Ghana, teachers' performance has been seen in their classroom delivery and assessment. There has been poor performance among the selected SHS and parents are crying over that. This encourages the researcher to find out the influence of CPD activities on teachers' performance in Birim Central Municipality in Eastern Region of Ghana.

2.19 Empirical analysis

2.19.1 The influence of CPD activities on teachers' performance

Some academics think that evaluations of professors are based on how well their students perform. Rebecca (2018) conducted a study in order to examine the benefits of continuous professional development on teachers in the Sagnarigu District. The ten junior high schools and their headteachers were chosen for the study with a sample size of 100 using a purposive sampling technique. The study found that forward professional development programs helped instructors perform better and become more competent.

Abbassi and Arulraj (2021) conducted a study to examine the effects of ongoing professional development on teachers' performance. The relevant understanding required to design the study was supported by social development theory and

organizational development theory. A survey questionnaire was used to gather information from 150 instructors at a private school in Dubai. A random sample method was used to pick the study's participants. Descriptive statistics, correlation testing, and regression analysis were all used to examine the data that had been gathered. The results showed that improved teacher performance and ongoing professional development have significant effects.

Test results for pupils were shown to be a reliable indicator of instructors' effectiveness by Mintel (2011). While focusing on what students can accomplish, Mintel (2011) neglected to examine the teacher's actions and competences that support effective teaching and learning. In the Birim Central Municipality of Eastern Region of Ghana, Arraela, Theall, and Aleamoni (2013) stated that test results for students alone cannot be utilized to gauge the impact of CPD activities on teachers' performance. Five criteria have been identified by Arraela, Theall, and Aleamoni (2013) as a way to evaluate how well teachers performed following their participation in CPD activities. The requirements include knowledge of the subject matter, proficiency in instructional design and delivery, assessment, and classroom management. The emotional control and linguistic skills of the teacher are further variables that Arraela, Theall, and Aleamoni (2013) neglect to take into account. Although they also have an impact on teachers' classroom efficiency, they weren't the main topic of this study. Only the four Arraela, Theall, and Aleamoni criteria are taken into account in this research article (2013). They are the teacher-student connection, how instruction is delivered in the classroom, assessment tools, and classroom management.

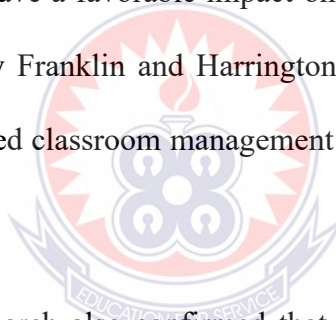
Teachers have a crucial role in the development of the human resources that are the major driver of economic progress. To satisfy the demands of the modern educational system, teachers must constantly develop. Many nations, including both affluent nations like Singapore, Japan, and Finland and less developed nations like Ghana, Benin, Nigeria, South Africa, etc., use CPD activities as a technique to increase the teaching staff's capabilities. To determine the impact of CPD activities after teacher involvement, professionals have developed a wide range of metrics to assess teachers' effectiveness.

2.19.2 The influence of CPD activities on classroom management practices

A survey was conducted with 50 secondary school teachers to capture their views on their classroom experiences by Egeberg, McConney & Price, (2021). The study employed mixed method. The study revealed that effective classroom management provided consistent reports that led to build positive relationships with their students, manage their classrooms by establishing clear boundaries and high expectations, and engage students in their learning. Effective classroom management techniques reduce behaviors that interfere with learning in the classroom (Egeberg, McConney & Price, 2021). According to the research by Egeberg, McConney, and Price (2021), classroom management techniques helped teachers provide instruction in the classroom effectively and efficiently. These aided in setting rules in the classroom and helping teachers set an example for their students. The study also showed that CPD-trained educators avoid pointless punishment, employ nonverbal cues, develop engaging lesson plans, etc.

Mahlase, (2014) research study focused on the impact of a continuing professional development program on teachers of technology's classroom practices and

professional development. It was a qualitative study which employed purposive sampling with three teachers. The study found that the outputs of the CPD program had some extent influence on the classroom practices and professional development of the Technology Education instructors who took part in the study's CPD program. Teachers acknowledged that the majority of the instructional tactics they use in their classes come from the CPD program under consideration. Teachers noted that they had learned new teaching strategies unique to technology education, which helped their students learn in class. The findings of this study also provide evidence that teachers were highly motivated by the CPD program to increase their expertise in technology education. According to Franklin and Harrington (2019), CPD activities in classroom management have a favorable impact on teachers' classroom performance. Based on the research by Franklin and Harrington (2019), it can be concluded that teachers who have received classroom management training perform better than those who have not.



A sizable amount of research also confirmed that the classroom management skills and behavior management persistence of new teachers in teaching careers are highly influenced (Ingersoll & Smith, 2003). New teachers frequently express worries about not having adequate tools to deal with pupils' severe disruptive behavior (Browsers & Tomic as cited in Oliver, Reschly, Wehby, & Lipsey, 2009). Teachers who struggle with classroom discipline and behavior control are generally inefficient in the classroom, and they typically experience high levels of stress and burnout symptoms (Browsers & Tomic as cited in Oliver, Reschly, Wehby, & Lipsey, 2009). Irregular classroom behavior is a major factor in instructors' quitting their jobs (Ingersoll & Smith, 2003). The low academic achievement of at-risk pupils and their high rate of

special education referrals are frequently caused by teachers' incapacity to properly control classroom behavior (Harrell, Leavell, van Tassel, & McKee, 2004).

2.19.3 The influence of continuing education activities on instructional delivery

The research of MacLeod and Napoles' (2014) focused on teachers' assessment and teaching effectiveness. The study used quantitative approach with the uses of regression analysis with 300 responses. The study revealed that experienced teachers' assessments effectiveness were influenced by teacher delivery and student success. Regardless of student development, teaching snippets with high teacher delivery were judged to be more effective than those with low teacher delivery. A multiple regression analysis revealed that student advancement was the second-largest predictor of experienced instructors' assessments of overall teaching effectiveness, trailing only teacher delivery.

The effectiveness of teachers in the classroom is strongly influenced by their capacity to adapt their delivery of the material to the students' level of comprehension. According to research, teachers who are knowledgeable about pedagogical topics perform better in the classroom. Educational emphasis CPD initiatives help teachers meet content standards and teaching indicators (Mundry & Stiles, 2009). Teachers' performance in the classroom is predicted by their command of the subject (Wabule, 2016).

The impact of three teaching strategies in raising senior secondary students' geometry performance was examined in Okri and Aglazo's (2020) study. The results showed that students taught utilizing the Hands-on Instructional Strategy (HIS) and the Cooperative Instructional Strategy (CIS) experienced the greatest gains in their

learning performance (CPIS). Although students taught using HIS, CPIS, and COLIS did not significantly outperform students taught using the traditional technique on the GPT, there was a significant difference between the scores of students in the experimental groups who were taught using the three instructional strategies.

According to Canales's (2020) research which took 250 responses from the respondents. The findings explicated that instruction and the processes of connecting to prior knowledge, providing feedback, and engaging in authentic learning are all correlated with high-order learning tasks. Instructional questioning by the teacher was the main technique used. When compared to the Student Engagement indicators, which produced weak correlations, Student Engagement produced various degrees of connection in regard to Instructional Delivery. It will take more investigation to determine which teaching methods can predict greater levels of student engagement in the classroom, as well as additional observational tools that can validate different types of engagement. Building teacher capacity requires professional development in the areas of explicit instruction, use of XI questions, giving feedback, and use of technology.

The performance of teachers and their content understanding are positively correlated (Belay, 2016). The study was quantitative and employed correlation design with a sample size of 200. It supported earlier studies showing how content-focused professional development can improve teachers' practices (Marzano & Toth, 2013). It is believed that instructors' performance is positively impacted by frequent involvement in content-focused professional development activities but negatively impacted by frequent engagement in pedagogically focused activities (Killion, 2002). Belay (2016) asserts that CPD activities make a significant contribution to the

development of teachers' professional competence and classroom practices. In addition, CPD activities have a significant impact on teachers' commitment, competence, cohesion, sense of responsibility, and motivation in their CPD practice. According to Kennedy (2005), CPDs that emphasize subject-matter expertise and student learning in a particular subject are more likely to have positive effects on teachers who reflect on student learning than programs that concentrate primarily on teaching practices. The research by Marzano and Toth (2013) found that instructors' total pedagogical content knowledge and pedagogical methods have a considerable positive impact on their performance.

2.19.4 The influence of CPD activities on the classroom assessment technique

Classroom evaluation tools give students and teachers feedback and assist the teacher in encouraging students to take ownership of their learning (Goldstein, 2007). (Scott & Weishaar, 2008). Furthermore, classroom evaluation tools may assist teachers in assisting students in monitoring and taking responsibility for their own learning (Hanson & Florestano, 2020). A study on classroom assessment practices and teachers' self-perceived assessment abilities was done by Zhang and Burry-Stock in 2003. The study examines instructors' assessment procedures at all teaching levels and in all subject areas, as well as how they estimate their own assessment abilities in relation to their teaching background and measurement expertise. A MANOVA technique was used to examine the Assessment Practices Inventory data from 297 teachers. Teachers use more objective examinations in their classroom assessments as students' grade levels rise, and they are increasingly concerned with assessment quality. The nature and significance of the subjects instructors teach are reflected in their participation in assessment activities across all curriculum areas. Regardless of their level of experience, teachers who have received measurement training rate their own

assessment abilities as being higher than those of their peers in the areas of using performance measures, standardized testing, test revision, instructional improvement, and communicating assessment results. Also presented are the implications of the findings for measurement training.

In their 2010 study on learning design and assessment with activities, Armellini and Aiyegbayo (2010) found that classroom assessment methods reflect pedagogy and evaluate how well students use both new knowledge and course objectives to determine their learning results. The study found that teachers who employ classroom assessment strategies help their students complete their coursework in a non-traditional online setting. This analysis of the literature has shown that classroom evaluation strategies work well when used in an online environment.

2.19.5 The influence of CPD activities on teachers' and students' relationships

Teachers build strong relationships with their students by fostering a supportive learning environment, treating all students with respect, having high expectations for all students, and ensuring that each student achieves their full potential. This results in a positive relationship between teachers and their students' receptivity to instruction (Fan, 2012). A key component of both teachers' and students' success is a healthy teacher-student connection (Hattie, 2009). According to Gregory and Ripski (2008), if there is a positive relationship, teachers can gain students' trust, make them feel emotionally safe and encouraged, and challenge them to achieve academic success. According to Marzano, Marzano, and Pickering (2003), teachers who participate in CPD activities promote students rather than criticize them, which prevents students from learning.

Effective teacher-student connections, according to Pearsonson (2012), reduce attitudes that undermine classroom lessons while fostering a positive learning environment for all students. The study was quantitative which employed regression and cross sectional design with a population size of 120 respondents. This link reduces the teacher's worries, which can increase absenteeism and instructional failure rates (Miller, 2000). It has a connection to raising student achievement levels and improving quality of life outcomes. Ineffective teacher relationships will negatively impact instructors' performance, which will negatively impact students (Estherlydia, 2009). The study employed mixed method which used 90 respondents for quantitative data and five (5) for qualitative data. It has been demonstrated that as a result of spending less time on behavior management, teachers become more successful and efficient in their classroom performance (Estherlydia, 2009). Studies have shown that teachers are capable of adapting to changes that may take place in the classroom or elsewhere (Estherlydia, 2009). This connection makes teachers more flexible in the classroom, which affects how well they perform.

2.20 Summary of the literature review

In conclusion, CPD activities have been used in many countries in the world, including Ghana. The next chapter focused on the methodology used to collect responses from the participants. In general, CPD activities are the process of providing additional learning opportunities to build the capacities of the teachers in order to improve their overall performance as facilitators in the classroom. According to experts (Desimone, 2009), in the field of CPD, CPD activities have an effect on teachers' performance, though the effects may be positive or negative. CPD activities available for SHS teachers include virtual learning or online learning, monitoring and coaching, Professional Learning Community (PLC), distance learning, regular

courses, self-learning through online, workshops, conferences, seminars, in-service training and others (Rebecca, 2018). According to them, CPD activities help to achieve the following improvements in instruction delivery, classroom management skills, building of teachers' classroom behavior, assessment skills, and teacher-student relationships. CPD activities' primary aim is to help teachers update their skills and knowledge in order to perform to standard. The research study employed the Champel job performance theory. The theory aims to make an investment in education, which will help the country get quality teaching services from the teachers. There are three main dimensions of use, including professional, clinical, and expanded role dimensions.



CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Overview

This chapter focused on the research procedures the researcher used to carry out the research work in the public SHS in the Birim Central Municipality. The areas consist of the research paradigm, research approach, research design, population, study area, sample and sampling procedures, data collection instruments, validity and reliability data collection procedures, data analysis procedures ethical considerations and chapter summary.

3.2 Research paradigm

This research study employed the traditional positivism paradigm. The positivist represented the traditional form of research and these assumptions hold more for quantitative research than qualitative research. The researcher employed the positivism assumption because it was the underline basis for a typical quantitative research study and appropriate for research studies where the opinions of the respondents were to express in numeric terms. It was very appropriate to use this paradigm since the participants' involvement very large.

This worldview is sometimes called the scientific method or doing science research. It is argued that social reality exists out there and is independent of the observer (Creswell, 2012). It operates on the assumption that human behavior is essentially rule-governed' (Cohen et al., 2002). According to Esterberg (2009), 'positivist researchers aim to discover a set of laws that can be used to predict and describe general patterns of human behaviour'. Allan (2012) and Creswell (2012) indicated the rationale and justification for the use of positivism.

This assumption is justified on the basis that it allows the researcher to only express the responses from the teachers in selected public SHS in Birim Central Municipality in numbers that are subjected to statistical analysis. All the participants' opinions can be quantified and related to numbers. It can use numbers to determine if the CPD activities influence teachers' performance in Birim Central Municipality. The positivism assumption is good and recommended for research works that aim to achieve standardization which makes it possible for comparing the finding of the teachers from the three public SHS from the Birim Central Municipality.

According to experts like Anderson and Arsenault, (2005) believe that the chief strength of positivist assumption is the vigorous process of setting and testing of hypothesis, it has deep analysis to measure results and the ability to codify teachers' responses or results to set laws to predict effects of interventions on the social behaviours. It helps to determine how CPD activities influence teachers' capacity building in Birim Central Municipality. This assumption helped the researcher to attain high accuracy and certainty in the results from the teachers' responses.

Aside, from the merits associated with positivism, there are some weakness attached to its usage. It is impossible to get responses from the perspective of the participants and does not allow two approaches to be used together (Allan 2012; Kusi 2012; Creswell 2012). The researcher may not be able to get information or responses from the perspective of the teachers. Other research approaches cannot be used together with this assumption. This assumption is good for quantitative research only but not applicable to qualitative. Another weakness associated with the use of traditional assumption is that it does not consider the emotional and physical gestures aspect of the respondents. Positivism is more about absoluteness and objectiveness which does not take issues from the perspective of the respondents. This means that positivism

does not take responsibility for the social life of the individual respondents'. It aims to search for ideals and perfect standards of scientific methodology and analysis that are too unrealistic in this complex world. Aside the weakness associated with the assumption it is the perfect assumption for the study.

3.3 Research approach

The researcher purported to take the responses from the SHS teachers and codify those responses using numbers. Due to that, the research study employed a quantitative approach. The quantitative approach is the process of gathering observable data to answer a research question using statistical, computation, or mathematical techniques (Quick & Hall, 2015). A quantitative approach is a research approach that allows the researcher to use inquiry to answer questions to discover the relationship between variables to explain, predict, and control phenomena (Creswell, 2012). It intends to confirm, develop and contribute to the theory. There is a high objective in the use of a quantitative approach which makes it possible to achieve standardization and testing of the hypothesis. This implies that it focuses on only numbers which can be subjected to SPSS to analyze the data from the teachers, unlike the qualitative approach. The quantitative approach is based on the measurement of quantity or amount.

In quantitative research, the approach is the process of expressing or describing responses in terms of one or more quantities. The result of this research is essentially a number or a set of numbers. The selection of the research approach was based on the fact that it is related to the positivist world point of view, the research questions, and the purpose of the study. It was appropriate for the study because respondents

whom data was collected from were very large. Also, it used numeric data to conclude the analysis of data through the use of the Statistical Package for Social sciences.

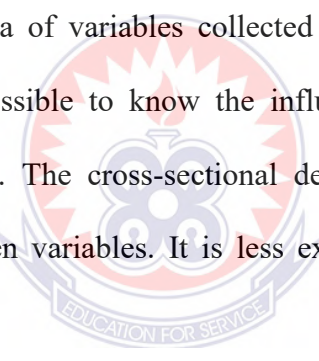
Due to the large number of respondents, there is a high chance and possibility to generalize the findings among the three selected SHS in Birim Central Municipality of Eastern Region. These variables (CPD activities and teachers' performance), in turn, can be measured, typically on instruments like questionnaires, so that numbered data can be analyzed using statistical procedures (Creswell, 2012). The researcher sort to find out if the CPD activities influence the SHS teachers' performance. It also supported a study that aims to predict and explain the influence of CPD on SHS teachers' performance in Birim Central Municipality. All the information and responses from the SHS teachers in Birim Central Municipality can be subjected to numbers. The research approach was very economical in its usage and easily manageable in short time research work like second degree.

After reading the research books written by (Creswell, 2012; Kusi, 2012), the researcher discovered some strengths and weaknesses associated with the use of the quantitative approach. The quantitative approach has some strength associated with it which serves as the basis for the rationale and usage of this kind of approach. The quantitative approach can utilize instruments like closed ended questionnaires that measure teachers' performance in terms of CPD activities they have participated and the information can be analyzed by using statistical procedures. Also, it is capable of collecting data from a large number of respondents and generalizing its findings. There are some other strengths associated with a quantitative approach which include easy and quick collecting of information from the selected respondents in the public SHS in Birim Central (Creswell 2012). According to Bryman (2012), it also added

that it avoids intrusion. A quantitative approach is not without weaknesses. The quantitative approach cannot be used to collect data from the participant's perspective and cannot be used with other approaches. Aside, from that, the researcher cannot attain the information behind social phenomena which can create a cloud of doubt on the final results lastly, it is a very expensive approach.

3.4 Research design

The research study employed cross-sectional design. The selection of this research design was influenced by the research approach, research questions and research objectives. Cross-sectional design involves taking data from a population at a particular point in time. The cross-sectional study design is a type of descriptive research that analyzes data of variables collected at one given point in time. It is purely descriptive and possible to know the influence of a variable on the other variables (Bryman, 2012). The cross-sectional design does not aim to reveal the causal relationship between variables. It is less expensive and capable of handling multiple variables.

The logo of the University of Education, Winneba, is a circular emblem. It features a central sunburst or starburst design. Below the sunburst, there is a banner with the motto "EDUCATION FOR SERVICE". The entire emblem is set against a light background.

This design is appropriate for a study that aims to measure and explain how variables influence other variables. In terms of explaining and describing the changes CPD activities inflict on the performance of SHS teachers, then cross-sectional research design is very appropriate. It also, allows the researcher to collect data on multiple variables and is less costly to operate.

Cross-sectional design was selected because it was capable of helping the researcher to get a snapshot of the teacher's performance in the three SHS in the selected study area. It allowed the researcher to collect data from the SHS teachers at the same time and less possible for the SHS teachers to quit during the data collection period. The

design fit research study duration. Cross-sectional design did not pave way for data manipulation. Though cross-sectional design only describes what has been observed. It is not capable of bringing the causal relationship between or among variables.

3.5. Site sample characteristics

The engagement of teachers in CPD activities has proof its relevant towards improving the performance of teachers. Therefore, a study that focused on the influence of continuous professional development (CPD) on Senior High Schools (SHSs) teachers' performance in Ghana is worthwhile. Due to time and financial factors of travelling from location place to another, the study focused on public SHS teachers in Birim Central Municipality. The choice of the Birim Central Municipality was influenced by many factors. The public Senior High schools selected were Oda Senior High (ODASCO), Attafuaah Senior High school (ASTECK) and St. Francis Technical Senior High School (FRANSTECH). The area was selected because it is very convenience and economical to conduct the study in such environment. It was very easy for the researcher to conduct the study in such environment since he had a good relationship with the heads of the school which made easy accessibility. Also, it was the typical case in the district. The quality of education as something to do with the quality of the teachers in the school. It has come to light that many SHS teachers in Birim Central Municipal heavily depends on their teaching experience without engaging in CPD training available to them.

Also, the performance among the teacher in the public SHS in Birim Central has fall. This might also have some kind of influence on students' academic performance. The low quality delivery is an indication of poor performance among the SHS teachers. The poor performance among SHS teachers were influenced by so many factors and

CPD activities is one of them. As far as Ministry of Education (MoE) and Ghana Education Service (GES) has much concern about improving teacher performance in the classroom, there was the need to find out if CPD activities has influence on the performance of SHS teachers in Birim Central Municipality. Also, the number of schools in Birim Central Municipality were manageable within the stipulated time for the study. Lastly, it was geographically convenience to research the respondents due to the good road network within the Municipality.

3.6 Population of the study

The total population of the study was 330. The population of the study consist of the all the permanent teachers in the three public SHS in Birim Central Municipality which were Oda Senior High School (ODASCO), Attafuah Senior High School (ASTECK) and St. Francis Technical Senior High School (FRANSTECH). Every permanent teacher met the criteria though the researcher was not much concern about years of teaching experience of the teachers. Permanent SHS teachers were used because they were able to give the needful information and there was possibility that they have participated in some of CPD activities. The permanent teachers were able to determine if the CPD activities they participated had effects on their performance in the classroom teaching and learning and provide vital data to draw accurate conclusion. But the study excluded Nation Builders Corps (NABCO) teachers, national service personnel and non-teaching staff. Nation Builders Corps (NABCO) teachers, national service personnel and non-teaching staff were excluded because they were not of interest to the researcher and cannot provide the researcher with rich information since some of them are new in the teaching profession and have little or no CPD at all. They cannot determine whether CPD activities have influence on teachers. Their responses were not helpful to the researcher to draw accurate and

reliable conclusion. The teachers include all the gender that is males and females. The total numbers of female teachers and males teachers were 140 and 190. The table 3.1 indicates the compositions of the total teachers were allowed to participate in research study. According to Kusi, (2012), population and sample size can be tabulated.

Table 3.1: Population of the study

POPULATION/SCHOOLS	ODASCO	ASTECH	FRANSTECH	TOTALS
Males	60	75	55	190
Females	50	45	45	140
TOTALS	115	120	95	330

Source: Fieldwork data (2021).

3.7 Sample size and sampling procedures

The research study employed census as a sampling technique. All the permanent teachers in the three public SHS in Birim Central Municipality were used without taking samples from the population. Bryman (2012) and Kusi (2012) stressed that the census involves the inclusion of an entire population. Census is the process by which all the members of the population are used for the study. Census does not make provision for samples from the population. In this case, the total population equates sample. This implies that all the teachers in ODASCO, ASTECK, and FRANSTECH are the participants and they were used in the research study.

Census was very appropriate because the SHS teachers involved in the study were not too large and there was also a possibility that some of the teachers may not make themselves available or participate in the research study. To avoid unfair representations of teachers to fill the questionnaires, all must be inclusively used. In the census, getting more than 50% of the participants is acceptable. The use of census mitigated sampling errors and biases. Census overrides the inadequacy and limitation

of information obtained from the sample made from the population and does away with sample errors and biases. The researcher got a fair representation of participants to participate in the study and to fill out the questionnaires.

3.8 Data collection instruments

The research instrument employed in this study was a questionnaire. The selection of the research instrument was based on the quantitative approach, positivism assumption, research topic, and research objectives. The closed-ended questions were used since it goes with questionnaires. Questionnaires are documents that consist of fixed and standard items that are used to collect relevant data from respondents. It used close-ended questionnaires and was much related to quantitative analysis. The questionnaires predetermined questions that respondents had to select from at ease. Questionnaires were used because it was a good tool for the protection of the privacy of the participant from the selected senior high schools in Birim Central Municipality in the Eastern region of Ghana. Also, questionnaires were in line with quantitative data which deal with numbers and statistics, and can be administered manual, postal, mailed, and web-based or email.

The questionnaires were used because it encourage and support research work that involves the use of a large population. It was possible to code and analysis the responses in a quantitative way. Due to the numeric nature of this research, questionnaires were used. The questionnaires allowed the researcher to get more data and the expected responses. The questionnaire contained predetermined standard questions which involved the collection of numeric data which was subjected to statistical analysis like SPSS (Version 25).

The questionnaires have five (5) sections. The first (1st) section (A) contains the background information of the respondents, the second (2nd) section (B) stresses teachers' involvement in CPD activities on their classroom management practice in Birim Central Municipality ; the third (3rd) deals teachers involvement in CPD activities on their classroom instructional delivery in Birim Central Municipality . The fourth (4th) section contains teachers' involvement in CPD activities on their usage of classroom assessment tools in Birim Central Municipality and the last section (5th) deal with teachers' involvement in CPD activities on the teacher-student relationship in the classroom.

The questionnaire was a Likert scale and the Yes/No questionnaires. The questionnaire used in this study was adopted but most of the items were modified to meet the needs of the study. The classroom management and discipline scale (CMDS) developed by Emmer & Hickman (1991) were adopted to measure how teacher engagement in CPD activities influences their classroom management practices. Also, the Teachers Performance Scale (TPS) developed by Glenn (2013) aim to measure the influence of CPD activities' on teachers' performance in terms of their ability to use assessment tools, their instructional delivery skills and the ability the teacher initiate a positive relationship with the students in the classroom. The reliability of the instruments used was above 0.70 which is an indication of high consistency and compatibility with the study.

The questionnaire was preferred to other data collection instrument because it was easy and cheap and cover a large geographic environment. Besides, questionnaires were used to collect large amount of data within the minimum time from a larger population, quickly and easily quantify the data by the researchers or through the use of a software package, courage scientific and objective analyses than other forms.

Questionnaires were inexpensive, more practical, ensure comparability, and observe research ethics such as anonymity and others. Also, the questionnaire did not require any identification of participants which make it possible to achieve confidentiality and anonymity in research. Lastly, questionnaire was used because it gave room for respondents to check their responses and does not intrude on the personal matters of the participants.

3.9 Validation of the instrument

To ensure that the questionnaire items serve the intended purpose, several procedures were adopted. First, content-related evidence was used, where the questionnaire items were carefully designed and built into the key variables forming the core themes raised in the research questions. Second, the designed questionnaires were given to colleagues to check the clarity of the statements, the use of appropriate language, and the clarity of the instructions. The vital suggestions from colleagues were taken into consideration. Finally, the questionnaire items were presented to the research supervisor for expert judgment. The necessary changes were made after the expert judgment and then the researcher prepared to administer the questionnaires.

3.10 Reliability of the instrument

The reliability of the questionnaire was determined by Cronbach's alpha (CA) through the use of SPSS (version 25). The individual items under the four questionnaires were selected and moved into the items section in the reliability analyses in the scale part of the descriptive analysis in the SPSS. The alpha in the model section was selected to give Cronbach alpha (CA). To check if items are okay, the Item, Scale, and Scale, if the item was deleted, were selected from the description section from the statistic button and select correlation in the inter-item section in the reliability analysis. The questionnaire items were said to be reliable when CA is above 0.70. The reliability of

the first research question was 0.89, the second question is 0.7, the third question was 0.74 and the question was 0.8. The reliability of the research questions was above 0.70 and it is the generally accepted value in Social Science research. The instrument was said to be reliable.

3.11 Data collection procedure

The duration for the data collection was one (1) month. The researcher officially meets the management of the SHSs on a different date but it was within the same week. The purpose of the meeting was to explain the purpose of the research to the management. The ethical issues including confidentiality, anonymity, and privacy were made clear to the management and the respondents. The meeting was used as a strategy to get access to the respondents in all three public Senior High Schools in the Birim Central Municipality. Appropriate permission was taken from the department authorities and supervisors at the University of Education, Winneba to facilitate access to the school.

The questionnaires were administered to the teaching staff in ODASCO, Attafuah Senior High School, and St. Francis Technical Senior High School. The researcher briefly explained the purpose of the questionnaires administered to them and clarified any items to the respondents. The administered questionnaires were collected from the respondents and the researcher showed appreciation for their commitment and support. Then after the data collection, the responses were subjected to statistical analysis. The total number of questionnaires administered in the three public SHS in Birim Central Municipality was 330 but 196 of them were returned to the researcher. This indicated that 60% of the teachers filled out the questionnaire and returned it to the researcher but some of the teachers did not make themselves available at all.

3.12 Data analysis procedures

After collecting the data, the researcher cleaned, coded, and screened the data to give room for data analysis. The questionnaire responses were serially numbered for easy identification. All responses for each item in the questionnaire were analyzed with the assistance of statistical tools like SPSS (Version 25). The data on each of the research questions were analyzed quantitatively using descriptive statistics and inferential statistics like regression.

Section A which contains the background information of the respondents was analyzed by the use of frequency, percentage, pie chart, and bar chart which is descriptive. The descriptive tools mentioned above were used because it makes it easy to describe the opinion of the respondents in a quantitative manner. It indicates the number and percentage of responses from the respondents on each item. The pictorial view depicted in the pie chart and bar chart helped to facilitate the users' understanding of the results and findings from the research study.

Regression was used to establish the influence of CPD activities on SHS teachers' performance. The researcher employed frequency (N) and percentage (%) to analyze the data for sections two (2) and three (3). Descriptive statistics like frequency (N) and percentage (%) were used because they can describe and explain the influence of CPD on SHS teachers' performance. It was capable to allow the researcher to find out whether the CPD activities affect SHS teachers' performance. The research question (4) which is section E was analyzed by the use of mean (M) and standard deviation (SD). This is because it will be easy for analyses and to be understood by the users. Tables were used to illustrate the findings. The hypothesis was tested by

multiple regression. This inferential statistics make it easy to predict the influence of the CPD activities on the SHS teachers' performance.

3.13 Research ethical consideration

Ethics in educational research are those issues that are related to how educational researchers conduct themselves and the consequences of these on the people who participate in their research (Kusi, 2012). It is unethical to enter into an organization or social group to collect data without permission from the 'gate- keepers' of the organization (Kusi, 2012).

To conform to the ethical operations in research, the researcher obtained an introductory letter from the Department of Educational Administration and Management of the University of Education, Winneba. The introductory letter contains the research topic. The purpose was to enable the researcher to get permission and approval from the school authorities to administer the questionnaire to the teachers from the selected public SHS in Birim Central Municipality. The researcher used such visitation to disclose the intention and the purpose of the research and established a cordial relationship with the management, teachers, and head teachers of the selected schools to get the appropriate responses and the needed support to carry out the research.

The researcher obtained consent from the teachers in Birim Central Municipality as they to fill the consent form which explains the purpose, risk, and institutionally approved letter. The researcher makes the teachers aware that their participation in the research is voluntary and not compulsory. Teachers were made aware that they have the voluntary right to research at any point in time without the research pressuring them or forcing them to do that. The researcher assured the teachers that they are

highly protected from participating in the research study. The teachers have the right and freedom to participate in this research study to protect their privacy. Besides, the researcher assured the SHS teachers of the confidentiality of the information provided.

The researcher assured the teachers' that the information provided would not be disclosed to anybody and used for any other purposes but this research purpose only. The teachers were made aware that their identities were covered and nobody can identify them and they must help the researcher to give the right information to get quality data for a quality outcome. Appropriate confidentiality steps were put in place to protect the privacy of the teachers. The teachers have the right to withdraw from participating in the research study and hold any private information from the researcher but the researcher courage the teachers to provide the true information.

3.14 Summary of the Research Methodology

Chapter three of the study discussed the research methodology. The study employed a quantitative approach which was underpinned by positivism research assumption. Also, the study employed a cross-sectional design. The study was conducted in the three public SHS in Birim Central Municipality. The population of the study was the teacher and only permanent SHS teachers were engaged. The study the sample size was the targeted population since the study employed census. The instrument employed was structured questionnaires. The questionnaires were adopted and modified from a scale developed by Emmer & Hickman (1991) and Glenn (2013). The questionnaires were analyzed by the use of the Statistics Package for Social Sciences (SPSS version 25). The appropriate ethical considerations were employed.

The next chapter focused on the data analysis, discussions, and presentation of findings.

Also, this chapter looks at the ethical considerations for the research work, instruments for data collection, validation of the instruments, reliability of the instruments, data collection procedures, and data analysis.



CHAPTER FOUR

DATA ANALYSIS AND DISCUSSIONS

4.0 Introduction

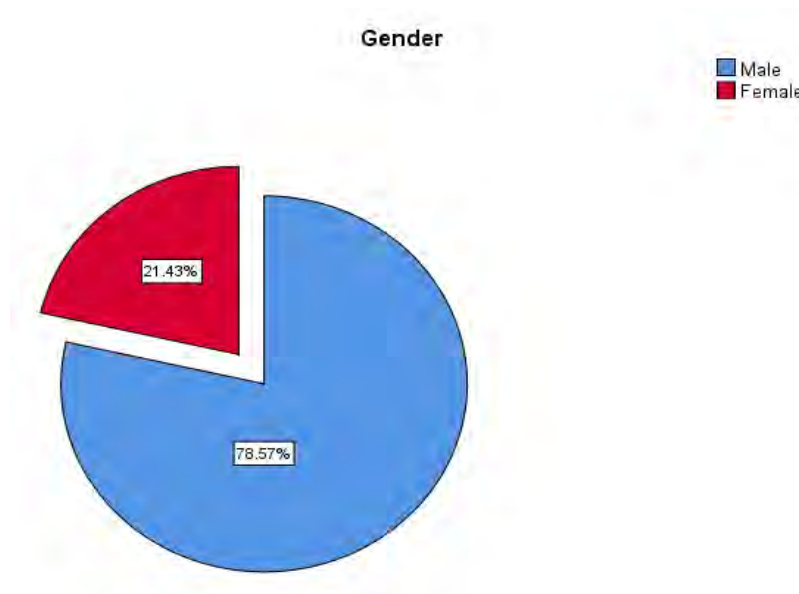
This chapter contains all the analysis from the respondents. Questionnaires were employed to gather data from the respondents. It contains the responses from SHS teachers in Birim Central Municipality on their background data, CPD activities engaged by SHS teachers and the influence of CPD activities on their performance in relation to classroom management, instructional delivery, usage of assessment tools and teacher relationship with students'.

4.1 Questionnaire return rate

From a sample size of 330 respondents, 196 questionnaires were successfully completed. This gave a questionnaire return rate of 60 (whole number) percent. The findings of this study were based on these responses. This clearly showed how the respondents were commented to the study. It was in line with Nzuve (2007), who asserts that 60 percent of available respondents are sufficient to represent the population and lead to a generalization of the study findings.

This also conforms to Mugenda and Mugenda (2008) stipulation that a response rate of 50 percent is adequate; 60 percent is good and 70 percent and over is excellent for analysis and statistical reporting. This response rate was more than satisfactory to make conclusions for the study. Based on the assertion, the response rate was considered to be excellent.

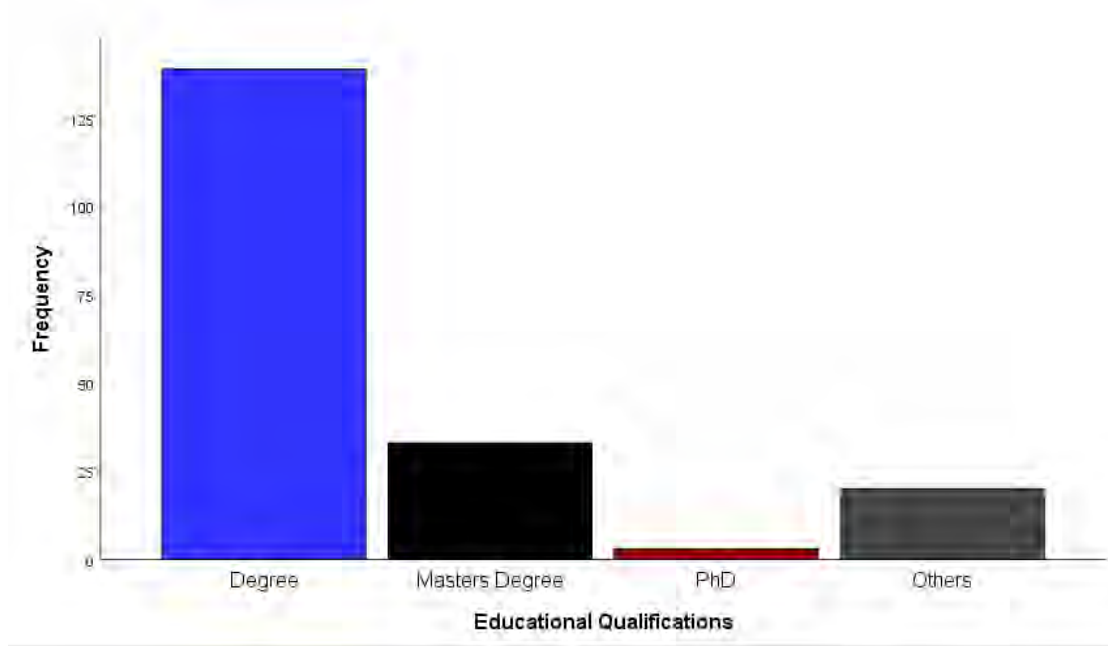
4.2 Background of the respondents.



Source: Fieldwork data (2021).

Figure 4.1: Gender of the respondents

The chart in figure 4.1 indicates the gender responses among the SHS teachers in Birim Central Municipality. The statistics for the male and female SHS teachers were 78.57% (154) and 21.43% (42). It was revealed that most of the respondents were male SHS teachers 78.57% (154) with few females 21.43% (42) teachers. This was an indication that most of the teachers' teaching at public SHS in Birim Central Municipality were males with few female SHS teacher.



Source: Fieldwork data (2021).

Figure 4.2: Educational of qualification of SHS teachers

The figure 4.2 above displayed the statistics on qualification among the SHS teachers'. It was revealed that the teachers in the public SHS in Birim Central Municipality were first degree holders 139 (71.6%), followed by Master degree 33 (16.9%), then teachers with other education 20 (10.3%) and few teachers were having PhD qualification 3 (1.5%). The average teacher in the three public SHS Schools were having a minimum qualification of first degree 68 (71.6%). This concluded that most of the SHS teachers were first degree holders which are represented by the longest bar. It was revealed from three SHS schools that most of the teachers do not upgrade themselves frequently at the Universities in Ghana. The teachers had other alternatives (professional studies, online education, formal workshop etc.) through which they build their knowledge in other perform well in the classroom. These alternatives were not popular among the SHS teachers in the Birim Central Municipality.

Table 4.1: Teaching experience of SHS teachers

Teaching Experience	Frequency (N)	Percentage (P) (%)
1-4 years	32	16.3
5-10 years	40	20.4
11-15 years	44	22.4
16 years and above	80	40.8
Total	196	100

Source: Fieldwork data (2021).

The SHS teachers were having a minimum qualification of first degree (figure 2) with most of them being a male teachers. The teaching experience among the three public SHS were 1-4 years 32 (16.3%), 5-10 years 40 (20.4%), 11-15 years 44 (22.4%) and 16 years and above 80 (40.8%) working experience. The statistics in table 2 showed that the least teaching experience among the SHS teachers was between one (1) and four (4) years but most of the teachers had taught for about 16 years and above. This indicated that the teaching staff within Birim Central Municipality were experienced teachers who might be an instrumental in helping other teachers to build their competencies and knowledge on teaching and learning in the classroom especially the newly recruited SHS teachers.

4.3 The CPD activities engaged in by SHS teachers

Table 4.2: CPD activities engaged by SHS teachers

Statement	Responses P% (N)	
	Yes	No
Monitoring and coaching from expert like head teacher, Colleagues	73% (143)	27% (53)
Taking training courses or formal study	86.1% (167)	13.9% (29)
Virtual or online learning	75% (144)	25% (52)
Professional Learning Community (PLC)	58.9% (115)	41.1% (81)
Self-learning	86.2% (182)	13.8% (14)
School based workshop and Conferences	82.2% (169)	17.8% (19)
Other CPD activities	25% (52)	75% (144)

Source: Fieldwork data (2021).

The table 3 above revealed the CPD activities undertaken by SHS teachers in Birim Central Municipality. The responses were “Yes” which indicates that they have engaged in CPD activities and “No” means they have not experience such activities before. On the basis of the “Yes” responses, the CPD activities engaged by SHS teachers were self-learning 86.2% (182), School based workshop and conferences 82.2% (169) and taking training courses or formal study like Sandwich, Regular courses, distance courses 86.1% (167) virtual learning or online learning 75% (144), monitoring and coaching from Expert like Headmaster, and colleagues 73% (143) and the least was Professional Learning Community (PLC) 58.9% (115). The other CPD activities such as teaming teaching and audio programme are not engaged by most of the SHS teachers.

The constant changes in knowledge and skills in teaching have come to stay and must be a medium that the SHS teachers in the Municipality to update their knowledge in

the discipline they taught. The research findings revealed some of the medium the SHS teachers in Birim Central Municipality may use to respond to educational changes. These CPD activities engaged by SHS teachers included monitoring and coaching, training course or formal study, virtual or online learning, self-learning, school based workshop and conferences, Professional Learning Community (PLC) and others like team teaching, audio program on phone etc. The CPD activities engaged by the SHS teachers are grouped into that is major activities and minor (other) activities.

Among the CPD activities by the SHS teachers, the major of them include teachers own self-learning 86.2% (182). The SHS teachers now upgrade themselves through reading of relevant books, articles, journals and other reading materials that related to the discipline taught in the school. The learning took place at the convenience place and time of the teachers. The teachers did this purposely to overcome knowledge deficit and efficiency and to deliver update information to students in the classroom. Also, some of the SHS teachers embark on training course or formal study program 86.1% (167) at the various Universities and other recognize tertiary in Ghana that run regular, distance, sandwich programs to enrich their competencies in the classroom. Aside that the public SHS in Birim Central Municipality organized workshop and conference programs 82.2% (169) for the SHS teachers. The latex one was the workshop on the new curriculum which introduces the SHS teachers to the applicable contents, area of assessment and teaching pedagogy.

The other CPD activities engaged by SHS teachers included monitoring and coaching, virtual or online learning, Professional Learning Community (PLC). Also, other CPD activities like team teaching, audio program on phone etc. were not participated

frequently by the SHS teachers in Birim Central Municipality. The findings were in confirmatory to research findings of Asare and Nti (2014) which disclosed that CPD activities available for SHS teachers include distance learning, regular courses, self-learning through online, workshops, conferences, seminars, in-service training and others.

4.4 RQ.1 Teachers' involvement in CPD activities on their classroom management practices in Birim Central Municipality

Table 4.3.1: Teachers involvement in CPD activities on their classroom management practices.

Statement	Responses								
	SD		D		A		SA		
	N	%	N	%	N	%	N	%	
My engagement in CPD activities has helped to :									
Use appropriate reinforcement to control students behavior	20	10.4%	40	20.6%	115	58.7%	20	10.3%	
Monitor students work in the classroom	78	40%	46	23.5%	41	22.5%	27	14%	
Arrange the setting of the students	10	5.2%	8	4.1%	108	55.7%	69	35%	
To create good conducive environment for learning	8	4.1%	10	5.1%	110	56.1%	68	34.7%	
To utilize the allocated time for teaching and learning	6	3.2%	21	10.8%	118	60.3%	50	25.7%	
Understand and respect the students differences	8	4.1%	10	5.10	126	64.3%	52	26.5%	
Guide learners to establish classroom guidelines	10	5.2%	13	6.7%	98	50%	75	38.1%	
Use non-verbal communication well	8	4.1%	10	5.1%	110	56.1%	68	34.7%	

Source: Fieldwork data (2021)

Table 4.3.2: Regression analysis of the influence of CPD activities on SHS classroom management practices

	ANOVA				
	Df	SS	MS	F	Significance F
Regression	1	597.6606	597.6606	0.059088	0.808199524
Residual	194	1962251	10114.7		
Total	195	1962849			

Source: Fieldwork data (2021)

Table 4.3.1 displays statistics for the influence of CPD activities on SHS teachers' performance in relation to classroom management practices. The statistics in table 4.3.1 disclosed that most of the SHS teachers agreed with 58.7% (114) the fact that CPD activities they engaged in influenced their ability to correctly use reinforcement, and some of the teachers also disagreed with 20.6% (40) and strongly disagreed with 10.4% (20) that CPD activities had no influence on their classroom reinforcement. The statistics in table 4.3.1 revealed that most of the teachers in Birim Central Municipality agreed 58.7% (114) that their involvement in CPD activities influenced their usage of reinforcement in the classroom. The reinforcement may be positive or negative, depending on the behaviors of the students. Due to the strict discipline enacted by the SHS teachers in the Birim Central Municipality, bad behaviours were controlled and others were detected from coping such behaviours. Conduct management focuses on shaping and controlling the behaviour of the students through the establishment of discipline protocols in the class (Iverson & Froyen, 1999).

The responses from the teachers in table 4.3.1 showed that SHS teachers agreed 55.7% (108) and strongly agreed 35.0% (69) that teachers' CPD activities influenced their classroom seating arrangement, but some of the teachers in the three public SHS in the Municipality 5.2% (10) strongly disagreed and 4.1% (8) disagreed that the CPD

activities they participated in had no influence on their classroom seating arrangement. In all, most of the teachers agreed that 55.7% (108) of the CPD activities they participated in influenced their classroom seating arrangement. The classroom seating arrangement influenced the teacher's output in the classroom. It enabled safe movement and a classroom climate that improves students' participation and contribution during instructional delivery. The physical arrangement of the classroom increases teacher performance in terms of monitoring and supervising the students' learning in the classroom. According to researchers, a teacher's classroom design improves productivity and efficiency and ensures ease of movement. Also, teachers are able to supervise the students' learning and control disruptions in class (Iverson & Froyen, 1999).

Again, statistics in table 4.3.1 show that most SHS teachers in Birim Central Municipality strongly disagree with 40% (70.4) that teachers' involvement in CPD activities did not affect their monitoring of students in the classroom. They believed that their monitoring skills had no statistical relation to the CPD activities they participated in, but this alone cannot disprove the influence of CPD on the SHS teachers' performance in Birim Central Municipality. Aside from that, some SHS teachers agreed that CPD activities influenced 22.5% (44.1) of their student monitoring.

Furthermore, the statistics in table 4.3.1 revealed that SHS teachers in Municipality agreed 56.1% (110) and strongly agreed 34.7% (68) that their involvement in CPD increases their ability to create a good conducive learning environment which facilitates teaching and learning in the classroom. Aside from the fact that 5.1% (10) of teachers disagree and 4.1% (8) strongly disagree that CPD activities influenced

their ability to create a conducive learning environment. In all, most of the SHS teachers in Municipality agreed with 56.1% (110) that their involvement in CPD activities influenced their ability to create a good learning environment for teaching and learning. The analysis findings revealed that SHS teachers with good classroom management are able to create a conducive environment for learning. This increases the students' participation in the lesson taught. Poor learning environments negatively influenced teaching and learning. Emmer and Saborine (as cited in Davis, 2017) argued that a positive learning environment increases students' participation, which is evidence of the high productivity of the teacher.

Moreover, the teachers' responses in table 4.3.1 showed that some of them agreed 60.3% (112) and strongly agreed 25.0% (49) that they were able to utilize instruction lesson time to teach the content to the learners after their involvement in CPD activities. But some of the SHS teachers in Municipality disagreed 10.8% (21) and strongly disagreed 3.2% (6) that their involvement in CPD activities has no influenced on their instructional time utilization. It was revealed from the statistics in table 4.3.1 that most of the teachers in three public SHS in Birim Central Municipality agreed that 60.3% (112) of their utilization of time for instruction is statistically influenced by the CPD activities engaged by them. The teachers were able to utilize their instructional lesson time properly due to their behavior control and management skills.

Again, there were different students in the class who came from different backgrounds, and teachers had to appreciate and respect such differences. In the statistics table, some teachers agreed that 64.3 % (126) and strongly agreed 26.5% (52) that their involvement in CPD activities influenced them to appreciate and

respect students' differences in the classroom in order to avoid discrimination and embarrassment. The teachers embraced the divergent cultures of the students. This promotes unity and student learning in the classroom. It do away with unhealthy competition in the classroom. Despite the agreement, some of the teachers also disagreed 5.1% (10) and strongly disagreed 4.1% (8) that CPD activities have no influenced on their respect for students' differences in the classroom. In conclusion, teachers' involvement in CPD activities influenced their respect for students' differences in the classroom. In addition, some of the teachers agreed 50% (98) and strongly agreed 38.1% (75) that after the teachers participated in CPD activities, they were able to guide and lead the students towards learning, leading to the achievement of learning goals. Though 5.2% (10) of teachers disagreed and 6.7% (13) strongly disagreed that CPD has nothing to do with their ability to lead and guide students in the classroom. It is obvious from the analysis results that teacher involvement in CPD activities influenced their leading and guiding styles in the classroom.

Table 4.3.1 disclosed that the SHS teachers' responses agreed 56.1% (110) and strongly agreed 34.7% (68) that their non-verbal mode of communication in the classroom was statistically affected by their participation in CPD activities organized within or outside the school. Other teachers strongly disagreed with 5.1% (10) of the fact that CPD activities did not influence their non-verbal communication in the classroom. It was indicated that most teachers agreed 56.1% (110) that CPD activities influenced their non-verbal communication with students in the course of teaching and learning. It was also a way of stressing some important and key ideas in the concepts taught in the classroom.

Table 4.3.2 revealed the statistically significance influence of CPD activities on SHS teachers performance in Birim Central Municipality. The table 4.3.1 has describe the SHS teachers' level of agreement with the influence of CPD activities on their classroom management practice. The regression analysis results indicated there was a positive influenced of CPD activities ($F=0.0591$, Sign. $F= 0.8081$) participated by the SHS teachers in Birim Central Municipality. CPD activities were a good predictor of public SHS classroom management practice in Birim Central Municipality. CPD activities organized by SHS teachers were one on the means of changing and improving teachers' classroom management practices.

Inferred from the analysis results in table 4.3.1 and 4.3.2, it was concluded that CPD activities engaged by SHS teachers influenced their classroom management practices in terms of content, conduct, covenant, and physical arrangement as an indicator of teacher performance in the classroom. CPD activities were a good predictors for effective classroom management practices ($F=0.0591$, Sign. $F= 0.8081$) in the classroom. Franklin and Harrington (2019) confirmed that CPD activities in relation to classroom management positively influenced teachers' performance in the classroom. Egeberg (2019) supported that classroom management strategies influence teachers' ability to be effective and efficient in their classroom delivery.

4.5 RQ.2: Teachers' involvement in CPD activities on their classroom instructional delivery in Birim Central Municipality

Table 4.4.1: Teachers' involvement in CPD activities on their instructional delivery in the classroom.

Statement	Responses							
	SD		D		A		SA	
	N	%	N	%	N	%	N	%
My engagement in CPD activities has helped to :								
master subject content knowledge	12	6.1%	6	3.1%	136	69.4%	40	21.4%
utilize the appropriate teaching method	6	3.1%	6	3.0%	137	69.9%	47	24%
improve my teaching repertoires	8	4.1%	16	8.2%	144	74.3%	26	13.4%
incorporate creativity in the lesson delivery	14	7.1%	18	9.3%	144	73.4%	20	10.2%
build my confidence and efficacy in delivery	10	5.1%	20	10.2%	146	74.5%	20	10.2%
improvement in communication in content delivery	8	4.1%	12	6.2%	131	67%	45	22.7%
utilize classroom instructional resources during teaching and learning	8	4.0%	16	8.2%	137	69.9%	35	17.9%

Source: Fieldwork data (2021)

Table 4.4.2: Statistical influence of CPD activities on SHS instructional delivery

ANOVA					
	Df	SS	MS	F	Significance F
Regression	1	0.713420738	0.713420738	1.033013519	0.733917798
Residual	194	133.9804568	0.690620911		
Total	195	134.6938776			

Source: Fieldwork data (2021)

The statistics in table 4.4.1 depicted teachers' involvement in CPD activities as influencing their instruction delivery in the classroom. The statistics in the table above showed that some teachers strongly disagreed with 6.1% (12) and disagreed with 3.1% (6) that mastering of the content or knowledge of a subject taught in the class is not influenced by the CPD activities they participated. A few of the teachers' beliefs that constant training in teaching in the classroom sharpens their content knowledge. However, 69.4% (136) of SHS teachers in Municipality agreed, with 21.4% (42) strongly agreed that participation in CPD activities enable them to master the content knowledge in the discipline they teach. The analysis results disclosed that SHS teachers' mastery of the content in the various disciplines as the results CPD activities engaged in by them, whether within or outside the school. Constant education upgraded and modernized SHS teachers' knowledge of subject teaching in the school. This makes the teachers love teaching and develop a passion for teaching in the classroom. Also, teachers with the right content knowledge of the subject were less likely to experience stress in the classroom. Most of the teachers' responses agreed that 69.4% (136) and others strongly agreed 24% (47) that their involvement in CPD activities affects their competencies to utilize appropriate teaching methods to deliver subject content to the understanding of the students. Aside from that, very few

teachers (3.1%) and strongly disagreed (3.1%) that teachers' CPD activities have no influence on their ability to use the correct teaching method to deliver content knowledge. It was disclosed that most of the SHS teachers agreed 69.4% (136) that teachers' ability to use appropriate teaching methods to deliver content knowledge was influenced by the CPD activities they participated in, whether formal or informal. Teachers' engagement in CPD activities builds their competencies in subject content and delivery strategies that facilitate their performance in the classroom (Wabule, 2016). The research findings indicated that SHS teachers' competency building on instructional delivery increases their content knowledge and how such content must be delivered to the understanding of the students. Marzano and Toth's (2013) research findings support the hypothesis that there are significant gains in teachers' overall pedagogical content knowledge and pedagogical practices on their performance.

Furthermore, statistics in table 4.4.1 showed that most of the SHS teachers agreed 73.4% (145) and strongly agreed 10.2% (20) that those teachers who participated in CPD activities were able to incorporate creativity into their lesson delivery. They believe that creativity in learning boosts teaching and learning and increases students' willingness to learn in the classroom. Creativity in teaching is a skill that every teacher must have in order to be efficient in the classroom. This can be obtained through CPD training available for the SHS teachers in the classroom. Very few of the SHS teachers strongly disagreed; 7.1% (14) and 9.3% (18) disagreed with the fact that CPD activities did not affect their creativity in teaching and learning. In conclusion, teachers' creativity in the teaching of students is vehemently influenced by the CPD activities organized for them by their SHS or in which they participate outside the school. It has been revealed that creativity training in teaching has made SHS teachers incorporate divergent instructional strategies and utilize classroom

resources in every lesson, which is a sign of the high performance of a teacher. It is very important for the teachers to attend such training in order to teach to meet the divergent needs of the students. Also, SHS teachers who engage in CPD activities were able to communicate the main ideas to the students, which leads to high student achievement among students. According to the Council of Chief State School Officers (2013), the instructor's ability to communicate subject ideas to the student through appropriate teaching strategies may influence the teacher's performance.

Furthermore, statistic table 4.4.1 revealed that the majority of teachers agreed 74.3% (144) that the CPD activities they participated in improved their teaching repository in that classroom, though some SHS teachers strongly agreed with 34% (26.3). Though most of the teachers agreed, a few disagreed 8.2% (16) and strongly disagreed that their CPD activities improved their repository in the classroom. The majority of the SHS teachers agreed that 74.3% (144) of CPD activities astronomically affected their classroom repository. That is, the teachers were able to apply their techniques and mechanisms that make learning interesting and attractive to both the teachers and the students.

Moreover, table 4.4.1 also showed the influence of CPD activities on teachers' confidence building and self-efficacy in delivering content in the classroom. According to the statistics, the majority of SHS teachers 74.5%(146) agreed that CPD training activities, whether formal or informal, helped them build their teaching confidence and self-efficacy in the classroom, though 10.2% (20) strongly agreed. Aside from the fact that 10.2% (20) of SHS teachers in the Municipality disagreed and 5.1% (10) strongly disagreed with the fact that CPD training activities influenced their confidence in the classroom. In all, SHS teachers in Birim Central Municipality

agreed that 74.5% (146) of CPD activities statistically influenced their confidence and self-efficacy in delivery in the classroom. Teachers with the right skills, content knowledge, and use of the right teaching strategies to deliver to the understanding of the students gain confidence in the classroom, which increases the students' trust in what they had thought in the classroom. Teachers' engagement in CPD activities builds their competencies in subject content and delivery strategies in teaching, which positively affects their confidence and self-efficacy in delivery (Wabule, 2016).

According to the statistics in table 4.4.1, most of the SHS teachers agreed 67% (136) that after their engagement in CPD training activities, their means and ways of communicating with students in the classroom have increased tremendously. Aside from that, some teachers strongly disagreed (4.1%) and disagreed (6.2%) that their communication has remained unchanged and that nothing has changed in their ways and means of communication as a result of the CPD activities they participated in. As inferred from the results of the analysis, the SHS teachers agreed that CPD activities improved their communication in the classroom. That is, there was improvement in the SHS teachers' communication ability when delivered in the classroom, which is prone to correct articulation of the main ideas to the understanding level of the students. Bambaeroo (2017) confirmed that communication influences a teacher's performance in the classroom.

Table 4.4.1 again disclosed the statistics for the SHS teachers' responses to the influence of CPD activities on the utilization of classroom instructional resources to facilitate teaching and learning. The results showed that most of the teachers agreed 69.9% (137), with a few of them strongly agreeing 17.7% (35) that the CPD activities they were involved in affected their capacity to utilize classroom instructional

resources to bring positive learning among the students. Some of the SHS teachers had the view that though they have been engaged in CPD activities, it has nothing to do with their ability to utilize classroom instructional resources. In all, the SHS teachers agreed 69.9% (137) that CPD statistically influenced their ability to utilize classroom instructional resources to influence teaching and learning in the classroom. The classroom resources utilized include both human and non-human resources used for teaching and learning in the classroom. Bukoye, (2019) supported that utilization of classroom instructional resources positively influences students' academic performance, which is the outcome of the teachers.

Table 4.4.2 revealed the statistically significance influenced of CPD activities on SHS teachers instructional delivery in the classroom in Birim Central Municipality. Teachers classroom delivery skills was very important and a requirement for leading learning in the schools. The choice of method used to delivery subject content was influenced by the teachers' competencies. The additional training they went through build their competencies and knowledge on how to deliver in the classroom. The regression statistics indicated that CPD activities ($F= 1.0333$, Sign. $F= 0.7339$) was a good predictor of the public SHS teachers effective instructional delivery in the classroom. Marzano and Toth (2013) research findings revealed that there were significant gains in teachers' overall pedagogical content knowledge and pedagogical practices on their performance. This was an indication that CPD activities engaged by public SHS teachers positively influence their classroom instructional delivery skills.

It is concluded that CPD activities engaged by SHS teachers helped them in their instructional delivery in the areas of confidence and self-efficacy building; creativity in teaching; usage of classroom resources; communication; and correct usage of

teaching methods. This affirmed how CPD activities inflict positive changes in the performance of SHS teachers in relation to their instructional delivery in the classroom. This also reflected that CPD activities influence SHS teachers' instructional delivery. CPD activities for SHS teachers had a significant influence on their classroom instructional delivery. Marzano and Toth (2013) research findings revealed that there were significant gains in teachers' overall pedagogical content knowledge and pedagogical practices on their performance. Instructional focus CPD activities assist teachers to achieve teaching indicators and content standards (Mundry & Stiles, 2005).

4.6 RQ.3: Teachers' involvement in CPD activities on their usage on assessment tools in Birim Central Municipality.

Table 4.5.1: Teachers CPD activities on SHS teachers' usage on assessment tools.

Statement	Responses (%)							
	SD		D		A		SA	
	N	%	N	%	N	%	N	%
My engagement in CPD activities has helped to :								
Incorporate all the domains when assessing students	6	3.1%	20	10.2%	134	68.1%	37	18.6%
Developed remedial strategies to assist needed students	8	4.1%	14	7.3%	113	57.7%	60	30.9%
Use alternative approach of assessing students	12	6.1%	8	4.1%	140	70.4%	38	19.4%
Get appropriate feedback from students	10	5.0%	16	8.2%	139	70.8%	31	16%
To diagnose the students to know the areas for improvement for the	4	2.2%	9	4.4%	141	72.3%	41	21.1%

next instructional activities

To encourage students to take responsibility of learning	12	6.1%	8	4.1%	140	70.4%	38	19.4%
Improvement on usage of appropriate grading system	6	3.0%	20	10.3%	144	68.1%	37	18.6%

Source: Fieldwork data (2021)

Table 4.5.2: Regression showing the influence of CPD activities on SHS teachers' usage on assessment tools.

ANOVA					
	Df	SS	MS	F	Significance F
Regression	1	0.199492888	0.199492888	0.126047362	0.72295167
Residual	194	307.040303	1.582681974		
Total	195	307.2397959			

Source: Fieldwork data (2021)

The statistics in table 4.5.1 displayed how teachers' involvement in CPD activities influences their usage of assessment tools. The statistics displayed that SHS teachers in Birim Central Municipality agreed 68.1% (144) and some strongly agreed 18.6% (37) that the CPD activities they participated in affected their ability to include all domains when assessing their students in the classroom. The teachers revealed that their unilateral cognitive way of assessment has been changed and now they were able to assess the totality of the students' learning in school. Some teachers disagreed 10.2% (20) and strongly disagreed 3.1% (6) that the CPD activities they participated in had no statistical influence on their ability to assess students across the entire domain. According to the statistics, CPD activities participated in by the SHS teachers' impact their ability to include the entire three domains (cognitive, affective, and psychomotor) in assessing the students. The CCP training manual (2020) supports

that teachers should not assess learners only cognitively but must include all the domains when assessing the students.

According to the statistics, very few of the SHS teachers in Municipality strongly disagreed 4.1% (8) and strongly disagreed 7.3% (14) that their engagement in CPD activities has not influenced them to develop remedial strategies to assist the special-weak students in the class. But most of the teachers agreed that 57.7% (112) and some strongly agreed 30.9% (61) that CPD in the form of a workshop had a good effect on their ability to develop remedial strategies to help the students learn to achieve an acceptable standard. This ensures that no student was left behind in learning. Also, most teachers agreed 70.4 % (138) that after their engagement in CPD activities , they were able to find possible alternatives to assess the students, which gave them a better understanding of the students in their class, though a few of the teachers strongly disagreed 6.1% (12) with that fact. In light of that, it was true that CPD helped the SHS teachers to find alternative approaches or strategies to assist their students in the classroom and organized alternative means to evaluate them for better understanding. Also, the teachers were able to understand students through their learning outcomes and use that as the basis for developing appropriate alternative approaches to help the special learners in the classroom. Teachers with CPD activities were able to applied divergent assessment skills to check the progress of learners (Hanson & Florestan, 2020). SHS teachers improve the quality of learning by using different approaches that are learner-centered, teacher-directed, mutually beneficial, formative strategies in the classroom (Tabuena, 2020).

Moreover, the statistics results in table 4.5.1 revealed that most of the SHS teachers agreed 70.8% (139) and a few strongly agreed 16% (31) that good CPD activities on

assessment positively affected the feedback obtained from students' learning. Though most teachers agreed, there were some of the SHS teachers who disagreed. 8.2% (16) of the feedback obtained after assessing the students was not influenced by the CPD training organized by the school, district or participated in by themselves. It was concluded that CPD activities, whether formal or informal, have a good effect on the feedback obtained from students in the school. The teachers understand the feedback from the students and analyze it to inform their decisions in the classroom. The research finding was supported by Goldstein (2007) and Mertler (2016), who disclosed that classroom assessment tools provide feedback to students and use the information to make decisions to improve their learning. This was conducive to effective teaching and learning in the classroom and informs the teacher to take the best decisions. Saeed et al. (2018) support that classroom assessment is a feedback strategy designed for or by teachers to trace the level of students' learning and focus on what to do to help the weak learners' progress in learning.

Furthermore, SHS teachers also agreed 72.4 % (141) and strongly agreed 21.1% (41) that diagnosing the students to determine their strengths and weaknesses in learning was influenced by the CPD activities they participated in. It is through this that the SHS teachers were able to develop appropriate remedial strategies and find alternative approaches to help the students. Some of the teachers who disagreed with 4.4% (9) and strongly disagreed with 2.2% (4) with the fact that CPD activities affect how they diagnose students. It was agreed that 72.4% (130) that the CPD workshops and conferences attended by the SHS teachers had a very tremendous positive effect on their diagnosing skills in teaching as a profession. CPD in the form of CCP education training builds teachers' competencies in the application of appropriate classroom remedial strategies that bring remarkable change in the learner (CPP Trainer Manual,

2020). The statistics showed that teachers who engaged in CPD activities were able to diagnose students 72.4% (130) to determine their learning progress and behaviour. It was through this that they can employ the appropriate remedial strategies to facilitate teaching and learning.

According to the statistics in table 4.5.1, the majority of the SHS teachers agreed 70.4% (138) and a few strongly agreed 19.4% (38) that after they received training on assessment, they have been very influential in encouraging students to take the responsibility of learning with little support from the teachers. This has affected the performance of the students in the classroom. Some of the teachers also strongly disagreed 6.1% (12) and disagreed 4.1% (8) with the fact that their engagement in the workshop influenced them to encourage the learners to take their responsibility for learning. As inferred from the statistics, CPD activities affect how they motivated students to take responsibility for learning. CPD motivates teachers to influenced students to take responsibility for their own learning (Scott & Weishaar, 2008). It was confirmed that classroom assessment tools may help teachers guide and assist students' monitors and take responsibility for their own learning (Hanson & Florestan, 2020).

The use of a grading system was very essential in measuring students' outcomes or performance, and the wrong usage of a grading system negatively affects the measuring of students' learning outcomes. According to the statistics in table 4.5.1, most of the teachers agreed 68.1% (132) and strongly agreed 18.6% (37) that they were able to use an appropriate grading system to express the learning outcomes of the students after the CPD activities they engaged in. Some of the teachers disagreed 10.3% (20) and strongly disagreed 3.0% (6) that their involvement in CPD activities

organized for them has no positive influence on their ability to grade their students. As inferred from the analysis results, teachers' CPD activities influence teachers' ability to grade the students' outcomes in the classroom. Classroom assessment is the systematic approach used by teachers to evaluate the level of students' learning and achievement to inform classroom decision-making (Wang et al., 2016).

Table 4.5.2 indicated the statistical influence of CPD activities on SHS teachers' usage of assessment tools or techniques. The use of assessment techniques in the classroom by teachers were very important and helped to understand the students very well. The regression ($F= 0.1260$, Sign. $F= 0.7230$) statistics disclosed that CPD activities participated by SHS teachers in Birim Central Municipality had a strong positive effect on their ability to use classroom assessment techniques. This indicated that SHS teachers CPD activities is good predictor of teachers' usage of classroom assessment. CPD activities like workshop, seminar, self-learning brought good changes to application of right assessment techniques' evaluate their students. This normally influenced the teachers' choice of instructional delivery strategies to teach a particular lesson.

It is concluded that CPD activities undertaken by SHS teachers had a statistical influenced ($F= 0.1260$, Sign. $F= 0.7230$) on their usage of assessment techniques in the classroom. That is, CPD activities influenced teachers to assess students across all three domains, to organize and develop remedial strategies for special students, and to use alternative approaches to assist students in learning. Also, SHS teachers diagnose the students very well and, based on the feedback, take good decisions and use an appropriate grading system to measure students' performance. Desimone (2009) professes that those CPD activities also have an influenced on the teacher's ability to

decide on and implement valued changes in teaching and leadership behaviours so that they can educate their students more effectively. Most teachers who lack CPD training on assessment find it difficult to assess the students in their classroom. Relying on experience alone may not be helpful for teachers to assess their students, but a combination of the teachers' experience and additional training gives a better outcome. In simple terms, CPD activities positively influence ($F= 0.1260$, Sign. $F= 0.7230$) SHS teachers in Birim Central usage of classroom assessment tools or techniques in the classroom.

4.7 RQ.4: Teachers' involvement in CPD activities on their relationship students in Birim Central Municipality

Table 4.6.1: Teacher involvement in CPD activities on their relationship with students

Statements	N	Mean	Std. Deviation
My engagement in CPD activities has helped to :			
Provide support service to all students'	196	3.37	1.25
Adopt positive attitude towards students.	196	3.44	1.25
Care for students academics and social being	196	2.54	1.35
Approachable and easy addressing of students grievances'	196	3.34	1.24
Create conducive climate for learning	194	3.45	1.06
Promote my sensitive to the needs of students	196	3.46	1.02
Reduce intimidation and negative tension which reduce students participation	196	3.49	1.13
Use various cultural activities	196	2.50	1.24
Provide clear and high expectation support	196	3.49	1.08

Source: Fieldwork data (2021).

Table 4.6.2: Regression showing the influence of CPD activities on SHS teacher-students relationship.

ANOVA					
	Df	SS	MS	F	Significance F
Regression	1	0.077723015	0.077723015	0.095420451	0.757727548
Residual	194	158.0192158	0.81453204		
Total	195	158.0969388			

Source: Fieldwork data (20221)

The statistics in table 4.6.1 indicated that the teachers' involvement in CPD activities influences their relationship with students in the classroom. The average M (Sd.) SHS teachers agreed that the CPD activities they participated in affected their ability to provide support services 3.37 (1.25) and their ability to adopt a positive attitude towards students 3.44 (1.25) in the classroom. This is likely to bring changes in the students' learning. The positive attitude and support from the teacher towards the students motivates them to learn more in the classroom. Poor teacher-student relationships affect teachers' performance, which also affects learners (Estherlydia, 2009).

Moreover, it was displayed in statistics in table 4.6.1 that the average SHS teacher in Birim Central Municipality disagreed 2.54 (1.35) that their engagement in CPD activities did not inflict better changes in their ability to show care towards the students in the classroom. They believed that CPD activities had no good influence on the teacher's caring ability for students.

Furthermore, teachers' engagement in CPD activities had made them develop strategies that make them sociable and approachable by their students 3.34 (1.240). It was through this that the students were able to communicate their learning difficulties

and other issues to their teachers. As the teachers became aware of their students' problems, they may be able to help them in learning and address their grievances in the classroom.

Also, most of the SHS teachers agreed 3.4(1.06) that their involvement in CPD activities affected them by creating a good climate for learning, which increases student participation and learning in the classroom. It made learning easier since they learn in a friendly manner. Pearsonson (2012) confirmed that effective teacher-student relationships mitigated attitudes that destruct the class lesson but rather create an atmosphere good for all learning in the classroom.

Also, statistics in table 4.6.1 indicated that average SHS teacher agreed that the CPD activities they engaged in made them more sensitive to the needs of the students' 3.46 (1.02), and develop strategies that reduced intimidation or negative tension in the classroom 3.39 (1.13). Mintel (2011) supported that teachers' experience with CPD activities influences them to develop compassion for students and eradicate other forms of negative impressions in the school.

Lastly, it is disclosed in table 4.6.1 that the average teacher agreed 3.49 (1.08) that after their involvement in CPD activities, they were able to provide clear and set high expectations for the learners. The teachers' believed that high expectations motivate the teachers to work harder and efficiently in order to achieve the high standards set. This led to an improvement in the teachers' performance, which positively affects the students as well. Mintel (2011) confirmed that high expectations for students encourage both the teachers and students to put in more sacrifice to achieve such a standard, which is tantamount to high performance among teachers.

Table 4.6.2 indicated regression statistics for the influence of CPD activities on SHS teacher-students relationship. The analysis results in table 4.6.1 revealed that average teacher supported that the CPD activities they engaged has helped them to developed good relationship with the students which created a good conducive environment for teaching and learning. Also, table 4.6.2 vehemently disclosed that CPD activities positively ($F=0.0954$, Sign. $F = 0.7577$) influenced teacher-students relationship. The relationship that exist between the SHS and student in public SHS in Birim Central Municipality was academic relationship not any other things. CPD activities is a good predictor of good SHS teachers-student relationship.

In conclusion, positive teacher-student relationships have been proven by CPD to bring changes in their performance in the classroom. It has been confirmed that teachers become more effective and efficient in classroom delivery since less time is spent on controlling behavior (Estherlydia, 2009). According to Aretha (2012), teachers' performance was measured in terms of teachers' ability to develop positive relationships with students, which is said to be a high performance. That is, the CPD activities engaged in by the SHS teachers enhance their ability to provide supportive service to students, show a positive attitude towards students and create a conducive learning environment for learning. The students' relationships with their teachers make it easy for them to approach the teacher with their complaints. Positive teacher-student relationships make teachers sensitive to the needs of students, which makes them set clear high expectations for the students in the classroom.

4.8 Influence of SHS teachers' involvement in CPD activities and their job performance

Table 4.7 Research hypothesis

SUMMARY OUTPUT					
Regression Statistics					
Multiple R					0.11362528
R Square					0.012910704
Adjusted R Square					-0.01876061
Standard Error					0.320872218
Observations					194

ANOVA					
	Df	SS	MS	F	Significance F
Regression	6	0.251825282	0.04197088	0.407646619	0.873371022
Residual	187	19.25332936	0.102958981		
Total	193	19.50515464			

Source: Fieldwork data (2021).

The statistical Table 4.6 revealed the influence of CPD activities on SHS teachers' performance in Birim Central Municipality. This showed that CPD activities had a significant favorable influence on the performance of public SHS teachers. The results of the ANOVA showed a significance value (Sig.) of 0.87. The CPD activities that the SHS teachers at Birim Central Public SHS participated in had an influence on their performance, according to the ANOVA table. It was discovered that CPD activities were reliable indicators of teachers' success. This also indicated that CPD activities have positively influenced SHS teachers' job performance in Birim Central Municipality. Improvements in teacher performance and continued professional development have a considerable impact, according to Abbassi and Arulraj (2021). According to the summary output's R Square value, CPD activities

completed by SHS teachers improved their performance by 1.3%. The effectiveness of the teachers was evaluated based on their control over the classroom, ability to present material effectively in class, appropriate application of assessment strategies, and rapport with the students. Table 4.6 statistics demonstrated how the instructors' participation in CPD activities affected their methods of classroom management (0.9239) and how they delivered lessons (0.7339). Additionally, the CPD activities that the participants took part in had an impact on their capacity to use suitable assessment methodologies (0.645) to assess the learners' development. It was also discovered that building relationships with students and teachers was a talent that must be learned through instruction. The statistical findings showed that CPD activities had a good impact on teachers' ability to form relationships with students that are conducive to high student learning. On the basis of that the alternative hypothesis was accepted in place of the null hypothesis, which cannot be accepted. According to Rebecca (2018), innovative professional development initiatives support instructors' improvement and competence. The outcomes showed that one of the predictors of teachers' success in Birim Central Municipality was CPD activities.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter dealt with the findings from the research study, conclusion and some possible recommendations. The research study aimed to know the influence of CPD activities on SHS teachers' performance in Birim Central Municipality, Eastern Region of Ghana. It was guided by these research objectives.

1. To find out the influence of CPD activities on SHS teachers' classroom management practice.
2. To describe the influence of CPD activities on SHS teachers' instructional delivery in the classroom.
3. To explain how CPD activities influence SHS teachers' on the usage of classroom assessment tools.
4. To find out the influence of CPD activities on SHS teachers-student relationship.

5.2 Summary of key findings of the study

The following major findings were revealed by this research paper:

1. The findings disclosed that teacher involvement in CPD activities influences their classroom management practices. That is, SHS teachers who engaged in CPD activities were able to correctly use classroom reinforcement strategies, classroom setting arrangements, and create a conducive learning environment. The SHS teachers' ability to control the learners' behavior measures their productivity and ability to utilize their lesson time during delivery in the

classroom. The teachers made the students respect their differences and were able to guide the learners to understand the content taught in the classroom. Lastly, teachers who engage in CPD activities are able to use non-verbal forms of communication to correct behaviors and give clues when teaching and learning in the classroom. This indicated that CPD activities has positive influenced on the SHS teachers classroom management practices in Birim Central Municipality.

2. The findings revealed that SHS teachers' engagement in CPD activities had positively influenced on their classroom instructional delivery. This means that SHS teachers who had been engaged in CPD activities built their competencies in the subject content and delivery strategies which facilitate their performance in the classroom. Also, the research study revealed that CPD activities engaged by the SHS teachers helped them to shape their instructional delivery in the classroom. CPD activities built and developed SHS teachers' confidence and self-efficacy, which helped to communicate the content ideas to the understanding of the students. The SHS teachers who participated in CPD activities were able to incorporate creativity into their teaching and correct usage of classroom resources to relate learning experiences more effectively than those who had none. Lastly, SHS teachers who engaged in CPD activities deployed appropriate teaching methods to deliver specific content in the classroom. The research findings revealed that there are significant gains in teachers' overall pedagogical content knowledge and pedagogical practices on their performance.
3. The findings from the statistics showed that there was statistical positive influenced of CPD activities on SHS teachers' usage of classroom assessment

tools. Due to their good knowledge of assessment, they were able to employ all the forms of assessment tools that are tantamount to high teacher performance in the classroom. Their engagement in CPD activities has helped them to guide students to set goals and able to include all domains in assessment. The teachers with CPD experience were able to use appropriate feedback from the students to determine the lesson to be taught and, if any, appropriate remedial strategies to employ to assist the special students in the class. Aside from that, teacher CPD activities had a significant impact on how they evaluate their students' learning and how they used an appropriate grading system to measure their students' learning.

4. The findings displayed that CPD activities statistically influenced a teacher's ability to develop a positive relationship with their students. Findings from the analysis report indicated that the SHS teachers who had engaged in CPD activities developed and adopted a positive attitude towards students and provided high-quality supportive service to students, which is conducive to efficient teaching and learning in the classroom. Since the teacher has a good relationship with his students, it makes it easy for the students to approach him. It is through this that the students' grievances and challenges are made known to the teachers. Aside from that, those teachers who have engaged in CPD activities create a good climate for learning, which increases students' participation in the class. Moreover, the findings showed that CPD activities improved the SHS teachers' ability to be sensitive to the needs of the students and reduce intimidation or negative tension in the classroom compared to those teachers who have no CPD activities. Lastly, teachers were able to

provide clear and set high expectations for the learners, which serves as a motivation for them.

5.3 Conclusion

The study concluded that CPD activities influenced SHS teachers' classroom management practices. This facilitate teaching and learning in the classroom. That is, the SHS teachers in the Municipality s who had experienced CPD activities on their classroom management were able to control students' behaviors and create a conducive environment for learning. Those new and old who had SHS teachers no or little experience difficulties in controlling the behaviour of students in the classroom. The SHS teachers were able to arrange the seating of the students, which facilitates movement and supervision of students working in the classroom. This is a strong indicator for measuring teacher job performance.

In addition, due to the teacher's constant learning, the appropriate teaching methods were always applied to teach specific content, which has led to improvement in teaching and learning. That is, the SHS teachers got the most current knowledge, skills, and competencies on the use of appropriate instructional delivery methods to transfer content knowledge to the students. They were also able to communicate concepts and utilize the classroom resources towards teaching and learning. This instructional delivery skills has helped the SHS teachers to use different mechanism that helped both the good and weak students in the school.

The study identified that SHS teachers who engage in CPD activities were able to apply assessment tools in assessing the students. The use of different assessment techniques in class bring the strength and weakness of the students to light where by the teacher use to determine what to teach next and how to teach it. The inclusion of

all domain led to total understanding of the learner. The teachers were able to assess the students on all three domains and utilize remedial strategies to assist the special students in the class.

Lastly, it was also concluded that teachers' CPD activities influenced their relationship with the students. A good teacher relationship stimulated teaching and learning. The teacher social skills in classroom encourage learning. This created a good learning environment, which increases students' participation in the class lesson. Students felt at ease with their teachers and express their concerns to them. The teacher also responded to the challenges of their students, which facilitates teaching and learning. Teachers' CPD activities influence SHS teachers' performance.

5.4 Recommendations

The following are the recommendation that:

1. The SHS teachers within the Municipality should be encourage to participate in CPD activities since it aims improving their competencies on classroom assessment tools, classroom management and delivery methods in the classroom. Since such CPD activities improve teachers' performance. They should not rely on their teaching experience only but combination with CPD activities.
2. The head of SHS schools should organize termly workshop on the use and application of assessment tools and class management in the school. This may give the SHS teachers the opportunity to learn new things which improves their teaching practice in the school.
3. The SHS teachers in the Birim Central Municipality must be committed and utilize the available CPD activities to build their teaching competencies. Also,

the professional development allowance allocated to teachers by the Ghana government must be used for such purpose only. The implementation of the new things taught during CPD programming is not easy but the teachers must do their best to implement the skills acquired in the course of the training.

4. The SHS authorities in the district should motivate SHS teachers' to develop positive teacher-students relationship with the students. This positive teacher-relationship create conducive learning environment for students and students are motivated to communicate to the teachers since they have trust in them.

5.5 Suggestion for further research

Based on the findings of the research study, the following are the suggestion for further research.

1. The influence of teachers CPD activities on basic school students' academic performance.
2. Assess the possible challenges facing teachers' participation of CPD activities.
3. A study on the influence classroom management on students' achievement.
4. A comparative study of CPD policy between countries in Africa.

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APPENDICES

APPENDIX A: REQUEST FOR INTRODUCTORY LETTER APPLICATION FOR INTRODUCTION LETTER FROM THE DEPARTMENT OF EDUCATIONAL ADMINISTRATION AND MANAGEMENT.

11/07/2021

Dear Sir/Madam,

APPLICATION FOR INTRODUCTORY LETTER

KENNETH AGYEI

INDEX NO. 200019847

I write to request for an introductory letter from the Department of Educational Administration and Management on pursuit of data collection on the research topic “THE INFLUENCE OF CONTINUOUS PROFESSIONAL DEVELOPMENT ACTIVITIES ON SENIOR HIGH SCHOOLS TEACHERS PERFORMANCE IN BIRIM CENTRAL MUNICIPALITY.”

It is my humble request for this introductory letter to help in collection and coalition of data for the research on the above topic.

Counting on your usual co-operation with the hope that you will offer me the necessary assistance.

Yours faithfully

.....

Agyei Kenneth

APPENDIX B: PERMISSION LETTER

UNIVERSITY OF EDUCATION, WINNEBA

FACULTY OF EDUCATIONAL STUDIES

**DEPARTMENT OF EDUCATIONAL ADMINISTRATION AND
MANAGEMENT**

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

PERMISSION LETTER TO CONDUCT RESEARCH IN YOUR SCHOOL

I write to seek permission from you to administer questionnaires to the teachers your secondary school.

Kenneth Agyei is my name, a post-graduate student pursuing Master of Philosophy in Administration and Management at University of Education, Winneba.

I am working on the thesis topic: ***“THE INFLUENCE OF CONTINUOUS PROFESSIONAL DEVELOPMENT ON THE SENIOR HIGH SCHOOL TEACHERS PERFORMANCE IN BIRIM CENTRAL MUNICIPALITY”***. The study participants are the permanent teachers in the public SHSs in the Municipality.

The study is guided by the following research objectives:

1. To find out the influence of CPD activities on SHS teachers’ classroom management practices in Birim Central Municipality.
2. To investigate the influence of CPD activities on SHS teachers’ instructional delivery in the classroom in Birim Central Municipality.
3. To investigate the influence of CPD activities on SHS teachers’ on the usage of classroom assessment tools in Birim Central Municipality.
4. To find out the influence of CPD activities on SHS teachers-student relationship in Birim Central Municipality.

The research findings will be used by education stakeholders like Ghana Education Service (GES), Ministry of Education (MoE), District Directors to take relevant and headmasters to decisions on making regular CPD activities for the SHS teachers. Again, the findings will inform tertiary Institutions like University of Cape Coast

(UCC) University of Education, Winneba (UEW) and University of Development Studies (UDS) to run distance and Sandwich programme in education that will help to address the needs of teachers in order to gain updated knowledge and skills to enhance performance.

Please, the participation of your school and the teachers are voluntary. The school and teachers have the right to withdraw from the study without negative effects. Also, you are assured that the information provided by the teachers and the school will not be disclosed to other persons. The confidentiality and anonymity is assured in this study. Again, the necessary actions are put in place to avoid interrupting instructional period in the school. Structured questionnaires with closed ended questions will be used to collect information from the participants. I will be very grateful when you grant the permission to conduct my research in your school.

An introductory letter from the Department of Educational Administration and Management, University of Winneba, confirms the authenticity of this important academic exercise.

I count on your kind co-operation.



Yours faithfully

.....

Agyei Kenneth

Contact for any information/enquiry:

AGYEI KENNETH

TEL: 0541133447

EMAIL: agyeikay22@gmail.com

APPENDIX C: INTRODUCTORY LETTER
INTRODUCTORY LETTER FROM THE DEPARTMENT OF
EDUCATIONAL ADMINISTRATION AND MANAGEMENT



UNIVERSITY OF EDUCATION, WINNEBA
FACULTY OF EDUCATIONAL STUDIES
DEPARTMENT OF EDUCATIONAL ADMINISTRATION AND MANAGEMENT

P.O. Box 23 Winneba, Ghana www.uew.edu.gh

UEW/EAM/MED/6

Date: 17th November, 2021

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

LETTER OF INTRODUCTION

We write to introduce Kenneth Agyei a student on the M.Phil. Educational Administration and Management programme of the Department of Educational Administration and Management.

Kenneth Agyei is currently working on a research project titled:

"THE INFLUENCE OF CPD ACTIVITIES ON SENIOR HIGH SCHOOL (SHS) TEACHERS PERFORMANCE IN BIRIM CENTRAL MUNICIPAL"

Please, give him the necessary assistance and co-operation.

Thank you.

Yours sincerely,

Judith Bampo (Ph.D)
Head of Department

cc: Dean, School of Graduate Studies



www.uew.edu.gh

APPENDIX D: QUESTIONNAIRES.

UNIVERSITY OF EDUCATION, WINNEBA.

POST GRADUATE STUDIES

DEPARTMENT OF EDUCATIONAL ADMINISTRATION AND

MANAGEMENT

QUESTIONNAIRES

Dear Teachers

I am embarking on research that purports to collect your opinion on the study: the influence of continuous professional development (CPD) activities on SHS teachers' performance in Birim Central Municipality. There is no right or wrong answer. I am interested in your personal experience and opinion. The confidentiality of your information is guaranteed. Thank you for your considerations and supports to complete these questionnaires.

Instruction: For each item, please circle or tick (✓) your preferred responses and opinion

SECTION A: BACKGROUND DATA OF THE RESPONDENTS

Please, kindly select the appropriate response.

1. **Gender/Sex:** Male [] Female []
2. **Education Qualifications:** Degree [] Master's degree [] Doctor Degree [] others (Specify) []
3. **Teaching experience:** 1-4 years [] 5-10 years [] 11-15 years [] 16 years and above []

Please, kindly tick [✓] CPD activities you have participated.

S/N	CPD Activities participated	1 Yes	2 No
5	Monitoring and coaching from Expert like Headmaster, colleagues etc.		
6	Taking training courses or formal study like Sandwich, Regular courses, distance courses etc.		
7	Virtual Learning or online learning on teaching skills		
8	Professional Learning Community (PLC) on PCK and classroom related activities		
9	Self-learning through books		
10	School based workshop and conferences		

11. Specify other CPD activities participated (if any)

.....

Instruction: In the tables below for each statement mark, how much you agree with a tick [✓] in the box to the right of each statement. *Strongly Disagree (SD), Disagree (D), Agree (A), Strongly Agree (SA).*

SECTION B

Classroom Management Practices

Please, kindly indicate your level of agreement to the statements in the table below by ticking [✓] whether you Strongly Disagree (SD), Disagree (D), Agree (A), Strongly Agree (SA)

S/N	Details	1 SD	2 D	3 A	4 SA
	My engagement in CPD activities :				
12	helped me to use correct and appropriate reinforcement in controlling students behaviour in the classroom				
13	helps me to monitor students work in the classroom				
14	helps me in classroom lesson planning and preparation				
15	helps me to arrange the setting of the students in order to have instructional space movement when teaching				
16	help me to create good conducive environment for learning				
17	help me to utilize the allocated time for teaching and learning				
18	helps me to understand and respect the differences of the students in the classroom				
19	help me to guide learners to establish classroom guidelines and develop self-control.				
20	help me to use non-verbal communication well in the classroom				

SECTION C

Instructional Delivery

Please, kindly indicate your level of agreement to the statements in the table below by ticking [✓] whether you Strongly Disagree (SD), Disagree (D), Agree (A), Strongly Agree (SA)

S/N	Details	1	2	3	4
		SD	D	A	SA
	My engagement in CPD activities :				
21	helped me to master subject content in my area of discipline				
22	help me to utilize the appropriate teaching method to deliver the content in the classroom				
23	help me to improve my teaching repertoires				
24	help me to incorporate creativity in the delivery of lesson				
25	help me to address the teaching needs of the students				
26	help me to build my confidence and efficacy in delivery				
27	helped to improve my ability to communicate delivery content during lesson				
28	helped me to utilize classroom instructional resources during teaching and learning				

SECTION D**Classroom Assessment Tools**

Please, kindly indicate your level of agreement to the statements in the table below by ticking [✓] whether you Strongly Disagree (SD), Disagree (D), Agree (A), Strongly Agree (SA)

S/N	Details	1	2	3	4
		SD	D	A	SA
	My engagement in CPD activities :				
29	helped me to incorporate all the domains when assessing students				
30	helped me to develop remedial strategies to assist needed students				
31	helped me to use alternative approach of assessing students				
32	helped me to get and give appropriate feedback to students				
33	helped me to decide on the instruction strategies to be used for the next lesson				
34	helped me to diagnose the students to know the areas for improvement for the next instructional activities				
35	helped me to encourage students to take responsibility of learning				
36	helped me to understand the nature of students in the classroom				
37	built my capacity on the usage of appropriate grading system to measure their learning outcome in the classroom				

SECTION E

Teacher-Student Relationship

Please, kindly indicate your level of agreement to the statements in the table below by ticking [✓] whether you Strongly Disagree (SD), Disagree (D), Agree (A), Strongly Agree (SA)

S/N	Details	1 SD	2 D	3 A	4 SA
	My engagement in CPD activities :				
38	helped me to provide support service to all students' in my class				
39	helped me to adopt positive attitude towards students				
40	makes me show caring towards students academics and social being				
41	makes me approachable and easy addressing of students' grievances'				
42	helped me as a teacher to create conducive environment for learning which increase students participation				
43	promote my sensitive to the needs of students in the classroom				
44	helped me to reduce intimidation and negative tension which reduce students participation				
45	helped me to promote social values like sharing, being patient, helping etc.				
46	teacher provide clear and high expectations for academic performance				