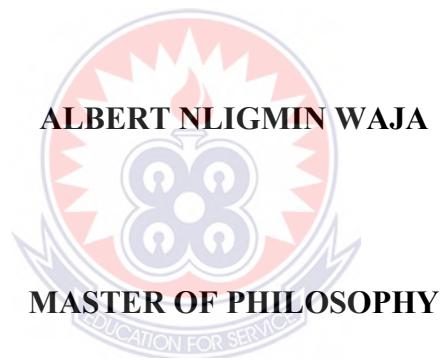**UNIVERSITY OF EDUCATION, WINNEBA**

PARTICIPATION AND BENEFITS OF CONTINUING PROFESSIONAL DEVELOPMENT (CPD) AMONG PUBLIC BASIC SCHOOL TEACHERS IN NKWANTA NORTH DISTRICT

ALBERT NLIGMIN WAJA

MASTER OF PHILOSOPHY

2022

UNIVERSITY OF EDUCATION, WINNEBA

PARTICIPATION AND BENEFITS OF CONTINUING PROFESSIONAL DEVELOPMENT (CPD) AMONG PUBLIC BASIC SCHOOL TEACHERS IN NKWANTA NORTH DISTRICT

ALBERT NLIGMIN WAJA
8180210001

**A thesis in the Department of Educational Administration and Management, Faculty of Educational Studies, submitted to the School of Graduate Studies in partial fulfilment
of the requirements for the award of the degree of
Master of Philosophy
(Educational Administration and Management)
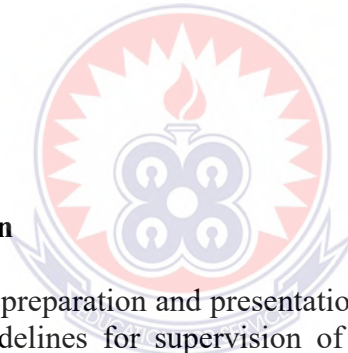in the University of Education, Winneba**

JANUARY, 2022
DECLARATION

Student's Declaration

I, Albert Nligmin Waja, 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 works, and it has not been submitted, either in part or whole, for another degree elsewhere.

Signature: ………………………………

Date: …………………………………

Supervisor's Declaration

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

Supervisor's Name: Prof. Hinneh Kusi

Signature: ………………………………

Date: …………………………………

DEDICATION

To my beloved father, the late Wanja Ndolignan and lovely mother, Muatin Gmadan, whose care and tender love nurtured me and who taught me to be hard working yet gentle, qualities that have taken me to greater heights. Though father is not with us now, I am happy to make them proud for fulfilling their dream of their wish to obtain higher education. May the Lord God bless mother and rest father's soul in eternal peace.

ACKNOWLEDGEMENTS

First and foremost, I thank God for His goodness to me without whose grace and blessings it would have been difficult for me to have this opportunity, good health, vision and guidance in my academic endeavour to pursue and complete my studies. My thanks also go to my supervisor, Prof. Hinneh Kusi who supervised and contributed to the successful completion of this thesis.

My special appreciation goes to Dr Kuranchie and Mr. Emmanuel Tekyi for their continued guidance, patience, encouragement and constructive criticism that yielded constant insights and ideas that have found their way into the development and completion of this study.

I am forever thankful to my wife Dora Lattuah for the vacuum she always filled in for me with her big heart, her kind support and being always there for me. And so were my beloved children, Diano Timormpon, Delight Nignan, Wilfred Danan, Wilbert Dawon, Pedro Ogaja, Andrea Ponan and Andrew Dawonbo, In the most difficult times, they were by my side in prayers. They believed in me and carried my burden on their shoulders gracefully.

TABLE OF CONTENTS

Contents   **Page**

LIST OF TABLES

LIST OF FIGURES

ABSTRACT

This study focused on continuing professional development (CPD) for teachers in the Nkwanta North District. The objectives are to examine the frequency at which basic school teachers encounter the contents of CPD activities, the benefit of involving in CPD activities, the challenges teachers have with participating in CPD activities and ways to improve CPD programmes for basic school teachers in the study area. The quantitative approach was employed for this study. The population for the study was 286, and a sample size of 86 teachers. The sampling strategy employed was the simple random sampling strategy. The questionnaire was used as the instrument for data collection and the statistical analysis was done using IBM SPSS v.26. The study revealed that, majority of teachers participated frequently on school leadership, guidance and career development of teachers, subject areas of specialization and classroom management to improve teacher practice. However, these CPD activities were rarely done; networks through subject specific collaborative to exchange ideas and tap into expertise of ideas from colleagues, and staff retreats to develop goals and action plans targeting specific school needs and contexts. From the teachers' perspective, the major benefits they derived from CPD activities were related to the enhancement of their prestige, improvement of their confidence in delivering lessons in the classroom, and acquisition of new knowledge. The study further revealed that, lack of trained CPD facilitators to coordinate the actions of CPD, lack of resources or budget to implement CPD, and overload the teacher were some of the challenges associated with the implementation of CPD. The study concluded that CPD programme sessions within the study area must be made and emphasise to reflect school leadership, guidance and career development of teachers, subject area specialization, classroom management and curriculum implementation in order to resonate with teachers in the study area. It is thus recommended that, CPD content be based on teachers' professional and scientific needs, rather than reliance on pre-planned external packages.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Education is regarded as both consumer and public good, because it offers satisfaction for the consumer and also serves as catalyst for developing the human resources necessary for economic and social transformation. The calibre of human resource of every nation determines the extent of development of that nation. The past two decades have seen many calls for teacher learning and professional development to be an integral part of educational institutions. Emphasis has been placed on the very nature of the teaching profession as a process of continuous and lifelong learning, both formal and informal (ELAN Research Programme, 2014). The argument put forth is that as society changes, so must our educational and school systems (Hadar & Brody, 2010). Therefore, teachers, as the principal contributors to these systems, require learning in significant ways through continuing professional development (CPD) activities, if they are to perform effectively and efficiently in their roles.

Defined as a range of activities that enhance teachers' knowledge, skills, attitudes, expertise and other characteristics (Organisation for Economic Co-operation and Development (OECD), 2014), the CPD of teachers exposes them to the skills and expertise they need to cope with the complexities of modern school systems and helps them develop greater confidence, improved self-efficacy, and openness to new ideas (Ememe, AIitokhuehi, Egede, & Ojo-Ajibare, 2013). As a result, teachers improve their classroom practices and thus their students' learning (Clarke & Hollingsworth, 2002; Guskey, 2002).

Professional development is also an embraced idea in employee management as it contributes to employees 'service delivery and productivity. For teachers, professional development is key to stakeholders of education. As it is believed that employees do not have to leave an employment with the competencies, they entered with so do teachers also have to add to the knowledge and skills they acquire from their professional training. As teachers are indispensable in the learning achievement of students, CPD serves as a conveyor belt to make teachers remain relevant and unavoidable. In buttressing this view, Saleem, Gul and Doger (2021) assert that teachers are the most facilitators of educational activities that take place in the school. It is believed that teachers need to have professional development activities on a continuous manner, hence, the concept of continuous professional development. Sequel to this assertion, stakeholders of education have, since time immemorial, been exposing teachers to various forms of training and development activities in their bid to make the latter capable of skillfully executing their responsibilities. Non-governmental organisations, for instance, have been providing CPD activities for teachers since 1960's (Tallon & Milligan, 2018). In the Ghanaian jurisdiction, the Ghana Education Service (GES) has institutionalised continuous professional development programmes for its teachers. With this arrangement, teachers undergo professional training and development activities within and outside of their schools to acquire knowledge and skills to enhance their job performance. These programmes are meant to improve the teachers 'competence in technological, pedagogical and content knowledge, essential for instructional delivery. Thus, it is expected that the pedagogical, content and other essential areas of teachers 'professional work would be enhanced by teachers and to participate in such programmes.

14

National Teaching Council (2011) defines continuous professional development as a lifelong teacher learning, which consists of the full range of educational experiences designed to enrich teachers 'professional knowledge, understanding and capabilities throughout their career. Caena (2011) also conceptualises continuous professional development as a set of activities that intend to develop teachers 'skills, knowledge, expertise and other characteristics that are different from their professional training. Kuranchie (2019) is of the thinking that continuous professional development is the building of employees 'capacity to engender continuous improvement in their work. Further, continuous professional development entails a wide spectrum of staff development activities, both informal and formal, which are designed to cater for teachers 'development needs and better their professional practices via sharing of effective practices, knowledge and skills (Mwila, Namuchana & Lufungulo, 2022). It is observed that continuous professional development is creative and innovative (Burns & Lawrie, 2015) that is expected to update the knowledge and upgrade the skills of participants for effective delivery of their job responsibilities

Regardless of these widely known benefits of CPD, opportunities provided for teachers often appear inadequate (Méndez, Arellano, Khiu, Keh & Bull, 2017), a situation described by Borko, 2004 as the "most serious unresolved problem for policy and practice in education" (p. 465). In the case of Ghana, there is minimal policy interest in teacher CPD activities (Anamuah-Mensah, Mereku & Asabere-Ameyaw, 2004; Kadingi, 2006), and consequently, using ongoing professional learning opportunities to shape teachers' beliefs, attitudes, and dispositions for their classroom teaching continue to be lacking (Atta & Mensah, 2015).

A look at Ghana's implemented reforms and educational policies to improve quality education over the past decades reveals the neglect of teachers' CPD. For instance, the implemented Free Compulsory Universal Basic Education (FCUBE), the 2002 President's Education Reforms, and the 2007 Educational Reforms (discussed later in Chapter 2) all prioritised educational restructuring and infrastructure provision over teacher quality issues. Educational reforms have thus focused on restructuring the educational system, setting new educational standards and curricula, tightening the entry requirements into teacher training colleges, and introducing promotional examinations (Akyeampong, 2003). Consequently, despite the numerous educational reforms, there has only been a marginal improvement in the quality of teaching and learning, as well as students' performances in basic schools (i.e. primary and junior high school) (T-Tel, 2018).

Meanwhile, there is currently a widespread sense that academic standards of students in basic schools in Ghana are falling (Ansong, Ansong, Ampomah & Afranie, 2015; Ngnenbe, 2018; Okyerefo, Fiaveh & Lamptey, 2011). Concerns have been raised especially about the quality of teachers in basic schools in terms of the required generic and subject-specific competencies (Snyder Jr, Mereku, Amedahe, Etsey & Adu, 2013) to provide effective teaching and learning. These concerns are justified by the fact that about 90% of school children in Ghana are believed to be learning very little (Ministry of Education (MoE), 2014), and that the performances of students in the annual Basic Education Certificate Examination (BECE) have over the years witnessed only a slight improvement (Ansong et al., 2015).

While other factors may be accountable for these falling academic standards, the central role of teachers in promoting active learning among students cannot be

overemphasised. Borg (2015) argues that of all the elements that can improve quality education, the CPD for teachers is the most significant. When teachers are exposed to high-quality CPD, they are empowered to make complex decisions regarding practice and develop their abilities to identify and solve problems while enhancing their pedagogical and content knowledge to promote students' learning (Smyth, Dow, Hattam, Reid & Shacklock, 2000; Shriki & Patkin, 2016). Consequently, students who are taught by such teachers are more likely to learn at twice the rate of those who are not (Hanushek, 2004).

To harness teachers' contributions to quality teaching and education in Ghana, there is therefore, an urgent need for investment into teacher learning and CPD initiatives through policy formulation and practice. Educational reform policies must give space for learning opportunities that enhance teacher competencies to perform effectively in the classrooms if the goal of quality education is to be met in Ghana. This study thus argues for the need for Ghana to refocus attention on the role of teacher learning and CPD in order to raise educational standards and students' performances in basic schools. This may be accomplished through the provision of institutionalised and effective CPD interventions to foster teachers' learning and development.

1.2 Statement of the Problem

It is obvious that change is inevitable and unavoidable. Teaching is also a dynamic profession with ever changing and emerging knowledge. In order to cope up with the ever-changing environment, the need for progressively improving and updating teachers' professional skill and knowledge in response to rising technology is unquestionable (Mynbayeva, Sadvakassova & Akshalova, 2018). Moreover, every education policy places teachers' quality at the very nucleus of learning and as a key

determinant of variation in a student achievement. Quality teacher development, however, does not occur by accident. It requires systematic and continuous implementation of teachers' professional enhancement (Melesse & Gulie, 2019). Therefore, since the speed of change and the expansion of knowledge require teachers to learn at many different times throughout their lives (Duta & Rafaila, 2014) and education is possibly one of the most significant social activities in the life of human beings, this issue is so significant for teachers.

Continuing professional development is a constant cycle of teacher education starting with primary training and enduring for as long as a teacher persists in the job (Alibakhsh & Dehvari, 2015). Teaching as a social job stimulates teachers and intensifies their social expectations to discover ways to enhance students' achievement (Mushayikwa & Lubben, 2009). Learning new competencies and adding to their skills and knowledge are among the main reasons' teachers attempt to engage activities planned for professional development (Bailey, Curtis & Nunan, 2001). CPD is of great importance, especially in today's fast, continually, and technologically changeful world. The area of teachers' continuing professional development (CPD) is of growing interest in Scotland and internationally (Kennedy, 2008).

Many studies have been conducted on training and development and their effects on workers' productivity. These studies were conducted in hospitals (Audu & Gunjul, 2014), manufacturing companies (Onuka & Ajayi, 2012), banks (Neelam et al, 2014; Ezeani, 2013) and insurance companies (Raja et al, 2014). For instance, the dearth of similar studies in public secondary school settings on manpower development and lecturers' productivity in tertiary institutions in Nigeria found out that there is a

significant relationship that existed between manpower development and lecturer's job performance (Peretomode & Peretomode, 2001)

Also, the conduct of this study is informed by the gap in the literature generally, and the dearth of empirical studies, particularly in the context of Ghana. Few investigations into teacher CPD in Ghana have examined teachers' perceptions and participation in in-service training and continuing education as professional development tools (Ananga, Tamanja, & Amos, 2015; Asare et al., 2012; Atta & Mensah, 2015; Mereku, 2014; Sofo & Abonyi, 2018).

Against this background, the current study investigates existing CPD practices and the experiences of basic school teachers in the Nkwanta North district. The study sought to identify contents of CPD models, effects of CPD models on performance of teachers, challenges associated with the CPD programmes and ways to improve CPD programmes. The intent is to provide evidence-based recommendations to guide broader CPD policy formulation and implementation of effective practice.

1.3 Purpose of the Study

The purpose of the study was to examine participation and benefits of continuing professional development (CPD) among public basic school teachers in Nkwanta North District.

1.4 Objectives of the Study

The study sought to:

i. examine the frequency at which the basic school teachers encounter the major contents'of CPD programmes in the Nkwanta North district.

ii. To examine the benefits of involving in CPD programmes in the Nkwanta North District.

19

iii.   To examine the challenges teachers face in participating in CPD programmes in the Nkwanta North District?

iv.   To find out ways to improve CPD programmes for basic school teachers in the Nkwanta North District.

1.5 Research Questions

The following research questions guided the conduct of the study:

i.   What is the frequency at which the basic school teachers' encounter the major contents of CPD programmes in the Nkwanta North District?

ii.   What are the benefits teachers derive from participating in CPD programmes in the Nkwanta North District?

iii.   What challenges do teachers face in participating in CPD programmes in the Nkwanta North District?

iv.   In what ways CPD programmes be improved for basic school teachers in the Nkwanta North?
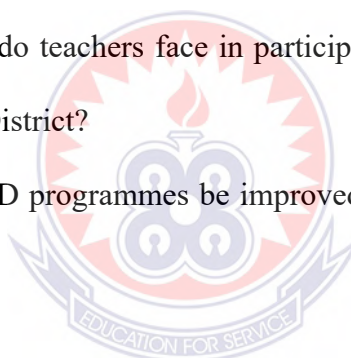
1.6 Significance of the Study

Asare (2009) has indicated that a very important element in the process of education is the interactions that go on between the teacher and the learners. He added that through such interactive processes, education quality is achieved. McFarlane (2011) puts it that "there should be a recognition that teachers and the methods they apply to impart knowledge in today's . . . global economy is vital in defining and creating quality learners" (p. 15). On this premise, it behoves all involved in teacher education efforts to pay particular attention to how the teaching and learning process must go on to facilitate students' learning. It is not uncommon to hear people asserted that teachers teach the way they were taught to become teachers. To change such an attitude and

20

perception would mean that there should be a reconsideration of what teacher education must entail.

It is believed that the result of this study was useful to the teachers because as the government get to know and provide their CPD needs, they would get better knowledge and this made their job easier. The government would also benefit from the findings in the sense that as the situation of teachers regarding CPD training is brought to focus and taken care of; the teachers will put in their best in the educational sector.

Also, the findings were useful to the students, because if the teachers are well provided for, they would be in a better position to provide enriched knowledge for academic, social and moral excellence. The findings of the study were beneficial to researchers as it would contribute to the existing literature in order to add to the body of knowledge in this field. Lastly, the findings of the study would provide the SMC with the needed data and information for policy formulation and recommendation.

1.7 Delimitation

Grix (2004) opines that using a whole universe in a research is not feasible. This implies that using the whole eight (8) circuits at Nkwanta North District is therefore impossible. In view of this, only two of the 8 circuits were selected for the study that is Kpassa East and Sibi circuits. This is primarily due to time and limited funds as well as proximity of the circuits to the researcher. Kpassa East circuit is located at the District capital whiles Sibi Circuit is interior. The study was therefore delimited to the nature of CPD models, the relationship between teachers' participation in CPD models and their job performance.

1.8 Limitation of the study

Every research may not be exempted from restrictions, for that matter, this study is also limited to restrictions. Since the study was restricted to only teachers and head teachers teaching in Kpassa East and Sibi Circuits, Nkwanta North District. The results of the study cannot be extended to all teachers and head teachers in Oti Region. It is often considered that any of the respondents may respond to the questionnaire in a rush, without interpreting it properly, and thus may respond incorrectly. Hence, all questionnaires that were incorrectly answered were not included. The lack of readiness of the respondents to return questionnaires as per the researcher's schedule can also be considered. They might be burdened with regular workplace and teaching tasks, and they would not be attentive to filling out questionnaires. These problems may affect the feasibility and reliability of the report. This issue was dealt with through explanation of the questionnaires and all ethical standards were observed accordingly.

1.9 Organisation of the study

The study is organized into five chapters. The first chapter covers the background of the study, statement of the problem, objectives of the study, research questions, significance of the study, delimitation, limitations and definition of terms and organization of the study. The second chapter covers review of related literature on CPD programmes and sub-sections dealing with the various relevant topics pertaining to the study. The third chapter deals with the methodology used and its justifications, the fourth chapter deals with the results and discussion of findings. The fifth chapter deals with the summary, conclusions drawn from the study, recommendations and suggestions for further research.

1.10 Chapter summary

CPD has emerged as a leading concept in education and has been adopted by educational institution all over the world. While it is assumed that CPD can help increase students' academic performance, challenges faced in the implementation of CPD obstacles can hinder teachers' abilities or limit their skills and knowledge in teaching. This chapter has therefore given a vivid description and explanation of what CPD and the problem study seeks to address.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.0 Introduction

This chapter focused on the review of related literature. Discussion centred on the following sub-heading:

1. Theoretical framework,

2. Conceptual review

3. Benefits of CPD

4. Challenges associated with implanting CPD

5. Opportunities to improve CPD for Teachers

6. Contextual review

7. Empirical Review

2.1 Theoretical Framework

The existence of theoretical framework makes it possible to explain the phenomena, to generate hypotheses, to frame questions, and to test them empirically. Significance of theory to a discipline can hardly be over emphasised. Garrison (2000) asserted that "theoretical frameworks models are essential to the long-term credibility and viability of a field of practice". Perraton (2000) accentuated "…unless research is grounded in theory, it cannot be much more than data gathering p.26". The foundation of this study is built on the premise of human capital theory and adult learning theory.

The human capital theory was put forward by Schultz in 1961. Mincer and Becker in 1964, and Adam Smith in 1976 to reflect the value of human capacities. Theses scholars were of the view that "the stock of competencies, knowledge and personality attributes embodied in the ability to perform labour so as to produce economic value is as result of human capital. It is the attributes gained by a worker through education and

24

experience". According to Schultz (1963), both knowledge and skill are a form of capital, and that this capital is a product of deliberate investment. This implies that knowledge acquired by continuing professional development is a form of capital. It is a deliberate investment of teachers to obtain skills and knowledge that would help them to become useful to themselves as well as their families and the nation as a whole.

Mincer and Becker (1994), asserted that individuals acquire skills and knowledge to increase their value in the labour market. The main mechanisms for acquiring human capital are experience, training and education. Education facilitates the acquisition of new skills and knowledge that increase productivity. This increase in productivity frees resources to new technologies, new businesses and new wealth, eventually increased economic growth. A good number of teachers have taken the advantage of continuing professional development programmes to increase their wealth in the labour market. Asabere-Ameyaw (2007) reiterated that CPD programme has become an integral part of the Ghanaian educational system in response to the changing economic and social realities which have made it difficult for many people and professionals to pursue courses in the conventional university setting. The modern trend of technology requires everybody to increase his or her wealth through education and training. But inadequate space, materials as well as human resources of the conventional educational system, would not allow everybody to achieve this intend. Therefore, CPD programmes now stands as the way to go. Human capital, could be enhanced through education and training to improve the quality and level of production in a country, especially the developing countries. It is seen increasing as a key determinant of economic performance and key strategy in determining growth of productivity. It is assured that with this theory, teacher-learners after completion of the CPD programme, help increase productivity for that matter performance. This increase would metaphors in

25

economic change, technological change, research, innovation, productivity, education, and competitiveness in the economy of the country.

The implication of human capital theory holds it that through education and training, individual could change his or her economic status, way of life and can even increase the lifespan on earth. Mincer and Becker (1994) accentuated that an educated individual has historical and contemporary knowledge of their own and other culture, the nature of global interdependence, and the societal influences of technological change. This means that individuals who participate in CPD programme could also influence their society through the technologies and knowledge acquired during training. Not only this, but acquire ethical judgement, grounded values, and a well-developed sense of responsibility. Again, the individual through this theory could demonstrate capacity to turn knowledge into good practice in the workplace, this civic arena, and private life. These elements are crucial in the execution of CPD programmes. Gorsky and Avner (2005) were of the view that the most significant element of CPD programme is the individual learner. In the theory of human capital, the cost of learning the job are a very important component of net advantage and have led economist such as Gary S. Becker and Jacob Mincer to claim that, other things being equal, personal incomes vary according to the amount of investment in human capital; that is, the education and training undertaken by individuals or groups of workers. A further expectation is that widespread investment in human capital creates in the labour-force the skill-base indispensable for economic growth

Another theory relevant to this study is the adult learning theory. It was grounded on andragogy, which is a term originally used by Alexander Kapp, a German educator, in 1833, and developed by Malcolm Knowles in 1968. Adult Learning Theory or andragogy is the concept or study of how adults learn and how it differs from

26

children. It aims to show how adult learning is distinct and identify the learning styles which suit them best. Over the years, the theory has been added to and adapted. At its core, it contains six key assumptions about adult learners and four principles of andragogy. Each one outlines the general ways in which adults perceive learning and how they prefer to train. (Knowles, 1984; Merriam, Caffarella & Baumgartner, 2007).

Self-concept: As a person matures, his self-concept moves from one of being a dependent personality towards one of being a self-directed human being. Therefore, adults need to be involved in the planning and evaluation of their instruction, letting learners know why something is important to learn;

Experience: As a person matures, he accumulates a growing reservoir of experience that becomes an increasing resource for learning. Thus, experience (including mistakes) provides the basis for learning activities and topics need to relate to learners' experience;

Readiness to learn: As a person matures, his readiness to learn becomes oriented increasingly to the developmental tasks of his societal roles. That is, adults are most interested in learning subjects that have immediate relevance to their job or personal life, people will not learn until they are ready and motivated to learn;

Orientation to learning: As a person matures, his time perspective changes from one of postponed application of knowledge to immediacy of application, and accordingly his orientation toward learning shifts from one of subject centeredness to one of problem centeredness. This means that adult learning is problem-centred rather than content-oriented, showing learners how to direct themselves through information;

27

Motivation to learn: As a person matures, the motivation to learn is internal. Adult learning requires helping learners overcome inhibitions, behaviours, and beliefs about learning. (Knowles, 1984, p. 12)

Adults need to know why they need to learn something: Adults need to know what's in it for them, how this new knowledge will solve a problem or be immediately applied.

Speck (1996) noted that the following important points for adult learning theory should be considered when PD activities are designed for educators:

Adults will commit to learning when the goals and objectives are considered realistic and important to them. Application in the 'real world' is important and relevant to the adult learner's personal and professional needs. Adults want to be the origin of their own learning and will resist learning activities they believe are an attack to their competence. Thus, professional development needs to give participants some control over the what, who, how, why, when, and where of their learning (King, 2000).

Adult learners need to see that professional development learning and their day-to-day activities are related and relevant. Adult learners need direct, concrete experiences in which they apply learning in real work. Adult learning is ego involved. Professional development must be structured to provide support from peers and to reduce the fear of judgment during learning (Freire, 2000).

Adults need to receive feedback on how they are doing and the results of their efforts. Opportunities must be built into PD activities that allow the learner to practice the learning and receive structured, helpful feedback. Adults need to participate in small-group activities during the learning to move them beyond understanding to application, analysis, synthesis, and evaluation. Small-group activities provide an opportunity to

28

share, reflect, and generalize their learning experiences (Sheared & Johnson-Bailey, 2010).

Adult learners come to learning with a wide range of previous experiences, knowledge, self-direction, interests, and competencies. The diversity must be accommodated in the PD planning. Transfer of learning for adults is not automatic and must be facilitated. Coaching and other kinds of follow-up support are needed to help adult learners transfer learning into daily practice so that it is sustained (Speck, 1996)

Merriam, Caffarella and Baumgartner (2007) pointed out that, teachers, like all adults, require time, resources and PD opportunities and activities related to their working environment. Given that these CPD activities have to take place in the life of the teacher, teachers' acquisition of this knowledge, skills and attitudes will take cognisance of the adult learning theory which reflects the growing base on how children learn just as in effective classroom practices for them to be effective. Teachers of various experiences also come along with previous learning and knowledge, self-direction, interests and competences. These past experiences affect their attitudes and beliefs. That is why in their CPD programmes, this diversity must be accommodated. It is effective when it incorporates, recognizes and validates these previous experiences in order that it is content and context specific. In this way, the teachers are orientated to learning by helping them overcome their inhibitions, behaviours and beliefs; they gain experience from the learning activities and are motivated and ready to learn. (Desimone, 2009).

Ganser's (2000) found that, like children, adults have varying styles of learning. Professional development activities that attend to a variety of learning modalities will be most effective. Active participation is a key element that must be balanced with

29

realities of limited time and need to efficiently convey information. Adults are motivated by practical applications and learning that is relevant to their own situations. This is particularly true for the teachers struggling to juggle the multitude of demands on time. Peixotto and Palmer (1994) contend that PD will be most effective when it provides direct application to the classroom. Teachers are very busy, preoccupied, and always juggling with a lot of demands for their attention. They appreciate PD that is well-planned, sets reasonable expectations and goals, and is efficiently delivered.

2.2 Conceptual review

2.2.1   Historical Development of Education and Teacher Education in Ghana

The emergence and growth of formal education in Ghana is a legacy of European activities that began around the 15th century. First introduced by the Portuguese merchants, formal education started in their castles and was known as 'castle schools'. However, this form of education was limited to mulattoes, (children of wives who married the western traders), Christian converts and children of local chiefs and wealthy merchants (Owusu-Agyarko, Ackah, & Kwamena-Poh, 1993). Successive European traders (British, Dutch, Danes) later joined in the provision of education, but education for the local people was never an end in itself, but rather a 'means to an end', where more people were purposefully given a form of education to help facilitate the increasing growth of trading activities. There were also missionaries, basically the Basel, Wesleyan, Bremen, Roman Catholic and the African Methodist Episcopal Zion, who collaborated in their efforts to extend formal education to the ordinary people in the country (Owusu-Agyarko et al., 1993). However, like the merchants, the form of training provided by the missionaries was designed to further the expansion of the activities of the church through reading and interpreting the Bible, which was their primary objective for being in Ghana.

With time, the increasing growth and expansion of elementary schools drove a corresponding need for teacher education and training in the country. Teachers were needed to help the missionaries in the evangelism process. Thus in 1848, the Basel Mission established the first teacher training college at Akropong and Abetifi. The Catholic missionaries followed with a teacher training school at Bla in the Upper Volta region of Ghana. These were the only two teacher training colleges in Ghana until 1909, when, to ease the pressure on the missionary training schools, the government established the first government teacher training college in Accra (Asare-Danso, 2014). At the time of Ghana's independence in 1957, there were 30 Teacher training colleges in the country (MOE, 1957, cited in Owusu-Agyakwa et al., 1993). Their structure was modelled on the British system as follows:

- ➢ a two-year initial training program leading to the award of Teacher Certificate "B",
- ➢ a two-year post initial training, leading to the award of Certificate "A" and
- ➢ a four-year training program leading to the award of Certificate "A".

Since then, Ghanaian education and teacher education systems have undergone a series of reforms in order to be responsive to the goals and development needs of the country.

2.2.2 Concept and definition of CPD Programme

The notion of Continuing Professional Development (CPD) is relatively less understood and discovered within the teaching profession in Ghana (Abreh, 2018). This is evident from the rare appearance, the term seems to make in academic publications, in conferences and seminars, and in staff rooms, meetings and discussions between teachers. Although in-service teacher education is a recurrent theme in the policies and

31

programmes of teacher education, it all grows into the larger and more inclusive concept of CPD. Day (1999) pointed out that, teaching is a learning profession and like any other professionals, teachers are expected to be lifelong learners. This expectation is not matched by a widespread professional learning culture in the teaching profession. An important reason for this is the lack of recognition of CPD, in its own right as a lifelong, continuous and voluntary process, and there is consequent paucity of support to sustain this process. CPD is usually found decreased to a sequences of isolated in-service teacher training events focusing on short-term goals of acquiring a set of skills and or some awareness (Padwad & Dixit, 2011).

CPD comprehensively signifies the process of continuing growth of a professional after joining that profession. In education, CPD is the imparting and acquiring of some precise sets of skills and knowledge to deal with new requirements. The comprehensive view considers CPD as a much deeper, wider and long-term process, in which professionals continuously improve not only their knowledge and skills, but also their thinking, understanding and maturity. They grow not only as professionals, but also as persons, their development is not limited to the work duties, but may also extend to new roles and responsibilities. CPD is a planned, continuous and a lifelong process, whereby, teachers try to develop their personal and professional potentials, and to improve their knowledge, skills and practice, leading to their empowerment, the improvement of their activity and the development of the organizations and pupils (Padwad & Dixit, 2011).

Kennedy (2005) asserted that promoting quality education in schools requires paying more attention to the CPD of teachers which is considered an essential component for creating a positive impact on their pedagogy and teaching practices. The term CPD is

used to "describe all the activities in which teachers engage during the course of a career which are designed to enhance their work" (Day & Sachs, 2004). CPD activities may include professional development meetings, attending internal and external courses and conferences, coaching and mentoring, joining PD networks, participating in reflective discussions, and conducting action research and investigations (The Training and Development Agency TDA, 2007). Guskey (2002) describes three aspects for the aspired change as major goals for professional development programmes. These are: change in teachers' classroom practices, change in their attitudes and change in their students' learning outcomes. What makes CPD different is the way in which it focuses on a proactive and conscious approach to personal development, rather than the more typical passive and reactive approach. It improves the effectiveness of teachers.

Clarke and Hollingsworth (2002), suggested that a good reason why CPD training needs to be understood is that for an organization to succeed it depends on its workforce, and to get the best from the workforce, it must be continuously trained and developed. CPD training programme involves equipping organizational workforce with all necessary skills needed for their improved satisfactory job performance, CPD training give room for workers to develop and enhance their skills. It is a wonderful tool employed by organization to achieve the best result from their employees. According to OECD in Musset (2010), CPD is geared towards updating, developing, and broadening the knowledge that teachers had acquired during the initial teacher education and provide them with new skills and professional understanding.

Eghonmwan (2008) defined CPD such as in-service training as the upgrading and updating of the knowledge and skills of employees and the modelling and reorientation

33

of their attitude, so that they can be more effective, efficient and productive in the performance of their job. This development becomes necessary because no employee has attained the level of perfection at the time of hiring. They need to be developed right from the time they take up their appointment to the day they retire (Chemir, 2013). Borg (2015) defined in-service training in a simpler way as activities that are intended for the instructional improvement of staff members.

Salimba (2005), Ogunu and Omoke (2006), and Tel-Guebuza (2013) see CPD as a series of short programmes made available to teachers or personnel in order to acquire higher qualification and improve on their professional practices. They added that "CPD Distance Education" "irregular Education Programme", "Adult learning", "Adult continuous Education", "Part Time Programmes", "Part time studies", "Sandwich Programmes" and among others are the various names given to the educational programmes provided outside the normal working hours and working environment. This kind of training usually takes place in training schools, conferences, seminars, workshops, among others.

The Department for Education and Skills (DfES) (2004) has described CPD as a programme of systematized activities promoted or directed by the school system that contribute to the professional or occupation growth and competence of staff members during the time of their service to the school system. CPD is a very important aspect of staff development. Igbo, Eze, Eskay, Onu and Omeye (2012) describes in-service training as an on the job training used by organizations to bring about development and improved competency in the workers.

2.2.3 Conceptualizing Teacher CPD

CPD ensures that teachers are part of a skilled and up-to-date profession. It is a continuous process where teachers build on existing knowledge and understanding to access up-to-date knowledge needed to be effective on their job (Ememe, Ezeh & Ekemezie, 2013). Guskey (2002) defines CPD as those processes and activities designed to enhance the professional knowledge, skills, and attitudes of educators so that they might in turn improve the learning of students. While CPD has been conceptualized differently, Opfer and Pedder (2011) definition captures the various aspects of what CPD is and isn't. The authors define CPD as all-natural learning experiences and those conscious and planned activities which are intended to be of direct or indirect benefit to the individual, group or school, 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 critically the knowledge, skills, and emotional intelligence essential to good professional thinking, planning, and practice with children, young people and colleagues throughout each phase of their teaching lives.

The variously perceived notions of CPD reflect its multifaceted nature and the varied ways to develop professional teachers. CPD focuses on activities that address teachers' behaviours, knowledge, emotions, and cognition (Borg, 2015) for changes in their classroom practice. Such activities are not isolated events but rather a continuous learning process occurring throughout teachers' working lives. When CPD is viewed as an event, it limits the opportunities for teachers to learn; thus, CPD must be considered an ongoing, job-embedded process of which every day presents a variety of learning opportunities (Guskey, 2002).

35

2.2.4   Models of CPD

The Training Model: The training model of CPD is universally recognisable (Little, 1994; Kelly & McDiarmid, 2002) and has, in recent years, arguably been the dominant form of CPD for teachers. This model of CPD supports a skills-based, technocratic view of teaching whereby CPD provides teachers with the opportunity to update their skills in order to be able to demonstrate their competence. It is generally 'delivered' to the teacher by an 'expert', with the agenda determined by the deliverer, and the participant placed in a passive role. While the training can take place within the institution in which the participant works, it is most commonly delivered off-site and is often subject to criticism about its lack of connection to the current classroom context in which participants work. Day (1999) identifies one of the principal difficulties as being the failure of such training events to 'connect with the essential moral purposes that are at the heart of their [teachers'] professionalism' (p. 49).

According to Sywelem and Witte (2013), the training model of CPD is compatible with, although not always related to, a standards-based view of teacher development where teachers strive to demonstrate particular skills specified in a nationally agreed standard. The model supports a high degree of central control, often veiled as quality assurance, where the focus is firmly on coherence and standardisation. It is powerful in maintaining a narrow view of teaching and education whereby the standardisation of training opportunities overshadows the need for teachers to be proactive in identifying and meeting their own development needs. The dominant discourse in Scotland, as in

36

many other countries, supports this notion that the standardisation of training equates to improvements in teaching, learning and pupil attainment. Indeed, Kirk, Beveridge & Smith (2003), in outlining the context for the development of the chartered teacher programme in Scotland, link the standards-based approach with an associated training model of CPD when they say that: Statements of competence and standards, derived with the support of the profession should help to ensure that development and training are clearly related and effectively targeted at the skills and knowledge teachers require (Kirk, Beveridge & Smith, 2003).

Despite its drawbacks, the training model is acknowledged as an effective means of introducing new knowledge (Hoban, 2002), albeit in a decontextualized setting. What the training model fails to impact upon in any significant way is the manner in which this new knowledge is used in practice. Perhaps even more significantly, though, in terms of the relative power of stakeholders, the training model provides an effective way for dominant stakeholders to control and limit the agenda, and places teachers in a passive role as recipients of specific knowledge.

The Standards-based Model: Before considering the characteristics of the standards-based model of CPD, it is worth giving some consideration to the terminology used. 'Standards' as opposed to 'competences' are now de rigueur in Scotland, with their most vigorous proponents extolling the relative virtues of standards as opposed to their predecessor's competences (Beyer, 2002). However, while the language has changed, in analysing the difference between the two, it is difficult to discern any real difference in either practical or philosophical terms. While the language may have shifted to hint at issues of values and commitment, etc., the real test is in the implementation of standards. Within the Scottish chartered teacher programme, for example, the emphasis

37

is firmly on the 'professional actions', which are seen as the way of demonstrating that the standard has been met. The emphasis on evidence-based, demonstrable practice surely renders the SCT competence-based, despite claims to the contrary. Indeed, Kirk, Beveridge & Smith (2003), in writing about their experiences as members of the Chartered Teacher Project Team, state that the team was committed to the proposition that 'the assessment of potential Chartered Teachers has centrally to focus on competence in professional performance' (p. 38). It is therefore contested that, in real terms and in contrast to popular academic discourse, there is very little substantive difference between competences and standards, other than in linguistic terms.

The standards-based model of CPD belittles the notion of teaching as a complex, context-specific political and moral endeavour; rather it 'represents a desire to create a system of teaching, and teacher education, that can generate and empirically validate connections between teacher effectiveness and student learning' (Beyer, 2002, p. 243). This 'scientific' basis on which the standards movement relies limits the opportunities for alternative forms of CPD to be considered. It also relies heavily on a behaviourist perspective of learning, focusing on the competence of individual teachers and resultant rewards at the expense of collaborative and collegiate learning.

Smyth (1991) argues that externally imposed forms of accountability and inspection, such as standards, indicate a lack of respect for teachers' own capacities for reflective, critical inquiry. Indeed, this argument could be taken further to suggest that not only is it a lack of respect, but that it sets clear expectations regarding the extent to which teachers should take responsibility for their own professional learning and encourages them to be reliant on central direction, even in assessing their own capacity to teach.

Beyer (2002) criticises the lack of attention given to central and contentious questions regarding the purpose of teaching, claiming that 'teacher education must be infused with the kind of critical scrutiny about social purposes, future possibilities, economic realities and moral directions' (p. 240). He views the move towards increasing standardisation in the USA as narrowing the range of potential conceptions of teaching to focus on quality assurance and accountability. This narrowing of view is surely in direct contrast to the above expressed notion of critical scrutiny.

Beyer (2002), among others, suggests that the move towards increasing standardisation in teacher education at both initial and continuing stages is in part a response to growing concerns about nation states' abilities to compete in the global economy. In this context standardisation can thus be equated to the pursuit of improved economic status. Despite the existence of extensive literature which is critical of the standards-based approach to teacher education, policies that adopt this approach do present a justification for its use. For example, within the context of the chartered teacher programme in Scotland, members of the development team have argued that the participative approach to the development of the Standard for Chartered Teachers will result in teachers being more willing to engage with it (Kirk, Beveridge & Smith, 2003). Arguably, standards also provide a common language, making it easier for teachers to engage in dialogue about their professional practice. However, Draper et al. (2004) note the tensions inherent in the standards-based approach, warning that 'the Standard (Standard for Full Registration) itself may be seen as a useful scaffold for professional development or as a source of pressure for uniformity' (p. 221).

There is clearly capacity for standards to be used to scaffold professional development and to provide a common language, thereby enabling greater dialogue between

39

teachers, but these advantages must be tempered by acknowledgement of the potential for standards to narrow conceptions of teaching or, indeed, to render it unnecessary for teachers to consider alternative conceptions out with those promoted by the standards.

The Coaching/Mentoring Model: The coaching/mentoring model covers a variety of CPD practices that are based on a range of philosophical premises. However, the defining characteristic of this model is the importance of the one-to-one relationship, generally between two teachers, which is designed to support CPD. Both coaching and mentoring share this characteristic, although most attempts to distinguish between the two suggest that coaching is more skills based and mentoring involves an element of 'counselling and professional friendship' (Rhodes & Beneicke, 2002, p. 301). Indeed, mentoring also often implies a relationship where one partner is novice and the other more experienced (Clutterbuck, 1991).

The mentoring or coaching relationship can be collegiate, for example, 'peer coaching', but is probably more likely to be hierarchical, as in, for example, the new induction procedures in Scotland (General Teaching Council for Scotland, 2002), where every new teacher is guaranteed a 'supporter' who supports the CPD process and is involved in the assessment of the new teacher's competence against the Standard for Full Registration. Key to the coaching/mentoring model, however, is the notion that professional learning can take place within the school context and can be enhanced by sharing dialogue with colleagues.

In contrast to the novice/experienced teacher mentoring relationship, Smyth (1991) argues for a model of 'clinical supervision', which is collegiate in nature and is used by teachers for teachers. These two ends of the spectrum indicate a clear difference, in conceptual terms, of the purpose of mentoring. The novice/experienced teacher model

40

is akin to apprenticeship, where the experienced teacher initiates the novice teacher into the profession. This initiation, while including support for the novice in gaining and using appropriate skills and knowledge, also conveys messages to the new teacher about the social and cultural norms within the institution. Bolam & Weindling's (2006) pointed out that, in direct contrast, where the coaching/mentoring model involves a more equitable relationship, it allows for the two teachers involved to discuss possibilities, beliefs and hopes in a less hierarchically threatening manner. Interestingly, depending on the matching of those involved in the coaching/mentoring relationship, this model can support either a transmission view of professional development, where teachers are initiated into the status quo by their more experienced colleagues or a transformative view where the relationship provides a supportive, but challenging forum for both intellectual and affective interrogation of practice.

Robbins, cited in Rhodes and Beneicke (2002) defines peer coaching as 'a confidential process through which two or more colleagues work together to reflect upon current practices; expand, refine and build new skills; share ideas; conduct action research; teach one another, or problem solve within the workplace'. So, while Robbins acknowledges the key characteristic of the one-to-one relationship, his particular definition of the relationship focuses on confidentiality as opposed to accountability. This adds a very different dimension to the relationship as the introduction of the condition of confidentiality shifts the power relationship quite significantly from that described under the induction type relationship where the purpose is dual support and assessment. Robbins' definition also militates against peer coaching as a form of accountability, instead placing it firmly within a transformative conception of CPD (Rhodes & Beneicke, 2002).

41

Regardless of the fundamental purpose of the coaching/mentoring model as mutually supportive and challenging, or hierarchical and assessment driven, the quality of interpersonal relationships is crucial. In order for the coaching/mentoring model of CPD to be successful, participants must have well-developed interpersonal communication skills (Rhodes & Beneicke, 2002). It is interesting to note, then, that while the new induction arrangements in Scotland require that each new teacher has a designated 'supporter', there are no requirements for that person to have particular strengths in terms of interpersonal communication or to be trained in the role of supporter. However, recent research into the experiences of probationer teachers in the new induction scheme in Scotland suggests that 'for the optimum relationship the supporter must want to do the job and should be trained' (Draper et al, 2004). So, while the key characteristic of the coaching/mentoring model is its reliance on a one-to-one relationship, it can, depending on its underpinning philosophy, support either a transmission or a transformative conception of CPD.

The Transformative Model: What is termed in this study as a 'transformative model' of CPD involves the combination of a number of processes and conditions – aspects of which are drawn from other models of CPD. The central characteristic is the combination of practices and conditions that support a transformative agenda. In this sense, it could be argued that the transformative model is not a clearly definable model in itself, rather it recognises the range of different conditions required for transformative practice**.**

Hoban (2002) provides an interesting perspective on this notion of CPD as a means of supporting educational change. He draws comparisons between the knowledge focused and contextually void model of a training approach with the context-specific approach of a communities of practice model that does not necessarily embrace new forms of

formal knowledge. He suggests that what is really needed is not a wholesale move towards the teacher-centred, context-specific models of CPD, but a better balance between these types of models and the transmission focused models. Hoban's description of the two ends of the spectrum do not, however, include communities of enquiry, which might be based on partnerships between teachers, academics and other organisations, and which can involve both the context, and the knowledge required for real and sustainable educational change. Such communities take 'enquiry' as opposed to merely 'practice' as their uniting characteristic, thereby asserting a much more proactive and conscious approach than is necessarily the case in communities of practice.

It could be argued, then, that the key characteristic of the transformative model is its effective integration of the range of CPD models, together with a real sense of awareness of issues of power, i.e. whose agendas are being addressed through the process. While examples of this model might not be much in evidence, except for limited small-scale research activities (Nieto, 2003), it features increasingly in academic literature. Indeed, it appears to provide an antidote to the constricting nature of the standards, accountability and performance management agenda, and could arguably be categorised as a poststructuralist approach to CPD.

However, an explicit awareness of issues of power means that the transformative model is not without tensions, and indeed it might be argued that it actually relies on tensions: only through the realisation and consideration of conflicting agendas and philosophies, can real debate be engaged in among the various stakeholders in education, which might lead to transformative practice. (Eraut 2004; McNally et al. 2004).

43

Professional Learning Communities (PLC) Model: In efforts to improve teaching quality and promote an approach to teacher development that is both social and contextual (Du Plessis & Muzaffar, 2010), many countries have started to implement alternative models of teacher professional development, such as Professional Learning Communities (PLCs). PLCs move professional development beyond the acquisition of new knowledge and skills (Vescio, Ross & Adams, 2008) to improvement of classroom practice through collaboration among teachers (DuFour, 2004). PLCs emphasize collaboration and reflection among a group of teachers, as a way to expose them to new ideas and practices so they can improve on their pedagogy through a process of critical inquiry. PLCs have become a "hot topic" in many developing countries as they hold considerable promise for teachers' capacity building for sustainable improvement in education quality (Stoll et al., 2006). Nonetheless, the literature on PLCs has typically focused on the experience of teachers in Western countries (Toole & Louis, 2002) and PLCs in developing countries have received limited attention. While recent research on PLCs in particular in South Africa is growing (Brodie, 2019; Feldman, 2020; Ndlovu, 2018, Mhakure, 2019) mainly contributions remain theoretical in nature, and largely absent for the rest of Africa.

PLCs in developing countries may operate in different ways reflecting their unique context, society and culture. PLCs in developed countries, for example, emphasize teachers' autonomy and authority in making decisions regarding the processes, agenda and objective of their learning communities (Feldman, 2020). Previous research, however, has indicated that developing countries trying to improve low-functioning education systems should focus on introducing highly specific approaches to instructional change (Piper et al., 2018). So, while teachers' autonomy is a key element of PLCs in developed countries, developing countries may adopt more prescriptive

44

approaches to promoting effective instructional change, to ensure PLCs are not reinforcing and maintaining existing traditional substandard practice rather than changing it (Stoll et al., 2006).

Research on PLCs is still in early stages of theory building (Sleegers et al., 2013) and there is no broad consensus in the literature on a definition of PLC (Lomos, Hofman & Bosker, 2011; Vescio, Ross, & Adams, 2008; Stoll et al., 2006). However, most definitions agree that PLCs involve a group of teachers sharing and critically interrogating their practice in an ongoing, reflective, collaborative, inclusive, learning-oriented, growth-promoting way (Stoll & Louis, 2007; Toole & Louis, 2002; Mitchell & Sackney, 2000). It is assumed with PLCs that knowledge is situated in the daily experiences of teachers and is best understood through critical reflection with others who share the same experience (Vescio, Ross & Adams, 2008; Buysse et al., 2003). The literature debates whether PLCs emerge organically in schools with effective principal and teacher leadership or if there is a place for top-down initiatives to create PLCs (Kruse & Louis, 2007). Hence, it is still an open question whether effective PLCs necessarily result from spontaneous teacher action or can as well be produced by reforms or education programmes proposed by local or national education authorities. The Fullan (1991) earlier warned that collaboration is better when it is not contrived. Once PLCs are functional, however, one key point the literature emphasizes is teachers' empowerment and authority to make decisions regarding both the content and processes of their PLCs (Vescio, Ross & Adams, 2008; Huffman & Jacobson, 2003; Supovitz, 2002). It is also assumed in the literature that PLCs will occur mainly within the school as the primary unit of effective change (Kruse & Louis, 2007).

Teachers may also form communities within institutions to discuss goals, issues and collaborate on curriculum and materials development, peer coaching/observation, team

45

teaching and action research. PLCs thus encourage teachers to think like a community of professionals rather than isolated individuals working towards the collective purpose of enhancing student learning (Stoll & Louis, 2007). When they extend beyond institutions, within the wider communities or beyond geographical borders, PLCs become venues for networking, thus bringing teachers much closer in dealing with similar learning challenges resulting from social, technological, economic and other global change forces. The use of the Internet has been significant in establishing global online communities to support teacher learning. While online learning communities take a lot of time, commitment and effort, they transcend time and context allowing members to interact with anyone, anywhere and at any time and thus establish a culture of learning with increased opportunities for interaction and flexibility. For instance, as I can relate from experience, through online discussion lists or communities' teachers can reflect on a topic personally, share their understandings with other members through the virtual platform, as well as document insights from their own authentic context (using blogs or mailing lists) which may be different from the contexts of other members. The interplay of personal, social and contextual influences has the potential for sustainability of learning in PLCs (Vescio, Ross & Adams, 2008).

2.2.5   Types of Professional Development

Courses, Academic Programmes and Workshops: The main purpose of an individual for getting enrolled in educational institutions and training centres is not only to develop knowledge and understanding, but also to enhance one's professionalism. For instance, when an individual is well equipped with the usage of technology, when he is able to perform one's jobs in an efficient manner, then he is said to be a professional. There are numerous subjects, courses and academic programmes, which contribute to professionalism of the individuals and enable them to do well in their jobs.

In educational institutions and organizations, there are organization of workshops that generate awareness amongst the individuals and enhance their professionalism.

Conferences and Seminars: The participation of the individuals in conferences and seminars contributes in enhancing professionalism amongst them. In higher educational institutions, when conferences and seminars are organized, researchers and educationists obtain the opportunity to improve their knowledge by listening to others, individuals present papers and acquire understanding of various areas. Students obtain the opportunity to improve their leadership skills and organize various events and functions. The dealing and communication of the individuals with each other, enable in enhancing their professionalism. The main aspect is; individuals are able to acquire immense knowledge regarding important areas.

Qualification Programmes: Bachelors, Masters, Doctorate and other qualification programmes are important and contribute to a major extent in enhancing professionalism amongst the individuals. Individuals acquire education and get enrolled in educational programmes, in accordance to their interests, requirements, skills, and abilities. There are individuals, who just complete high school, whereas others go up to pursuing doctoral programmes. Professional degree programmes such as, medical, engineering, law, management, science, technology, arts, and so forth enable individuals to acquire professionalism. For instance, a person, who has pursued a law degree becomes a lawyer, a person who has pursued an engineering degree, becomes an engineer and so forth. After pursuance of the degree, it is important for the individuals to work in their field and utilize their professionalism in an effective manner.

Observation Visits to Other Schools: The teachers and the students make observation visits to other schools to observe number of aspects. They observe the school environmental conditions, teaching-learning methods, extra-curricular activities, students, appearance of the classrooms and many other areas related to education. Observation visits to other schools, help the teachers to acquire knowledge and information, regarding number of areas that are needed to get improved upon. In number of cases, observation methods prove to be beneficial to the individuals in enhancing their job performance. On the other hand, students too get involved in observation visits to other schools, they acquire understanding of various areas that should be improved and can communicate ideas and suggestions to their teachers.

Professional Development Network: Development of professionalism is regarded as the main objective of the individuals, whether they are teachers, students or other staff members. Development of professionalism takes place in a number of ways, such as, by being efficient, resourceful, diligent and conscientious in the performance of one's job duties. By possessing adequate information and knowledge, especially regarding one's concerned areas. Working towards acquiring appropriate knowledge and skills, regarding innovative techniques and methods and communicating with other professional individuals and experts.

Individuals and Collaborative Research: In higher educational institutions, research is an important and an integral part of education. Research is carried out in two ways, one is individual research and the other is collaborative research. There are primarily three areas, through which research can be conducted, use of various kinds of writing materials, and internet and the other one is field research. Either the individual gets involved in research by himself or he collaborates with others in carrying out a research

project or an activity. When two or more individuals are involved together in a research project, then it is known as collaborative research.

Mentoring, Guidance and Peer Observation: Professionalism, skills and abilities of an individual can be improved upon by mentoring, guiding and by observing peers. In educational institutions, there are number of areas that cause stress amongst the individuals, they face hardships and problems in carrying out academic activities and these impose impediments within the course of development of professionalism. The areas of mentoring, guiding and observing peers in the performance of their tasks and activities is an effective area that contributes in not only providing solutions to the problems but also in enhancement of professionalism amongst the individuals.

Practices and Experiences: Practices and experiences are the areas that contribute in the enhancement of professionalism, skills and abilities amongst the individuals. Continuing professional development has contributed a significant part in making improvements within the teaching practices of the teachers and learning abilities of the students. In this manner, the overall quality of education gets improved (Sinyangwe, Billingsley, & Dimitriadi, 2016). This is obvious that to acquire professionalism, one has to get engaged into practice, as there is a saying, practice makes a perfect. With continuing practice sessions, one will be able to enhance his professionalism.

2.2.6   Efficient CPD Features or Indicators

The opinion has developed that the most successful CPD is concentrated and collaborated on teachers' work. This implies that a growing professional work indicates that collaborative learning is of interest for teachers not only as school specialists but also as members of the wider education culture to step from the periphery of professional knowledge to the center of it. According to the Organization for Economic

49

Co-operation and Development (OECD), (2005), professional learning appears to be best developed by explicitly defined goals, continuing school-based funding for teachers, topic material, relevant preparation plans, teacher management approaches and resources in the educational fields for observation, experience and the application of innovative ways of teaching. Sparks and Louck (1990) observed that programme undertaken in schools are connected with the vast efforts of schools, teachers engaging mutually as helpers and as planners with the administrator of service programmes, and as characteristics of productive continuous professional growth. The key characteristics of successful CPD include self-learning and differentiated educational experiences, teaching workers to act for themselves, choice of objectives and tasks, focus on demonstration, controlled tests and input, on-going, concrete and ongoing training.

WestEd (2002) notes that a successful continuous professional development curriculum centers on teachers as fundamental to student preparation, the advancement of individuals, colleges and institutions, appreciation for and promote the analytical and managerial ability of teachers, directors of schools and others. It also represents the latest study and experience available in curriculum learning and leadership. Again, it helps teachers to gain more knowledge in topics and teaching techniques. It also uses technology and other primary teaching components. It supports the continuing investigation and development of schools in their everyday lives.

In addition, a coherent long-term roadmap powers an efficient CPD. Change is a gradual development; hence, more time is required for the teachers to be supervised and the need to be measured based on their effect on the efficiency of teaching and the learning of the students. The ultimate aims in every teacher CPD initiative are reforms to teachers and resulting increases in learning success (WestEd, 2002). Located

50

learning and technical preparation groups are the other common aspects of successful CPD. CPD is successful if teacher preparation is truly carried out by the constructive involvement and participation of students. This real way of learning is central to the advancement of teaching and learning in the sense of practice. Teachers use relational construction and meaning negotiations, through sharing, collegiality and meditation, to bring what they have learned into practice and new learning. Cooperation is essential in the production of successful CPD in this learning process. It is the cornerstone for building skilled learning groups and also for teaching staff to gain trust and for instructor engagement (Harris, 2003).

In addition, the qualities of a successful school-based CPD reflect on the activities and teamwork in the classroom; strengthening the teacher success at the classroom; team instruction and action study together. And ultimately, the performance of the CPD promotes the students' success and the teachers' professional growth. Practicing and applying the CPD curriculum thus leads to success.

According to Desalgne (2010), CPD is structured to provide teaching personnel with the skills to learn, evaluate and improve their cognitive skills. It improves the awareness of teachers' content and enables the use of teachers and appealing teachers through the active involvement of partners in the collaboration and preparation of CPD activities.

2.2.7   CPD Policy Framework in Ghana

Within global educational reform initiatives, the professional development of teachers has been recognized as an important approach for improving the quality of teaching and learning within schools (Groundwater-Smith, Mitchell, Mockler, Ponte & Ronnerman, 2012). However, in spite of this recognition, the CPD of teachers attracts minimal policy interest in educational reforms and efforts to improve quality education in many

51

sub-Saharan African countries (Pryor, Akyeampong, Westbrook & Lussier, 2012). In Ghana, although several reform initiatives have been adopted within teacher education curriculum and structure, there is yet to be implemented a broader and a coherent policy framework that guides teacher CPD practices, design, and implementation.

At present, there is the Pre-Tertiary Teacher Professional Development and Management (PTPDM) policy, which was drawn from the 2008 Education Act (Act 774) to provide some standards and guidelines for teachers' professional development activities. Among other things, the PTPDM policy stipulates that all professional development programmes adopt a competency-based approach in both the programme specification and assessment. Hence, teacher professional development activities must equip teachers to meet specific demands of the teaching profession and the management and responsibilities that go with them. CPD programmes must also be designed to reflect the aims and objectives of pre-tertiary education in Ghana (Ministry of Education, 2012). With its implementation, the existing teacher promotion system that is based on years of teaching experience, is to be supplanted with evidence of teachers' professional development activities. Participation in professional development activities is to be linked to teachers' career advancement and evidence of professional growth and achievements to form the basis of career progression and awards (Ministry of Education, 2012).

The PTPDM policy also underscores teacher licensing as a measure to ensure teachers stay abreast of current trends in knowledge and classroom pedagogies. Teachers are mandated to be licensed and eligibility for licensing is to be dependent on the completion of induction and participation in other required in-service training programmes. While the PTPDM policy attempts to institutionalize teachers'

professional activities, Ghana is yet to implement its central tenets years after enactment on a larger scale. Also, other deficiencies in the policy call for new policy that will address them holistically. For instance, the current PTPDM policy does not stipulate clearly what should constitute teacher CPD. It also fails to specify the standards against which CPD activities are to be organized. Finally, the policy lacks a broader framework to guide CPD implementation as an ongoing learning process for teachers.

It is also relevant to mention that in 2018 a new teacher education reform was introduced known as "The Cabinet Memorandum on Policy on Teacher Education Reform" (CMPTER). This new policy captures "The National Teachers Standards" (NTS), which unlike the PTPDM includes teachers' professional values with emphasis on teachers' critical and collective reflection on practice to improve their personal and professional development through lifelong learning and CPD (National Teaching Council [NTC], 2017). While this is assuring, the NTC is an aspect of a broader teacher education reform policy and thus does not constitute a broader framework of teacher CPD activities and practices.

Against this background, this study explores the current CPD situation in Ghana within a lack of a broader policy framework that guides practice. Focusing on teachers in the Oti region of Ghana, the study explores teachers' needs for professional development, the nature of prevailing practices and provision, and the barriers and supports for teachers' participation in CPD activities. The study provides implications for developing a broader CPD policy framework to guide the design, implementation, and practice of CPD for Ghanaian teachers.

2.2.8   CPD models Activities

The Action Research: Somekh (cited in Day, 1999) defines action research as 'the study of a social situation, involving the participants themselves as researchers, with a view to improving the quality of action within it'. The 'quality of action' can be perceived as the participants' understanding of the situation, as well as the practice within the situation.

Advocates of the action research model (Weiner, 2002; Burbank & Kauchak, 2003) tend to suggest that it has a greater impact on practice when it is shared in communities of practice or enquiry, and indeed, many communities of practice will engage in action research. However, collaboration of the nature found in a community of practice is not a prerequisite of the action research model.

Weiner (2002) discusses one particular example of research-based professional development set within the particular national context in Sweden. Key to this national context is an agreement among partners (universities, government and professional groups) that national education research needs to be more relevant to practitioners, and that, in supporting teachers to carry out action-based research, the problem of relevance will be addressed. Weiner acknowledges that this agreement could potentially point to a number of agendas, but she concentrates primarily on this move as a means of supporting 'greater participation, relevance and democracy' (p. 3). Indeed, she claims that 'action research has practitioner development and transformation as its main aim' (p. 5). However, this particular move must be seen against a background of increasing decentralisation in the Swedish education system where local authorities and schools are responsible for their teachers' CPD, with no overall national strategy to adhere to. In addition, the move away from universities as sole producers of research could be seen as an attempt to weaken their power base.

Burbank and Kauchak (2003) argue that collaborative action research provides an alternative to the passive role imposed on teachers in traditional models of professional development. They advocate teachers being encouraged to view research as a process as opposed to merely a product of someone else's endeavours. It is also, arguably, a means of limiting dependency on externally produced research, instead shifting the balance of power towards teachers themselves through their identification and implementation of relevant research activities.

Action research as a model of CPD has been acknowledged as being successful in allowing teachers to ask critical questions of their practice. However, Sachs (2003) queries the extent to which it allows teachers to ask such critical questions of the political determinants that shape the parameters of their practice. Nevertheless, an action research model clearly has significant capacity for transformative practice and professional autonomy.

Portfolio: The further essential tasks of the CPD include the creation of a teacher's professional portfolio. A full account of the career growth of teachers that has begun during the year is the Portfolio. Portfolios are meant to gather papers as confirmation of advanced learning. It helps to boost teachers' mood, engagement and enthusiasm (Falk, 2001). The teacher portfolios in the Ghana sense should include the following records: educational documentation and credentials of people; individual CPD action plans; proof of any of the tasks performed by either a teacher, mentor/facilitator feedback; progress self-reflections of teachers; annual assessment reports; the record of professional skills attained and exam results of review samples and assessment lesson plans samples (Desalgne, 2010).

The GES / MoE Ghana workshops are held in Ghana with a team of experts sharing their expertise and abilities to instructor classes on school or school holidays. In

Heystek et al (2008), these courses, in which instructors remain learners, are designed to provide educators with real knowledge. The fact that they do noticeably develop their understanding, skills and material do not adequately reflect in the education system. These conventional methods are unsuccessful. As a result, Mundry (2005) proposes that policy makers and curriculum administrators should discard obsolete person growth methods and engage in more 'practical' approaches to educators' technical learning. The workshop teaching did not necessarily lead to a transition of expertise, Heystek et al (2002) agreed.

Teamwork and group work: the development of Teachers' who operates in a teamwork environment (Heystek et al, 2008). Steyn and Van Niekerk (2002) claimed that using teams, the first step in establishing ownership and participation requires vast numbers of people in decision-making. Teachers are getting increasingly effective and competent together but the efficiency of the generated learning is increased. Teachers in the group typically have key problems and the team members also pose the same concerns (Smith, 2003; Heystek et al., 2008). However, collegiality is an essential feature of a team. A study conducted by Little (1994) recognizes the importance of collegiality as she concludes that consistent career growth is ideally accomplished when educators speak about the discipline of teaching regularly, continually and more explicitly. Teamwork forms the foundation of self-development, as it offers an incentive for equal to exchange experience and skills in content preparation, technique, learning and appraisal used in their teaching. This means educators are returning to their classrooms with a better knowledge of the issue and even educators from other schools (Heystek et al, 2008).

Such reciprocity is a principle that underlines peer learning (Cohen, Boud, & Sampson, 2001) and many other studies have advocated for it to be included in CPD learning

56

interventions to ensure effective learning among teachers (e.g. Levine & Marcus, 2010; Poekert, 2012). Teachers participating in my study also considered this practice effective in fostering their learning and development and recommended that organized workshops and cluster-based INSETs adopt these principles in planning and implementation.

Clustering of schools and educational visit: Clusters are an arrangement that includes two or more schools close together to learn good practice. Excellent educational institutions are grouped with institutions that face difficulties in delivering good education. Specialists in district bureau also come to assist in each of these clusters. Closely packed schools can decide to write traditional cluster exam documents and organize communal scripts. Educators are given a chance to draw up scripts more closely and analyse the success of the pupils (Heystek et al, 2008).

2.2.9   Impact of Professional Development on Instruction Practices

Professional development can affect teachers' behaviour which will manifest in their classroom practices (van Driel, Heirink, van Veen & Zwart, 2012). Teachers' opportunities to learn about reform influence their knowledge and practice. This effect is what Clarke and Hollingsworth (2002) referred to as "domain of practice". Professional development is regarded as an important means of changing teachers thinking and increasing their content knowledge which in turn influence and improve their classroom practices (Southerland et al., 2016). Professional development thus improves teachers' pedagogical content knowledge.

Given the major role teachers play in educational reforms, it is very important that professional development provides the teachers with the needed content and opportunities to bring about changes in their teaching practice (Kennedy, 2008) since

professional development is seen as the best bet for effecting change in teachers' practices (van Driel et al., 2012).

It is generally accepted that professional development can bring about improvement in teaching practice (Kennedy, 2008). But for that to occur Southerland et al. (2016) claim that there must be a balance between teachers' pedagogical discontentment (that is the degree to which teachers are dissatisfied with their teaching practice and want to change) and their self-efficacy. This means that until teachers are dissatisfied with their teaching practice and have the belief that it can be changed, there will not be any change in their teaching practice. This idea is supported by Southerland et al., (2016) who argued that removing contextual barrier is a necessary but not a sufficient condition to bring change in teachers' practices. The authors further argued that for change in teaching practice to take place there should be existence of pedagogical dissatisfaction.

For teachers, carrying out a new idea or practice is finding out how and when to add that idea into their already developed habitual practices (Kennedy, 2008). According to Doyle and Ponder as cited in (van Driel et al., 2012), teachers consider innovation such as new teaching practices as practical when; a. efficient procedures are available to translate innovative ideas into concrete instruction, b. the change in proposal fits their current practice and goals sufficiently, and c. implementation of the innovation will require limited investment, whereas the expected benefits are substantial. Implementation of such innovation becomes difficult if it does not meet these practicality criteria. Trying to change the teaching practices of teachers is a very difficult task to achieve because the process requires concerted efforts (van Driel et al., 2012). Luft and Hewson (2014) therefore suggested that teachers need different forms

58

of instructional support in order to change their instruction. This instructional support require collaboration from peers and educational communities.

2.2.10 Measures Promoting Professionalism amongst Teachers

The measures to promote professionalism amongst teachers have been stated as follows: Supportive classroom climate: Students learn best within the consistent, organized and caring learning communities (Teacher's Professional Development, 2010). The role of the teacher as a model and socialiser is emphasised upon. The teachers need to be supportive and accommodating towards the needs and requirements of the students. There have been instances, when teachers depict harshness and strictness towards the students for various reasons, such as not completing their homework assignments, performing poorly in tests and so forth. In such cases, it is vital to implement effective instructional strategies and teaching and learning methods, and assist the students in improving their performance. Supportive classroom environment will enhance not only professionalism of teachers, but also students.

Opportunity to Learn: The teachers are able to generate awareness amongst themselves and students are able to acquire more knowledge, when most of the available time is allocated towards the curriculum related activities and the classroom management system put emphasis upon maintaining students' involvement in those activities. It is up to the teachers to organize curriculum related activities, so that students are able to enhance their interactive skills and professionalism. The formulation of curriculum related activities, not only improve professionalism of the students, but the teachers are also able to enhance their professionalism and bring about improvements in the teaching-learning processes.

Curricular Alignment: All constituents of the curriculum are associated to create a cohesive programme for accomplishing instructional purposes and goals. When imparting knowledge and instruction to the students, teachers assume the roles of leaders, they are supposed to be coherent, truthful, and wise in carrying out their job duties. The teachers need to treat all students equally and not discriminate against anybody on the basis of class, caste, creed, gender, religion, ethnicity and socio-economic background. Decision making is an integral aspect within the educational institutions and teachers are vested with the authority to make decisions, but need to take into consideration the needs and requirements of the students. Professionalism of the teachers indicate that they put all the options before the students and consult them.

Establishing Learning Orientations: Teachers can prepare students for learning by providing an original structure to clarify the intended outcomes and cue the desired learning strategies, i.e. providing advance organisers and cuing the kind of responses that are expected. In schools and higher educational institutions, there are organization of competitions, events, functions, seminars, workshops and so forth. In these, students are required to assume leadership roles and implement the operations. In this case, besides academic learning, teachers contribute in developing leadership skills amongst students. In this manner, teachers are able to focus upon their professional development, by improving leadership skills amongst students.

Coherent Content: To smooth meaningful learning and maintenance, content is explained noticeably and developed with an emphasis put on its organisation and links. The teachers need to take into consideration, when they are imparting coherent content to the students, explanation should be carried out in a logical manner. When making presentations, providing explanations, or giving demonstrations, effective and

60

professional teachers create enthusiasm and interest for the content and organise and sequence it, so as to maximise its lucidity and learner friendliness. Lack of coherency within the content imposes disadvantages and affects the learning of the students in a negative way.

Thoughtful Discourse: Within the classroom instruction, besides reading and writing and other instructional strategies. Questions and answers are planned to involve students in the sustained discourse structured around influential ideas. The teachers and the students are required to get involved into oral communication with each other in order to facilitate learning. There have been instances of students, who are able to perform well academically in writing assignments, but when they go in a social circle, they experience problems in interacting with the other individuals, due to lack of communication skills, therefore, it is vital to focus upon thoughtful and logical discourse.

Practice and Application Activities: Students need adequate opportunities to practice and apply, what they are learning and to receive improvement-oriented feedback. In science and technology and in the making of artworks and handicrafts. The students are taught theoretical concepts, but it is important to perform practical activities in acquiring better understanding of the concepts. When the teachers at first provide theoretical and then make the students perform the task practically, then teachers too are able to improve their teaching-learning methods and enhance their professionalism. The professional skills and abilities of the teachers are mainly recognized by their teaching skills and communication processes.

Framing the Students' Task Engagement: The teacher needs to make provision of assistance that students need to enable them to get engaged in learning activities

61

productively. Organising and assistance can be reduced as the students' expertise, knowledge and proficiency develops. When the students are able to generate self-sufficiency amongst themselves, and when they are able to carry out the tasks independently, then they require less help from their teachers. On the other hand, primary job of the teachers is to contribute towards effective growth and development of the students. When they are able to perform their job duties well, then they are participating in CPD.

Strategy Teaching: The teacher models and instructs students in learning and self-regulation strategies. Meta-cognitive awareness and self-regulation are required in frameworks like problem solving, general learning and study skills. An example is a teacher, who needs to be well prepared, while modelling the use of the strategy. Students are motivated to observe and reflect on their learning. When teachers adopt the teaching strategies, they are required to take into consideration, the levels and needs of the students. The teaching strategies and the instructional techniques are always formulated, taking into account the requirements of the students, their age groups, backgrounds and so forth.

Co-operative Learning: Team work, group discussion and project work, where two or more individuals work together with each other is an integral part of learning in especially higher educational institutions. Co-operative learning has always proven to be advantageous to the students, provided they need to possess effective communication skills. Students often benefit from working in pairs or small groups, to build an understanding or help one another develop skills and abilities. One of the most important benefits of co-operative learning is, learning and understanding of the students, gets improved by obtaining ideas and suggestions from others. Teachers too

62

work in co-operation with each other, when carrying out joint activities and class projects. They develop teaching skills by collaborating with each other.

Goal-oriented Assessment: The teacher uses a variety of formal and informal assessment methods to monitor progress towards learning goals. Comprehensive assessment also examines students' reasoning and problem-solving processes. Evaluation techniques within the educational institutions are of utmost significance. They are made use of by the teachers in assessing the performance of the students and in finding out flaws and inconsistencies and implementing measures to correct them. The students also evaluate the teachers in higher educational institutions and in this way, they come to acquire awareness of the areas that need to get improved. Assessment techniques play an important part in CPD.

Achievement Expectations: The teacher forms and follows through on appropriate expectations for learning outcomes. When teachers make use of professional teaching methods and instructional strategies to facilitate learning, growth and development of the students, then they have certain expectations from the students as well. These expectations are performing well academically, maintaining discipline and decorum and inculcating the qualities of diligence, resourcefulness and conscientiousness amongst them. When students are able to understand the concepts and perform well, this make the teachers feel pleasurable. On the other hand, inability to understand the concepts and poor performance of the students, disappoint the teachers. Achievement expectations are mainly related to the performance of the students within the class. The professionalism of the students gets improved by achievement expectations of the teachers.

2.2.11 Evaluating of CPD

There are a number of evaluation practices of CPD in schools and higher educational institutions. The vast majority of evaluation practices in schools remain at the level of participant reaction and learning. Continuing professional development is a comprehensive area and there are number of aspects that come under it. Organizational support, changes, transformations, teaching-learning processes, instructional strategies, technical aspects, infrastructure, organization of competitions, events, functions and so forth are number of areas that are required to be taken into consideration under continuing professional development. The influence of CPD upon the learning of the students was not taken much into consideration. The above stated aspects are the ones that were taken into consideration, when evaluating CPD. The main areas that are taken into consideration, when evaluating CPD have been stated as follows: (Goodall, Day, Lindsay, Muijs & Harris, 2005).

Participant Satisfaction – The teachers are the main participants in continuing professional development. When professional skills and abilities of the teachers will improve upon, then they will be able to render an effective contribution towards development of the students. It is vital that the teachers should be satisfied with their participation in CPD and make effective use of their knowledge, skills and abilities.

Attitude of the Teachers – In majority of cases, an individual gets engaged in his job in accordance to his interests, needs and requirements. Teachers, in most cases are pleased and satisfied with their jobs. On the other hand, in nursery schools, teachers sometimes feel dissatisfied, as they do not enjoy teaching and working with young students, who are just three to five years of age. It is vital for the teachers to possess a positive attitude

64

towards their CPD. The possession of positive attitude will help in enhancing professionalism and in turn they will be able to incur job satisfaction.

Teaching-Learning Processes – The evaluation of teaching and learning processes is of utmost significance. When teachers implement teaching and learning methods, which are their main job duties within the educational institutions, then they have to take into consideration that students benefit from them wholeheartedly. When the students perform well in class, when they render an effective performance in all areas, academics, creative activities, debate, sports and communication skills, then teachers feel they have made use of their professional skills and abilities.

Curriculum and Instructional Methods – The curriculum should be in accordance to the standards and levels of the students. For instance, learning in nursery schools begins with play and gradually students are taught concepts and other areas as they grow. Instructional methods indicate the professional skills and abilities of the teachers. For instance, in nursery schools, oral teaching methods are mostly made use of such as, rhymes, poems etc. In high school, teachers make use of technology and students are encouraged to read and write the concepts. Evaluation of curriculum and instructional methods is essential in order to find out the weaknesses and make improvements.

Infrastructure and Facilities – The CPD of the teachers and the students will take place in an effective manner, when infrastructure and other facilities are appropriately available. If the teacher is delivering effectual knowledge, applying suitable teaching methods, making students understand difficult concepts in a proper manner, but there are lack of facilities and proper infrastructure in schools, then most likely, learning will not take place in an effective manner. In such cases, the concentration of the students

65

gets hindered, therefore, there should be availability of infrastructure and other facilities, to make teaching and learning meaningful.

Leadership and Management Roles –The teachers in schools, colleges and universities need to assume roles of leaders and managers. Leadership roles signify, they are required to exercise administrative functions and control the class. Effective decision making is an integral part of one's job duties and these need to be made, taking into consideration, the needs and interests of the students. For instance, if the students want the teacher to provide them notes for a difficult chapter plan, then teacher should provide notes, instead of giving oral explanation. Management roles are important in not only organizations, but educational institutions at all levels. The managerial functions of planning, organizing, leading, directing, co-ordinating and controlling need to be carried out by the teachers in an effectual manner. It is vital to evaluate these aspects from time to time, so that improvements can be made.

2.2.12 Government Policy on CPD Training of Teachers

The National Policy on Education (NPE) in Ghana had undergone many reviews since inception in 1974. The prominent role of teacher education has been adequately highlighted in National Policy of Education (FGN 2010). The policy stressed that "since no education system may rise above the quality of its teacher, teacher education shall continue to be given major emphasis in all educational planning and development. Owolabi (2005) pointed out that policies of teacher education deal with what the relevant authorities are meant to be carrying out on a continual basis to enhance the quality of teacher education.

Emenanjo (2008) emphasized the significance of in-service training of teachers, so that education can be advantageously employed to fulfil national philosophy. Thus, the policy states that:

1. Teacher's education will continue to take cognizance of changes in methodology, and in the curriculum;

2. Teachers will be regularly exposed to innovations in their profession;

3. In-service training will be developed as an integral part of continuing education. No matter the efficiency of the pre-service training, we give to teachers there will be necessarily be areas of inadequacies.

The policies which the government put in place made it clear that teachers training and retraining is highly recognized.

2.2.13 Funding of in-Service Training of Teachers

To show how important education is to the nation, the government of Ghana has put in place some laid down policies and guidelines on the education of its citizens and also on the need for teachers' development. The role of government in financing the implementation of the Inclusive Education (IE) policy cannot be over emphasised. Government has to take the lead role in financing and could then draw on the support of the Development Partners (DPs) and the Private Sector (MoE, 2014). The Policy enjoins the government to ensure that a proportion of the national revenue is set aside annually to fund the implementation of the Policy. Momodu (2002) is of the view that employees should be given regular training on the job so that they can excel. Ehirim (2008) opined that modern teachers are facing challenges in their teaching profession because of the demand of technological revolution and therefore should be put through regularly in-service training. The national policy on education as recorded (MoE,

2014), also recognizes the changes that take place in methodology of institution and in the curriculum and therefore acknowledge the need for teachers to be regularly exposed to innovations in the profession.

Financial constraints and lack of funds are the major challenge to the programmes of education in Ghana and has always been a challenge. The funding of public schools is majorly the responsibility of the government, so if the funds are not released it will seriously affect the training programmes. Unavailability of funds leads to inconsistency and irregularity of the programmes.

The present level of financial allocation to the educational sector is far less than 26% of the states and National budget which is far less than the funding hallmark recommended by the United Nations Educational Scientific and Cultural Organization (Peretomode, 2001). The incident of poor funding is seen in the low quality of students produced. Sinyangwe et al., (2016) pointed out that the development of students in terms of quality of education depends on the quality of the various teachers, and this quality can only be assured through in-service training which cannot guaranteed in the absence of adequate funds.

2.3   Benefits of Continuous Professional Development

A resounding benefit of CPD is the opportunity that it provides to empower and stimulate individuals, it is a process whereby dreams and aspirations can be realised and people can move towards their future goals. CPD should make individuals thirsty for more knowledge, to learn new skills and create opportunities to build on what they already know (Whitaker and Megginson, 2007). However, this could be perceived as a somewhat idealistic view of CPD for all professions. Bubb (2006) identifies good teacher professional development as containing key ingredients encompassing a clear

and agreed vision, taking into account a participant's previous knowledge and promoting continuous enquiry and problem solving. Additionally, it should involve opportunities for staff to develop subject knowledge, expand their range of teaching strategies and stay updated with advances in new and emerging technology. Bubb (2006) further asserts that if any of these key elements are absent then the impact of CPD is further reduced. Clearly, programmes 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 receive (Beavers, 2011). It is evident that there is a need, and a place for teachers' CPD in particular, for the growth, and improvement of our educational establishments, most teachers would acknowledge the need for continued training on new technologies, classroom practice, assessment and updates on educational policy. Certainly high quality and effective teacher enhancement can affect teachers' skills and attitudes in the classroom, which is undoubtedly a fundamental benefit to further increasing the education that students receive (Hien, 2008 in Beavers, 2011).

The benefits of CPD are numerous with respect to teachers. Professional development has generally been recognised as having an important role in ensuring that teachers are part of a skilful, accomplished and one of the most significant professions. This recognition has, however, always been tempered by the strong, mostly anecdotal, evidence that much professional development has not been operative in terms of achieving change in teacher practice. Research has indicated, the professional development of teachers has multiple layers, to be uncovered. Each layer represents the precise needs that have been identified by the data. This multiple layering means that the connections between cause and effect are multifaceted, and the authors truthfully

recognize this. They use a black box as their metaphor for the relationship between the learning of the teachers and students (Timperley, Wilson, Barrar & Fung, 2007).

Effective continuing professional development recognises the theories that teachers bring with them into the classroom setting, teachers in most cases assume the roles of innovators and express enthusiasm in the adoption of innovative methods and techniques. In order to make use of the innovative methods and strategies, it is important to conduct an analysis of the student's requirements. How and in what ways, students will be able to acquire understanding, put in more confidence within themselves and make efforts to improve. This can be used to challenge the existing theories and open the way for new and advanced teacher practices that are strengthened by research pedagogy (Timperley, Wilson, Barrar, & Fung, 2007). One of the important benefits of CPD is, teachers not only improve upon the learning abilities and the understanding of academic concepts amongst the students, but they are also able to inculcate values, norms, ethics and principles amongst them. It is important for a person to make use of educational qualifications to turn into a moral and an ethical human being.

There are number of other aspects that need to be taken care of when implementation of CPD takes place. It is important for the teachers to incur job satisfaction and there are number of areas that need to be taken into consideration, these are, working environmental conditions need to be pleasant and favourable, communication between the individuals and members of the organization need to be carried out in an appropriate manner, effective measures should be devised to resolve the occurrence of conflicts and disputes, and individuals need to be collaborative with each other to put into operation, innovative techniques, measures and strategies. When individuals are motivated

towards CPD, then they are able to incur job satisfaction through every means and work efficiently towards the achievement of desired goals and objectives.

A study conducted by Sharp (2009) identified that when teachers are given the opportunity to develop whiles on the job, they become empowered to take major decisions, solve problems on their own and face situations as they come. This empowerment that Sharp talked of is very important as it gives the teacher the feeling of independence. Teachers work effectively and efficiently when they have the fillings that they are their own 'boss'. Keiser and Shen (2000) stated, "The benefits of teacher empowerment include increased teacher job performance, productivity, improved teacher morale, increased teacher knowledge of subject matter and pedagogy, and in the end, higher student motivation and achievement".

Continuous professional development has proven to be quintessential for teacher professional practices. According to Kizilbash (2016), the three main goals of professional development programmes for teachers are: change in classroom practices of teachers, change in teachers 'attitude and beliefs, and change in the learning outcomes of students. Worldwide, continuous professional development has been embraced as a means of providing knowledge and skills to teachers to make them remain effective in the teaching service. Both states and development partners have realised the impeccable role of continuous professional development in teacher professional practices and have consequently demonstrated keen interest in and funded such programmes. The relevance of continuous professional development to human capacity development accounts for the non-governmental organisations' (NGOs) incessant offering of training to teachers for ages (Tallion & Milligan, 2018).

71

There is a belief that teachers can develop when they are provided with the chance to learn (Simpson, 2017). Otoo, Assumeng and Kuranchie (2018) discovered that training and development programmes are essential for teacher professional practices. There is a litany of evidence which proves that continuous professional development contributes enormously to developing practising teachers 'competence for their job. Continuous professional development provides opportunities for teachers to collaborate and discuss professional practice issues with colleagues. CPD also provides an avenue for teachers to learn from each other and enjoy collaboration which brings about support among teachers (Forte & Flores, 2014).

When teachers undergo continuous professional development training, it enables them to learn more about their subject matter knowledge as well as subject-specific pedagogy. It also helps them to develop professional knowledge with other teachers. The litany of the benefits of continuous professional development activities makes it expedient for stakeholders of education to continuously expend efforts, funds and other resources to persistently offer such service to teachers. Research evidence also supports this view. For example, Saunders (2014) found that teachers 'participation in continuous professional development leads to altering of their instructional practices and impacts their ability to decide on and apply valued modifications in teaching. Trumper and Eldar (2015) also arrived at a conclusion that participation in continuous professional development has a long-term impact on teachers' pedagogical content knowledge. Saleem et al (2021) hold a similar view that continuous professional development helps teachers on how to use new strategies and techniques in teaching. Continuous professional development activities could serve as means to increase teachers 'ability and techniques in teaching, which could, in turn help improve students 'learning.

Self-efficacy is what Bruce, Esmonde, Ross, Dookie and Beattie (2010) found out in their study. According to them, teachers gain self-efficacy beliefs through continuous professional development which give them the confidence in the classroom. Bruce et al. (2010) described self-efficacy as a form of empowerment, in which teachers perceive they have the competence to enhance student learning, possess the ability to build and sustain meaningful and effective programmes to assist students, and have the power to be agents of change in reference to student achievement. Stronge & Tucker (2005) are of the view that "a highly qualified teacher is a good starting point, but most of us would want our child to have a highly effective teacher whose teaching effort yields high rates of student learning".

The connection of CPD to improved student learning is central to the features the concept of teacher self-efficacy or effectiveness to enact new learning. It specifically notes that "improving student outcomes is the ultimate goal of teachers and school leaders, and of the professional learning they undertake" (p. 4). With research showing that students' learning in the middle years can decline (Borg, 2015), building teachers' sense of efficacy to teach this age-group by providing CPD that supports skill development is critical. Tschannen-Moran and Hoy (2001) argued that a teacher's sense of efficacy is their belief or "judgment of his or her capabilities to bring about desired outcomes of student engagement and learning, even among those students who may be difficult or unmotivated" (p. 783).

Teacher efficacy can be categorized into two types: general teacher efficacy– "teachers' beliefs in the ability of teachers in general to influence student outcomes"—and personal teacher efficacy–"teachers' beliefs about their own ability to affect student outcomes" (Wheatley, 2002). A teacher's sense of efficacy or their belief that they have

73

the capacity to affect student performance is directly linked to their enacted practices. A growing body of literature reveals that where teachers have stated a high level of self-efficacy, improved student outcomes have been reported (Bruce, Esmonde, Ross, Dookie & Beattie, 2010; Goddard, Hoy, & Hoy, 2004; Ingvarson, Meiers & Beavis, 2005; Tschannen-Moran & Hoy, 2001). This causal link has been attributed to a range of behaviours linked to classroom practice, including the level of teacher effort invested in planning and organization, goals and aspirations, and risk taking with new pedagogies to meet the needs of students as well as persistence and resilience when things go awry (Tschannen-Moran & Hoy, 2001). Thus, teachers' beliefs in their personal efficacy to motivate and promote learning affects the types of learning environments that are created and the resultant student outcomes (Bruce et al., 2010).

A body of research has also focused on the sources that develop teachers' sense of self-efficacy. Bandura's (1997) social cognitive theory asserted that teacher's self-efficacy beliefs are developed from four main sources, namely: mastery experiences (successful teaching experiences), vicarious experiences (observing or hearing of the successful experiences of others), verbal coaxing (encouragement from respected peers), and physiological encouragement (inner personal strength or resilience). A teacher's sense of efficacy has been shown to increase the most through personal mastery experiences, that is, success in the classroom (Tschannen-Moran & Hoy, 2001). Even a teacher with a strong sense of efficacy may not feel successful in all teaching situations. A teacher's sense of efficacy is context-specific and, as such, can be affected either positively or negatively by whole-school and classroom specific variables such as physical resources (classroom layout and structure) and the school's culture, programmes, and leadership (Bandura, 1997).

Although it has been argued that a teacher's sense of self-efficacy remains relatively stable after its initial formation during their pre-service experiences and the early years of teaching (Hoy & Spero, 2005), more recent research has also suggested that CPD can contribute to a teacher's increased sense of self-efficacy to the extent that it facilitates mastery experiences or when participant interaction in CPD increases opportunities for vicarious experiences and/or verbal persuasion (Ross & Bruce, 2007).

Also, when teachers work in close collaborative relationships (e.g., middle school teaching teams), opportunities for observation, feedback, verbal persuasion and continued professional dialogue are heightened and provide increased opportunities that further enhance their sense of efficacy (Bandura, 1997). Although a causal link has been found between quality teaching and student outcomes, Bruce et al., (2010) caution that teacher efficacy is a mediator and not a causal link, thus, teacher efficacy does not directly result in improved student outcomes but, rather, it affects the process (teachers' practice) or teachers' goal setting and persistence. Teachers' self-efficacy beliefs have also been shown to be the best predictor of the amount of teacher change, routinization, or sustainability of an innovation or change to teaching practices and resultant student outcomes (Bruce et al., 2010).

2.3.2 CPD Training Programme and Teachers' Job Performance

A major purpose of CPD training is to re-orientate teachers to new goals and values, to prepare them to cope with curriculum change, to train them in new teaching and learning methods and to provide them with the knowledge and skills to teach new learning areas. The aim is to provide effective practice-related CPD training that meets the requirement of the new curriculum that results in improved teaching and learning in the classroom (Nadia, 2000). Romina (2016) asserted that teacher's CPD training

75

can be seen as a catalyst capable of propelling positive changes in behaviour, boosting their morale and their job performance. Quartey (2012) stressed that the more training workers received and are satisfy with their job and environmental conditions, the more they help enhance their organizations performance. Jones (2005) confirmed that increasing effort increases workers job performance.

Performance is the result of the efforts exerted and the resources utilized (Vipinosa & Acevedo, 2015). Performance is measured in terms of both efficiency and effectiveness of the teachers, Garret & Poole in (Ajayi & Afolabi 2012). Vipinosa & Acevedo (2015) opined that CPD training enhances teachers' job performance. As stated by Handerson (2002) in his book the evaluation of in-service teacher training, In-service training for teachers is a tonic to their work, and an injection that is useful in preventing arteriosclerosis, a common disease that affect teachers to continuously act in the same old way not minding the changes and innovation in the society.

In this present time, more than ever before in the history of mankind, there is very rapid and continuous change resulting from demands outside the education world. One of the greatest revolutions of all times is knowledge explosion which can be said to begin on a new scale in the 21st century. Wayne and Young (2003) noted that promoting teachers' quality through CPD training is the basic element in the improvement of productivity among teachers in both primary and secondary school through CPD training, teachers become responsible for their own growth and effectiveness, and they therefore become more sensitive, insightful, open to more options, and are less scared of innovations and changes (Stewart & Hart, 2005). In the same view, Goldhaber and Anthony (2007) postulated that the main aim of CPD training is constantly improving teachers' performance, effectiveness and efficiency in classroom related activities.

76

Emechebe (2009) added that in as much as a well-developed teacher is likely to perform more than his counterpart who doesn't have any formal training, the need arises to design training and development programmes to ensure their high productivity at work. As a result, staff development tends to improve on the performance of teachers and the standard of education. Khan in Igbo et al. (2012) noted that in-service serves as an incentive to self-esteem of workers and its ripples effect spread across family life activities, health and productivity in work places.

2.3.3 Skills Acquired Through CPD Training of Teachers and their Job Performance

Wenglinsly (2002) suggests that various forms of professional development of teachers is a key predictor of student achievement as well as an important factor in helping teachers develop into high quality teachers. Training are activities involved in raising skills, knowledge and behavioural change. According to Nakpodia (2008), in-service training is a channel through which teachers acquire more conceptual and technical knowledge, skills and competencies in their teaching subjects and pedagogy in order to improve their efficiency on the classroom. Onasanya (2009) asserted that training is a form of specialized knowledge, skills and attitudes" which he must possess to effectively perform in a given position on a job.

A number of studies demonstrate that CPD enhances teachers' content knowledge and strengthen their pedagogical skills (Supovitz, Mayers & Kahle, 2000). These programmes boost teachers' confidence in teaching their matters and foster a positive attitude towards teaching and student learning. To meet the educational needs in terms of skills and knowledge, the rules and capacities of the trainees can be improved

77

through in-service training. Only the trained teachers can organize plans for reaching those goals (Pintrich & Schunk, 2002).

Clotfeller (2005) in support of the above point by (Cottrell & Neuberg, 2005) added that through CPD the teacher benefited in the areas of:

1. Acquisition of new Knowledge;

2. Development of new Skills;

3. Improved Competencies; and

4. Enhance Motivation, all when added together under a learning environment ensure improved academic performance of students.

Cottrell and Neuberg (2005) noted that having more education other than pre-service education, teachers' skill is more enhanced, hence impact on teacher's performance. CPD can be structured and organised in a number of different ways, and for a number of different reasons. While most CPD experiences might be considered as means of introducing or enhancing knowledge, skills and attitudes, it cannot be assumed that this is uncontested. For example, Momodu (2002) argues that it is not merely the type of professional knowledge being acquired that is important, but the context through which it is acquired and subsequently used that actually helps us to understand the nature of that knowledge. Analysing the means through which CPD for teachers is organised and structured may help us to understand not only the motivation behind such structures, but also the nature of professional knowledge and professionalism itself. Momodu (2002) identifies three major contexts in which professional knowledge is acquired through the academic context, institutional discussion of policy and practice and practice itself.

Clearly, knowledge acquisition is not situated exclusively within any one of these three contexts, but the identification of the different contexts is useful in analytical terms. Momodu (2002) does not give explicit consideration to the role of informal professional discussion and reading that takes place out with the institutional context, yet this, too, is surely a relevant context. The models discussed in this study reflect varying degrees of importance placed on each of these contexts as potential sites of knowledge acquisition, and their consideration aids the analysis of the underpinning agendas that are supported by the various models.

This study presents a framework in which the main characteristics of a range of models of CPD are identified and categorised. It considers the circumstances in which each particular model might be adopted and explores the form(s) of knowledge that can be developed through the particular model. In broad terms, four are identified, which have been categorised into the following models:

1. Training Model
2. The Standards-based Model
3. Coaching/mentoring Model
4. Transformative Model
5. Professional Learning Communities (PLC) Model

Each of these models will be considered in turn, drawing on specific examples from the Scottish context, before moving on to discuss their interaction and their relative capacity for supporting transformative practice. However, it should be noted that the three models are not proposed as necessarily exhaustive or exclusive; rather they are an attempt at identifying key characteristics of different types of CPD with the aim of enabling deeper analysis of, and dialogue about, fundamental issues of purpose.

2.4   The Challenges of CPD Implementation

There are different challenges or obstacles in order to achieve the predetermined goals. These challenges need efforts and strength of mind to solve the existing problems and to become successful. According to the finding of the Ministry of Education, MoE (2014),the major challenges identified at the national level to practice CPD programme are; lack of trained facilitator, time constraints of teachers, the cluster resource centres were not well organized and transforming CPD activities, teachers are not provided awareness about the background of CPD, lack of CPD books, absence of coordination between the stakeholders, teachers are not motivated to solve the ongoing problems, and less committed of the stakeholders.

According to Falk (2001), lack of uniformity of the CPD formats for the portfolio and absence of guide line about what should be included in the format confuses teachers. Similarly, principals and the school based CPD facilitators or mentors are not performing their responsibilities of providing clear feedback for teachers on the portfolio documents (Bruce et al., 2010). This absence of feedback on the portfolio development compels teachers to repeatedly copy the already existing portfolio documents. Most teachers have no knowledge about the purpose of the portfolio. Thus, teachers see it as time wasting paper work rather than as means of professional development. Many teachers fill the format not knowing why and what the outcome of the task could be. This creates less commitment and resistance against the implementation of the CPD practices.

Furthermore, leadership and supervision for professional development are distributed among teachers, principals and other administrators. School based continuous professional development is most effective when there are strong leadership and

80

supervisory assistance. But, defects in the leader's recognition of the value of high-quality professional development discourages and undermines teacher participation and communication about the benefits of professional development to stake holders (Gray, 2005).

Besides, limited resources hinder the effective implementation of CPD. Almost all CPD programmes need a certain amount of monetary and material inputs to run. It does not matter whether it is on-school or off-school site-based CPD. Without financial resources, CPD programme cannot run. These programmes need financial resources for logistical purposes. These may include transportation, buying of materials to use during and after the training, paying allowances to resource persons and participants and paying for accommodation of participants if the training is an off-school site based CPD programme (Melesse & Gulie, 2019). Melesse and Gulie add that governments need to commit themselves to CPD programme budgets and ensure that they are used for the intended purpose. Cost effective ways of running effective CPD programmes need to be explored so that the programmes do not suffer much due to limited funding.

In addition, duration and time span of CPD programmes are determining factor for the effective implementation of CPD. Penuel, Fishman, Yamaguchi and Gallagher (2007) have pointed out that a common criticism of professional development activities designed for teachers is that they are too short and offer limited follow-up of teachers once they begin to teach. This results in teachers either assimilating teaching strategies into their current repertoires with little substantive change or rejecting the suggested changes altogether. Another scholar, Brown (2004) argues that professional development that is of longer duration and time span is more likely to contain the kinds

81

of learning opportunities necessary for teachers to integrate new knowledge into practice.

Also, Audu and Gunjul (2014) stated that in most cases teachers are poorly experienced to implement reforms in subject matter teaching that ends with the absence of the integration of the contents with students' opportunity to learn. Neelam et al, (2014) further indicate that the magnitude of CPD task frustrates teachers and discourages them to dilemmas. Moreover, less committed leaders damage the coordination of CPD programme.

2.5 Opportunities to improve CPD for Teachers

The following discussion is about how CPD can be improved. CPD improvement can be categorised as formal certificated and accredited teacher learning; contextualized and work-based teacher learning; and personal and self-paced teacher learning (Goh, 2016).

Formal teachers' continuing education consists of study programmes, short courses and workshops, and professional events. It plays a key role in offering relevant certificated opportunities to education officers. For example, the Professional Development Continuum Model is provided to teachers on a part time basis and the Professional Development-Higher Degree Pathway is offered to enable teachers to complete up to four stand-alone Masters-level courses as an in-service participant before applying for admission to a Master's degree programme. This is the academic route.

Conference attendance and presenting papers at local and overseas conferences form part of formal teacher learning. Here, teachers are nominated by their schools to attend important conferences on teaching and education research, as well as discipline-specific

82

ones. This trend can largely be explained by MoE's efforts at developing teachers' classroom inquiry capacities (MoE, 2014), as well as more teachers having received a Master's or a doctoral education.

Another form of improving CPD is through the work-based teacher learning which takes the form of PLCs. Innovations, such as Professional Learning Communities within schools and school networks, have also been strengthened through bottom–up initiatives, reflecting teachers' professionalism through ownership of their learning. In a Professional Learning Communities, teachers meet together in groups of about four to eight members during a timetabled period to work on enhancing teaching and student outcomes. They engage with colleagues in a department or school based collective activity, such as planning lessons and developing assessment literacies. In parallel there is a platform for the exchange of ideas to bring about improvements in daily teaching. This is the Networked Learning Communities which also helps in solving specific educational problems. Professional Learning Communities activities are not restricted to teachers in a school or their networks. Lee and Lee (2013) adds that external experts from university or faculty members from the universities or overseas institutions, and other academics are also invited to introduce new ideas, such as by offering teachers tools for reflection or analysis of classroom data, or to act as a catalyst to spur teachers to examine their own practice or sharpen their professional dialogues. Through participation in professional learning, teachers also develop positive professional selves, in particular when they can influence the directions of their own professional learning and the ways its success can be evaluated (Lee & Lee, 2013).

For example, quite recently, the Centre for Teaching and Learning Excellence was created in Singapore (Yang, 2015). The Centre has Master Teachers of curriculum

subjects from Academy of Singapore Teachers (AST), as well as university experts, teaching alongside teachers from the school. The establishment of such a centre is an example of the nation's continual collaborative quest in offering innovative ways for teacher learning. It aims at enriching teaching in the school. The lessons taught by the experts and the teachers also serve as demonstration classes which can be observed by both practising and pre-service teachers though special facilities, such as one-way mirrors.

Many advanced countries such as UK, USA, Canada and Singapore recognize the need for teachers to keep up with the rapid changes occurring in the world and to be able to constantly improve their practice. They are therefore entitled to 100 hours of professional development per year. This may be undertaken by following courses at the university which focus on subject matter and pedagogical knowledge and lead towards higher degrees or advanced diplomas. Much CPD is school-based and led by staff developers. Their job is to identify teaching-based problems in a school, for example, with a group's mathematics performance; or to introduce new practices such as project-based learning or new uses of ICT. Each school also has a fund through which it can support teacher growth, including developing fresh perspectives by going abroad to learn about aspects of education in other countries.

A study by Chang, Teng, Tan, Chan, et al., (2015) has provided empirically based insights into how the CPD hours were being utilised. They observed the intertwining of success factors and challenges in the CPD work done in Singapore. The multipronged support structure, the top–down but guided approach, and teachers' sense of professionalism all contributed to the high level of teacher participation in CPD. The researchers suggested that these enablers could also simultaneously constrain teachers

because of conflicting priorities among the needs of the school, the department and the teachers themselves. Developing a quality teaching force and the continual professionalization of the work of teachers through CPD has been a result of thoughtful planning and careful implementation by the Singapore government. There is a deep collective belief among key stakeholders that teachers' own learning will directly raise the quality of education for every child. It is this belief that drives the country's commitment to excellence in teacher continuing education and that has resulted in many of the successes experienced today (Goh, 2016).

However, commentators have questioned how much deep learning takes place and the extent to which teachers' learning becomes embedded in their day-to-day practice. The availability of sustained forms of learning is also a major concern noted in the PD literature. The most prevalent format across many countries and systems is the offering of standalone courses or workshops. These activities, however, have often been criticised for their 'one-off' treatments of professional or curricular needs, quick fixes that do not allow for teachers' prolonged engagement with the required knowledge and skills. The MoE in Singapore believes that teachers should be encouraged to carry out action research at the level of their school as that will develop their problem-solving skills and take a critical stance towards their own practice (McNiff & Whitehead, 2002). Another advantage is that they will generate new knowledge about students' learning including innovative strategies from bottom-up against the centralization of education systems (Karagiorgi & Symeou, 2006). However, one drawback is that it takes time and a lot depends on the school leaders' willingness to change organizational structures.

2.5.2 CPD Opportunities for Teachers in Ghana

Despite the critical need for CPD to improve teacher performance and student learning, there is widespread belief that CPD provided for teachers is inadequate (Borko, 2004). In the case of Ghana, there is currently the absence of well-defined standards for teacher CPD. Even though Ameyaw-Ekumfi (2001) observed the neglect of teacher CPD interventions in the educational system, the use of ongoing professional learning opportunities to shape teachers' beliefs, attitudes, and dispositions for classroom practices is still lacking (Atta & Mensah, 2015).

Nevertheless, Ghanaian teachers have been engaging in CPD activities as far as their professional careers are concerned, even though at the individual teacher level, efforts towards their professional development have been negligible (Asare & Nti, 2014). At most, teachers undertake further education to upgrade their qualifications for their job. To this end, the Ghana Education Service (GES) implements a quota system policy to grant study leave with or without pay to enable teachers to further their education.

However, teachers' access to these programs is constrained by infrastructural limitations as well as the quota system itself (Personal Interview, 2017). Hence, teachers alternatively rely more on distance education and sandwich programs to upgrade their professional knowledge and skills.

Although teachers are increasingly upgrading themselves academically, there remains the unanswered question: What is the relevance of such qualifications for teachers' professional careers to classroom practices? Researchers have begun to question the relationships between knowledge obtained from this formal approach to teachers' professional development, and its bearing on pedagogical content knowledge of teachers, as well as instructional and classroom practices (Desimone, 2009; Guskey, 2002). In the case of Ghana, teacher professional development through sandwich and distance modes has been found to have adverse effects on students' learning because it

takes teachers from their classes. For instance, Tamanja (2016) reported in his study on teachers' participation in sandwich programs that in an academic years there was an average loss of 264 hours of instructional time with pupils. Participation also increased teacher absenteeism, a phenomenon the GES has been battling over the years.

Similarly, a study on teachers' participation in distance education also found negative impacts on effective teaching and learning of students (Ananga, Tamanja, & Amos, 2015). Mereku (2014) uses the "diploma disease" metaphor to highlight the challenges in using distance education programs for upgrading of teachers' professional knowledge. His study on teachers' experiences in distance education programs revealed that although the programs served their purpose in upgrading many teachers, they were inadequate for increasing teachers' capacity to deliver better teaching in their classrooms. This was due to inefficiencies in the distance education curriculum and the few opportunities the programs offered to develop teachers' skills and competencies.

Another vital area for teachers' professional learning and development has been the induction and traditional in-service training. Induction offers support for novice teachers' transition into full professional teacher status and survival (Ingersoll & Smith, 2004). It initiates new entrants into school cultures and fosters their survival in their new teaching environments. Yet, induction is often inadequately performed for new entrants (Cobbold, 2007), resulting in their challenges of having to cope with expectations of pre-service teaching and the realities of in-service teaching (Buchanan et al., 2013). However, as a coping strategy, Manuel (2003) suggests the need to support new teachers through meaningful participation in CPD activities and utilising the learning support from professional teaching associations.

Ghana has yet to establish a formal educational policy on the induction for beginning teachers (Cobbold, 2007). Keengwe and Boateng (2012) indicate that the majority of

beginning teachers get into actual classroom teaching without any form of induction. Novice teachers are left on their own to explore ways of surviving in their new profession (Mereku, 1998). Consequently, beginning teachers who had hitherto entered into the profession with energy and enthusiasm face the reality of the confronting day-to-day school life (Manuel, 2003) and difficulties in their teaching, with some reverting to the styles that they had learned during their teacher preparation.

There are also the periodic in-service training programs organised at the school, and cluster-based, and district levels, and periodic workshops organised for subject-specific teachers to upgrade their professional knowledge and skills (Asare et al., 2012).

However, these organised CPD interventions are infrequent, and usually uncoordinated with teachers' classroom needs. For instance, Atta and Mensah (2015) in their study on teachers' perspectives on the availability of professional development programs, found that CPD interventions for teachers in Ghana are uncoordinated and fragmented events with limited teachers' participation. Also, interventions provided by the MOE, the GES and other funding agencies take the form of a cascade model where head teachers and circuit supervisors are given training and are expected to provide the same training to local districts and schools (Asare et al., 2012). According to Kadingdi (2006), CPD provision in Ghana has been ad hoc and patchy, with the aim to retrain and re-skill teachers in areas within the curriculum that they might never have studied in detail during their training preparation.

It is essential to state that the current situation of teacher CPD in Ghana resonates with those of most other African countries where teachers' development has been neglected due to issues of finance and overemphasis on the pre-service education of teachers (Ono & Ferreira, 2010). In Nigeria, for instance, Garuba (2004) reported in a study that most CPD provisions had never been implemented, and award-bearing models (continuing

88

education) predominate teacher CPD activities. In Lesotho, Letsatsi (2010) reported that the issue of teacher CPD was not given sufficient attention in schools; consequently, teachers' understanding of CPD did not go beyond the workshops or induction activities provided at the beginning of their careers. More recently, Geldenhuys and Oosthuizen (2015) found an insufficiency of CPD provision for South African teachers. Indeed, CPD remains at a lower level of policy interest in many Sub-Saharan African and other developing countries where the provision of activities is uncoordinated and resources

are limited.

2.6 Contextual Factors Affecting Professional Development

Professional development takes place within a context (school, district, regional and national) which affects the content, process and effects (van Driel et al., 2012). Organisational factors have strong influence on the impact of professional development as they determine whether professional development will have impact or not. Organizational context is a key variable when it comes to professional development implementation since they can support or thwart the expected outcome of professional development (Luft & Hewson, 2014). The impact of professional development activities in bringing about change in the knowledge and practice of the teachers is influenced by the context, teachers' previous knowledge and skills, the type of knowledge to be acquired and the network to which the teacher belongs to (National Academy of Sciences, Engineering and Medicine, 2015).

According to Guskey (2002), a lot of factors account for the ineffectiveness of professional development key among them being the failure to take into consideration two crucial issues; the motivating factors for teachers to engage in professional

89

development and the process by which change in teachers occur. Other factors that affect the implementation of professional development include existing curriculum, standards, principals and colleagues (Opfer & Pedder, 2011).

Professional development is affected by teachers' personal context such as science knowledge and "frames of interpreting policies', school schedules, resources and time for planning and reflection; "vision and leadership' and "collective commitment" (Penuel, Fishman, Yamaguchi & Gallagher, 2007). As Heck, Banilower, Weiss and Rosenberg (2008) put it that "teacher capacity interacts with system capacities [to affect professional development meant] for reform" (p.115). It is therefore important that both resources needed for implementation and likely barriers are considered for professional development in science education (Penuel et al., 2007).

Heck et al. (2008) concluded their research by re-echoing the need to attend to factors that affect teachers' ability to change their teaching practice. Penuel et al. (2007) advocated for the need to attend to local barriers from school environment that teachers perceive to be barriers of professional development implementation. This is because "even the highest quality professional development programmes are limited in the likelihood of changing classroom practice when there are major disincentives for teachers to implement what they are learning" (Heck et al., 2008). Several empirical studies have looked at how the various contextual element affect professional development implementation (Heck et al., 2008).

2.7   Empirical Review

Abakah, Widin and Ameyaw (2022) conducted exploratory study regarding the current continuing professional development (CPD) situation of basic schoolteachers in Ghana. The study investigated the teachers' CPD needs, frequency and nature of CPD

provisions, and barriers to teachers' participation in CPD activities. Using a cross-sectional survey involving 456 teachers, the study found that teachers required to be developed in areas of "ICT skills for teaching," "research and dissemination," and "teaching students with special learning needs." It was also revealed that the predominant CPD practices were workshops, in-service training, and continuing education. However, these practices were seldom provided and rarely met the development needs of the teachers. Teachers' participation in CPD activities were also found to be minimal due to factors such as non-available CPD offerings, lack of pre-requisite information on CPD activities and lack of schools' support. The study concludes that the current CPD situation of teachers in Ghana reflects a lack of implemented CPD policy framework. There is therefore the need for a broader CPD policy framework that will guide the provision, participation, and CPD practices of teachers in Ghana.

In an experimental study of science teachers' professional development programme, involving 125 teachers and 1676 students, Abakah, Widin and Ameyaw (2022) found that there was an effect on the teachers in their classroom practices as teachers in the treatment engaged in more student-centered teaching activities than those in the control group. A study was conducted by Abakah, Widin and Ameyaw (2022) involving 1180 teachers to examine the relation between professional development and teacher classroom practices. The researchers found a positive relationship between professional development and teachers' instructional practices.

Nwakpa (2019) assessed the relationship between teachers' continuous professional development practices and their job performance in secondary schools in Ebonyi State, Nigeria. The main purpose of this study was to determine the relationship between

91

teachers' continuous professional development practices and their job performance. It was a co-relational study, and was carried out from the three education zones of the state. Population of the study was 4500 teachers from the state public secondary schools. The sample for the study was 450 teachers' selected from the three education zones of the state representing 10% of the population. Researchers-developed instrument, titled: questionnaire on teachers' continuous professional development practices and job performance (QTCPDJP) was used to elicit information from the respondents. The instrument was face-validated by three experts from the department of Educational Foundations of Ebonyi State University, Abakaliki. The reliability of the instrument was established through test retest procedure using twenty teachers in public secondary schools in Enugu State, and the reliability index of 0.87 was obtained using the pearson product moment correlation coefficient. The researcher administered the instrument directly on the respondents with the help of three research assistants. The study was guided by only one research question and one null hypothesis. Data collected were analyzed using pearson product moment correction coefficient. Findings of the study revealed that there is a moderate positive correlation between teachers' continuous professional development practices and their job performance in secondary schools in Ebonyi State. The study, among others, recommended that teachers should take interests in professional growth and development through regular workshops, seminars and conferences in order to increase their job performance.

Mahama, Mohammed and Gunu (2022) investigated aligning the working needs of teachers to continuous professional development programmes in the Nanumba North District of Ghana: interrogation within the ambience of policy and practice. Professionals all over the world including teachers need to update their knowledge and skills often through diverse Continuous Professional Development Programmes

(CPDP's). Using the Descriptive Survey Design and Mixed Method Approach, this paper assesses the policy requirements and the potency of these training programmes in relation to the working needs of teachers within the Nanumba North District of the Northern Region of Ghana. The study sampled 100 teachers and 20 administrators in various Basic Schools in the district. Mainly, questionnaires and in-person interviews were used in soliciting data. Data management and analysis in this study was done using the SPSS version (23). Even though the study did not entirely dismiss the fact that the Ghana Education Service appreciates the importance of CPDP's, the findings strongly revealed that CPDP's in the district do not align with the working needs of participating teachers. Organizers choose areas they deem important without conducting needs assessment for training engagements. It is recommended that CPDP's must be incorporated into the teacher training curriculum and backed by law and thus support and address the operational needs of the Ghanaian teacher.

Gyimah and Ayinselya (2022) studied teacher professional learning, a tool for managing teachers to improve pupils' learning: the views of teachers in Ghana. The research sought the views of basic school teachers in Ghana regarding the forms of professional learning (PL) activities that they engaged in, the challenges in accessing them and how they wanted to be empowered in their PL. Simple random sampling technique was used to select six regions in which 19 teachers were selected across the regions participated. Data were collected through a questionnaire comprising both open-ended and close-ended questions. The close-ended questions were analysed and presented in the form of diagrams, while the open-ended questions were analysed thematically. The findings showed that all respondents engaged in some form of PL activities. However, they were confronted with challenges such as inadequate and inappropriate PL resources, poor support and lack of motivation. Hence, they wanted

to be empowered through motivation and support with resources to enable them to have control over their own PL and make the needed impact in pupils' learning.

A survey was conducted by T-TEL (2017) to assess the impact of TTEL programmes in the colleges of education. Using teachers' self-report and observation, it was found that the 65.9% of tutors used in the study demonstrated student-focused teaching methods compared to a previous baseline study of 26.1%. It was concluded that "a growing number of tutors have mastered the use of student-focused teaching methods and gender responsive instructional strategies" (T-TEL, 2017).

Melesse and Gulie (2019) examined the extent to which Primary Schools of Fagita Lekoma Woreda implement teachers' CPD and its impact to quality in education. Data were collected from teachers, school principals, and woreda education office supervisors. Questionnaire and interview were used as the data gathering tools of the study. The quantitative data was analyzed using percentage and one sample t-test. The qualitative data was analyzed via thematic description. The findings confirmed that the respondents' level of agreement regarding the implementation of teachers' CPD was found significantly greater than the expected mean (3) in some parameters of the implementation of CPD (e.g., teachers' access to new ideas (3.48), teachers' state of sharing experiences (3.44), and teachers' professional interaction (3.48)). But, there was no significant difference between the expected mean (3) and the calculated means of the other parameters (e.g., attention given for teachers true learning (3.15), focus on staff professional development (3.10), pursuit for improved teaching and learning (3.06), teachers' engagement into continuous professional development (3.31), the match between professional development provision and professional needs (3.08), conceptualization of professional development (2.92), being insensitive of matching of

94

staff development opportunities to individual concerns (2.75), effort made to relate learning experiences to work place conditions (2.88), and teachers' engagement into professional development that promotes inquiry, creativity, and innovation (3.04)). The aggregate calculated mean value of extent of CPD implementation (3.14) also showed insignificant difference from the expected mean (3). Moreover, it was confirmed that there was no significant difference between the expected mean and the calculated means of all the parameters of the impact of CPD implementation on quality in education of primary schools of the woreda.

Abahumna and Dadi (2019) assessed teachers' continuous professional development practices in secondary schools of Arsi zone: opportunities and challenges. This study is based on the assumption that the successful implementation of any educational reform/policy is largely depends on teachers' commitment and professional skills. The purpose of this study is to examine the practices and challenges of teachers' continuous professional development in secondary schools of Arsi Zone. To achieve this purpose, a descriptive survey method and a mixed approach of research design were undertaken to collect and analyze the data obtained from the research participants. Ten randomly selected secondary schools were involved in this study. Out of these schools, 128 teachers (M=98, F=30) were included in the study by using simple random sampling technique. Furthermore, five supervisors and ten school principals were involved using availability sampling techniques. A self-developed questionnaire and interview guidelines were used for data collection from the secondary school teachers, and leaders (supervisors, principals) respectively; since they are an important constituent in the study of professional development. Various statistical tools such as percentage, weighted mean and standard deviation were used to analyze the data.

In addition, one-way ANVOA was used to analyze the mean differences of teachers based on their professional ranks. The findings of the data analysis generally showed that at present the practices of teachers' professional development in the secondary schools are not to the expected standard as per CPD guideline established by MoE. The benefits teachers gained as a result of participation in professional development practices are not significant rather rated as moderate contributions. Thu, it was concluded that the present practices are overwhelmed with multifaceted problems in its implementation. The study, therefore, suggests that there should be clear guidelines for effective implementation of CPD in secondary schools. In addition, for effective professional development programmes there has to be adequate support with necessary facilities for teachers to gain optimal benefits out of the practices.

Wolde (2021) investigated the role of continuous professional development in improving secondary school teachers' teaching and learning competencies to deliver quality education in Ethiopia. The main purpose of this study was to understand the role of Continuous Professional Development (CPD) in improving secondary school teachers' teaching and learning competencies at Basso Preparatory and Secondary School (BPSS). In so doing, single case study design was employed, and the participants of the study were teachers, principals, supervisor and CPD coordinator of the school and experts at district and Zonal levels, and the data sources were CPD framework and toolkit, portfolio module, teachers' CPD plans and portfolios. The data collection methods were questionnaire, interview and document analysis, and the data collected were analysed.

The result depicted that CPD has improved the teaching competencies of some teachers whereas there are some teachers who have problems in their teaching methods,

96

assessment and evaluation, and subject area knowledge. Besides, the findings from the document analysis disclosed that there are also gaps in the framework and toolkit not to including all the expected teaching and learning competencies in line with the current literature. The portfolio module was not also well conceptualized. This implies that CPD is not playing its best role to developing teachers' teaching and learning competencies as a whole to deliver quality education at BPSS, and implications for the stakeholders at different levels were forwarded.

Southerland et al. (2016) conducted a longitudinal study to examine the change in the thinking and practices of teachers after participating in two professional development using 106 teachers. Using data from questionnaire, interview and observation, it was found that changing teachers' beliefs about teaching had an indirect influence on teachers' instructional practices. That is, teachers' participation in the professional development influenced their belief which in turn affected their teaching practice.

Alemayehu (2021) investigated the nexus between continuous professional development (CPD) and teachers' teaching competence, action research preparation, mentoring and peer observation in Addis Ababa, Ethiopia's Gulele sub city's public schools. By using mixed research design, the descriptive survey approach was used. Purposive, availability, and simple random sample techniques were all utilized in the study. With a total of 340 participants, the sample size was 220 teachers, 30 department heads, 30 principals, 20 vice principals, 10 CPD facilitators, 10woreda education office experts, 10 cluster supervisors, and 10 sub city education office experts. Three research questions were utilized in this study. Questionnaires, interviews, and document analysis were used to obtain information. Principals, Vice principals, department heads, Continuous Professional Development facilitators, cluster supervisors, Woreda and sub

97

city education office specialists were among those who took part in the interview. The data collected through closed-ended questionnaires was then analysed using mean scores, standard deviations, and rank. While the data collected through interviews and open-ended questions was subjectively narrated. The findings of this study revealed that Continuous Professional Development (CPD) moderately improved the teachers' teaching competence, action research preparation, mentoring and peer observation activity.

In terms of ways of career growth, TALIS (2013) included nine different options in its survey: training/workshops, conferences or lectures, certification programmes, trips to other institutions to observe, engagement in a teachers' network, individual or joint study on a subject, and coaching and mentoring. Brown, Edmonds and Lee (2001) found that career learning takes place through one-off courses, conferences and conferences, unaccredited academia and professional activities, in-structure instruction, intervention studies, attended other classes, network platforms, in-class supporting colleges, and evaluation. In-service (INSET) and in-service analysis in the UK. Although the production of CPD is successful with and from each other and proof of best practice, some teachers view CPD as an on-the-job occurrence or brief courses that are not always school-relevant but are of varying standard and interest from a variety of external suppliers (Sweeney, 2005).

In continuation of the Continuous Professional Development (CPD) project in the Addis Ababa City Authority, Desta, et al (2013) explore possibilities and threats among primary school educators in Ethiopia. This study shows that teachers invest in self-reflection (for tracking and assessing their own work outside the collection of portfolios), intervention research (for the career advancement of educators),

98

mentorship, seminars at schools in-house, and counselling from school leaders, peers, and orders. Kokebe (2013) also assessed in Ethiopia activities and difficulties in the Metekel district, Benishangul Gumuz Region, of the ongoing career advancement of college teachers in primary schools. Both primary and secondary data techniques were used for analysis methods. Teachers, department heads, heads of government, facilitators of CPD schools, vice-directors, surveillance specialists, and experts in the areas were students. A simple random and purposeful sampling procedure is used to pick the participants. Questionnaires, focus forums, and interviews as well as the study of records were selection instruments. Descriptive figures and narratives were used to interpret the data collected. The study showed that teachers were very interested in CPD practice, such as the mentoring, creation of portfolios, the execution of action testing, and the fostering of group conversations and peer insights.

In Ethiopia, Mekonnen (2014) assessed the tradition and difficulties of the continued professional growth of school-based teachers at Kemashi District, Benishangul-Gumuz Regional State High Schools were investigated in Ethiopia. The study showed that teachers engaged marginally in CPD activities, such as mentoring, portfolio development, action testing, community discussion, and peer review practices, as well as evaluation of overall accomplishments and execution shortcomings.

In Abu Dhabi, United Arab Emirates, Badri, Alnuaimi, Mohaidat Yang and al- Rashedi (2016) examined the needs, consequences of professional advancement, and the challenges faced by the secondary education teachers through Teaching and Learning International Survey analysis. The report shows that teachers have a good involvement in preparation and workshop (83.6%), mentorship and coaching (63.0%), instruction or workshops (51.6%), and personal or joint testing (50.8%), as well as a weak presence

in certification (16.6%) and observational trips to other schools (29.9%). They have also been active in student-related CPD activities, including assessment and evaluation of teachers (84.5%), educational experience in the area (79.9%) and student conduct and school administration (78.1%).

Fresew (2016) analyzed the role of government secondary schools and the opportunities for continuing professional growth in Oromia, a town in Jimma using a qualitative approach. The study found that current CPD activities were seminars, instruction, and engagement in creative class management methods, exchange of insights, and the provision of additional instructional resources to students. In this sense, they are informally and sporadically active.

Meke (2013) explored the factors that impact negatively on teacher motivation as regards the implementation of what they learn at Continuing Professional Development (CPD) programmes. The research was conducted in Zomba Rural Education District in Malawi and focused on primary school teachers. The study used a qualitative research design and collected data through focus group discussions, interviews and document reviews. The results show that poor allowances that teachers receive during CPD training and poor conditions of service such as salaries, promotions and accommodation for teachers, have contributed to lack of motivation of teachers to effectively implement at classroom level, what they learn at CPD training. This calls for the government and stakeholders in education to seriously look into factors that are de-motivating teachers to implement what they learn from CPD programmes if gains in CPD programmes are to be realized.

Lusaka's instructor viewpoint for Continuous Professional Development (CPD) has been studied recently in Zambia (Kabila, Moonga & Moonga, 2018). This research

comprised all four High Schools in the central Lusaka region, all secondary school teachers and administrators, and the Education Standards Officer of the District (DECO). The aim was to pick a sample of 20 professionals and 1 school administrator and the DECO with a total of 84 respondents. Data gathered by supervisors and teachers were used for interviews and focus group discussions (FGD). Via inductive data analysis and interviews on popular topics, responses from (FDGs) were recorded. Participants and facilitators were students, though both teachers were not interested in CPD activities.

Similarly, the tradition and difficulties of continuing professional growth of school-based teachers in the Arbaminch City administration government secondary schools in the Gamo Gofa district are evaluated by Berehe, Legesse, and Tadesse (2018). The research was both descriptive and explanatory. Purposeful random sampling approaches for educators, heads of schools, city training offices, and cluster administrators were employed. In order to obtain data from the respondents, questionnaires, interviews, and documentation were used. The data were analyzed using descriptive and narrative statistics. The study shows that teachers were lowly engaged in CPD behaviour, such as action research, classroom management, mentoring, counseling, and portfolio development. The study suggested that the city education office partner closely with educators, provide the necessary preparation funds, empower teachers to accept more roles in the CPD phase, and appoint well-trained CPD facilitators to reduce the effects of the CPD implementation challenges.

In Ghana, Abreh (2018) researched teacher engagement in ongoing professional development activities and their effect on science and mathematics teaching in Ghanaian High Schools. The research design for exploratory surveys was used in this analysis. The

101

research population was composed of heads of Mathematics and Science in Senior High in Ghana. A questionnaire was used to collect information from department heads. The study found that both Science and Mathematics teachers participated in several CPD activities such as workshops on capacity building and the Secondary Education Improvement Project (SEIP) workshops. SEIP is a World Bank/Ghana Government intervention to support secondary education to improve learning outcomes); Mathematical Association of Ghana (MAG) conferences; entrepreneurial skills training workshop; ICT training workshops, peer training workshop.

Equally, in Ghana, Dampson and Mensah (2018) explored the professional development needs of teachers, headteachers, and School Improvement Support Officers (SISOs) in the Basic Schools in the Central Region of Ghana. The study employed a descriptive survey design. The study found that teachers, headmasters, and SISOs in both regional areas engage in staff learning activities such as courses/workshops on good practice in schools and facilities for new education curricula/school administration and leadership, graduate courses/certificates, instructional studies, and teaching and teaching workshops. In urban schools, though, respondents are more interested than their counterparts in rural-urban schools.

In Ethiopia, Tulu (2019) explored activities and problems in Hawassa City Administration secondary schools for the continued career growth of school-based teachers. The research used both a quantitative and a qualitative method of descriptive survey design. For chosen teachers' department heads, directors, and CPD facilitators, simple random and convenience sampling was hired. Questionnaires, interviews, and analysis of records were used to collect data. The data obtained were analyzed using descriptive statistics and narration. In the report, respondents were not properly engaged

in CPD work, such as mentoring, creation of portfolios, action analysis, group dialogue, peer- reviewing, and the overall achievements and shortcomings of the systems.

Banda (2013) studied continuing professional development through sustainable in-service teacher training system in Kenya, Malawi and Zambia. A teacher is critical in modeling a learner. Continuing Professional Development (CPD) for teachers is important in attaining sustainable education. Africa has had several In-Service Training (INSET) systems as interventions towards CPD. Respective governments owning, managing, driving and sustaining INSET is vital if effective teacher professional development aimed at sustainable quality teaching and learning is to be achieved in any country. However, the problem is the presence of unsustained CPD and INSET systems in Kenya, Malawi and Zambia running for short periods with unsustained continuity. With the view to propose owned and sustained INSET system, the objective of this qualitative research was to identify governmental strategies that would enhance CPD through sustainable INSET. Secondly, it was to clarify teacher professional development with the focus on implementation of programmes at operational levels, the role played by: individual governments through in- country trends and its structures as well as international trends and cooperation. To achieve this, a qualitative study based on the Grounded Theory approach examining historical records, perception and field visit was conducted. The data was analyzed with the support of ATLAS.ti 6.2 This paper discusses how the software worked to reduce the data so that it can be explained to the benefit of this research.

David and Bwisa (2013) studied the continuous professional development of teachers who are employees of Teachers Service Commission (TSC) in Kenya. The main objective of this study was to establish the factors which influence teachers' active

involvement in continuous professional development. The target population of this study comprised the county director TSC, district education officer (D.E.O) and the quality assurance and standards officer (DQASO) and 57 secondary school teachers in Trans Nzoia West district in Kenya making a sample size of 60. Questionnaires and interview schedule were used to collect data. The researcher used descriptive statistics and the results were presented in frequency distribution tables which the researcher used for interpretation. The findings from this study showed that few teachers were actively involved in continuous professional development in the district and that the work environment does not support teachers' involvement in continuous professional development.

2.8 Chapter Summary

This chapter has examined relevant literature related to the study. Literature relating to CPD programmes were reviewed and this led to some key inclusions being made to the existing literature. The majority of the literature revealed a lack of funds, inadequate support, and a low level of participation in CPD as some of the challenges. It is important that the various stakeholders efficiently create a conducive environment for teachers to partake in CPD programmes without any hindrances.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0   Introduction

This chapter discusses the methodology employed to achieve the research objectives. The discussion centred on analysing the participation and benefits of continuing professional development (CPD) among public basic school teachers in Nkwanta North District. The strategies for performing the research are listed in this chapter. The research design, demographics, survey techniques, the tool for gathering data, ethical concerns, and eventually data management and interpretation guidelines are presented. It also discussed how reliability and authenticity have been checked for the instrument.

3.1   Research Paradigm

The choice of research paradigm or philosophical position for any research is premised on the approach employed for the study. A paradigm is a "worldview" (Creswell, 2013; Teddlie & Tashakkori, 2009), an epistemological stance (Crotty, 1998), a shared belief among a community of researchers and model examples of research (Morgan, 2007) . It is a set of beliefs that guide research actions, hence influences researchers' choice of designs, methods, procedures, and interpretations of their study (Mertens, 2014). Mackenzie and Knipe (2006) argue that without nominating a paradigm as the first step in research, there is no basis for subsequent choices regarding methodology, methods, or research design.

Thus, in conducting a qualitative study, the most commonly used philosophical position or paradigm is the interpretivist paradigm. The interpretivist paradigm is mostly used in qualitative studies because "it acknowledges the feelings, experiences and viewpoints of the researched as data" (Kusi, 2012). That is, the interpretivist paradigm allows to gather verbal data from respondents based on their experiences and socio-

105

cultural context. This affirms Rugg and Petre's (2007) claim that the interpretivist paradigm argues that social reality is created jointly through meaningful interaction between the researcher and the researched-on agreement in the latter's socio-cultural context (Kusi, 2012). The positivist paradigm, on the other hand, underpins quantitative studies.

3.2   Research Approach

According to Bryman (2016) the quantitative approach deals with the collection of numerical data, a deductive view of the relationship between theory and research. McMillan and Schumacher (2010) state that quantitative research designs put emphasis on objectivity in measuring and describing phenomena. Maree & Pietersen (2009) and Creswell & Plano-Clarker (2011) explains that quantitative approach is systematic and objective in its way of using numerical data from only a selected subgroup of a larger population to generalize the findings to the universe that is being studied.

This was a quantitative study underpinned by the positivist paradigm. The positivist paradigm, according to Kusi (2012) is of the view that social reality exists 'out there' and it is independent of the observer. Positivist paradigm operates on the assumption that human behaviour is essentially rule-governed and can best be interpreted through discovering a set of laws that can be used to predict general patterns of the human behaviour (Cohen, McLaughlin & Talbert, 2007). Esterberg (2002) further added that instruments which have measuring qualities are very significant in their investigations. Therefore, measuring instruments such as standardised/structured questionnaire is employed to gather data and such data can be subjected to statistical analysis.

3.3   Research Design

The study was directed towards the ideas, opinions and participation and benefits of continuing professional development (CPD) among public basic school teachers in Nkwanta North District. The descriptive survey design was used. Avoke (2005) views descriptive survey as a design that portrays accurately the characteristics of particular individuals, groups or situations. The use of the survey design enabled the collection of quantitative data using the questionnaire for descriptive analyses (Creswell, 2014). This method is non-experimental and deal with the relation among non-manipulated variables. This is consistent to this study because it is a non-experimental type of study. The descriptive survey design was the preferred choice for this research because it permitted the researcher to gather large volumes of data that could be analysed for frequencies, averages, mean and standard deviation.

3.4   Geographical Setting of the Study

The study was taken in the Nkwanta North District of the Oti region, Ghana. The Nkwanta North District being one of the eight (8) districts in the Oti Region, is located between Latitude 7°30'N and 8°45'N and Longitude 0°10'W and 045'E. The district shares boundaries with the Nanumba South District to the North, Republic of Togo to the East, Kpandai District to the West and Nkwanta South Municipal to the South. The District Capital, Kpassa is located 99km to the South of Dambai (the Regional Capital). The District has a surface area of approximately 1,098.9km2. (Ghana Statistical Service – GSS, 2010).

Besides, the district's closeness to the Republic of Togo makes it a potential avenue for wealth creation through greater international trade and positive socio-cultural exchanges between the district in particular, Ghana and Togo. The ethnic groups in the

district include Bikpakpalm, Basares, Ewes, Akans and others from the Northern Region. The Bikpakpalm is the dominant ethnic group followed by the Basare. Agriculture, hunting and forestry at the subsistence level are the main economic activities in the district with minimal activities of secondary and tertiary sectors. The major economic activities include; Crop Farming, Fishing and Livestock Farming.

People of all ages in the district are involved in farming due to the high returns derived from yam production. The District is one of the leading producers of yam in the country. There is a high concentration of 'yam buying middlemen' in the district. These activities of middlemen offer employment to a sizeable number of the youth.
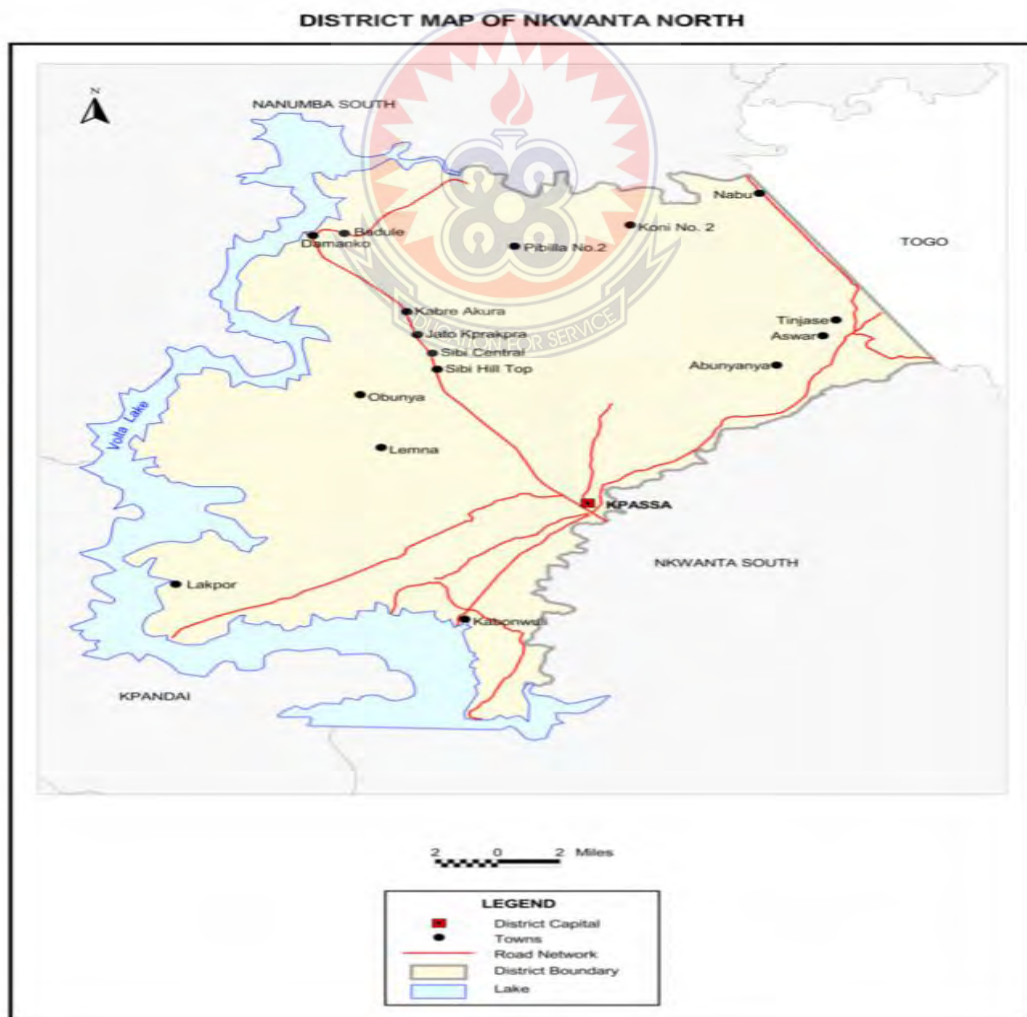
Figure 3.1: Nkwanta North Map Source: Ghana Statistical Service (2010)

3.5   Population of the Study

Population is defined as an entire group of individual, events or object with some common observable characteristics (Mugenda & Mugenda, 2003). Amoani (2005) also asserted that population refers to the totality of whatever objects or measurement that the researcher is investigating. It can be finite or infinite. The population of this study consisted all teaching staff and the circuit supervisors in Nkwanta North District. Specifically, the population include head teachers, assistant head teachers, teachers and the circuit supervisors at Sibi and Kpassa East Circuits. The target population is twelve basic school head teachers and teachers in Nkwanta North District. This is made up of two hundred and eighty-six (286) head teachers, assistant head teachers, teachers and circuit supervisors.

The study took the head teachers and teachers in the target schools as the target population. They must have been in the same school for at least a year. The head teachers were targeted as they are important because they have the authority to supervise, coordinate and plan curriculum instruction needs in the schools and also may participate and benefit from staff development models. The teachers were important in the study as they were the implementers of curriculum instruction in the schools. They were the ones who participated and benefited from staff development models.

3.6   Sample and Sampling Technique

Miles and Huberman (1994) asserted that one cannot study everyone everywhere doing everything at the same time. Grix (2004) added that using a whole universe in a research is not feasible. Therefore, a sample of the population should be constituting for the study. A sample is a portion of the population that is being studied (Grix, 2004). It is

the small amount of the population that gives out a more representative information about the population it was taken from. According to Denscombe (2010), the suitability of the sampling technique used determines the quality of a research study as much as the adequacy of methodology and instrumentation. Furthermore, Cohen, McLaughlin and Talbert (2007) contend that the nature of the population being studied and the objective of the study both influence the appropriate sample size. The authors also emphasised that, before beginning actual research, the choice of sample size must take into account the number of variables the researcher intended to control in the analysis and the kinds of statistical tests the researcher wished to use. Thus, the researcher deemed a sample size of 86 teachers and head teachers being 30% of 286 population to be convenient for this study (Gay, Mills & Airisian, 2012).

The study used a simple random sampling technique for equal opportunity of selection. This served to prevent biases and enable a valid extrapolation from the sample to the population. Bryman (2016) asserted that each participant of the population has an exact equal probability of getting chosen using this sampling technique. The researcher therefore randomly selected the 84 participants involved in this study through the lottery method. Pieces of papers were cut and folded for all the teachers to pick with 'YES and NO'. Those with 'YES' formed the participants of the study. This was done before classes began in the morning. The use of the simple random sampling technique offered each participants the equal opportunity of being selected at random for the study.

3.7 Instrument for the Study

The instrument for the study was a structured questionnaire. According to Avoke (2005), questionnaire is an instrument that is designed to collect data for decision

making in research. Wilson and Mclean (1994) cited in Cohen, McLaughlin & Talbert (2007) asserted that questionnaire is widely used and it is a useful instrument for collecting survey information, providing structured, often numerical data, being able to be administered without the presence of the researcher, and often being comparatively straight forward to analyse. In fact, these were the grounds that encouraged this study to use questionnaire as data collection tool. It includes both open and close-ended questionnaires. Close-ended questions sought objective responses while open-ended questions sought subjective responses.

Questionnaires were used because they could ensure anonymity, permit use of standardized questions, have uniform procedures, provide time for respondents to think about responses, read and write independently and are easy to score. They present an even stimulus to a large number of people simultaneously and provides an investigation with an easy (relatively) accumulation of data. Best and Kahn (1993) noted that questionnaires enable the person administrating them to explain the purpose of the study and to give the meaning of the items that may not be clear.

A questionnaire titled "teachers' Continuous Professional Development models and Job Performance Questionnaire" was used to collect data for the study. Section A of this questionnaire was used to generate demographic information on the respondents, while section B was used to gather data on teachers' participation in CPD models and was equally used to answer the research questions. Section C was used to gather data on teachers' job performance. The questionnaire was structured on a 4-point Likert scale of Strongly Agree (SA) 4 points, Agree (A) 3 points, Disagree (DA) 2 points and Strongly Disagree (SD) 1 point to measure attitudes.

111

3.8   Validity of the Instrument

Validity is an important element to effective research. Validity essentially demonstrates what a particular instrument purported to measure. According to Opoku (2005), validity refers to the fact that the test items constituting a questionnaire are measuring the construct that the test developer has designed it to measure. To ensure the validity of the instruments, the researcher reviewed the instruments with his peers in the department of educational administration and management, his supervisor and three other experts in the institution to assist in the examination of the content and the degree to which the instruments would gather the information intended. Their feedback and corrections were integrated into the final draft of the questionnaire to improve the face validity and content validity of the research instruments. This was done by checking the content to ensure that it measures what it is supposed to measure. The key issues of which the research intended were maintained in the instrument of the study. The instrument fairly and comprehensively covers the domain it purported to cover to maintain face validity and avoid any ambiguity of instructions and leading questions, the instrument was given to colleague students to offer suggestions for a better set of questions. This was done to eliminate typographical errors, double-barrel questions, school details like curriculum, sponsorship, number of streams and number of students per class, and average length of lessons and to ensure consistency of the instrument.

Pilot study was conducted at Kpassa D/A Primary B4 school in Kpassa West Circuit before actual data collection. This school was not included in the sample for the main study. The pilot data was collected through personal administration of the questionnaires. The researcher discussed with each of the respondents after completing the questionnaire to determine whether the items were correctly worded and therefore not open to misinterpretation when administered to the respondents of the main study.

112

The questionnaire which was found to be generally long, were shortened by eliminating those items that bore similar meanings or were irrelevant to the objective of the study. Review was then made accordingly. It was noted that the demographic items on how long they had been in the teaching profession, how many lessons they taught in a week, their teaching subjects and the subjects they taught in their school were irrelevant to the study and were removed from the questionnaire. Other items found irrelevant were, the items on information on teachers' perception towards CPD and their recommendations were also found to be repetitive and were removed. This reduced the questionnaire to manageable size. Similarly, the questionnaire for circuit supervisors was found to be a duplicate of the head teachers' questionnaire and it was combined instead. The interview schedule for education officers and parents were also omitted as they did not have a strong bearing to the study.

3.9 Reliability of Instrument

Reliability is a precision and accuracy. Reliability is the extent to which a test or procedure produces similar results under constant conditions on all occasions (Bell, 1993). Cohen, McLaughlin & Talbert (2007) asserted that reliability in quantitative research is essentially a synonym for dependability, consistency, and reliability over time, over instruments and over group of respondents. There should be consistency of scores when the research instrument is administered multiple times on different occasions.

The instrument was piloted to test the stability and consistency. Piloting was done to establish reliability and make necessary adjustments on instruments. To ensure the reliability of the instrument, the test- retest method was carried out on thirty (30) respondents outside the sample area. After a period of two weeks, another fresh test

113

was carried out on the same set of people, after which their responses were collated and analysed using Pearson's Product Moment Correlation Coefficient.

First, the instruments were administered once thus eliminating sources of error in measurement due to different testing conditions. Secondly, the questionnaires are long hence administering them once was to eliminate fatigue that could be otherwise affect the outcome (Gay, 1996). The scored Likert Scale items from the pilot study was numbered and separated into two halves, the odd numbered instruments made one-half while that of the even numbered instruments formed the other half. The respondents' scores from the two groups were computed and correlated.

Since the correlation computed reflected half the test scores, a correlation factor was applied on the computed coefficient using the Pearson Product – Moment correlation (γ) using SPSS for Windows version 26. The adjusted coefficient then represented the reliability of the whole test. Pearson Product – Moment correlation coefficient (r) ranges from -1 to +1. The result obtained showed that the "r" obtained was 0.77 which indicated that the instrument was very reliable for this study.

3.10   Data Collection Procedure

According to O'leary (2004), the first step in collecting data is access. She further iterated that "whether it be written records, workplaces, survey respondents, or interviews, without access, obtaining data becomes impossible" (p.150). This research began after ethical clearance from the Department of Educational Administration and Management. Permission was also sought from the Nkwantan North District Educational Office in Oti of the Ghana Education Service and was granted with a formal letter of introduction allowing the researcher to conduct the study on teachers in the District. Their approval enabled the researcher to go direct to the field to collect

114

data. The researcher visited the sampled schools, sought permission from the head teachers and made appointments for a familiarization and climate setting between the researcher and the respondents. An appointment was made on when the researcher would return to conduct the research through the administration of the instruments. Stratified sample technique was used to select male and female teachers. Though majority of teachers were males, however, simple random technique was used to select the respondents from the teachers. This was done to give equal opportunity to each of the respondents to be fairly selected. The researcher declares the intention and purpose of the study to the respondents and the instrument was administered by the researcher to the sampled teachers himself. The researcher explained the rationale for the study to them and assured them of confidentiality. Due to the scattered nature of the schools, opportunity was granted the respondents to fill and return them. The researcher checked the returned questionnaires' one by one for those uncompleted to be completed. The return rated was about 70%. This was due to allowing the respondents to fill and submit it on their accord.
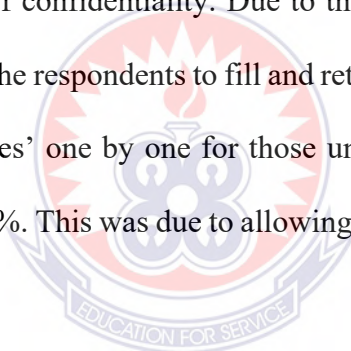
3.11 Data Analysis Procedures

After the collection of the raw data, the researcher sorted out the data and edited it to identify blank spaces or unfilled items, and those that could have been wrongly responded to. Questionnaires from teachers were classified according to the patterns of the responses given by the respondents, and their homogeneity as explained in Mugenda and Mugenda (2003). They were coded for purposes of allocations of magnitude or numbers to the various responses being measured.

The data were arrayed and keyed into Statistical Product for Service Solutions (SPSS) for processing. Fraenkel and Wallen (2000) observed that a descriptive statistic is a

statistical technique that is used to analyse data by describing or summarising the data from a sample. Descriptive statistics (Frequencies, means and standard deviation) were used to analyse the data.

3.12   Ethical Consideration

Every good research ensures the ethical consideration of research. In view of this, the research through the Department of Educational Administration and Management secured permission from the Director of Education and the Circuit Supervisors of the respective schools. This was done to ensure smooth entry of the schools for effective execution of intended purpose of the study. During the collection of the data, great care was taken by the researcher to adhere to professional conduct and ethics. The respondents were therefore assured of protection from harm, and confidentiality as information provided will be strictly for the academic purpose. The question of deception of the respondents will be addressed by explaining the purpose of the study and how the data collected were going to be used (Gall, Borg & Gall, 1996).

Therefore, individuals would not be identified with their names or responses, or appear in the research report. This was done to warrant free flow of information and willingness of respondents to participate in the study. Respondents were made to understand that participation was voluntary and that they were not under any compulsion to take part however, they were encouraged to participate since the intention was solely academics. This was done to warrants the willingness of respondents' participation. After collection of the data, the researcher thanked head teachers for their cooperation. Should there be a need to return at a later date this will be communicated to the head teachers.

3.13   Chapter Summary

This chapter discussed the research method employed for this study and how data was collected. It further outlined how the data was analysed as well as how it would be presented. Issues of ethical concern that underpin the study have also been addressed. The next chapter deals with the presentation of the results in a descriptive table comprising of frequencies, simple percentages, mean and standard deviation. The results from the data were discussed to reveal the findings based on the themes, in accordance with the research questions set.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND DISCUSSION OF FINDINGS

4.0   Introduction

In this chapter, the focus is on presenting the data and discussing the results obtained from analysis. The discussion is aligned with the objectives of the study, providing a comprehensive analysis of the findings.

The table below depicts the gender distribution of the respondents who participated in the research study:

Table:4.1 Gender Distribution of Respondents

Gender	Frequency	Percentage (%)
Male	56	65.1
Female	30	34.9
Total	**86**	**100**

Source: Fieldwork data (2024).

According to Table 4.1, there were 56 male participants (65.1%) and 30 female participants (34.9%) in the study. The results indicate that there are more male teachers than female teachers in the study area.

The table below depicts the age distribution of the respondents who participated in the research study:

118

Table: 4.2 Age Distribution of Respondents

Age	Frequency	Percentage (%)
20-29	31	36.0
30-39	41	47.7
40-49	13	15.1
Above 50	1	1.2
Total	**86**	**100**

According to the table 4.2, the majority of the respondents (47.7%) fell within the age range of 30-39 years. 36% of the respondents were between 20-29 years of age, 15.1% of the respondents were in the age range of 40-49, and only one respondent (1.2%) was above 50 years old. Hence, it can be inferred that the majority of the teachers who participated in the research study were relatively young.

The table below depicts the age distribution of the respondents who participated in the research study:

Table:4.3 Distribution of Respondents by Qualification

Professional qualification	Frequency	Percentage (%)
Diploma in education	37	43.0
B.A/ B.Sc.	3	3.5
B. Ed	46	53.5
Total	**86**	**100**

Source: Fieldwork data (2024).

119

According to the analysis of table 4.3, we can see that the professional qualifications of the teachers in the study have been evaluated. It is evident that approximately 37 (43.0%) of the respondents have a diploma in basic education as their highest professional qualification. Only 3 (3.5%) of the respondents have either a Bachelor of Arts or a Bachelor of Science as their highest professional qualification, while around 46 (53.5%) of the respondents possess a Bachelor of Education as their highest professional qualification. This indicates that the majority of teachers within the study hold a Bachelor of Education as their highest professional qualification in terms of academic qualifications.

The table below depicts the professional experience distribution of the respondents who participated in the research study:

Table:4.4 Teaching Experience of Respondents

Professional experience	Frequency	Percentage (%)
5 Years and below	53	61.6
6-10 Years	18	20.9
11-15 Years	12	14.0
16-20 Years	3	3.5
Total	**86**	**100**

Source: Fieldwork data (2024).

In Table 4.4, we analyzed how long respondents had been in the teaching profession. The results show that 53 (61.6%) of the respondents have been teaching for at least five years. 18 (20.9%) respondents have been teaching for six to ten years, 12 (14.0%) have been teaching for eleven to fifteen years, and 3 (3.5%) have been teaching for sixteen to twenty years. These findings suggest that the majority of teachers in the study area

are relatively inexperienced, as having longer duration in a profession usually leads to improved experience and practice.

RQ1: What is the rate at which teachers encounter the contents of the CPD programmes they participate in the Nkwanta North District?

The table below depicts rate at which teachers experience or are exposed to the major contents of CPD programme offered to teachers in the research study:

Table:4.5: Frequency of Teachers' Encounter with the Contents of CPD

	Frequently	Sometimes	Rarely	Never
School Leadership	40(46.5%)	32(37.2%)	10(11.6%)	4(4.7%)
Guidance and Career Devt	37(43.0%)	32(37.2%)	13(15.1%)	4(4.7%)
Subject Area	40(46.5%)	28(32.6%)	1315.1%	5(5.8%)
Effective Teaching	60(69.8%)	20(23.4%)	2(2.3%)	4(4.7%)
Classroom Management	54(62.8%)	26(30.2%)	4(4.7%)	2(2.3%)
Curriculum Implementation	41(47.7%)	33(38.4)	9(10.5%)	3(3.5%)
Action Research	25(29.1%)	33(38.4%)	21(24.4%)	7(8.1%)
Study Groups	18(20.9%)	45(52.3%)	16(18.6%)	7(8.1%)
Scoring students ss improve perf	39(45.3%)	31(36.0%)	8(9.3%)	8(9.3%)

Source: Fieldwork data (2024).

The participation rate of teachers in the study area learn the contents of the major contents of the CPD model is as follows: concerning school leadership, 40 (46.5%) of respondents frequently encounter it, 32 (37.2%) of respondents sometimes encounter it, 10 (11.6%) of respondents rarely meet it, and 4 (4.7%) of teachers never meet it.

121

Regarding guidance and career as a content of a development issue for teachers, 37 (43.0%) of teachers frequently meet it, 32 (37.2%) sometimes meet it, 13 (15.1%) reported to have rarely participated in it, and 5 (5.8%) of respondents never meet it in a CPD programme. For CPD session is on the respondents' subject of teaching, 40 (46.5%) of them have participated in it, 28 (32.6%) of respondents sometimes participate in it, 13 (15.1%) respondents rarely participated it, and 5 (5.8%) of respondents never participated it.

Regarding effective teaching strategies, 60 (69.8%) of the respondents frequently learn it at CPD programmes, 20 (23.4%) of the respondents sometimes participate in it, 2 (2.3%) of the respondents rarely participate in it, and 4 (4.7%) of the respondents had never participated in it. On the content of classroom management, 54 (62.8%) of respondents frequently meet it at CPD programmes, 26 (30.2%) of them sometimes meet it, 4 (4.7%) of respondents rarely meet it and 2 (2.3%) of them had never met it in CPD programmes.

Relating to curriculum implementation as a content of CPD activities, 41 (47.7%) of the respondents frequently encounter it, 33 (38.4%) of the respondents sometimes encounter it, 21 (24.4%) of the respondents rarely encounter it, and 7 (8.1%) of the respondents had never encountered it. Concerning the CPD content on action research, 25 (29.1%) of the respondents frequently participate in it, 33 (38.4%) of them sometimes participate in it, 21 (24.4%) of respondents rarely participate in it, and 7 (8.1%) of respondents had never participated in it. When the CPD session is on study groups, 18 (20.9%) of respondents frequently participate, 45 (52.3%) of respondents sometimes participate, 16 (18.6%) of respondents rarely participate, and 7 (8.1%) of respondents never participate.

Overall, the results demonstrate that the majority of teachers in the study area frequently participate in CPD programmes that cover school leadership, guidance and career development, subject areas of specialization, effective teaching, classroom management, and curriculum implementation. Additionally, the results show that the majority of teachers within the study area sometimes participate in CPD sessions that cover action research and study groups.

The results show that the teachers frequently participate in CPD activities which could have positive influence on their professional practice as argued by Weiner (2002) and Burbank and Kauchak (2003). The authors tend to suggest that CPD has a greater impact on practice when it is shared in communities of practice or enquiry, and indeed, many communities of practice will engage in action research. However, collaboration of the nature found in a community of practice is not a prerequisite of the action research model.

Burbank and Kauchak (2003) argue that collaborative action research provides an alternative to the passive role imposed on teachers in traditional models of professional development. They advocate teachers being encouraged to view research as a process as opposed to merely a product of someone else's endeavours. It is also, arguably, a means of limiting dependency on externally produced research, instead shifting the balance of power towards teachers themselves through their identification and implementation of relevant research activities. A study conducted by Little (1994) recognizes the importance of collegiality as she concludes that consistent career growth is ideally accomplished when educators speak about the discipline of teaching regularly, continually and more explicitly. Teamwork forms the foundation of self-development, as it offers an incentive for equal to exchange experience and skills in content preparation, technique, learning and appraisal used in their teaching. This

means educators are returning to their classrooms with a better knowledge of the issue and even educators from other schools (Heystek et al, 2008). Such reciprocity is a principle that underlines peer learning (Cohen, Boud, & Sampson, 2001) and many other studies have advocated for it to be included in CPD learning interventions to ensure effective learning among teachers (Levine & Marcus, 2010; Poekert, 2012). Teachers participating in my study also considered this practice effective in fostering their learning and development and recommended that organized workshops and cluster-based INSETs adopt these principles in planning and implementation.

RSQ2: What are the benefits of involving in CPD activities in the Nkwanta North District?

The table below depicts the benefits of participation of teachers in the activities of the CPD programme who participated in the research study:

Table:4.5: Benefits of Involving in CPD Programmes

CPD Activity	N	M	SD
Improve teacher competency	86	2.9884	1.15294
Improve efficiency in classroom	86	3.9186	3.33331
Enhance personality	86	3.5349	.50171
Enhance prestige	86	3.3256	.71029
Expand Knowledge in teaching	86	3.3953	.63763
Expand skills in teaching	86	3.4767	.54722
Enhance confidence in delivery	86	3.5349	.52463
Help in acquisition of new knowledge	86	3.5814	.51939
Improves professionalism	86	3.4651	.52463
Improves assessment practices	86	3.5000	.52580

Source: Fieldwork data (2024).

Based on the results presented in Table 4.5, the teachers who participated in CPD activities in the study area experienced higher benefits in terms of enhancement of their prestige (M = 3.3256, SD = 71029), improvement in their confidence while delivering lessons in the classroom (M = 3.5349, SD = 52463), and acquisition of new knowledge (M = 3.5814, SD = 51939). On the other hand, the benefits of expanding teaching skills (M = 3.4767, SD = 54722), improving professionalism (M = 3.4651, SD = 52463), and enhancing assessment practices (M = 3.5000, SD = 52580) were comparatively lower. The benefits of improving teacher competency (M = 2.9884, SD = 1.15294) and classroom efficiency (M = 3.9186, SD = 3.33331) were recorded as the lowest among teachers who participated in CPD activities in the study area.

From the teachers' perspective, the major benefits they derived from CPD activities were related to the enhancement of their prestige, improvement of their confidence in delivering lessons in the classroom, and acquisition of new knowledge. The findings corroborate findings from other researches such as Otoo, Assumeng and Kuranchie (2018) whoh discovered that training and development programmes are essential for teacher professional practices. Trumper and Eldar (2015) also arrived at a conclusion that participation in continuous professional development has a long-term impact on teachers' pedagogical content knowledge. Saleem et al (2021) hold a similar view that continuous professional development helps teachers on how to use new strategies and techniques in teaching.

Bubb (2006) further asserts that if any of these key elements are absent then the impact of CPD is further reduced. Clearly, programmes 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 receive (Beavers, 2011)

RQ3: What challenges do teachers have with participating in CPD activities in the Nkwanta North District?

The table below depicts the challenges of participation of teachers in the activities of the CPD programme who participated in the research study:

Table 4.6: Challenges Teachers have with Participating in CPD

Challenges	N	M	SD
Inadequate Funds	86	3.6163	.55664
Transportation	86	3.6163	.68888
Lack of resources	86	3.6279	.65163
Absence of motivation	86	3.9651	4.32353
Workload of Teachers	86	3.0116	.86084
Lack of trained Facilitators	86	3.0465	.83886
Non-follow-up of CPD Activities	86	3.1395	.73825
Inadequate time of Teachers for CPD	86	3.1744	.79988
Inadequate duration of CPD Programme	86	3.1744	.81460
Where they are organised	86	3.3488	.79361
Mode of assessment of Teachers'	86	3.3837	.76955

Source: Fieldwork data (2024).

Table 4.6 indicates that teachers in the study area perceive inadequate funds (M = 3.6163, SD = 55664), transportation (M = 3.6163, SD = 68888), lack of resources (M = 3.6279, SD = 65163), and mode of assessment for teachers (M = 3.3837, SD = 76955) as the biggest challenges for implementing CPD activities in their schools. On the other hand, workload of teachers (M = 3.0116, SD = 86084), lack of trained facilitators (M =

126

3.0465, SD = 83886), non-following of CPD activities (M = 3.1395, SD = 73825), inadequate time for CPD activities (M = 3.1744, SD = 79988), inadequate duration of CPD programme (M = 3.1744, SD = 81460), and the location of CPD activities (M = 3.3488, SD = .7936) are considered the least significant challenges. It was also found that teachers did not view a lack of motivation (M = 3.9651, SD = 4.32353) as a challenge to the CPD programme.

The study highlights that the major challenges facing the implementation of CPD activities in the schools under review are inadequate funds, transportation, lack of resources, and mode of assessment for teachers. However, the study also found that teachers did not consider a lack of motivation as a challenge.

Penuel, Fishman, Yamaguchi and Gallagher (2007) have pointed out that a common criticism of professional development activities designed for teachers is that they are too short and offer limited follow-up of teachers once they begin to teach. Brown (2004) also argues that professional development that is of longer duration and time span is more likely to contain the kinds of learning opportunities necessary for teachers to integrate new knowledge into practice. Neelam et al, (2014) further indicate that the magnitude of CPD task frustrates teachers and discourages them to dilemmas.

RQ4: In what ways Can CPD programmes be improved for basic school teachers in the Nkwanta North district?

The table below depicts the ways of improving teachers' participation in the activities of the CPD programme in the research study:

Table 4.7: Ways that CPD could be Improved for Teachers

| Ways of improving CPD	N	M	SD
Enough funds	86	3.6163	.55664
Provision of regular workshops	86	3.6279	.66944
Enough resources provision	86	3.8372	.37134
Means for Deprive areas teachers	86	3.7907	.43700
CPD activities organised weekends	86	4.1163	4.1163
CPD provision online or distance	86	2.9884	1.01163
Follow-up of CPD activities	86	2.9070	.92835
Decentralization of CPD activities	86	3.2907	.71729
CPD coordinators be well trained	86	3.2907	.71729
Frequent assessment of Teachers	86	3.5814	.62243
Teachers' be motivated	86	3.5814	.54147

Source: Fieldwork data (2024).

The table above presents the results of the study about how teachers perceive the improvement of the CPD programme in their schools. The study found that the provision of sufficient funds (M = 3.6163, SD = 55664), enough resources (M = 3.8372, SD = 37134), and means of transportation for teachers in deprived areas (M = 3.7907, SD = 43700) are the most important factors for improving the CPD programme in their schools. However, regular workshops (M = 3.6279, SD = 66944), online or distance CPD provision (M = 2.9884, SD = 1.01163), follow-up of CPD activities (M = 2.9070, SD = 92835), decentralization of CPD activities (M = 3.2907, SD = 71729), well-trained CPD coordinators (M = 3.2907, SD = 71729), and frequent assessment of

128

teachers (M = 3.5814, SD = 62243) were considered less important. Furthermore, the study revealed that respondents failed to recognize CPD activities organized during weekends (M = 4.1163, SD = 4.1163) as an important factor in improving the CPD programme in their schools.

In summary, the results indicate that provision of enough funds, enough resources, and means of transportation for teachers in deprived areas are crucial for improving the CPD programme in schools. Through participation in professional learning, teachers also develop positive professional selves, in particular when they can influence the directions of their own professional learning and the ways its success can be evaluated (Lee & Lee, 2013). The MoE in Singapore believes that teachers should be encouraged to carry out action research at the level of their school as that will develop their problem-solving skills and take a critical stance towards their own practice (McNiff & Whitehead, 2002). Tamanja (2016) reported in his study on teachers' participation in sandwich programs that in an academic year there was an average loss of 264 hours of instructional time with pupils.
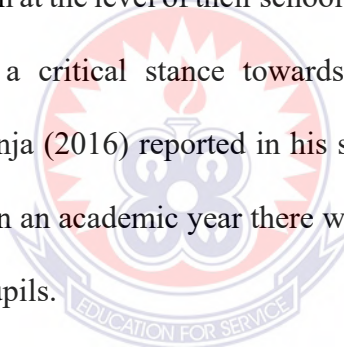
CHAPTER FIVE

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

5.0   Introduction

This chapter presents a summary, major findings and conclusion. Based on the conclusion drawn from the study some possible recommendations to the findings in the study were made.

5.1   Summary

This study is organised in line with the demographic information of the respondents and the research questions. The study presented the results of the analysis of the socio-demographic information of the respondents. The analysis of research questions thus; explored the frequency at which the basic school teachers' encounter the major contents of CPD programmes, the benefits teachers derive from participating in CPD activities, the challenges teachers have with participating in CPD programmes and finally ways CPD programmes could be improved for basic school teachers in the Nkwanta North?

It was found that that the majority of teachers in the study area participate frequently in CPD programmes which cover school leadership, guidance and career development of teachers, subject areas of specialization, effective teaching, classroom management, and curriculum implementation.

The study also found that the major benefits teachers derived from CPD activities were related to the enhancement of their prestige, improvement of their confidence in delivering lessons in the classroom, and acquisition of new knowledge.

It was further found that the study highlights that the major challenges facing the implementation of CPD activities in the schools under review are inadequate funds, transportation, lack of resources, and mode of assessment for teachers.

The study also found that that provision of enough funds, enough resources, and means of transportation for teachers in deprived areas are crucial for improving the CPD programme in schools.

5.2 Conclusion

Based on the findings of the study, several key conclusions can be drawn:

The study concludes that activities relating to CPD programme sessions within the study area must be made and emphasize to reflect school leadership, guidance and career development of teachers, subject area specialization of teachers, effective teaching, classroom management and curriculum implementation in order to resonate with teachers in the study area.

The study further argued that for proper implementation of activities pertaining to CPD programme, there should availability and deployment of funds, resources for schools to effectively conduct a CPD programme that will have the capacity to influence the intent of the coming in force of the programme.

5.3 Recommendations

Based on the conclusions drawn for the study, the following recommendations were made;

There is an urgent need for policy, financial and physical resourcing of teacher learning and CPD activities in Ghana. First, a national coherent policy framework of CPD would be beneficial to guide teacher CPD activities in Ghana. As the findings demonstrated,

teachers in Nkwanta North District engage in not only formal CPD activities but also other informal forms such as peer learning, independent learning, and mentoring as valuable means of CPD. Since these informal practices are not yet recognised as forms of CPD, a more integrated policy that recognises both traditional and non-traditional (informal) approaches to teacher development will be essential. I recommend this policy framework comply with international standards of practice; describe the elements and composition of what should constitute CPD and how those activities will be evaluated; and, more importantly, emphasise the value of collaborative CPD. In addition, a CPD policy framework should consider the career stages of teachers to allow for differentiated CPD for teachers at different points in their careers.

Also, Ghanaian teachers should be offered a diverse range of CPD events and activities. As the study illustrated, the dominating INSET, and workshops were infrequent and, in some cases, failed to meet teachers' learning and development needs adequately. I therefore recommend CPD integrate other informal and collaborative approaches, such as mentoring and coaching, reflective practice, study groups, observation, and peer learning. These collaborative approaches promoted knowledge co-construction among basic schoolteachers in this study, yet lacked recognition as CPD even among teachers. Finally, MoE through GES should work closely with the schools to provide timely training, allocate adequate budget and other resources for training, motivate teachers to willingly take more responsibilities in the implementation process of CPD, and schools assign well trained CPD facilitators to minimise the effect of challenges affecting CPD implementation.

5.4   Suggestions for Future Research

Since the findings have shaped understandings of the complexities involved in teacher learning and CPD activities and led to the recommendations outlined above, there are still some important areas for future researchers to study.

There is a potential for a future study to explore how the teachers' participation in CPD influences students' academic achievement.

Another area that could be investigated is the impact of teachers' informal learning on their professional development. Such research would support calls to recognize teachers' informal learning experiences as legitimate CPD in Ghana.

Finally, an action research project could investigate the potential collaboration between teachers and the GES in regards to the types and contents of CPD programmes.

REFERENCES

Abahumna, A., & Dadi, L. (2019). Teachers continuous professional development practices in secondary schools of Arsi zone: opportunities and challenges. *International Journal for Research in Education (IJRE), 8*(5), 4-17.

Abakah, E., Widin, J., & Ameyaw, E. K. (2022). Continuing professional development (CPD) practices among basic school teachers in the Central Region of Ghana. *SAGE Open, 12*(2), 215824402210945.

Abreh, M. K. (2018). Heads of departments' perception of teachers' participation in continuous professional development programmes and its influence on science and mathematics teaching in Ghanaian secondary schools. *African Journal of Educational Studies in Mathematics and Sciences*, *14*, 85-99.

Ajayi, I. A., & Afolabi, C. Y. (2012). The influence of sex and experience on secondary school teachers' productivity in South West-Nigeria. *European Journal of Educational Studies, 4*(3), 43-64.

Akyeampong, K. (2003). *Teacher training in Ghana—Does it count?* (MUSTER Country Report One). Sussex, UK: DFID.

Alemayehu, E. (2021). Does continuous professional development (cpd) improve teacher's performance? Evidences from Public Schools in Addis Ababa, Ethiopia. *Research & Reviews: Journal of Educational Studies, 7*(9). 1-17

Alibakhshi, G., & Dehvari, N. (2015). EFL teachers' perceptions of continuing professional development: A case of Iranian high school teachers. *Issues in Teachers' Professional Development, 17*(2), 29–42.

Amoani, F. K. (2005). *Introduction to research methodology: An overview.* Winneba: University of Education, Winneba.

Anamuah-Mensah, J., Mereku, D. K. & Asabere-Ameyaw, A. (2004). *Ghanaian Junior Secondary School Students' Achievement in Mathematics and Science*: Results from Ghana's participation in the 2003 Trends in International Mathematics and Science Study, Accra: Ministry of Education Youth and Sports.

Ananga, D. E., Tamanja, E. M., & Amos, P. (2015). *Effects of teachers' participation in distance education on basic education: A case study of Central region in Ghana*. Plan Ghana. Accra.

Ansong, D., Ansong, E. K., Ampomah, A. O., & Afranie, S. (2015). A spatio-temporal analysis of academic performance at the Basic Education Certificate Examination in Ghana. *Applied Geography, 65*, 1-12.

Asabere-Ameyaw, A. (2007). *Welcome Address at Teacher Education and Learning of Association of Teacher Education.* Accra: May, 2007.

Asare, K. (2009). *Education: Training, retraining, and retaining teachers in Ghana (Part 1).* Retrieved from http://www. modernghana.com/news/211101/1/education-training-retrain- ing-and-retaining-teache.html

Asare, E. O., Mereku, D. K., Anamuah-Mensah, J., & Oduro, G. K. T. (2012). *Inservice teacher education study in sub-Saharan Africa: The case of Ghana.* Retrieved from https://www.academia.edu/33218760/INservice_ teacher_education_study_in_subsaharan_Africa_the_case)of_Ghana

Atta, G., & Mensah, E. (2015). Exploring teachers' perspectives on the availability of professional development programs: A case of one district in Ghana. *International Journal of Humanities and Social Science, 5*(7), 48-58.

Audu, J. S. & Gunjun, T. (2014). Effects of human resource training and development on productivity in Nigerian Hospitality Industry. *International Journal of Public Administration and Management Research (IJPAMR), 2*(2), 80-87.

Avoke, M. (2005). Inclusive education for persons with disabilities. *African Journal of Special Educational Needs, 4,* 1-5.

Badri, M., Alnuaimi, A., Mohaidat, J., Yang, G., & Al Rashedi, A. (2016). Perception of teachers' professional development needs, impacts, and barriers: The Abu Dhabi case. *SAGE Open*, *6*(3), 1-15.

Bailey, K. M., Curtis, A., & Nunan, D. (2001). *Pursuing professional development*: The self as source.

Banda, B. (2013). Continuing professional development through sustainable in-service teacher training system in Kenya, Malawi and Zambia continuing professional development through sustainable in-service teacher training system. *ATLAS.ti User Conference 2013: Fostering Dialog on Qualitative Methods.* 2-9

Bandura, A. (1997). Social cognitive theory of moral thought and action. *Handbook of Moral Behavior and Development, 1,* 45-103.

Beavers, A. (2011). Teachers As Learners: Implications Of Adult Education For Professional   Development. *Journal of College Teaching & Learning (TLC)*, 6(7).

Bell, J. (1993). *Doing your research project*. London: Open University.

Berehe, D., Legesse, D., & Tadesse, A. (2018). Practice of school based continuous professional development in government secondary schools of Arbaminch City Administration. *Journal of Humanities and Social Science, 23*(10), 34-39.

Best, J. W. & Kahn, J. V. (1993). *Research in education*. Boston: Edward Arnold

135

Beyer, L. (2002). The Politics of Standardization: teacher education in the USA. *Journal of Education for Teaching, 28*, 239-245.

Bolam, R., & Weindling, D. (2006). *Synthesis of research and evaluation projects concerned with capacity-building through teachers' Professional development*. London: GTC.

Borg, S. (2015). Overview-beyond the workshop: CPD for English language teachers. In S. Borg (Ed.), *Professional development for English language teachers: perspectives from higher education in Turkey* (pp. 5-17). Turkey: British Council.

Borko, R. (2004). The missing link: The role of employee engagement in business success. *Workspan Journal, 47*, 48-52.

Brodie, K. (2019). Teacher agency in professional learning communities. *Professional Development in Education*, *4*, 93-117.

Brown, L. (2004). Complex decision-making in the classroom: The teacher as an intuitive practitioner, in T. Atkinson & G. Claxton (Eds), *The intuitive practitioner: On the value of not always knowing what one is doing* (Buckingham, Open University Press), 165–181

Brown, S., Edmonds, S., & Lee, B. (2001). *Continuing professional development: LEA and school support for teachers*. Slough: NFER.

Bruce, C. D., Esmonde, I., Ross, J., Dookie, L. & Beatty, R. (2010). The effects of sustained classroom- embedded teacher professional learning on teacher efficacy and related student achievement. *Teaching and Teacher Education* (in press), doi: 10.1016/j.tate.2010.06.011.

Bryman, A. (2016). *Social research methods* (5th ed.). Oxford, CA: Oxford University Press.

Bubb, S. (2006). *Helping Teachers Develop*. London: Paul Chapman Publishing.

Bubb, S. and Earley, P. (2004). Leading and managing continuing professional development: Developing people, developing schools. London: SAGE Publications.

Burbank, M.D. & Kauchak, D. (2003) An Alternative Model for Professional Development: investigations into effective collaboration, *Teaching and Teacher Education*, 19, pp. 499-514.

Burns, M & Lawrie, J. (2015). *Where it matters most: Quality professional development for all teachers*. InterAgency Network for Education in Emergencies.

Buysse, V., Sparkman, K. L., & Wesley, P. W. (2003). Communities of practice: Connecting   what we know with what we do. *Exceptional Children, 69*(3), 263-277.

Caena, F. (2011). *Literature review of quality in teachers" continuous professional development.* European Commission Directorate-General for Education and Culture.

Chang, C. H., Teng, P., Tan, A. L., Chan, Y. W. & Tham-Poh, M. S. (2015). *An evidence informed study to determine why Singapore teachers engage in professional development.* [Unpublished final report: OER24/12 CCH]. Singapore: Office of Education Research, National Institute of Education.

Chemir, H. (2013). *Practices and challenges of the implementation of Continuous professional development in secondary schools of Gurage Zone.* Unpublished master's thesis, Dill University.

Clarke, D. & Hollingsworth, H. (2002). Elaborating a model of teacher professional growth. *Teaching and Teacher Education, 18*(8), 947–967.

Clotfeller, C. (2005). *Teacher's students matching and the assignment of teacher's effectiveness.* Ducham Duke: University Press.

Clutterbuck, D. (1991). *Everyone needs a mentor*. London: Institute of Personnel and Development.

Cohen, R., Boud, D., & Sampson, J. (2001). Dealing with problems encountered in assessment of peer learning. In N. Falchikov (Ed.), *Learning together: Peer tutoring in higher education.* London: Routledge Farmer.

Cohen, D. K., McLaughlin, M. W., Talbert, J. E. (Ed). (2007). *Teaching for understanding: Challenges for Policy and Practice*. San Francisco: Jossey-Bass.

Cottrell, C. A., & Neuberg, S. L. (2005). Different emotional reactions to different groups: A socio-functional threat-based approach to "prejudice". *Journal of Personality and Social Psychology, 88*(5), 770–789.

Creswell, J. W. (2014). *Qualitative inquiry and research design*: Choosing among five approaches (4th ed.). Los Angeles, CA: Sage.

Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches*. London: Sage publications.

Creswell, J., & Plano, C. V. L. (2011). *Conducting and designing mixed methods research* (2nd ed.). Thousand Oaks.

Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process*. London: Sage Publication.

Dampson, D. G., & Mensah, D. K. D. (2018). Professional development needs of stakeholders in education: A comparative study of basic schools in the central region of Ghana. *People: International Journal of Social Sciences*, *4*(2), 1205-1220.

David, N. M., & Bwisa, M. H. (2013). Factors Influencing Teachers' Active Involvement in Continuous Professional Development: A Survey in Trans Nzoia West District, Kenya. *International Journal of Academic Research in Business and Social Sciences, 3*(5). 224-235.

Day, C. (1999). *Developing teachers: The challenges of lifelong learning*. London: Falmer Press.

Day, C., & Sachs, J. (2004). *Professionalism, performativity and empowerment*: *Discourses in the politics, policies and purposes of continuing professional development*. In C. Day & J. Sachs (Eds.), International handbook on the continuing professional development of teachers (pp. 3-32). Maidenhead,UK: Open University Press.

Denscombe, M. (2010). *The good research guide for small-scale social research projects* (4th ed.). London: Sage Publications.

Department for Education and Skills (DfES) (2004). *Primary national strategy: Intensifying support programme*. Retrieved January 30, 2021, from http://www.education.gov.uk/publications/eOrderingDownload/DfES-0037-2004.pdf

Desalgne, C. (2010). *Continuous teacher professional development: The Ethiopian context*. Ethiopia: Addis Ababa University.

Desimone, L. M. (2009). *Improving impact studies of teachers' professional development: Toward better conceptualizations and measures.* Educational Researcher, 38(3), 181-199.

Desta, D., Chalchisa, D., & Lemma, G. (2013). School-based continuous teacher professional development in Addis Ababa: An investigation of practices, opportunities and challenges. *Journal of International Cooperation in Education*, *15*(3), 77-94.

Draper, J., O'Brien, J. & Christie, F. (2004). First impressions: The new teacher induction arrangements in Scotland. *Journal of In-service Education, 30*, 201-223.

Du Plessis, J., & Muzaffar, I. (2010). *Professional learning communities in the teachers' college: A resource for teacher educators*. EQUIP1.

DuFour, R. (2004). What is a professional learning community? *Educational Leadership, 61*(8), 6-11.

Duta, N., & Rafaila, E. (2014). Importance of the lifelong learning for professional development of university teachers - Needs and practical implications. *Procedia Social Social and Behavioral Sciences, 127*, 801–806.

Eghomwan, J. A. (2008). *Organisational theory and behaviour*. Benin City: Ambik Press.

Ehirim, E. O. (2008). *In-service training programme for academic staff in Imo State secondary schools*. Faculty of Education; Educational Management. Unpublished M.Ed thesis, University of Port Harcourt, Nigeria.

ELAN Research Program (University of Twente). (2014). Advances in theory and practice of teacher professional development. Retrieved from https://www.utwente.nl/en/bms/elan/research/elan-research-program-2014-2018- july-2014.pdf

Emechebe, S. N. (2009). *Human resources management in education in theories and tasks.* Lagos: Macmillan Nigeria Publisher.

Ememe O. N., Ezeh S. C., Ekemezie C. A. (2013). The role of head-teacher in the development of entrepreneurship education in primary schools. *Academic Research International*, *4*(1), 242.

Ememe, P., AIitokhuehi, O., Egede, S., & Ojo-Ajibare, J. (2013). Enhancing teaching quality through continous professional education. *European Journal of Educational Studies, 5*(2), 277-291.

Emenanjo, E. N. (2008). Languages and the national policy on education policy on education: Implications and prospects. Retrieved from http://fafunwafoundation.tripod.com/fafunwafoundation/id9.html

Eraut, M. (2004). Informal learning in the workplace. *Journal of Continuing Education* 26, no. 2, 247-73. Accessed online at http://www.tlrp.org/dspace/retrieve/226/Informal+Learning+in+the+workplace1.doc on 30 April, 2021.

Esterberg, K. G. (2002). *Qualitative methods in social science*. London: McGraw Hill.

Ezeani, N. S. (2013). Implications of training and development programmes on accountant's productivity in selected business organizations in Onitsha, Anambra State, Nigeria. *International Journal of Asian Social Science*, *3*(1), 266-281.

Falk, A. U. (2001). Driving forces of informal sanctions. *Working paper No. 59*. Institute for Empirical Research in Economics, University of Zurich.

Falk, J. H. (2001). *Learning from museums: Visitor experiences and the making of meaning.* Walnut Creek, CA, Alta Mira Press.

Feldman, J. (2020). The role of professional learning communities to support teacher development: A social practice theory perspective. *South African Journal of Education, 40*(1), DOI: https://doi.org/10.15700/saje.v40n1a1668

FGN (2010). *National policy on education*. Abuja: FME. 33 - 35.

Fraenkel, R. J., & Wallen, E. N. (2000). *How to design and evaluate research in education* (4th ed.). San Francisco: McGraw-Hill.

Freire, P. (2000). *Pedagogy of the oppressed. Rev. 30th Anniversary ed.* New York: Continuum.

Fresew, G. H. W. (2016). *The status, challenges, and prospects of continuous professional development in Oromia: The case of two government secondary schools in Jimma town.* (Master's thesis, Department of Educational Planning and Management, Addis Ababa University, Addis Ababa).

Fullan, M. (2011). *Change forces: The sequel*. Bristol. Pennslyvania: Falmer Press.

Fullan, M. G. (1991). *The new meaning of educational change*. New York, NY: Teacher College Press.

Fuller, A. (2006). Participative learning through the work-based route: From apprenticeship to part-time higher education. *European Journal of Vocational Education, 37,* 68-81.

Gall, M. D., Borg, W. R., & Gall, J. P. (1996). *Educational research: An introduction* (6th ed.). White Plains, New York: Longman.

Ganser, T. (2000). *An ambitious vision of professional development for teachers*. NASSP Bulletin, 84(618), 6-12.

Garrison, D. R. (2000). Theoretical challenges for distance education in the 21st century: A shift from structural to transactional issues. *The International Review of Research in Open and Distance Learning, 1*(1), 1-17.

Gay, L. R. (1996). *Educational research: Competence analysis and application* (4th ed.). New York: Macmillan Publishers.

Gay, L. R., Mills, G. E., & Airasian, P. W. (2012). *Educational research: Competencies for analysis and applications*. Boston: Pearson.

General Teaching Council for Scotland (2002). *Achieving the standard for full registration: Guidance for schools*. Edinburgh: GTCS.

Ghana Statistical Service (2010). *Population and housing census: Summary report of final results.* Accra: Sakoa Press Limited.

Goddard, R. D., Hoy, W. K., & Hoy, A. (2004). Collective efficacy beliefs: theoretical developments, empirical evidence, and future directions. *Educational Researcher, 33*, 3-13.

Goh, C. M. (2016). Successes and challenges in the continuing education of teachers: The Singapore experience. In *THF Workshop Report 4: Teacher Development: Dimensions and Perspectives* (pp. 9–20). Singapore: The HEAD Foundation.

Goldhaber, D., & Anthony, E. (2007). Can teacher quality be effectively assessed? National board certification as a signal of effective teaching. *Review of Economics and Statistics*, *89*(1), 134-150.

Goodall, J., Day, C., Lindsay, G., Muijs, D., & Harris, A. (2005). *Evaluating the impact of continuing professional development, Research Report* 659, Department for Education and Skills (206 pages).

Gorsky, P. & Avner, C. (2005). *British Journal of Educational Technology Vol 36* No 2. 137-144.

Gray, S. L. (2005). *An enquiry into continuing professional development for teachers*. University of Cambridge: Esmee Fairbairn Foundation.

Grix, J. (2004). *The foundations of research*. New York, NY: Palgrave Macmillan.

Groundwater-Smith, S., Mitchell, J., Mockler, N., Ponte, P., & Ronnerman, K. (2012). *Facilitating practitioner research: Developing transformational partnerships*. Routledge. Crossref.

Guskey, T. (2002). Does it make a difference? Evaluating professional development. *Educational Leadership, 59*(6), 45–51.

Guskey, T. R (2002). Professional development and teacher change. *Teachers and Teaching: Theory and Practice, 8*(3), 381-391

Gyimah, E. K., & Ayinselya, R. A. (2022). Teacher professional learning, a tool for managing teachers to improve pupils' learning: The views of teachers in Ghana. *PRACTICE, 4*(1), 12-32.

Hadar, L., & Brody, D. (2010). From isolation to symphonic harmony: Building a professional development community among teacher educators. *Teaching and Teacher Education, 26*(8), 1641-1651.

Handerson, E. (2002). *The evaluation of in- service teacher training*. London: Groom Helm.

Hanushek, E. A. (2004). *Some simple analytics of school quality*. Working Papers 10229.

Harris, A. (2003). Distributed leadership in schools: Leading or misleading? *Management in Education*, *16*(5), 10-13.

Heck, D. J., Banilower, E. R., Weiss, I. R., & Rosenberg, S. L. (2008). Studying the effects of professional development. *Journal for Research in Mathematics Education, 39*, 113-152.

Heystek, J., Nieman, R., Van Rooyen, J., Masoge, J. & Bipath, K. (2008). *People leadership in Education.* Sandton: Heinemann.

Hoban, G. F. (2002). *Teacher learning for educational change*. Buckingham: Open University Press.

Hoy, W. A. & Spero, B. R. (2005). Changes in teacher efficacy during the early years of teaching: A comparison of four measures. *Teaching and Teacher Education, 21*, 343-356.

Huffman, J. B., & Jacobson, A. L. (2003). Perceptions of professional learning communities. *International Journal of Leadership in Education: Theory and Practice, 6*(3), 239–250

Igbo, J. N., Eze, J. U., Eskay, M., Onu, V. C., & Omeje, J. (2012). *Influence of retraining programme on self-esteem of primary school teachers in Ebonyi State, Nigeria*. US- China: Education Review. B12.

Ingvarson, L., Meiers, M. & Beavis, A. (2005). Factors affecting the impact of professional development programs on teachers' knowledge, practice, student outcomes & efficacy. *Education Policy Analysis Archives, 13*(10), 33-40.

Jones, J. T. (2005). The determinants of training in Australian Manufacturing SMES. *Education and Training, 47,* 605-615.

Kabila, J., Moonga, A., & Moonga, S. (2018). Lusaka central zone teachers' perspectives on continuing professional development. *International Journal of Humanities Social Sciences and Education (IJHSSE)*, *5*, 15- 22.

Kadingi, S. (2006). Policy initiatives for change and innovation in basic education programmes in Ghana. *Educate, 4*(2), 3-18.

Karagiorgi, Y. & Symeou, L. (2006). Teacher professional development in Cyprus: reflections on current trends and challenges in policy and practices. *Journal of In-service Education, 32*(1), 47-61.

Keiser, N. M., & Shen, J. (2000). Principals' and teachers' perceptions of teacher empowerment. *Journal of Leadership Studies, 7*(3), 115–121.

Kelly, P. & McDiarmid, G. W. (2002). Decentralisation of Professional Development: Teachers' decisions and dilemmas. *Journal of In-service Education, 28*, 409-425.

Kennedy, A. (2005). Models of continuing professional development (CPD): a framework for analysis. *Journal of In-Service Education, 31*(2), 235–250.

Kennedy, A. (2008). *The Professional Development of Teachers*. In T. G. K. Bryce and W. M. Humes, (Eds.). *Scottish Education 3rd edition.* Edinburgh: Edinburgh University Press.

King, K. (2000). The adult ESL experience: Facilitating perspective transformation in the classroom. *Adult Basic Education, 10*(2), 69–89

Kirk, G., Beveridge, W. & Smith, I. (2003). *Policy and practice in education: The chartered teacher*. Edinburgh: Dunedin Academic Press.

Knowles, M. et al. (1984). *Andragogy in action. Applying modern principles of adult education*. San Francisco: Jossey – Bass.

Kokebe, M. Y. (2013). *Practices and challenges of continuous professional development in primary schools of Metekel Zone*. (Master's thesis, Instituteof Education and Professional Development Studies, Department of Educational Planning and Management, Jimma, University).

Kruse, S. D., & Louis, K. S. (2007). *Developing collective understanding over time: reflections on building professional community*. Professional Learning Communities: Divergence, Depth and Dilemmas: Divergence, Depth and Dilemmas, 106.

Kuranchie, A. (2019). *The educator"s guide*. (2nd ed.). Bookworm Publications.

Kusi, H. (2012). *Doing qualitative research, a guide for researchers*. Accra New Town: Empong Press.

Lee, D. H. L. & Lee, W. O. (2013). A professional learning community (PLC) for the new teacher professionalism -The case of a state-led initiative in Singapore schools. *British Journal of Educational Studies, 61*(4), 435–451.

Levine, T. H., & Marcus, A. S. (2010). How the structure and focus of teachers' collaborative activities facilitate and constrain teacher learning. *Teaching and Teacher Education, 26*(3), 389-398.

Little, J. W. (1994). *Teachers' professional development in a climate of educational reform, systemic reform: Perspectives on personalizing education*. Available at: http://www.ed.gov/pubs/EdReformStudies/SysReforms/little1.html

Lomos, C., Hofman, R. H., & Bosker, R. J. (2011). Professional communities and student achievement–a meta-analysis. *School Effectiveness and School Improvement, 22*(2), 121-148.

Luft, J., & Hewson, P. (2014). Research on teacher professional development in science. In N.G. Lederman and S.K. Abell (Eds.), *Handbook of Research in Science Education* (vol. II,pp. 889-909). New York: Routledge.

Mackenzie, N., & Knipe, S. (2006). Research dilemmas: Paradigms, methods and methodology. *Issues in Educational Research, 16*(2), 193-205.

Mahama, A., Mohammed, I., & Gunu, I. M. (2022). Aligning the working needs of teachers to continuous professional development programmes in the Nanumba North District of Ghana: Interrogation within the ambience of policy and practice. *European Journal of Education and Pedagogy, 3*(1), 7-15. doi:10.24018/ejedu.2022.3.1.242

Maree, K. & Pietersen, J. (2009). Surveys and the use of questionnaires. In Maree, K. (Ed.), *First steps in research* (pp. 154-170). Pretoria: Van Schaik Publishers.

McFarlane, D. A. (2011). A comparison of organizational structure and pedagogical approach: Online versus face-to-face. *The Journal of Educators Online, 8*(1), 1-43.

McMillan, J. H., & Schumacher, S. (2010). *Research in education: Evidence-based inquiry* (7th ed.). Boston: Pearson.

McNally, J., Boreham, N., Cope, P., Gray P., & Stronach, I. (2004). *Informal learning in early teacher development*. Paper presented to BERA Conference, Manchester.

McNiff, J. & Whitehead, J. (2002). *Action research: Principles and practice* (2nd edition). London: Routledge Falmer.

Meke, E. S. (2013). Teacher motivation and implementation of continuing professional development programmes in Malawi. *The Anthropologist, 15*(1), 107-115.

Mekonnen, A. (2014). *Practices and challenges of school based continuous professional development in secondary schools of Kemashi Zone*. (Doctoral dissertation, Jimma University).

Melesse, S., & Gulie, K. (2019). The implementation of teachers" continuous professional development and its impact on educational quality: Primary schools in Fagita Lekoma Woreda, Awi Zone, Amhara Region, Ethiopia in focus. *Research in Pedagogy, 9*(1), 81-94.

Mereku, D. K. (2014). Diploma disease in Ghanaian distance education upgrading programmes for teachers. *Open Learning: The Journal of Open, Distance and e-Learning, 29*(1), 45-58.

Merriam, S. B., Caffarella, R. S., & Baumgartner, L. M. (2007). *Learning in adulthood: A comprehensive guide (3rd ed.).* San Francisco: Jossey-Bass

Mertens, D. M. (2014). *Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods* (4 ed.). London: Sage publications.

Méndez, D. M., Arellano, A. B., Khiu, E., Keh, J.-S., & Bull, R. (2017). Preschool teachers' engagement in professional development: Frequency, perceived usefulness, and relationship with self-Efficacy beliefs. *Psychology, Society & Education, 9*(2), 181-199.

Mhakure, D. (2019). School-based mathematics teacher professional learning: A theoretical position on the lesson study approach. *South African Journal of Education, 39*(1), DOI: https://doi.org/10.15700/saje.v39ns1a1754.

Miles, M. B. & Huberman, A. M. (1994). *Qualitative data analysis (2nd Ed)* Thousand Oaks. CA: Sage.

Mincer, J. & Becker, G. (1994). *Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education*. Chicago: The University of ChicagoPress.

Ministry of Education (MoE), Culture and human resources [Mauritius], (2014). *the development of education.* National Report of Mauritius. Retrieved April 11, 2021, from http://www.ibe.unesco.org/National_Reports/ICE_2008/mauritius_NR08 .pdf

Ministry of Education. (2012). *Pre-tertiary teacher professional development and management in Ghana: Policy framework*. Ghana Education Service.

Mitchell, C., & Sackney, L. (2000). *Profound improvement: Building capacity for a learning community.* Lisse, The Netherlands: Swets & Zeitlinger.

Momodu, M. O. (2002). Information needs and information seeking behaviour of rural dwellers in Nigeria: a case study of Ekpoma in Esan West local government area of Edo State, Nigeria. *Library Review, 51*(8), 406–410.

Morgan, D. L. (2007). Paradigms lost and pragmatism regained: Methodological implications of combining qualitative and quantitative methods. *Journal of Mixed Methods Research, 1*(1), 48-76.

Mugenda, O. & Mugenda, A. (2003). *Research methods: Quantitative and qualitative approaches*. Nairobi: Publishers ACT Press.

Mundry, S. (2005). Changing perspective in professional development. *Science Educator,* 14(1), 9-15.

Mushayikwa, E., & Lubben, F. (2009). Self-directed professional development: Hope for teachers working in deprived environments. *Teaching and Teacher Education, 25*(3), 375–382.

Musset, P. (2010). *Initial teacher education and continuing training. Policies in a comparative perspective*: Current practice in OECD countries and a literature review on potential effects. OECD Education Working Paper, OECD Publishing.

Mynbayeva, A., Sadvakassova, Z., & Akshalova, B. (2018). Pedagogy of the twenty-first century: Innovative teaching methods. New Pedagogical Challenges in the 21st Century - Contributions of Research in Education.1-20.

Mwila, K., Namuchana, M. & Lufungulo, L. (2022). Teachers 'continuous rofessional development in Southern African Development Community (SADC): A review of policies, approaches and implementation strategies in enhancing teachers 'competence. *International Journal of Education Humanities and Social Sciences*, 5(1), 104-124.

Nadia, E. (2000). The development of a school-based approach to staff development for study support. *Federal Aids to Education, 52*(3), 249-259.

Nakpodia, E. D. (2008). *The role of educational administration in the promotion of in-service teacher education in Nigeria.* Current issues in educational management in Nigeria, Benin City: Ambik Press.

National Academies of Sciences, Engineering, and Medicine. (2015). *Science teachers learning: Enhancing opportunities, creating supportive contexts.* Washington, DC: The National Academies Press.

National Teaching Council (NTC). (2017). *National teachers' standards for Ghana: Guidlines*. Retrieved from http://www.t-tel.org/files/docs/Learning Hub/Teachereducation policies and protocols/NTS for Ghana.pdf

Ndlovu, M. (2018). Themes in mathematics teacher professional learning research in South Africa: A review of the period 2006-2015", In G. Kaiser et al (eds) (2018), Invited Fernanda Soares, Kirsten

Neelam, T., Israr, K. Y. Shahid, J. & Mohammad, H. (2014). *The impact of Training and development on employees' performance and productivity*: A case study of United Bank Limited Peshawar city, KPK, Pakistan.

Ngnenbe, T. (2018). *Ghana scores low in World Bank Human Capital Index*. Graphic Online. Retrieved from https://www.graphic.com.gh/news/general-news/ghananews-ghana-scores-low-in-world-bank-human-capital-index.html

Nieto, S. (2003). Challenging current notions of 'highly qualified teachers' through working a teachers' inquiry group. *Journal of Teacher Education, 54*(5), 386-398.

Nwakpa, P. (2019). Relationship between Teachers Continuous Professional Development practices and their job performance in secondary schools in Eobnyi State, Nigeria. *Asian Journal of Applied Sciences, 6*(6). doi:10.24203/ajas.v6i6.5693

Ogunu, M. A., & Omoke, D. O. (2006). Introduction to personnel management. In Aghenta, J. A & Omoregie, E. O. (Eds.), *Fundamental of Educational management.* Agbor: Krisbec Publishers.

Okyerefo, M. P. K., Fiaveh, D. Y., & Lamptey, S. N. L. (2011). Factors prompting pupils academic performance in privately owned Junior High Schools in Accra, Ghana. *International Journal of Sociology and Anthropology, 3*(8), 280-289.

Onasanya, S. A. B. (2009). *Effective personnel management and industrial relation.* Lagos: Centre for Management Development.

Onuka, P. & Ajayi, F. (2012). *Research methods: Principles and Practice*, Kenya. Keitty and Dolis.

Opfer, V. D., & Pedder, D. (2011). Conceptualizing teacher professional learning. *Review of Educational Research, 81*, 376-407.

Opoku, S. A. (2005). *The need for indigenous knowledge in environmental impact assessment: The case of Ghana*. Edwin Mellen Press. ISBN: 0-7734-6151-5

Organisation for Economic Co-operation and Development (OECD), 2014). *Teaching and learning*. Paris: International survey (TALIS).

Organization for Economic Co-Operation and Development (OECD) (2005). *Teachers matter: Attracting, developing and retaining effective teachers*. Paris, France: OECD.

Otoo, I. C., Assumung, B. J. & Kuranchie, A. (2018). Professional development practices for employees in the Ghana Education Service. *International Journal of Science and Research*, 8(2), 905-914.

Owolabi, J. (2005). *Policy-making and educational policy analysis*. Kampala: Makerere University.

O'leary, Z. (2004). *The essential guide to doing research*. London: Sage Publications.

Padwad, A. & Dixit, K. (2011). *Continuing professional development: An annotated bibliography*. British Council India, available online at: http://www.bristishcouncil.org/cpdbiblio.pdf.

Peixotto, K. & Palmer, J. (1994). *High – Quality professional development*. Northwest Regional Educational Laboratory (NWREL), June 1998.

Retrieved April 16, 2020, from www.nwrel.org/request/june98/profdevelopment.html

Penuel, W. R., Fishman, B. J., Yamaguchi, R., & Gallagher, L. P. (2007). What makes professional development effective? Strategies that foster curriculum implementation. *American Educational Research Journal, 44*, 921-958.

Peretomode, V. F. (2001). Introduction to education and supervision. *American Journal of Educational Research, 4*(8), 617-623.

Peretomode, V. F. & Peretomode, O. (2001). *Human Resources Management.* Lagos: O and O Publisher Ltd.

Perraton, H. (2000). Rethinking the research agenda. *The International Review of Research in Open and Distributed Learning, 1*(1), 1-11.

Pintrich, P. R., & Schunk, D. H. (2002). *Motivation in education: Theory, research and applications.* Retrieved from https//www.Pearson.com

Piper, B., Destefano, J., Kinyanjui, E. M., & Ong'ele, S. (2018). Scaling up successfully: Lessons from Kenya's Tusome national literacy program. *Journal of Educational Change, 19*(3), 293-321.

Poekert, P. E. (2012). Examining the impact of collaborative professional evelopment on teacher practice. *Teacher Education Quarterly, 39*(4), 97-118.

Pryor J., Akyeampong K., Westbrook J., Lussier K. (2012). Rethinking teacher preparation and professional development in Africa: An analysis of the curriculum of teacher education in the teaching of early reading and mathematics. *Curriculum Journal*, *23*(4), 409–502.

Quartey, S. H. (2012). Effect of employee training on the perceived organization performance; a case study of the print media industry in Ghana. *European Journal of Business and Management, 4*(15), 17-87.

Raja, I. S., Naheem, A. Farazat, A. S. B. Jwaria, N & Waqar, A. (2014). Impact of training on productivity of employees: A case study of electricity supply company in Pakistan. *International Review of Management and Business Research, 3*(2), 595-604.

Rhodes, C. & Beneicke, S. (2002). Coaching, mentoring and peer-networking: Challenges for the management of teacher professional development in schools. *Journal of In-service Education, 28*, 297-309.

Romina, I. A. (2016). Relational Study of in-service training, teaching effectiveness and academic performance of students. *Journal of Training and Education, 5*(2), 205- 216.

Ross, J. A., & Bruce, C. (2007). Professional development effects on teacher efficacy: Results of randomized field trial. *The Journal of Educational Research, 101,* 50–66.

Rugg, G., & Petre, M. (2007). *A gentle guide to research methods*. Maidenhead: Open University Press.

Sachs, J. (2003) *The Activist Teaching Profession.* Buckingham: Open University Press.

Saleem, A., Gul, R & Doger, A. A. (2021). Effectiveness of continuous professional development programme as perceived by primary level teachers. *Elementary ducation Online*, 20(3), 53-72.

Salimba, S. S. (2005). Education in Equatorial and South Africa. In Ajayi, S.O. & Babajide, J. V. (Eds.), *Comparative Education*. Lagos: AUB.

Schultz, T. (1963). *The Economic Value of Education.* New York: Columbia University Press.

Sharp, V. F. (2009). *Computer education for teachers*. Hoboken, NJ: Wiley

Sheared, V. & Johnson-Bailey, J. (2010). *The hand-book of race and adult education: A resource for di-alogue on racism*. San Francisco: Wiley & Sons.

Shriki, A., & Patkin, D. (2016). Elementary school mathematics teachers' perception of their professional needs. *Teacher Development, 20*(3), 329-347.

Sinyangwe, M. K., Billingsley, B., & Dimitriadi, Y. (2016). Factors affecting teachers" 28 participation in continuing professional development (CPD): The perspectives of 29 secondary school mathematics teachers in Zambia. *Proceedings of the British Society 30 for Research into Learning Mathematics.* UK: Loughborough University, 55-60

Sleegers, P., den Brok, P., Verbiest, E., Moolenaar, N. M., & Daly, A. J. (2013). Toward   conceptual clarity: A multidimensional, multilevel model of professional learning communities in Dutch elementary schools. The Elementary School Journal, 114(1),   118-137.

Smyth, J. (1991). *Teachers as collaborative learners.* Buckingham: Open University Press.

Smyth, J., Dow, A., Hattam, R., Reid, A. & Shacklock, G. (2000). *Teachers' work in a globalizing economy*. London, Falmer Press.

Snyder, C. W., Mereku, K. D., Amedahe, F. K., Etsey, K., & Adu, J. (2013). National assessment and the opportunity to learn in educational reform. *International Journal of Educational Reform, 22*(1), 76-102

Sofo, F., & Abonyi, U. K. (2018). Investigating the self-reported professional development activities of school leaders in Ghanaian rural basic schools. *Professional Development in Education, 44*(4), 521-538.

Southerland, S. A., Hughes, R., Enderle, P., Ke, F., Roseler, K., Saka, Y., & Tekkumru-Kisa, (2016). Essential aspects of science teacher professional development: Making research participation instructionally effective. *AERA open, 2*(4), 1-16.

Sparks, D., & Loucks-Horsley, S. (1990). Models of staff development. *Handbook of Research on Teacher Education, 3*, 234-250.

Speck, M. (1996). Best practice in professional development for sustained change. *ERS Spectrum,* 33-41.

Stewart, C., & Hart, H. (2005). *Teachers education foundation of education research*. New York: Prentice Hill.

Steyn, G. M. & Van Niekerk, E. J. (2002). *Human resource management in education.* Pretoria: University of South Africa.

Stoll, L., & Louis, K. S. (2007). Professional learning communities: Divergence, depth and dilemmas. McGraw-Hill Education (UK).

Stoll, L., Bolam, R., McMahon, A., Wallace, M., & Thomas, S. (2006). Professional learning communities: A review of the literature. *Journal of Educational Change, 7*(4), 221-258.

Stronge, J. H., & Tucker, P. D. (2005). *Handbook on teacher evaluation*. Larchmont, NY: Eye on Education.

Supovitz, J. A. (2002). Developing communities of instructional practice. *Teachers College Record, 104*(8), 1591–1626.

Supovitz, J. A., Mayers, D. P., & Kahle, J. B. (2000). Promoting inquiry-based institutional practice, the longitudinal impact of professional development in the context of systemic reform. *Educational Policy, 14*(5), 31-56.

Sweeney, D. (2005). *Learning along the way: Professional development by and for teachers.* Portland, Maine, USA: Stenhouse Publishers.

Sywelem, M. M. G., & Witte, J. E. (2013). Continuing professional development: Perceptions of elementary school teachers in Saudi Arabia. *Journal of Modern Education Review, 3*(12), 881-898.

TALIS (2013). Results: *An international perspective on teaching and learning*. TALIS, Paris: OECD Publishing. http://dx.doi.org/10.1787/9789264196261-en.

Tallon, R. & Milligan, A. (2018). The challenges field of development and global education resource provision in New Zealand. *International Journal of Development Education and Global Learning*, 10(1), 59-71.

Teacher's Professional Development (2010). Europe in International Comparison. Retrieved October 10, 2017 from http://www.dgeec.mec.pt/np4/105/%7B$clientServletPath%7D/?newsId=157&fileName=Teachers__Professional_Development.pdf

Teddlie, C., & Tashakkori, A. (2009). *Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences*. Thousand Oaks, CA: Sage

Tel-Guebuza, G. D. (2013). *Education in Asian countries*. Retrieved 13th August, 2020.

The National Teaching Council (2011). *Policy council strategic plan*. The National Teaching Council.

Timperley, H., Wilson, A., Barrar, H., & Fung, I. (2007). *Teacher professional learning and development*: Best Evidence Synthesis Iteration (BES). Wellington, New Zealand: Ministry of Education.

Toole, J., & Louis, K. S. (2002). The role of professional learning communities in international education. In K. Leithwood & P. Hallinger (Eds.), *Second international handbook of educational leadership and administration* (pp. 245–281). Dordrecht, The Netherlands: Kluwer.

Training and Development Agency for Schools (TDA) (2007). *PPD Impact Evaluation Report*: March 2007.

Tschannen-Moran, M., & Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education, 17,* 783–805.

T-TEL (2017). *Professional development programme. Four-year bachelor of education degree supported teaching in school: School Placement Handbook*. MoE, Ghana.

T-TEL (2018). *T-TEL professional development programme, Theme 9: Preparing tutors for the delivery of the National Teachers' Standardbased Bachelor of Education Curriculum- A handbook for Professional Development Coordinators*. Accra: Ministry of Education.

Tulu, A. (2019). The practice and challenges of school-based teachers' continuous professional development: A case of Government Secondary Schools of Hawassa City in Ethiopia. *Educational Research and Reviews*, *14*(1), 33-43.

van Driel, J. H., Meirink, J. A., van Veen, K., & Zwart, R.C. (2012). Current trends and missing links in studies on teacher professional development in science

151

education: A review of design features and quality of research. *Studies in Science Education, 48*(2), 129-160.

Vescio, V., Ross, D., & Adams, A. (2008). A review of research on the impact of professional learning communities on teaching practice and student learning. *Teaching and Teacher Education, 24*(1), 80-91.

Vipinosa, L. D., & Acevedo, C. G. F. (2015). Productivity, work values and teaching effectiveness of science teachers in Capiz state university. International *Journal of Multidisciplinary Research and Development, 2*(5), 69-74.

Wayne, A., & Young, P. (2003). Teachers characteristics and student's achievements. *Grain Reviews of Educational Research, 73*(1) 87-94.

Weiner, G. (2002). *Professional Development, Teacher Education, Action research and Social Justice*: a recent initiative in North Sweden, paper presented at the Annual Conference, In-service and Professional Development Association, Birmingham, 1-3 November 2002.

Wenglinsly, H. (2002). *The Milken family foundation and educational testing service*. Princeton, NJ: Milken Family Foundation.

WestEd (2002). *Teachers who learn, kids who achieve.* San Francisco. WestEd

Wheatley, K. F. (2002). The potential benefits of teacher efficacy doubts for educational reform. *Teaching and Teacher Education, 18*(1), 5–22.

Whitaker, V. and Megginson, D. (2007). *Continuing professional development*. 2nd ed. London: Chartered Institute of Personnel and Development Country = UNITED KINGDOM.

Wolde, B. D. (2021). The role of continuous professional development in improving secondary school teachers' teaching and learning competencies to deliver quality education in Ethiopia: A case of secondary school. *The Qualitative Report, 26*(5), 1345-1363.

Yang, C. (2015). New centre to boost development and training of teachers.

Straits Times, B3.

APPENDICES

QUESTIONNAIRE FOR TEACHERS

Questionnaire for Teachers

Dear Respondent,

I am a student of University of Education, Winneba pursuing MPhil. in Educational Administration and Management. As part of the programme, I am conducting a study into continuous professional development. As a teacher in this selected school, you have been chosen to participate in the study. This exercise is an academic one and the information you provide would be used as such. You assured of anonymity and confidentiality of the information you provide. Thank you.

Please tick [√] in the bracket the most appropriate response and where explanation is required use the spaces provided.

Section A: Demographic Information

1. Indicate your sex

    Male [   ]   Female [   ]

2. Your age bracket in years

        20-29 years [   ]   30-39 years   [   ]

        40-49 years [   ]   Above 50 years [   ]

3. What is your highest qualification as a teacher?

    Dip. Ed. [   ]   B. A. / B. Sc.   [   ]   B. Ed. [   ]

    PGDE   [   ]   M. Ed. /M.A. /M. Sc. [   ]

Other (specify) _____

4. Indicate how long you have been a teacher in your school

5 years and below [   ]   6-10 years [   ]   11-15 years [   ]

16-20 years [   ]   above 20 years [   ]

153

SECTION B: Participating in CPD activities

5. Indicate how often you have participated in the following professional development activities in the last Five (5) years.

Participating in CPD activities	Frequently	Sometimes	Rarely	Never
offered by district education office on:				
a. school leadership, organization and improvement				
b. guidance and counselling, career development of students				
c. subject area				
d. effective teaching				
e. classroom management				
f. curriculum implementation or curriculum resources				
g. action research on classroom situations				
h. study groups organized around particular topic of interest on available literature				
i. scoring student work samples to improve performance				

Section C: Benefits of involving in CPD activities

Please tick [√] the most appropriate response with extent to which you agree or disagree; 1=Strongly Disagree (SD), 2=Disagree (D), 3=Agree (A) and 4=Strongly Agree (SA).

Item	SD	D	A	SA
Participating in CPD activities:				
a. improves my competency as a teacher				
b. improves my efficiency as a classroom teacher				

c. enhances my personality as a teacher				
d. enhances my prestige as a teacher in the society				
e. expands my knowledge in teaching				
f. expands my skills in teaching				
g. gives me the confidence to deliver in the classroom				
h. helps in acquisition of new knowledge and skills.				
i. improves my professionalism				
j. improves my classroom time management				
k. improves my classroom assessment practices				

Section D: Challenges teachers faced for participating in CPD programmes

Challenges faced for participating in CPD programmes include	SD	D	A	SA
a. In adequate funds				
b. Transportation				
c. Lack of resources (eg. computers)				
d. Absence of motivation				
e. The workload of teachers				
f. Lack of trained facilitators to coordinate the actions of CPD				
g. Non-follow-up of CPD activities				
h. In adequate time for teachers to participate in CPD actions				
i. In adequate duration of CPD programme				
j. Where they are organised				
k. Mode of assessment of teachers' knowledge				

Section E: What can be done to improve CPD programmes

Item	SD	D	A	SA
a. Enough funds should be provided				
b. Provision of regular workshop and short courses				
c. Enough resources should be provided (eg. computers)				
d. Teachers in deprive areas should be provided with means of transport				
e. The activities should be organised during weekends or vacations				
f. Provide on-line or distance-learning programmes				
g. Follow-up of CPD activities				
h. Decentralisation of CPD activities				
i. CPD coordinators should be well trained				
j. Frequent assessment of teachers' knowledge				
k. Teachers should be motivated				

Thank you for your cooperation