

**CONTINUING PROFESSIONAL DEVELOPMENT (CPD) OF  
TEACHERS IN GHANA: AN EXPLORATION OF BASIC SCHOOL  
TEACHERS' PRACTICES AND EXPERIENCES**

**ELLEN ABAKAH**

M. Phil Adult Education (University of Ghana)

B.A. Sociology and History (University of Ghana)

Doctor of Philosophy

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## **CERTIFICATE OF ORIGINAL AUTHORSHIP**

I, Ellen Abakah declare that this thesis, is submitted in fulfilment of the requirements for the award of Doctor of Philosophy degree, in the School of Education at the University of Technology Sydney.

This thesis is wholly my own work unless otherwise referenced or acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis. This document has not been submitted for qualifications at any other academic institution.

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## **DEDICATION**

I dedicate this thesis to my late dad, Mr Thomas Keg Abakah. Dad, I feel accomplished having finished what you could not do because of your unfortunate demise. Wherever you are, I know you are proud of my achievement.

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## TABLE OF CONTENT

CERTIFICATE OF ORIGINAL AUTHORSHIP .....	II
DEDICATION.....	III
ACKNOWLEDGEMENTS.....	IV
TABLE OF CONTENT .....	VI
<i>LISTS OF FIGURES</i> .....	<i>xiii</i>
<i>LISTS OF TABLES</i> .....	<i>xiv</i>
GLOSSARY OF TERMS .....	XV
ABSTRACT .....	XVI
<b>CHAPTER 1 :INTRODUCTION .....</b>	<b>1</b>
1.1 BACKGROUND OF THE STUDY .....	1
1.2 THE GAP IN KNOWLEDGE .....	3
1.3 PERSONAL REFLECTION .....	5
1.4 AIMS OF THE STUDY .....	6
1.5 RESEARCH QUESTIONS.....	6
1.6 SIGNIFICANCE OF THE STUDY.....	7
1.7 DEFINITIONS AND EXPLANATION OF TERMS .....	8
1.8 OVERVIEW OF THE THESIS .....	9
1.9 CHAPTER SUMMARY .....	9
<b>CHAPTER 2 : THE STUDY IN CONTEXT .....</b>	<b>11</b>
2.1 INTRODUCTION .....	11
2.2 HISTORICAL DEVELOPMENT OF EDUCATION AND TEACHER EDUCATION IN GHANA .....	11
2.3 THE STRUCTURE OF GHANA EDUCATION SYSTEM .....	12
2.4 TEACHER EDUCATION IN GHANA.....	14
2.4.1 <i>Structure and Content of the Teacher Education Curriculum in Ghana</i> .....	16
2.4.2 <i>Issues Relating to Teacher Education in Ghana</i> .....	19
2.5 CPD POLICY ENVIRONMENT IN GHANA.....	21
2.5.1 <i>The Pre-Tertiary Teacher Professional Development and Management (PTPDM) Policy</i> .....	23
2.5.2 <i>Recent Teacher Education Reforms</i> .....	26
The National Teachers Standards (NTS).....	27

2.6	CPD OPPORTUNITIES FOR TEACHERS IN GHANA .....	29
2.6.1	<i>The Role of Teacher Associations in Teacher’s Development in Ghana</i> .....	32
2.7	WHAT IT MEANS TO BE A TEACHER IN GHANA .....	34
2.8	PROFILE OF THE STUDY AREA: THE CENTRAL REGION OF GHANA .....	36
2.9	CHAPTER SUMMARY .....	37
<b>CHAPTER 3 : THEORETICAL AND CONCEPTUAL FRAMEWORKS .....</b>		<b>39</b>
3.1	INTRODUCTION .....	39
3.2	UNDERSTANDING TEACHER CPD AND TEACHER LEARNING .....	39
3.2.1	<i>Defining Teacher CPD</i> .....	39
3.2.2	<i>Purposes and Functions of Teacher CPD</i> .....	42
3.2.3	<i>Teacher Learning, Professional Learning and CPD</i> .....	44
3.3	THEORETICAL FRAMEWORK .....	46
3.3.1	<i>Sociocultural Theory (SCT)</i> .....	46
Mediation	.....	47
Tools	.....	48
The Zone of Proximal Development (ZPD)	.....	49
Community of Practice	.....	50
3.3.2	<i>Implications of SCT to Teacher Learning and Professional Development</i> ...	51
3.4	CONCEPTUAL FRAMEWORKS .....	53
3.4.1	<i>Kennedy’s Framework of CPD Models</i> .....	53
3.4.2	<i>Desimone’s Conceptual Framework of Effective CPD</i> .....	57
3.5	SCT, KENNEDY’S AND DESIMONE’S FRAMEWORKS .....	60
3.6	CHAPTER SUMMARY .....	63
<b>CHAPTER 4 : TEACHER CONTINUING PROFESSIONAL DEVELOPMENT (CPD) IN PRACTICE .....</b>		<b>64</b>
4.1	INTRODUCTION .....	64
4.2	TEACHERS AS ADULT LEARNERS .....	64
4.3	OVERVIEW OF EMPIRICAL STUDIES ON TEACHER CPD PRACTICES .....	67
4.4	TEACHER AGENCY AND CPD PARTICIPATION .....	72
4.5	TEACHER PROFESSIONAL DEVELOPMENT (PD)/LEARNING NEEDS .....	74
4.6	TEACHER MOTIVATION TO PARTICIPATE IN CPD.....	78
4.6.1	<i>Teacher Investment in CPD</i> .....	81

4.7 CPD CONTEXTUAL FACTORS.....	82
4.7.1 Macro Level Factors.....	83
Educational/School Policy.....	83
School Culture .....	84
School Leadership .....	86
4.7.2 Micro Level Factors .....	88
Teacher Beliefs and Attitudes towards CPD .....	88
Time Factor.....	89
Finance.....	90
4.8 CHAPTER SUMMARY .....	90
<b>CHAPTER 5 : RESEARCH METHODOLOGY .....</b>	<b>91</b>
5.1 INTRODUCTION .....	91
5.2 RESEARCH PARADIGM .....	91
5.2.1 <i>Constructivist Paradigm</i> .....	91
5.3 RESEARCH DESIGN .....	93
5.3.1 <i>The Embedded/Nested Mixed Method Design</i> .....	94
5.4 PHASE I: QUANTITATIVE METHODS AND APPROACHES.....	95
5.4.1 <i>Research Design</i> .....	96
5.4.2 <i>Population</i> .....	96
5.4.3 <i>Sample and Sampling Procedures</i> .....	97
5.4.4 <i>Data Collection Processes</i> .....	99
5.4.5 <i>Reliability and Validity of the Research Instrument</i> .....	100
5.4.6 <i>Data Analysis Process</i> .....	101
5.5 PHASE II: QUALITATIVE METHODS AND APPROACHES .....	102
5.5.1 <i>Qualitative Research Design</i> .....	102
5.5.2 <i>Research Participants</i> .....	103
5.5.3 <i>Recruitment of Participants</i> .....	103
5.5.4 <i>Piloting</i> .....	106
5.5.5 <i>Data Collection Processes</i> .....	107
Face-to-Face Interview .....	108
5.5.6 <i>Data Analysis</i> .....	108
Thematic Analysis Process.....	109

5.5.7 <i>A Framework of Data Analysis</i> .....	111
Teacher-Learning Frame.....	111
Practice Frame .....	112
Context Frame .....	112
5.5.8 <i>Trustworthiness of Data</i> .....	114
Credibility .....	114
Confirmability.....	115
Dependability.....	116
Transferability.....	116
5.6 ROLE OF THE RESEARCHER .....	118
5.7 ETHICAL CONSIDERATIONS.....	119
5.8 LIMITATIONS OF THE STUDY .....	120
5.9 CHAPTER SUMMARY .....	121
<b>CHAPTER 6 : MAPPING THE TERRAIN OF TEACHER CONTINUING PROFESSIONAL DEVELOPMENT (CPD) IN GHANA.....</b>	<b>122</b>
6.1 INTRODUCTION .....	122
6.2 FINDINGS .....	122
6.2.1 <i>Demographics of Respondents</i> .....	122
6.2.2 <i>Teachers' Learning Needs for Professional Development</i> .....	124
Teacher Characteristics and Perceived Learning Needs.....	126
6.2.3 <i>CPD Practices among Basic Schoolteachers</i> .....	127
Teacher Participation in CPD Activities.....	128
<i>Relationship Between Teacher Characteristics and Participation in CPD             Activities</i> .....	130
Perceived Usefulness of CPD Participation.....	131
6.2.4 <i>Influencing Factors for Teacher CPD Participation</i> .....	133
6.2.5 <i>General CPD Situations within Schools</i> .....	134
6.3 CHAPTER SUMMARY .....	136
<b>CHAPTER 7 : ANALYSIS OF CONTINUING PROFESSIONAL DEVELOPMENT (CPD) NEEDS AND PRACTICES OF BASIC SCHOOL TEACHERS IN GHANA .....</b>	<b>137</b>
7.1 INTRODUCTION .....	137

7.2 THE TEACHER-LEARNING FRAME .....	137
7.3 TEACHER LEARNING NEEDS .....	138
7.3.1 Pedagogical Content (PCK) Knowledge Need.....	139
7.3.2 Technological Knowledge Need .....	141
7.3.3 School Management Practices.....	144
7.3.4 Student Management .....	145
7.4 PROFESSIONAL KNOWLEDGE CONSTRUCTION/PROFESSIONAL LEARNING .....	147
7.4.1 Continuing Education.....	147
7.4.2 Organised CPD Interventions .....	150
7.4.3 Self-initiated/Informal Learning Activities .....	152
Independent Reading and Researching for Information .....	152
Peer-to-peer Learning .....	154
Mentoring Based on Informal Arrangements .....	155
Staff Common Meetings.....	157
Social Media as a Learning Platform.....	158
Teacher Agency .....	159
7.5 CHAPTER SUMMARY .....	162

## **CHAPTER 8 : ANALYSIS OF TEACHER PARTICIPATION AND CPD**

<b>EXPERIENCES .....</b>	<b>163</b>
8.1 INTRODUCTION .....	163
8.2 THE PRACTICE FRAME .....	163
8.3 TEACHERS' PARTICIPATION AND CPD EXPERIENCES.....	163
8.3.1 <i>The Nature of Basic Schoolteachers' CPD Practices</i> .....	164
The Cascade Nature of Organised CPD .....	165
8.3.2 <i>CPD Fundamental Purpose and the Use of Standardised Tests</i> .....	169
Problems Surrounding Standardised Tests .....	170
8.3.3 <i>Teachers' Perceptions about their CPD Experiences</i> .....	172
Absence of Teacher Consultation.....	173
Infrequent CPD and the politics of access to CPD Opportunities .....	175
Duration and Timing of CPD Programs .....	179
Active Learning Processes.....	182
Coherence of CPD Activities to Teachers' Classroom Practice.....	185

8.4 CONTEXTUALISATION/IMPLEMENTATION OF CPD LEARNING EXPERIENCES .....	188
8.4.1 <i>Teachers' Implementation Strategies</i> .....	189
Reflection on Practice .....	189
Social Interaction in the Workplace.....	191
8.4.2 <i>Teacher Change as a Result of CPD Participation</i> .....	192
8.4.3 <i>Barriers to Teachers' CPD Implementation</i> .....	197
8.7 CHAPTER SUMMARY .....	199
<b>CHAPTER 9 : INFLUENCE OF CONTEXT ON TEACHER CPD PRACTICES</b>	
<b>IN GHANA .....</b>	<b>200</b>
9.1 INTRODUCTION .....	200
9.2 THE CONTEXT FRAME.....	200
9.3 POLICY ISSUES INVOLVED WITH TEACHER CPD IN GHANA .....	201
9.4 ORGANISATIONAL/SCHOOL LEVEL FACTORS .....	207
9.4.1 <i>School Leadership</i> .....	208
School Leadership and Politics Within the School System.....	210
9.4.2 <i>School Culture</i> .....	214
Collaborative Learning Culture .....	215
Teacher Individualism and Balkanisation.....	218
9.5 TEACHER IDENTITY FACTORS .....	220
9.5.1 <i>Teachers' Personal Beliefs and Attitudes towards Professional Learning and Development</i> .....	220
9.5.2 <i>Teacher Workload and Time</i> .....	224
9.5.4 <i>Socio-Economic Status of Teachers</i> .....	228
9.5.5 <i>Teachers' Reasons for Participation in CPD</i> .....	230
Personal/Intrinsic Factors .....	231
Increasing Pedagogical Content Knowledge .....	232
System/External Motivators .....	235
Promotion and Career Advancement.....	235
Incentives for Participation.....	237
Mandatory CPD .....	240
Social Capital/Social Relationship .....	241
Reasons for Non-Participation.....	242

9.6 WIDER COMMUNITY SETTING AND THE TYPE OF SCHOOL .....	244
9.7 CHAPTER SUMMARY .....	248
<b>CHAPTER 10 : DISCUSSION .....</b>	<b>249</b>
10.1 INTRODUCTION .....	249
10.2 THE SOCIOCULTURAL PERSPECTIVE OF TEACHER LEARNING .....	249
<i>10.2.1 Mediation Through Cultural Artefacts/tools .....</i>	<i>250</i>
<i>10.2.2 Mediation Through Human Beings (Social Interaction).....</i>	<i>251</i>
<i>10.2.3 The CPD Learning Process.....</i>	<i>254</i>
10.3 CPD CONTEXTUAL CHALLENGES .....	259
<i>10.3.1 CPD Policy Paradox .....</i>	<i>259</i>
<i>10.3.2 Access to CPD Opportunities .....</i>	<i>261</i>
<i>10.3.3 School Politics .....</i>	<i>263</i>
10.4 PROFESSIONAL DEVELOPMENT/LEARNING NEEDS OF BASIC SCHOOLTEACHERS IN GHANA .....	265
10.5 GHANAIAN BASIC SCHOOLTEACHERS' CPD PRACTICES.....	269
<i>10.5.1 CPD Prevalent Practices.....</i>	<i>269</i>
Overreliance of Continuing Education .....	271
<i>10.5.2 Basic Schoolteachers' Views of Effective CPD .....</i>	<i>273</i>
10.6 TEACHER AGENCY IN LEARNING AND CPD .....	279
<i>10.6.1 Manifestation of Teacher Agency Towards Professional Development....</i>	<i>280</i>
<i>10.6.2 Agency and the Type of CPD Activity.....</i>	<i>282</i>
10.7 MOTIVATION AS INVESTMENT .....	283
10.8 CHAPTER SUMMARY .....	288
<b>CHAPTER 11 : SUMMARY, RECOMMENDATIONS AND CONCLUSION ..</b>	<b>290</b>
11.1 INTRODUCTION .....	290
11.2 SUMMARY .....	290
11.3 MAJOR FINDINGS OF THE STUDY .....	291
11.4 CONTRIBUTION OF THIS RESEARCH .....	297
11.5 RECOMMENDATIONS.....	298
11.6 SUGGESTIONS FOR FUTURE RESEARCH .....	303
11.7 CONCLUSION.....	303
APPENDICES .....	305

<i>APPENDIX A: Permission Letter From the Central Regional Education Office</i>	305
<i>APPENDIX B: Survey Questionnaire</i> .....	306
<i>APPENDIX C: Interview Guide</i> .....	313
<i>APPENDIX D: Characteristics of Interview Participants</i> .....	315
<i>APPENDIX E: Ethical Clearance</i> .....	316
<i>APPENDIX F: Consent and Information Sheets</i> .....	317
REFERENCES .....	321

## **LISTS OF FIGURES**

Figure 2.1: The Structure of the Ghana Education System .....	13
Figure 2.2: The National Teachers' Standards .....	28
Figure 2.3: A Map of Ghana and Central Region.....	36
Figure 3.1: Relationship Between CPD and its Functions .....	44
Figure 3.2: Kennedy's CPD Model .....	54
Figure 3.3: Desimone's Conceptual Framework.....	60
Figure 3.4: SCT, Desimone and Kennedy's Frameworks .....	62
Figure 5.1: Embedded Mixed Method Design.....	95
Figure 5.2: Recruitment of Interview Respondents .....	106
Figure 5.3: A Framework of Analysis .....	113
Figure 5.4: A Diagrammatical Representation on the Mixed Method Research Processes .....	117
Figure 6.1: Days of CPD Participation .....	129
Figure 7.1: Teacher-learning Frame .....	138
Figure 9.1: Reasons for CPD Participation.....	231
Figure 10.1: The CPD Learning Cycle .....	256
Figure 10.2: A Model of Effective CPD (Author's Construct) .....	278
Figure 10.3: CPD Investment Model.....	287

## LISTS OF TABLES

Table 5.1: Clustered Districts .....	97
Table 5.2: Names of District with the corresponding number of JHSs and Sampling Interval.....	98
Table 5.3: Some of the Codes for Analysis Transcripts .....	111
Table 6.1: Demographic Characteristics of Respondents.....	124
Table 6.2: Proportion of Respondents Rating Their CPD Learning Needs as Low, Moderate or High.....	125
Table 6.3: Results of the Chi-square Test on the Influence of Teachers' Characteristics on Their Perceived (low, moderate and high) CPD learning needs .....	126
Table 6.4: Proportion of Respondents Rating How Frequently they were Provided with CPD Activities .....	127
Table 6.5: Proportion of respondents rating how frequently they participated in CPD activities.....	128
Table 6.6: Results of the Chi-square test on the influence of teachers' characteristics on their rating of participation (low, moderate and high) in CPD activities .....	130
Table 6.7: Proportion of teachers rating the impact of CPD activities on their development from 'none' to 'a large impact' .....	132
Table 6.8: The mean ranking of the factors that explained teachers' reasons for participating in CPD activities.....	133
Table 6.9: Factors Affecting Teachers' CPD Participation .....	134
Table 6.10: General CPD Situation in School .....	135

## **GLOSSARY OF TERMS**

<b>Terms</b>	<b>Meanings</b>
CPD	Continuing Professional Development
PD	Professional Development
INSET	In-service Training
SCT	Sociocultural Theory
ZPD	Zone of Proximal Development
PCK	Pedagogical Content Knowledge
TLMs	Teaching and Learning Materials
MOE	Ministry of Education
GES	Ghana Education Service
CoE	College of Education
UTDBE	Untrained Teachers Diploma in Basic Education
PTPDM	Pre-Tertiary Teacher Professional Development and Management
CMPTR	Cabinet Memorandum on Policy on Teacher Education Reform
JHS	Junior High School
BECE	Basic Education Certificate Examinations
GNAT	Ghana National Association of Teachers
NAGRAT	National Association of Graduate Teachers

## ABSTRACT

Enhancing teacher quality through continuing professional development (CPD) currently remains at the heart of many educational reforms and efforts to ensure quality education. However, in Ghana, there is little policy interest in CPD as a means of enhancing educational quality. The result has been that CPD available for Ghanaian teachers consists of fragmented practices, which attract limited teacher participation. This study thus sought to investigate the current CPD practices and experiences of basic schoolteachers, that is, teachers of students from grade 1 to grade 9 in the Central region of Ghana to provide evidence-based recommendations for the improvement and expansion of practice.

Sociocultural theory was used as the theoretical framework for this research, and I used constructivism as the research paradigm. I adopted a nested mixed method research design wherein a survey instrument was used within a much broader qualitative study. There were 522 teacher participants and nine key informants in this study. Questionnaires were used to collect quantitative data on the general CPD situations within the schools, while in-depth qualitative interviews were used to interrogate further teachers' CPD practices and experiences. The quantitative data were analysed using SPSS software and the qualitative data assessed using a thematic analysis approach.

It emerged from the study that continuing education, workshops, and in-service training dominated CPD practices of Ghanaian teachers. Though there was sufficient evidence of teachers' involvement in informal learning activities, such practices lacked recognition and hence rarely expanded into a broader notion of teacher professional development. Teachers also had varied learning needs for their development, including pedagogical content knowledge and ICT skills both for personal growth and for use in classrooms. While participation in CPD increased teachers' learning, some participants on the other hand, expressed discontent with programs that did not match their development needs. Effective CPD experiences were reported as ones that enabled integration of new knowledge in classroom practice, allowed active learning, increased self-directedness, and addressed significantly specific learning needs of teachers.

In its conclusion, the study proposes guidelines for the development of effective CPD for basic schoolteachers in Ghana, where teacher consultation and learning needs feature significantly. The study thus recommends the enactment and implementation of a more coherent CPD policy to guide teachers' practice. CPD for Ghanaian teachers must integrate more sociocultural models that foster collaboration and social interaction in learning.

# CHAPTER 1 :INTRODUCTION

## 1.1 Background of the Study

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 Program (University of Twente), 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, Alitokhuehi, Egede, & Ojo-Ajibare, 2013). As a result, teachers improve their classroom practices and thus their students' learning (Clarke & Hollingsworth, 2002; Guskey, 2002).

Regardless of these widely known benefits of CPD, opportunities provided for teachers often appear inadequate (Borko, 2004; Méndez, Arellano, Khiu, Keh, & Bull, 2017), a situation described by Sykes (1996) 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 (Asare, Mereku, Anamuah-Mensah & Oduro, 2012; 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 critical 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 (Pryor, Akyeampong, Westbrook, & Lussier, 2012). 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<sup>1</sup>) 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 of 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 (Banks & Smyth, 2011; Shriki & Patkin,

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<sup>1</sup> BECE is a nation-wide standardised examination that are organised for Junior High School students (i.e.

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 exigent 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.

Against this background, the current study investigates existing CPD practices and the experiences of basic schoolteachers in the Central region of Ghana. The study identifies teachers' learning needs for development, examines the nature of available CPD opportunities, and teachers' experiences of those CPD activities. The intent is to provide evidence-based recommendations to guide broader CPD policy formulation and implementation of effective practice.

## **1.2 The Gap in Knowledge**

Research on teacher CPD has grown exponentially over the years. There have been investigations into the different aspects of CPD, including characteristics of effective CPD practice (Darling-Hammond, Hyler, & Gardner, 2017; Garet, Porter, Desimone, Birman, & Yoon, 2001; Lindvall, Helenius, & Wiberg, 2018; Makopoulou, 2018); impacts of CPD (Dennis & Hemmings, 2018; Jacob, Hill, & Corey, 2017; King, 2014) and the specific types of CPD activities (Palacio, Vargas, & Taborda, 2019; Reid-Griffin, 2019; Thompson, 2018). However, it has been observed that most of these studies are atomistic, where teachers and their learning experiences and contexts are treated as separate entities (Avalos, 2011; Webster-Wright, 2009). Hence, there are increasing calls for CPD studies to investigate teachers' learning needs and experiences as well as their social and institutional contexts (Banks & Smyth, 2011; Borko, 2004; Ganser, 2000).

Critics of the CPD literature also point to the predominantly small-scale nature of studies (Tatto, 2013) and the inability of most studies to provide evidence-based findings that can inform practice (Goldacre, 2013). While a few other studies have attempted a holistic approach towards teacher CPD (e.g. Mansour, Heba, Alshamrani, & Aldahmash, 2014; Tang & Choi, 2009), there is still a need for more research that incorporates the different systematic aspects of CPD within a single study.

My study fills these knowledge gaps in the literature with its investigation into the CPD practices and experiences of basic schoolteachers in Ghana. First, I adopt a more holistic approach to investigate teachers' learning needs, their CPD experiences, and the role of contexts within a single study. I demonstrate the significant role of social context as it influences teachers' learning needs, motivation, and participation in CPD activities. In addition, both quantitative and qualitative data are collected from a large population of teachers to increase the scope of this study in order to provide evidence-based recommendations to inform CPD policy and effective practice within the Ghanaian context.

Another gap identified in most CPD studies is the failure to address the critical question of how teachers learn, as well as teachers' learning experiences in CPD activities (Borko, 2004; Opfer & Pedder, 2011; van den Bergh, Ros, & Beijaard, 2015). Using teachers' participation experiences, my study identifies and explains teachers' learning processes during CPD participation. This has been captured in the study's introduction of the CPD learning cycle.

Finally, the conduct of this study is informed by the current 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; Sofu & Abonyi, 2018).

My study differs from these existing studies in its attempt to afford a sociocultural analysis of the Ghanaian CPD situation. My study adds to knowledge about teacher

CPD with its capture of the CPD learning process and the proposal for a new CPD model to guide practice based on the transformative approach where teacher consultation feature significantly (see Chapter 10). Also, by working across Vygotsky's sociocultural theory in conjunction with Kennedy's (2005, 2014) CPD model and Desimone's (2009) conceptual framework, this study offers a unique contribution for theory and research into teacher CPD.

### **1.3 Personal Reflection**

I concur with Wiliam (2006) who suggested that "we can get a greater improvement in teacher quality at a lower cost, by investing in teacher learning" (p.16). My personal motivation for this research was born out of concern for poor academic standards of basic schools in Ghana and the limited support systems for teachers' ongoing professional learning and development within the current educational structure. Yet, teachers assume the sole responsibility in determining student outcomes, which invariably affect the wider society in significant ways.

For this reason, I was motivated to look at how basic schoolteachers in Ghana learn and develop themselves professionally in practice after their training college years. My interest was later intensified by a viral video of an ICT teacher in a rural basic school in Ghana who was unable to explain the concept of a 'scanner' to his students. The content of the video raised two critical questions: (1) what becomes of the fate of the school children that are taught erroneously by teachers across different schools in Ghana? and (2) what mechanisms are in place to ensure teachers' constant upgrading of their professional knowledge. From my initial readings I found many gaps and issues that deepened my curiosity and encouraged me to investigate further. These issues related to the lack of broader and coherent CPD policy frameworks, the inadequacy of CPD opportunities and organisation, as well as the effectiveness of the existing CPD practices in promoting genuine learning for teachers' development.

To explore these gaps, I am informed by the sociocultural theory of learning (SCT), which has given me a conceptual tool for perceiving teachers' learning and professional development. The nature of these investigations has also enabled me to employ multiple data sources in my bid to cover the length and breadth of the research phenomenon. In

effect, the processes of conducting this research have shaped my personal development and analytical thinking through the honing of my research skills. The outcome of this research is intended to inform CPD policy formulation in Ghana as well as the more general design and implementation of effective interventions to foster teachers' learning and development.

#### **1.4 Aims of the Study**

The current study aims to investigate the existing CPD practices and participation experiences of basic schoolteachers in the Central region of Ghana. It seeks to understand how basic schoolteachers learn and develop professionally; the CPD opportunities that are offered to them; the conditions for effective CPD to thrive; and how teachers' professional contexts influence their professional development. In the absence of broader institutionalised and implemented CPD policy framework in Ghana, another purpose of this study is to provide insights and adequate information to inform CPD policy formulation and practice there, and to provide evidence-based recommendations for the expansion and implementation of effective CPD for Ghanaian teachers.

#### **1.5 Research Questions**

The current study is guided by the overall research question:

How is CPD practised and experienced by basic schoolteachers in the Central region of Ghana?

The related research questions I seek to address are:

1. What professional development/learning needs do basic schoolteachers have?
2. What are the CPD opportunities available for basic schoolteachers in Ghana?
3. What are the participation experiences of basic schoolteachers in CPD activities?
4. What factors motivate basic schoolteachers' decisions to participate in CPD activities?
5. How do contextual factors affect basic schoolteachers' CPD practice?

Learning is an integral part of CPD; therefore, to understand teachers' CPD practices and experiences, I have framed the study within a theory of learning. Vygotsky's (1978) sociocultural theory (SCT) of learning has proven useful for my examination and

explanation of how teachers in my study learned and developed professionally. This theoretical stance also affords the interpretation of the processes of teacher learning and allows the examination of the role and significance of social contexts in shaping teachers' learning and professional development; hence its suitability for the study. In addition, I use Kennedy's (2005, 2014) CPD model and Desimone's (2009) conceptual framework as analytical tools to explain the various findings of the study. I am aware that these analytical and theoretical approaches originated in European and other 'western' countries; however, they have provided useful lenses with which to examine the Ghanaian context. These approaches do prioritise the importance of context and are flexible enough for me to work productively to explain teachers' learning and their CPD practices and experiences.

This study is premised on the assumption that basic schoolteachers are adult learners; hence, the principles of adult learning are highly applicable in investigating their experiences. This resonates with Ganser's (2000) assertion that effective CPD is influenced by the extent to which CPD can meaningfully draw on principles of adult learning. Methodologically, I employ a mixed method research design that uses both quantitative and qualitative data collection and analysis procedures. While the quantitative component of the study provides an overview of the general CPD situation across a larger teacher population using a survey, the qualitative part of the study uses in-depth interviews to explore further the actual experiences of basic schoolteachers in CPD activities.

### **1.6 Significance of the Study**

In Ghana, the concept of teacher CPD is relatively little understood and explored in educational policies and academic research and literature. There is, therefore, the need for empirical evidence to illuminate the critical requirement for teacher CPD and for its integration into the teacher education system and other educational improvement efforts in Ghana. In this regard, my study is significant; it contributes to the growing field of knowledge and practice of teacher CPD in Ghana. Mainly, the findings from this study expose the complexities and the importance of understanding what conditions support teachers' learning and development, and why and how teachers learn, all of which are essential considerations to improve the current CPD situation in Ghana. For instance,

issues around teacher consultation, motivation, and teachers' learning needs raise concern about the design and implementation of effective CPD for teachers.

The study provides guidelines for Ghana to develop a coherent CPD policy at a time when the country is implementing new teacher education reforms. This study is considered timely as it will provide evidence and information for the enactment of a CPD policy to guide teachers' professional practice. In effect, this study offers evidence-based recommendations for Ghanaian policymakers (the Government of Ghana; Ministry of Education (MOE); Ghana Education Service (GES); and NGOs) responsible for the formulation and implementation of a more coherent CPD policy to guide effective interventions that foster teachers' development. The study will also serve as a reference document for future academic studies on teachers' CPD in other countries by suggesting further research that might expand CPD activities in Ghana.

### **1.7 Definitions and Explanation of Terms**

The following terms and concepts are explained as used in the study:

- **Basic Schoolteachers:** These are a category of teachers teaching at the basic school level. In Ghana the basic school comprises of both primary (from ages 6 to 12) and junior high school (from 12 to 15years).
- **Junior High School (JHS):** It is an equivalent of middle school (from Grades 7-9). In Ghana, it is of three years duration where students take standardised examinations (BECE) for enrolment into various senior high schools (High school).
- **Continuing professional development:** All forms of learning activities (both formal and informal) teachers engage in after their initial training to improve practice to affect the learning of students.
- **Teacher learning:** Refers to the “processes that, whether intuitive or deliberate, individual or social, results in specific changes in the professional knowledge, skills, attitudes, beliefs or actions of teachers” (Fraser, Kennedy, Reid, & Mckinney, 2007, p. 157).
- **Pedagogical Content Knowledge (PCK):** This refers to the knowledge that links both content and pedagogy and the knowledge of making content comprehensible for students (Mukeredzi, 2016).

## **1.8 Overview of the Thesis**

This thesis is organised into 11 chapters. Chapter 1 introduces the thesis, gives a background to the research topic and explains the aims, the research questions, and the significance of the study. Chapter 2 traces the historical development of education and teacher education in Ghana, reviews some teacher education policies, and examines the roles of teachers and teacher associations in teachers' professional development. The chapter also contains information on the research sites.

Chapter 3 explains the study's analytical tools in the forms of SCT, Kennedy's (2005, 2014) CPD model, and Desimone's (2009) framework of effective CPD practice. The chapter also demonstrates how these frameworks interlock to inform the analysis and interpretation of the findings of the study. In Chapter 4, relevant literature about the phenomenon of investigation is reviewed. This includes teacher CPD practices and the empirical examination of some teacher CPD studies. In Chapter 5, I discuss the research methodology used for the study. I describe the research paradigm, and the approaches used in both the quantitative and qualitative aspects of the study. Issues of reliability and validity, data analyses approaches, and ethical research concerns are also addressed in this chapter.

The results of the study are reported in Chapters 6, 7, 8, and 9. Chapter 6 presents the survey results while the qualitative interview results are shown in Chapters 7, 8, and 9. The main themes that emerged from these analysis chapters are discussed in Chapter 10. Finally, Chapter 11 provides a summary and a conclusion to the entire thesis. The final chapter also highlights some key recommendations for policy, practice and future research.

## **1.9 Chapter Summary**

This chapter has described the background of the study, presented the justification for the study as well as the personal reflection that led to the conduct of this research. It also explained the significance of the study and enumerated the research questions guiding the research. The focus of Chapter 2 is to contextualise the study by providing sufficient information for readers to be familiar with the research context. It will

provide an overview of the educational systems in Ghana and examine some educational reform policies and current CPD opportunities for teachers in Ghana.

## **CHAPTER 2 : THE STUDY IN CONTEXT**

### **2.1 Introduction**

This chapter examines the relevant contextual and background information to enable comparison of the phenomena researched for this thesis with those of other situations (Shenton, 2004). The chapter begins by tracing the historical development of education and teacher education in Ghana; it describes teacher education pathways, and reviews educational reforms and CPD policy implementation in Ghana. It then explores the role of teacher associations in teachers' development, as well as the status of teachers in Ghanaian societies. Finally, the chapter provides information on the research sites in order to situate the study's results within the much broader scope of historical, socio-economical, political, and cultural contexts of teachers' professional practice in Ghana.

### **2.2 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 15<sup>th</sup> 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).

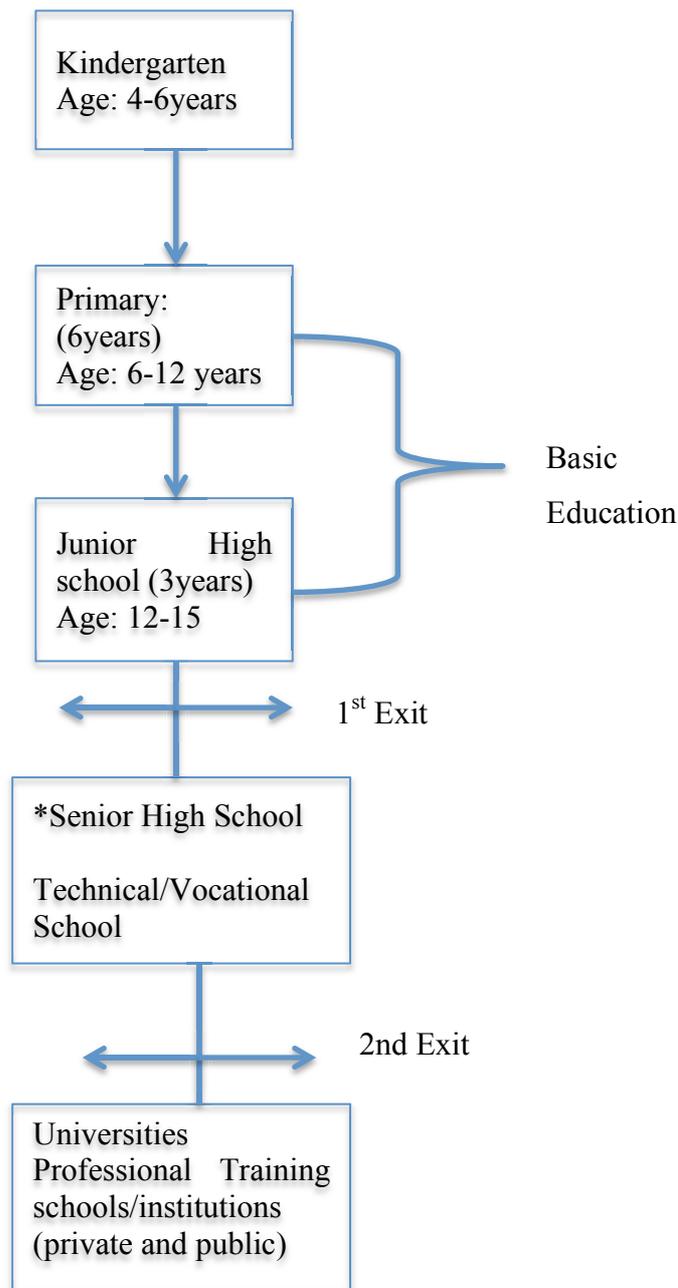
At the time of Ghana's independence in 1957, there were 30 Teacher training colleges in the country (MOE, 1957, cited in Owusu-Agyakwa et al., 1993). Their structure was modelled on the British system as follows:

- 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.

### **2.3 The Structure of Ghana Education System**

The current educational system of Ghana has witnessed radical reforms, the most prominent being the restructuring of the educational system in 1987. Before this reform, education in Ghana consisted of a six-year primary schools, a four-year middle schools, a seven-year secondary school (where students could gain an 'O' level certification after first five years, and "A" level certification after seven years), and three or four-year tertiary education. The structure of the educational system in Ghana has since become more complex, as outline in Figure 2.1.



*Figure 2.1: The Structure of the Ghana Education System*

\*The duration of Senior High School is three years with students' ages between 15 and 18 years; tertiary education lasts two to four years, or more, with students' ages between 18 and 22 years.

Figure 2.1 depicts a 6-3-3-4 year structure representing six years of primary schooling, three years of junior high school (JHS), three years of senior high school (SHS) and two or four years of tertiary education. The pre-school period comprises of nursery school

and kindergarten, which prepares children for enrolment into the mainstream educational structure. The basic school is compulsory. It is made up of six years of primary school and three years of JHS (middle school). Students complete JHS after their participation in the national standardised examination, the Basic Education Certificate Examinations (BECE). Upon performance in the BECE, students are enrolled in the various senior high schools in the country. In 2017, the implementation of a free SHS policy widened access to students' enrolments into the SHS, regardless of grades or achievements during the BECE.

Students who complete SHS are also mandated to undertake an external examination to qualify for entry into the various tertiary institutions in the country. Tertiary education consists of universities, polytechnics, training colleges, and other specialised professional institutions. The duration for tertiary education is between two and four years, or longer, depending upon the course pursued.

For this study, I focused on collecting data from teachers teaching at the various JHS within public schools in the Central region of Ghana. With this focus, I analysed specific learning needs and variations in teachers' CPD experiences based on subject-specific teachings.

#### **2.4 Teacher Education in Ghana**

To improve education quality, Ghana has altered its teacher education system through several reforms. Significant among them is the 2007 educational reform, which re-designated teacher training colleges as "Colleges of Education" and upgraded them to diploma-awarding institutions. Primarily, teacher education in Ghana aims to train and develop teachers who are competent, committed and dedicated, capable of applying and synthesising the various acquired forms of knowledge to prepare learners to participate fully in national development (Ministry of Education (MOE), 2002).

Teacher education in Ghana consists of pre-service education, induction (for new teachers) and teacher development or continuing professional development for practicing teachers (Asare et al., 2012). The initial teacher education or pre-service training is offered in 39 public and seven private Colleges of Education (CoE) in Ghana.

The University of Cape Coast (UCC), and the University of Education, Winneba (UEW) also complement the Colleges of Education, by providing bachelor's degrees in teacher education. Whereas the Colleges of Education prepare teachers to teach at the basic school level, the universities produce teachers and head teachers for secondary schools and teacher training colleges and provide for the upgrading of the qualifications of teachers working in basic, secondary and technical education.

The various conduits to teacher preparation imply a lead pathway to a range of academic certifications and qualifications for teachers as professionals in Ghana. Lewin (2005) classifies these qualifications into four types. Type 1 programs are the initial teacher education programs offered by the various Colleges of Education and the Universities of Cape Coast and Winneba. These programs lead to the award of diplomas and bachelor's degrees, which qualify students as professional teachers. While the College of Education offers a three-year Diploma in Basic Education (DBE), the Universities of Cape Coast and Winneba on the other hand, provide a regular four-year bachelor's degree program to train students as professional teachers. Under Type 1 there are also two-year post-DBE courses run in sandwich and distance mode for teachers who have already had some form of teacher education to upgrade themselves.

Type 2 programs aim at preparing graduates from other tertiary institutions who enter the classroom but are not yet professional teachers. There is a one-year Post-graduate Certificate in Education as well as Post-graduate Diploma in Education for such teachers to qualify as professionals. On the other hand, the purpose of Type 3 programs is to certify persons recruited as 'pupil teachers' as an alternative pathway to qualified status (Anamuah-Mensah, 2008; Lewin, 2005). The Colleges of Education in conjunction with the Teacher Education division of the MOE offer a four-year Untrained Teachers Diploma in Basic Education (UTDBE) in a distance mode for such teachers. 'Pupil teachers', also called 'barefoot teachers', are non-professional teacher practitioners who are usually utilised in both public and private schools due to the inadequate number of teachers. The UTDBE was introduced to support their learning and development while equipping them for qualified status.

The Type 4 teacher education program resembles an apprenticeship where untrained teachers can enter teaching by their highest academic qualifications. Teachers in Type 4 programs are supported through the provision of induction and in-service training to ensure their development. Through these programs, teachers are prepared to teach in the different categories in the educational system in Ghana.

Within these classifications of teachers is the prevalence of out-of-field teachers who teach subjects for which they have little or no education or training (Ingersoll, 1999). These teachers are qualified but offer to teach subjects in which they had neither majored nor minored during training or further development, resulting in a mismatch between their own and the specific teaching subjects taught in schools. While this phenomenon is widespread in other countries (OECD, 2014), Cobbold (2015) identifies that in Ghana the practice widely occurs in the many rural schools that lack teachers.

#### **2.4.1 Structure and Content of the Teacher Education Curriculum in Ghana**

An important dimension of educational quality is its relevance to the diverse socio-economic needs of people in a society; thus, it is incumbent for teacher education curricula to be responsive to the national development agenda as well as the needs of the wider society. The curriculum and content of pre-service education programs must aim to equip teachers with the knowledges, skills, and competencies, including instructional strategies, that are foundational to successful educational outcomes. Ronfeldt and Reininger (2012) found that the quality of the curricula and processes of teacher education programs can affect teaching effectiveness. In designing an effective curriculum for pre-service teacher education, certain guiding principles must be considered: “demand, integration of theory and practice, school/classroom focus, competency and assessment processes” (Adegoke, 2003, p. 8).

Through the Colleges of Education, Ghana currently implements two teacher education programs that lead to the certification of Diploma in Basic Education (DBE). One is an old program that uses the 2005 curriculum, while the newer program that uses the 2014 curriculum. The 2005 DBE curriculum aims to train basic generalist schoolteachers (to teach at both the primary and JHS levels), whereas the 2014 curriculum broadens teachers’ training into specialist teachers capable of teaching specific subjects at the

JHS and SHS levels (Ocansey & Davis, 2016). Teachers' specialisations include any of the foundational subjects as well as Early Childhood Education. The content of the curricula are as follows:

- Foundation academic studies: These courses comprise of the subjects taught at the basic school<sup>2</sup>. Emphasis is placed on the content of these subjects rather than methodology.
- Specialised personal development studies: These include courses designed to develop to meet trainees' professional needs, including communication and study skills, as well as general socio-economic issues that underlie national development such as ICT, HIV/AIDs.
- Educational studies: These courses focus on the trainee in the context of the school situation and are linked with the teaching and learning processes as well as assessment. They also include issues related to the theory and practice of education and child psychology.
- Curriculum studies and methodology: These courses equip teachers with the knowledge of the content of the academic subjects as well as the pedagogies needed to teach those contents.
- Practical training: These courses are intended to prepare teachers for the efficient handling of the subjects at the basic school level. They may include school visits, school attachments, on-campus practice teaching, and design and production of teaching and learning materials

(Adegoke, 2003; Akyeampong & Furlong, 2000; Asare & Nti, 2014; Ocansey & Davis, 2016).

In preparing student teachers, various instructional methodologies are utilised, including role-plays, brainstorming, individualised projects, and problem-solving approaches. There are also expository teaching, drills, and teacher-led discussions (Asare & Nti, 2014) . However, the dominant methods still remain the transmission or lecturing and

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<sup>2</sup> The subject areas include English Language (including literature), Mathematics, Ghanaian language and Culture, Integrated Science, Environmental and Social Studies, Pre-Vocational Skills (either sewing, catering or art related), Religious and Moral Studies, Technical Skills, French, Physical Education and Music and Dance. Teachers can specialise in any of the subjects in addition to Early Childhood Education.

student-centred approaches, where teacher trainees are perceived as ‘empty vessels’ who possess little or no knowledge or experience (Akyeampong, 2003; Asare & Nti, 2014). These approaches foster rote learning and inhibit the creativity of student teachers as learners who can engage in reflective practice and problem-solving in their professional training. Consequently, these teachers later tend to adopt similar methodologies in their classroom practices.

In a study by Akyeampong, Lussier, Pryor, and Westbrook (2013) on teaching and learning of basic mathematics and reading in Africa, it was found that newly qualified teachers in Ghana adopt teacher-led approaches that fail to engage learners. It also emerged that teaching reading was divorced from meaning, while mathematical activities were not linked to learning concepts in the newly qualified teachers’ classroom practices. In an era of a growing knowledge economy, effective teacher training must adopt and utilise innovative methodologies that allow teachers to be reflective practitioners and to co-construct professional knowledge with their tutors. On the other hand, already qualified teachers can also be supported through CPD to integrate innovative methodologies into their classrooms.

In summary, the education and teacher education system in Ghana has had a varied history. Teacher education provision has been based on emergencies and needs in the educational system, the interests of the missionaries, the political economy of Ghana, and the availability of funds to implement policies that were considered appropriate (Akyeampong & Furlong, 2000; Cobbold, 2006). Despite these challenges, Ghana presently extols a teaching body that is trained to drive the socio-economic development of the country. However, there is still the need for consideration of teacher CPD activities in teacher education system to foster teachers’ continuous development. As is evident in the current teacher education structure and curriculum, there is emphasis on knowing and understanding subject content knowledges but silence on teachers’ development activities in real classroom situations. If Ghanaian teachers are to adequately face the complexities of today’s classrooms, they need to be supported after their pre-service education through effective CPD and other learning opportunities.

### **2.4.2 Issues Relating to Teacher Education in Ghana**

Ghana is not the only country where the structure of the teacher education system has been criticised. In an international review of literature on teachers' professional development, Villegas-Reimers (2003) has identified criticisms of teacher education systems in both developed and developing countries that include:

- poor quality curricula
- overemphasis on theory and a lack of practice
- a weak relationship between program and school practices
- low quality of candidates that enter the teaching profession
- overly short programs, which leave newly trained teachers ill-prepared to enter the classrooms, with deficiencies in subject matter knowledge and pedagogical skills.

These challenges resonate with the teacher education system in Ghana and have led to the growing discontent with the initial teacher preparation there. There is concern about disjuncture between the training provided by the Colleges of Education and the realism of teachers' work in today's classrooms, schools, and communities. There is also the question about the nature of the professional knowledge that teachers receive and whether the Colleges of Education are providing sufficient understanding of subject knowledge to teachers at the basic schools (Pryor et al., 2012). Darling-Hammond (2000) asserts that effectual pre-service teacher preparation should extend beyond the provision of subject matter and pedagogical knowledges. She argues that an effective curriculum should incorporate research elements that enable teachers to link theory to the teaching of practical realities in their classrooms. Teacher education curricula must acknowledge the diversity of teaching and classroom experiences if they are to enable teachers to design suitable learning experiences in varied contexts.

In their observation about the teacher education curriculum in Ghana, Coultas and Lewin (2002) reported that little attention was given to linking subject content and pedagogical knowledge in ways that were flexible and responsive to teachers' context of practice. There is also the rigidity of teacher education curricula that trains students in stringent ways, without the liberty to explore and find solutions to problems. In the view of Mereku (2014), the curricula of the Colleges of Education lack the flexibility to

integrate emerging concerns from the educational system, such as teaching problem-solving skills. The result is that given real-life situations in the classrooms, teachers are unable to translate theory into practice. The remedy thus lies in through the provision of effective CPD interventions.

Another concern about the teacher education system is the issue of the calibre of students who are recruited by the Colleges of Education (CoE), whose entry requirements are relaxed when compared to universities. Based on their study on the characteristics of student teachers, Coultas and Lewin (2002) reported that trainee teachers in Ghana were academically poorly qualified, with the majority of student teachers in Ghana entering training colleges with a bare pass of grade E in English language, and 9% not having a science qualification. From the same period, a study by Akyeampong and Stephens (2002) on the background of beginning student teachers in Ghana also revealed that the majority of students who entered into training colleges did so with weak passes, unlike the universities. From the same study, about 91% of student teachers were found to have come to the CoE with a low pass in English, while in the case of mathematics, 40% had entered with grade “E” and 25% with grade “D”. These findings have since been supported by Ossei-Anto, Fletcher, Annan-Noonoo, and Korankye (2013), who found only 30 out of the 99 students records sampled, had better grades than grade “D7” in integrated science and mathematics.

While the academic entry requirements remain the same (minimum of aggregate 24), selection procedures have been revised since 2000 in a bid to ensure teacher quality. Nonetheless, the development of teachers is a fluid and ongoing process, not static one. Teachers develop over time through training and experience. Thus, teacher CPD needs to be integrated into the teacher education system in Ghana to ensure that teachers add quality to their professional practices and can meet the challenges of real classrooms.

Behind these concerns is the critical issue of the absence of a well-developed, sustainable and systematic CPD framework within the structure of the teacher education system in Ghana. Although captured in most educational reform documents, teachers’ CPD, which contributes to their lifelong learning, remains absent in the current structure of teacher education in Ghana (this will be explored in Section 2.5). Kadindi (2006) argues that there is a greater need for Ghana to focus on providing CPD activities to

support teachers in their classroom roles than on providing resources. From this perspective, Asare and Nti (2014) contend that the implementation of licensing will be a useful way to get teachers to invest in their professional development. They recommend that teacher licensure should integrate teachers' participation in meaningful CPD activities as benchmarks for renewal.

The role of teacher CPD in ensuring teacher quality and the prospect of teachers having prosperous professional careers cannot be overemphasised. The constant changes in general education systems in terms of content and pedagogies make it impossible for a trainee to acquire all the knowledge and skills needed for their whole professional life. Teachers require continuous development throughout their professional career if they are to stay abreast of all the skills essential to surviving in a 21<sup>st</sup>-century school system. The limited opportunities provided for teachers' CPD within the current Ghanaian teacher education system makes this study timely. I argue for the need to consider the CPD of teachers as an essential ingredient of educational improvement efforts as well as a crucial element in the development of teacher quality. To develop this argument, I examined the CPD practices and experiences of basic schoolteachers in the Central region of Ghana. I also offer evidence-based recommendations to inform the implementation of more robust and systematised CPD activities that may influence teachers' classroom practices and improved student learning.

## **2.5 CPD Policy Environment in Ghana**

Since independence in 1957, the education system of Ghana has seen immense reforms to make education responsive to the needs of the general population for accelerated national development (Tagoe, 2014) and to ensure quality in education provision and delivery. Among these have been:

- The 1987 educational reform, which overhauled the entire educational structure and curricular
- The implementation of the Free Compulsory Universal Basic Education (FCUBE) in 1996
- The 2002 President's Committee on Educational reform that reviewed the whole educational system

- The 2004 Government's White Paper on Education Reform to ensure high quality free basic education and inclusive second-cycle education (Adu-Gyamfi, Donkoh, & Addo, 2016; Kadingi, 2006; Tagoe, 2014).

An essential commonality among these reforms and policies has been the increase in access to education to accelerate the country's development, while at the same time minimal attention has been given to the role of teachers' learning and development in ensuring quality and improved education. Focusing on the latter, the FCUBE was able to define ways of providing in-service training activities for teachers. The FCUBE policy stressed that teacher development should be more school-based, with an emphasis placed on hands-on-training activities in schools (MOE, 1996). In addition, this policy sought to ensure teacher quality through the "revision of curriculum and provision of teaching and learning materials, incentives for teachers in rural schools, institution of motivation award scheme and an improvement in teacher education programs" that would provide practical training to increase teacher competencies (Zame, Hope, & Respress, 2008, p. 116). However, like other policy reforms, the FCUBE has been critiqued for its overemphasis on material inputs for the revitalisation of a quality education than on how teachers' attitudes, behaviours and learning in the classrooms might be enhanced. In the words of Kadingi (2006), the policymakers of the FCUBE "appeared not to take into consideration the attitudes and behaviours of teachers who were to implement the change" (p. 10) in teachers' classroom practices.

The minimal policy interest in teachers' CPD activities has had adverse effects on Ghana's attempt to increase students' performances and improved education delivery, especially at the basic school level. Due to this neglect of CPD, there is the persistent underachievement of students in basic schools in Ghana (T-Tel, 2018), as over the years, students' performances have failed to be commensurate with policies that aimed to raise educational quality. For instance, in 2014 a national literacy assessment for early grade primary school pupils revealed that more than 95% of public school children could read with understanding neither the Ghanaian language nor English languages by the age that most children were expected to be able to do so (MOE, 2014).

Elsewhere (for example in Australia, USA, Scotland), governments are implementing thoughtful, planned professional development for teachers in their educational reform policies (Guskey & Yoon, 2009). It was not until 2012 that the MOE in Ghana enacted a national policy to foster the development of pre-tertiary teachers. This policy borrowed its ideas from the recommendations of previous educational policies and committee of enquiry reports (such as Anamuah-Mensah Report, 2002; Adami-Issah, Elden, Forson and Schrofer Report, 2007; Ministry of Education Report, 2010) to address the concerns of the deficiencies in quality teaching and learning, especially within the basic schools. These recommendations opened debates on teacher education policy and the role of teachers as instruments in ensuring quality education. For instance, some policy recommendations included: establishing National Teaching Council to foresee teacher development activities; upgrading the status of teacher training colleges into diploma-awarding institutions; the introduction of the UTDBE programs for ‘pupil teachers’; and the need to increase teachers’ competencies and skills through career development and human resource management (Atta & Mensah, 2015).

While some of these recommendations had been systematically implemented over the past years, a comprehensive CPD policy to guide teachers’ professional development activities in Ghana was missing. Thus, drawing on the Education Act 2008, the Pre-Tertiary Teacher Professional Development and Management (PTPDM) policy was enacted based on a nationally agreed set of standards which informs how teachers are trained, certified and promoted.

### **2.5.1 The Pre-Tertiary Teacher Professional Development and Management (PTPDM) Policy**

The pre-tertiary teacher professional development and management policy (PTPDM) was a convincing attempt to prepare teachers for quality education in Ghana. According to the Ministry of Education (2012), the policy came at an opportune time, as the country was struggling to achieve quality education, especially at the pre-tertiary levels. Thus, the PTPDM seeks to prepare and nurture teachers through the provision of CPD programs to function effectively in the basic and second cycle schools while they reflect on becoming proficient practitioners capable of providing quality education for all Ghanaian children.

Drawing its tenets mainly from the provisions made in the 2008 Education Act (Act 774), the PTPDM provides the framework and standards for enhancing teacher quality and recognising teachers' achievements through the provision of practical, in-service training (Ministry of Education, 2012). The policy also sets out a promotion system that links teachers' development to their appraisal and career advancement. The aims of the policy are:

- Providing the framework for developing standards, core values and ethics for the teaching profession to foster the development of a world-class teacher capable of contributing significantly to student learning and development;
- Developing teachers' ability to adopt reflective teaching approaches to enhance the quality of lesson delivery at the pre-tertiary school levels;
- Specifying principles for teacher management to motivate excellence in teacher performance and commitment to lifelong learning;
- Providing areas for setting regulatory standards to govern teachers' work, professional standards and conditions of service to make teaching an attractive and rewarding career;
- Fostering the notion of teaching as a lifelong career, which is linked, to an evidence-based system of career advancement and promotions;
- Promoting awareness of the importance of teacher welfare and the working conditions to raise the value and social status of pre-tertiary teachers in Ghana (Ministry of Education, 2012, p. 9).

The policy also stipulates that all teacher professional development programs adopt a competency-based approach in both the program specification and assessment. Thus, professional development activities must equip teachers to meet specific demands of the teaching profession and the management responsibilities that go with them and must also be designed to reflect the aims and the objectives of pre-tertiary education in Ghana.

Through its implementation, the PTPDM policy expects to supplant the existing teacher promotion system, which is based on the main number of years of teaching experience, by incorporating evidence of teachers' professional development achievements for promotion (Personal interview, 2017). Participation in professional development

activities will be linked to teachers' career advancement, and evidence of professional growth and achievements will form the basis of career progression and awards (MOE, 2012). Activities that will be used as evidence for promotion will be based on defined standards of professional practice such as the demonstration of communication and interpersonal skills, development in technical skills, and classroom management and leadership skills (Government of Ghana (GoG), 2018).

As a regulatory mechanism, the PTPDM policy underscores teacher licensing as a measure of ensuring teachers are up to date with current trends in knowledge and classroom pedagogies. The policy mandates that teachers be licensed upon graduation from the training colleges. Eligibility for licensing is to be dependent on the completion of induction and other required in-service training (INSET) programs, after which mentors will be assigned to help teachers in their professional development.

The details of the PTPDM policy seem promising and laudable because unlike previous reform policies, the PTPDM underscores teacher CPD as essential to fostering teacher quality for enhanced education delivery in Ghana. The Global Monitoring Report (UNESCO, 2014) has recommended the policy and argued for its adoption in other African countries to improve teacher performance in their classrooms. Interestingly, more than a decade after its enactment, and UNESCO's commendation, the PTPDM has yet to be implemented on a large scale to institutionalise teachers' professional development activities in Ghana (it is currently being piloted only in five districts). Also, within the PTPDM policy, still missing is mention of what should constitute or what should count as teacher professional development, the standards against which it is to be organised and a coherent framework to guide implementation as an ongoing learning process among pre-tertiary schoolteachers. These deficiencies within the PTPDM leave room for further development of a policy that addresses them more holistically and more adequately.

The next section looks at recent teacher education reforms in Ghana.

### **2.5.2 Recent Teacher Education Reforms**

A new teacher education reform took effect from the beginning of the 2018/2019 academic year. Dubbed “The Cabinet Memorandum on Policy on Teacher Education Reform” (CMPTER), which was implemented in October 2018, it seeks to convert Colleges of Education into universities to implement a four-year B.Ed. (Bachelor of Education) teacher education program. With this, the 46 Colleges of Education in Ghana will roll out a new teacher education curriculum approved by the National Accreditation Board (NAB).

The new reform aims to redesign the pre-service teacher education in Ghana and to train highly qualified and motivated teachers who can inspire pupils to achieve better outcomes in basic education than the current teacher education system (T-Tel, 2017). The reform also includes the setting up of National Teachers Standards (NTS) for pre-service teachers and National Teacher Education Curriculum Framework (NTECF) to accomplish the reforms.

The CMPTER also stipulates that the new teacher education reform will require teachers to hold a valid licence to practice as a professional teacher and be willing to engage in CPD in the course of their professional practice. Thus, upon completion of the four-year training program, trainee teachers will be expected to work for a further year within the basic school systems before being eligible for their ‘Qualified Teacher Status’ and licensing by the NTC to practice as professional teachers (GoG, 2018).

Before these recent reforms, the issue of teacher licensing had been captured in the PTPDM policy with reference to the Education Act 778 (2008) to address the problems of teacher quality; trainee teachers were to pass special examinations after mandatory training before being granted the license to teach. However, the introduction of the licensure examinations was met with stringent opposition from the teachers and teacher unions, with concerns that there had been limited teacher consultations. Such opposition was imminent, following Bediako and Asare’s (2010) observation that some innovations in education meet resistance because teachers, as implementers, are often not consulted. Given this, Asare and Nti (2014) suggest the need to involve teachers in

attempts to implement teacher licensing. Amidst the tension, the MOE succeeded in organising the first examination on the 10 to 12 September 2018.

***The National Teachers Standards (NTS)***

Of the elements in the CMPTER, the National Teachers Standards (NTS) is worth considering. The NTS gives recognition to teacher CPD in pre-service teacher education, which hitherto was missing in the structure of teacher education in Ghana. The NTS aims to ensure that teachers are prepared and subsequently developed to the highest possible standards in knowledge, conduct and practice in their workplace (National Teaching Council (NTC), 2017). The NTS is thus the determiner of what a good teacher is and, unlike the PTPDM, offers the standards against which all new teachers will be assessed for certification and licencing. There are three overlapping domains of standards: professional values and attitudes; professional knowledge; and professional practice. These are shown in Figure 2.2.



*Figure 2.2: The National Teachers' Standards*

Source: NTC (2017)

These three domains contain other significant areas, which together explain what teachers should value, know, and do, regarding their preparation and development. Emphasis here will be placed on teachers' professional values and attitudes because it contains professional development and community of practice. The professional development component expects that teachers will critically and collectively reflect on their practice in order to improve their personal and professional development through lifelong learning and CPD, and to demonstrate their growing leadership qualities in the

classroom and the broader school (NTC, 2017). On the other hand, the teachers' community of practice component emphasises teachers' collective and positive engagements with colleagues and other school systems, the moulding of a positive teacher identity, and teachers' roles as agents of change, both within the school and in the wider community.

Although many policy reforms over the years have focused on pre-service education, with lesser interests in teachers' CPD activities (Moon, 2007), the CMPTER reforms pay significant attention to teachers' development in their professional practice. The NTS, for instance, provides standards to inform teachers' development in their first year before their licensing as professionals and provides the framework for future professional and career development. Teachers' professional development activities are expected to be at the individual, school and cluster-based levels, and include training, induction, and self-development (T-Tel, 2017).

The conduct of this study is therefore timely, especially being at the crossroads of the CMPTER. While applauding the integration of CPD element within the new teacher education framework, my study, however, calls for a broader formulation and implementation of CPD policy to guide practising teachers.

## **2.6 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 year 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 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.

### **2.6.1 The Role of Teacher Associations in Teacher's Development in Ghana**

Professional teacher associations are a potential rich resource for teachers' learning and development (Manuel, 2003). There are two major pre-tertiary teacher associations in Ghana: (1) Ghana National Association of Teacher (GNAT) and (2) National Association of Graduate Teachers (NAGRAT). These two associations have as their core mandates the need to improve teacher quality through the provision of professional development activities for their teacher members. Consequently, over the years, both GNAT and NAGRAT have organised and provided avenues to ensure teachers' development.

With assistance from the Canadian Teachers Federation (CTF) and Canadian International Development Agency (CIDA), GNAT has over the years complemented GES's efforts in organising workshops and INSET activities for their members. Like the GES and MOE, GNAT targets teachers' development in specific subject areas where there is a need. At present, those subject areas covered under the CTF and CIDA projects are English, Mathematics, French, and basic design and technology. There is also periodic training in leadership and administration for head teachers of schools. While the content of these INSETs and workshops focuses on curricula in the subject areas, participants are also trained in other issues that affect practice and society.

To develop rural teachers in Ghana, GNAT implements the “Nkabom” project (literally meaning togetherness) to eliminate the barriers to education, especially in rural communities. Under this project, teachers from rural and needy schools are brought together and developed through training activities dealing with content of the curriculum and pedagogy, as well as provision of learning resources to foster their learning and development (Personal interview, 2017). Teachers who are trained under this project commit to training other teachers in their regions who might need their services, thus emphasising the cascade approach to teacher development.

Over the years, NAGRAT has also organised seminars and workshops on topical educational issues for association members to increase their knowledge in their various fields of teaching and to upgrade their professional competencies. Like GNAT, NAGRAT has scholarship schemes that support their members in their CPD pursuits.

While these PD interventions are laudable, the associations like the GES and MOE are challenged by the lack of both finance and resources. Consequently, not all teachers can access these CPD avenues. There also are bureaucratic challenges that affect most teachers in obtaining these opportunities (Personal interview, 2017).

It is important to emphasise that teacher associations play critical roles as moderators between teachers and school principals, as well as the GES, should issues arise that affect their practice within their workplaces. These teacher associations also organise orientations and induction activities for newly trained teachers in addition to workshop activities for members who are due for promotion in order to acquaint them with procedural information and structures (Personal interview, 2017). There is also the Caulley Reference Library, which provides information services, access to professional literature and assistance to teachers to conduct educational research and for their personal studies (GNAT, 2010).

In sum, the currently available opportunities for teachers’ professional learning are inadequate to meet the challenges of producing quality pre-tertiary in 21<sup>st</sup> century Ghana. Because there are still growing numbers of ‘pupil teachers’ and out-of-field teachers especially in rural Ghana, teachers ought to be trained or retrained through

ongoing CPD, which presently seems to be missing. More empirical studies on teachers' CPD practices are therefore needed to inform CPD policy implementation in Ghana. This study thus investigates basic schoolteachers' CPD practices and experiences in the Central region of Ghana and aims to provide evidence-based recommendations to inform policy and practice.

## **2.7 What it Means to be a Teacher in Ghana**

Teachers are seen in many societies as agents of change who are responsible for the transmission of fundamental skills, attitudes, knowledge, and moral values; they function as 'public intellectuals', especially in rural communities (Osei, 2006). Teachers nurture and influence other professionals and continue to encourage and develop the reflexive abilities of their students. Yet, although "teachers live, work and interact with many other people, they are alone in professional terms" (Fischer, 2004, p. ix).

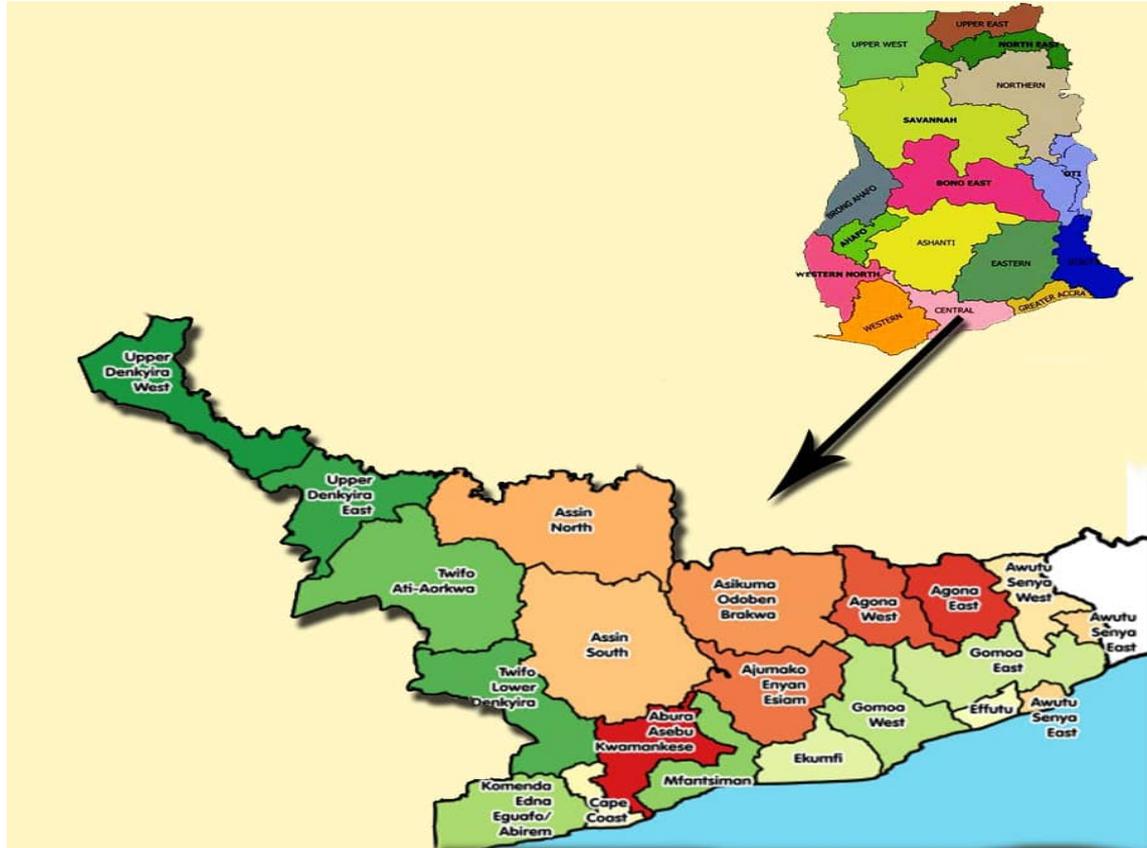
In Ghana, teachers perform multiple functions. They play the roles of parent and guide, counsellor and manager, as well as leader and role model to their students. These roles are in addition to their school duties of nurturing the intellectual growth of their students. Teachers also perform other social responsibilities within their communities by their recruitment as assembly members, community leaders, electoral registration monitors and other civic and health education activities (Mereku, 2000). Such multi-talented engagements heighten teachers' value and respect in Ghanaian communities; hence to the school child, the teacher is always right.

Ironically, with so much influence on the lives of school children, it seems that very few children desire to become teachers. This is as a result of the growing loss of prestige associated with the teaching profession and the recognition that teaching is an unrewarding profession (Sam, Effah, & Osei-Owusu, 2014). Teachers are confronted with managing large class sizes, delays in payment of salaries, poor working conditions, limited teaching support and resources, long working hours, and lower remuneration, as compared to other civil servants in the country (Osei, 2006; Sam et al., 2014). The UNESCO (2001) report on world education indicators describes teachers in Ghana as overworked yet underpaid.

The above situation about the conditions of teachers in Ghana has consequentially made the teaching profession unattractive to recent high school graduates, a position that has culminated in the shortage of teachers, especially in the rural areas, and high teacher attrition throughout the country. A study by Quansah 2003, cited in Cobbold (2007) identified that the basic schools have an annual shortage of 40,000 trained teachers positions, 24,000 of which are filled by untrained or pupil teachers. As well, Akyeampong (2002) reported more than 70% of teachers had failed to return to the classroom after having enjoyed the study leave policy. A GNAT/TEWU (2010) survey on teacher attrition in Ghana revealed that about 10,000 teachers left the classroom every year for other profession. Similarly, Sam et al's (2014) study involving senior high school teachers concluded that most teachers were dissatisfied with the teaching job and indicated their intention to leave the profession in the nearest future if their conditions of service and salaries are not improved.

The poor working conditions of teachers have heightened the activities of teacher unions championing the course of better wages and conditions of services for its members, although mostly with minimal impact (Amoako, 2015). At worst, teachers resort to strikes and demonstrations, which inadvertently affect students' learning as classrooms are left empty for days and sometimes weeks. One significant attempt to address teachers' concerns about better wages was the implementation of the single spine salary (SSS) structure in 2010, which targeted salary discrepancies within the public service. Its implementation affected the salary scale of teachers positively, depending on their qualification levels. Even though today teachers continue to agitate for salary increments, there is no doubt that the implementation of the SSS has increased teachers' pay in Ghana significantly. It is important to emphasise that, despite the growing dissatisfaction in the profession and the incidences of teacher absenteeism, teachers continue to exhibit enthusiasm and commitment towards the task of teaching (Osei, 2006).

## 2.8 Profile of the Study Area: The Central Region of Ghana



*Figure 2.3: A Map of Ghana and Central Region*

This study analyses data collected from basic schoolteachers in public schools in the Central region of Ghana (shown in Figure 2.3). With a total land size of about 9,826 square kilometres, the Central region forms part of the 16 administrative regions of Ghana. The region is bounded to the west by the Western region, to the north by the Ashanti and Eastern regions, to the East by the Greater Accra region and the south by the Gulf of Guinea. According to the last population census, the Central region has a population of about 2,201,863 with a growth rate of 3.1% (Ghana Statistical Service, 2013).

Politically, the region is administered under the Local Government Act of 1993 (Act 462) and the National Development Planning Commission System of 1994 (Act 480). Thus, the region consists of a regional coordinating council, a four-tier metropolitan and a three-tier municipal/district assembly, functioning as both legislative and executive

heads. While metropolitan and municipal assemblies are classified as urban based on their population density<sup>3</sup>, district assemblies assume rural status with a wider geographical area combining rural areas and small towns and communities. In all, there are 20 districts in the Central region.

In terms of education, the literacy level (ability to read and write) of the region is about 78.2% with variations in the various districts. The highest literacy is recorded in Cape Coast Metropolis (89.7%) and the lowest in Gomoa West District (66.6%). Also, over eight in ten of those currently attending school in the region are found in basic schools comprising nursery (6.7%), kindergarten (19.0%), primary (45.4%) and JHS (17.8%) (Ghana Statistical Service, 2013). There are three Universities (the University of Cape Coast, University of Education, Winneba and Cape Coast Technical University) as well as three Colleges of Education (OLA College of Education, Fosu College of Education and Komenda College of Education) in the Central region of Ghana.

The Central region appears more rural than urban. The primary economic activities for most of the communities are agriculture and fishing. About 17% of the working population engaged in trading and crafts activities, while managers, professionals, associate professionals, and technicians constitute only 9% of employed persons.

For this study, 12 out of the 20 districts were selected for inclusion (see Chapter 5) using the random sampling approach. These districts share both urban and rural characteristics; hence, the study involved teachers from both rural and urban schools.

## **2.9 Chapter Summary**

This chapter has provided contextual information relevant to the phenomenon being investigated. The chapter traced the historical development of education and teacher education and touched on some key reforms within the teacher education system in Ghana. It also highlighted the inadequacies in these educational reforms and argued for the need for the recognition of teacher CPD as essential for improving teacher quality

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<sup>3</sup>Metropolitan assemblies cover urban areas with populations of over 250,000 while municipal assemblies are single-town councils with populations of 95,000 and more.

and enhancing educational outcomes. The next chapter will explain the theoretical and conceptual frameworks that were used in this study as analytical tools.

## **CHAPTER 3 : THEORETICAL AND CONCEPTUAL FRAMEWORKS**

### **3.1 Introduction**

This chapter examines the theoretical and conceptual frameworks that inform the analysis, interpretation, and understanding of the study. In the first section of the chapter, I provide an overview of the phenomenon of continuing professional development (CPD) and teacher learning. In the second section, I describe the sociocultural theory (SCT) of learning as an overarching theoretical framework for the study. I also explain the use of Kennedy's (2005, 2014) CPD model and Desimone's (2009) framework of effective CPD as lenses through which to examine the CPD practices and experiences of basic schoolteachers in Ghana. Together, the theory and conceptual frameworks provide the analytical tools with which I will critically analyse and interpret the study's findings.

### **3.2 Understanding Teacher CPD and Teacher Learning**

In the last two decades, there have been increasing calls for teacher learning and CPD to be integrated into educational establishments. For instance, Guskey (2000) suggests that proposals for educational reform and school improvement must emphasise "the need for high-quality professional development", both for teachers and school administrators (p. 3). However, as discussed in Chapter 2, elements of teacher CPD seem to be missing in many of the educational reforms implemented to improve quality education in Ghana. As a result, this study advocates that Ghanaian educational authorities recast teacher CPD as an essential ingredient in ensuring quality education, especially at the basic school level.

This section examines the various definitions of teacher CPD as well as its functions and purposes. It also explains teacher learning and its relationship with CPD, and how both are conceptualised in this study.

#### **3.2.1 Defining Teacher CPD**

Although CPD is widely accepted in national discourses on improvement in education, in many studies the term CPD is often ill-defined. In recognising this difficulty of

definition, Hardy (2012) contends that CPD is contested and variously conceptualised as a policy, a research process and a part of teachers' work. This study views CPD as embedded in teachers' professional practice.

In a much broader sense, the term CPD refers to the development of a person in their professional role (Villegas-Reimers, 2003). It is perceived as the "systematic maintenance, improvement and broadening of knowledge and skill and the development of personal qualities necessary for the execution of professional and technical duties throughout the practitioner's working life" (Construction Industry Council, 1986, p. 3, cited in Friedman & Philips, 2004). For Friedman and Phillips (2004), the multifaceted nature of the term CPD allows for

- lifelong learning for professionals
- personal development
- individual professionals to ensure a measure of control and security in the often-precarious modern workplace
- assuring a wary public that professionals are indeed up to date, given the rapid pace of technological advancement
- professional associations to verify that the standards of their professionals are being upheld
- employers to garner a competent, adaptable workforce. (p. 362)

CPD is thus conceptualised in this study as the conscious updating of professional knowledge and the improvement of professional competencies throughout a person's working life.

Relating this concept to education, teacher CPD is perceived as a lifelong learning process that extends from teacher education at the tertiary level to in-service training at the workplace (Putnam & Borko, 2000). It embodies a set of activities that aim to develop teachers' skills, knowledge, expertise and other characteristics that are distinct from their pre-service training (Caena, 2011). Similarly, Creemers and Kyriakides (2013) define CPD as encompassing all forms of learning "undertaken by teachers beyond the point of their initial training" (p. 3).

While the above definitions explain teachers' CPD beyond the formation years, Guskey (2000) emphasises the outcome of CPD in his definition of 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" (p. 16). That is, CPD intervention for teachers must target their development for the improvement of students' learning. Similarly, Day and Sachs (2004) perceive teacher CPD as "all the activities in which teachers engage during a career which are designed to enhance their work" (p. 3). Sharma and Bindal (2013) also perceive teacher CPD as a long-term process that involves regular opportunities and experiences planned systematically to promote growth and development in the profession to affect the learning of students.

These definitions highlight the purpose and outcome of teacher CPD as the improvement of teachers' learning for the enhancement of students' learning through standardised and formal sets of learning activities. However, they overlook the interstices of the informal learning activities of teachers that occur in the course of their work. Another flaw in these enlisted definitions is that they overlook the context of teachers' practice as an essential precursor for teacher learning and CPD.

Kelchterman (2004) provides recognition for the significance of practice in teacher CPD activities in his definition of CPD as "learning process resulting from meaningful interactions with the context (both in time and space) and eventually leading to changes in teachers' professional practice (actions) and in their thinking about that practice" (p. 220). Day's (1999) definition offers a more comprehensive understanding of what teacher CPD is as a practice:

Professional development consists of 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. (p. 4)

From these various definitions and perceptions of CPD, it is now possible to identify three essential elements that are critical for this study. First, CPD is multifaceted, with foci on activities that address behaviours, knowledge, emotions, and cognition of teachers (Borg, 2015) . Such activities are, however, not isolated events but rather a continuous learning process occurring throughout the working lives of teachers. Also, CPD may be planned by systems or institutions to promote teacher learning and development or may happen naturally as teachers informally carry out their tasks in the school or outside their settings (informal learning).

Second, these definitions also clarify the functions and outcomes of CPD (to be discussed in detail in the next section). That is, CPD aims to improve teachers' skills and their abilities to enhance students' learning in the classroom. Such outcomes affect individual teachers, their schools or institutions, and the quality of education in general (Borg, 2015). For Sharma and Bindal (2013), CPD allows teachers to develop a wide range of beliefs and attitudes that support effective teaching practices, by various means and in a variety of contexts, which promotes the quality of education.

Third, teacher CPD practices and enactments are affected either positively or negatively by contextual factors such as classroom, school, and community (Timperley, Wilson, Barrar, & Fung, 2007). These contexts are worth examining in CPD studies (Borko, 2004; Webster-Wright, 2009). This element also suggests that it is insufficient to limit teacher CPD to participation in formalised activities only. CPD for teachers must be an ongoing, continuous learning process that is also embedded in their daily work.

### **3.2.2 Purposes and Functions of Teacher CPD**

As discussed in the previous section, the fundamental purpose of teacher CPD is to equip teachers with knowledge, skills, and attitudes to improve students' learning. According to Mizell (2010), there are often misunderstandings about teacher CPD, its purpose and how it functions. This section thus outlines the overall functions and purposes of teacher CPD that educational authorities in Ghana should pay critical attention to if their goals of improving teacher education and students' performances are to be met.

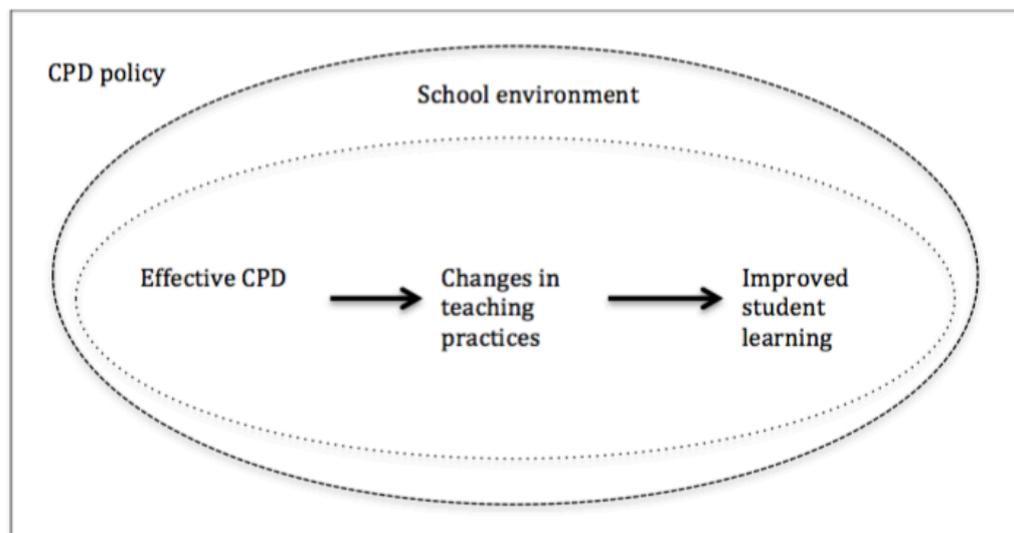
In their work on the purposes of CPD, Day and Sachs (2004, p. 22) broadly outline the functions of CPD: (1) to align teachers' practices with educational policies; (2) to improve learning outcomes of students' by improving the performance of teachers; and (3) to enhance the status and profile of the teaching profession. Similarly, Grundy and Robison (2004) identify three interrelated purposes of CPD: (1) extension, (2) growth and (3) renewal. Extension implies the introduction of new knowledge or skills to teachers' range of knowledge and experiences; CPD thus aims to equip teachers who are perceived to be deficient with the knowledge, skills or attitudes needed to function well in their careers.

Growth signifies the development of higher levels of expertise essential for a successful career as a teacher. Here, CPD aims to develop teachers as professionals through continuous learning and to be self-directed learners who initiate their learning to further their growth and development (Broad & Evans, 2006). CPD fosters teachers' growth by equipping them with the requisite knowledge, skills to be abreast of any emerging trends of development in their field of practice. Finally, Grundy and Robison's (2004) renewal purpose suggests the transformation and change of knowledge and practice. Teacher professional development aims to improve students' learning outcomes by providing teachers with greater knowledge and skills that can be applied directly to their practice (Hargreaves & Fullan, 1992). Thus to Sachs (2007), CPD has two interrelated purposes: (1) to ensure that the goal of improving student learning is achieved; and (2) to support an active and autonomous teaching profession.

Drawing on the works of other scholars, Sharma and Bindal (2013) tell us that CPD allows teachers to:

- be acquitted with the latest developments in the field of teaching
- exchange information with teacher colleagues from other schools
- learn new teaching methodologies
- gain new skills or knowledge that increases career options within a teaching
- upgrade professional qualifications
- acquire the relevant skills or knowledge to gain promotion position
- help teachers to solve their present positions
- improve their quality and to cope with future problems. (p. 546)

CPD equips teachers with new knowledge (in content and pedagogy), skills and attitudes, which lead to teacher change for effective classroom teaching and student learning (Clarke & Hollingsworth, 2002; Guskey, 2002). Teacher change results through a process of learning (participation in CPD) that revolves around teachers' knowledge, experiences, beliefs and their professional actions (Fraser et al., 2007). Guskey (2002) identifies three types of teacher change from engagement in CPD activities: (1) change in classroom practices; (2) change in attitudes and beliefs; and (3) change in the learning outcomes of students. Supovitz and Turner (2000) demonstrate the relationship between CPD and its functions with the model shown in Figure 3.1.



*Figure 3.1: Relationship Between CPD and its Functions*

Source: Adapted from Supovitz and Turner (2000, p. 965)

The significance of this model is that, in addition to its demonstration of how CPD leads to improved student learning, it also sets out contextual influences that may affect teacher CPD and the implementation of changes for enhanced student learning. These contextual factors are examined in Chapter 4 of this study.

### **3.2.3 Teacher Learning, Professional Learning and CPD**

While some scholars equate CPD with teacher learning or professional learning (Borko, 2004; Cochran-Smith & Lytle, 1999; Putnam & Borko, 2000; Wilson & Berne, 1999),

others argue for the need to view the two concepts as mutually exclusive (Corcoran, 1995; Fraser et al., 2007; Webster-Wright, 2009). Arguing for the interrelatedness of the two concepts, Cochran-Smith and Lytle (1999) emphasise teacher learning and CPD as equipping teachers with the professional knowledges needed in practice, and how such knowledges could be organised to inform their teaching. Within this perspective, Cole (2012) also defines professional learning as “the formal and informal learning experiences undertaken by teachers and school leaders that improve their professional practice and the school’s collective effectiveness as measured by improved student engagement and learning outcomes” (p. 5).

However, from a different epistemological position, Fraser et al. (2007) argue for a distinction to be made between these two concepts. Their view is that while teacher professional development is a broader process of change influencing the teaching profession, teacher professional learning is the specific undertaking focused on the particular learning of individuals and groups. They distinguish the two concepts as follows:

Teachers’ professional learning can be undertaken to represent the processes that, whether intuitive or deliberate, individual or social, results in specific changes in the professional knowledge, skills, attitudes, beliefs or actions of teachers. Teachers’ professional development, on the other hand, is taken to refer to the broader changes that may take place over a longer period resulting in qualitative shifts in aspects of teachers’ professionalism (p. 157).

To avoid confusion between CPD and professional learning, Webster-Wright (2009) suggests yet another term, “Continuing Professional Learning” (CPL), to describe the learning of practising professionals. Teacher CPL can thus be seen as all forms of learning that either occurs (or does not occur) through CPD, Professional Development (PD), Continuing Education (CE) or any other activity (Webster-Wright, 2009). CPD, teacher learning and CPL share characteristics that suggest lifelong learning activities for teachers’ development. Teachers learn from activities that include formal workshops and seminars as well as the informal interactions and experiences that comprise their work practices. While acknowledging the differences between the two concepts (teacher

learning and CPD) as used in this study, it is important to emphasise that teacher learning is integral in teacher CPD.

### **3.3 Theoretical Framework**

Primarily, the current study seeks to investigate the CPD practices and experiences of teachers in the Central region of Ghana. As was identified earlier, learning underlines teacher professional development; consequently, a theory of learning and development is an ideal lens through which to investigate teacher CPD. According to Johnson and Golombek (2003), the sociocultural theory (SCT) of learning possesses “tremendous explanatory power for understanding the processes of teacher learning” (p. 730), hence, its application to the current study.

#### **3.3.1 Sociocultural Theory (SCT)**

The sociocultural theory (SCT) of learning is derived largely from the work of the Russian psychologist Lev Vygotsky (1971, 1978, 1986). His work, along with that of his associates, dates from the 1920s and 1930s (John-Steiner & Mahn, 1996). Since then, the theory has increasingly been recognised and applied to diverse fields of study and has been developed further by other theoreticians such as, John-Steiner and Mahn (1996), Lave and Wenger (1991), Lemke (1990), Rogoff (1990) and Wertsch (1991).

According to the SCT of learning, knowledge is constructed as individuals engage and interact in social activities with other people, objects and events (Vygotsky, 1978). Hence, knowledge construction cannot be separated from the social, cultural and historical contexts from which such development emerges (Johnson, 2009). Sociocultural theorists, therefore, view knowledge as situated in “culturally-specific contexts created and developed over time to solve real-life problems that occur within that culture and society” (Eun, 2010, p. 405). From this perspective, learning is perceived to be the changes in participation in socially organised activities and in individuals’ use of knowledge as an aspect of their participation in social practices (Greeno, 2003; Lave & Wenger, 1991). Effective learning thus lies in the ability of learners to use knowledge gained in the process of learning to solve problems in their social contexts. Therefore, teachers participating in CPD activities would be expected to

use knowledge gained through such participation to solve real problems in their classrooms.

There are four constructs widely used to explain human development and learning within SCT: (1) mediation, (2) tools, (3) the Zone of Proximal Development (ZPD) and (4) community of practice. The subsequent sections examine these constructs.

### ***Mediation***

A fundamental premise of SCT is the belief that human development and learning occurs through mediation; therefore, learning is dependent of learners' contexts (Lantolf, 2000). This position presumes that there are mechanisms that facilitate or mediate human learning and development. These mechanisms include social interaction with human beings as well as material, cultural or symbolic tools (Lantolf, 2000; Vygotsky, 1978). In explaining human development, Vygotsky (1978) emphasised that the success of active learning lies in the nature of the social interaction between two or more people with different levels of skills and knowledge. He reasoned that through social interactions, human cognition develops through two processes: the social level between people (inter-psychological) and the individual learner (intra-psychological).

Sociocultural theorists thus view development and learning as a progressive movement from external socially mediated activities (that is, the social plane) to internal mediation (psychological plane) controlled by individual learners through a process of internalisation (Johnson & Golombek, 2003). Internalisation is the process in which other people or cultural artefacts initially mediate a person's activity but the activity later comes to be controlled by the person as he/she appropriates resources to regulate his/her actions (Johnson & Golombek, 2002; Rogoff & Chavajay, 1995). John-Steiner and Mahn (1996) explain appropriation as the process whereby an individual reconstructs knowledge that she/he has internalised, and makes the information acquired essential to the self, thus transforming how knowledge is constructed and used by the individual and others. This process leads to contextualisation of learning, which Shan (2011) argues occurs when the content of the curriculum (in this case the CPD), and the methods and materials associated with it are related directly to the experiences and environment of the learner (teacher). Contextualisation enables teachers to adapt and re-

organise CPD learning experiences to meet real needs in real classrooms (Tang & Choi, 2009).

Mediation emphasises the interactive social nature of learning and therefore rejects the notion of learning as “acquisition” (Sfard, 1998), where a teacher passively receives knowledge and skills through their participation in CPD. It embraces a dialogic and interactive teacher’s self in the process of the learning activity rather than a focus on replacement of the teacher’s knowledge and skills (Golombek & Johnson, 2007). A teacher’s learning depends on the availability of mediating agents in the co-construction of professional knowledge. These mediational means include the organised learning activities of CPD (Kozulin, 2003), human beings (colleague teachers and other external persons) and cultural or material artefacts (textbooks, technological tools, lesson notes) that aid the progression and appropriation of knowledge for use in the classrooms.

### ***Tools***

Tools, either cultural or symbolic, facilitate the process of mediation. As emphasised earlier, SCT holds that knowledge is not internalised directly but through the use of tools which are not invented in isolation by the individual but are a product of sociocultural evolution (John-Steiner & Mahn, 1996; Wertsch, 1991). Tools are thus the elements that aid and mediate social and individual functioning, connect the external and internal planes, and assist in developing communicative and cognitive functions in moving from the social plane to the psychological plane (Liu & Matthews, 2005; Nasir & Hand, 2006). Tools include language, writing diagrams, signs and symbols, concept usage, and any other artefacts that assist learning.

Tools affect the ways people (teachers) organise, process and remember information (Al-Maddi & Al-Wadi, 2015). They are, however, not static but are developed over time and used in different cultural groups (Kozulin, 2003). For Wertsch (1991), tools and signs in one’s sociocultural milieu mediate new patterns of thoughts and overall human mental functioning. Tools aiding mediation can be object-regulated (physical or cultural tools), other-regulated (human behavior/social relationships), and self-regulated (abstract complex mind) (Johnson & Golombek, 2003; Shi, 2017). Tools thus serve as a buffer between a person and the environment and mediate the relationship between the

individual and the social material world (Lantolf, Thorne, & Poehner, 2015). As will be demonstrated in this study, teachers' access to relevant teaching and learning tools peculiar to their context of practice is necessary for the process of their learning and development.

### ***The Zone of Proximal Development (ZPD)***

Vygotsky (1978) introduced the Zone of Proximal Development (ZPD) to establish the relationship between development and learning. He argued for the distinction between two developmental levels - the actual and the potential - wherein the actual typifies the accomplishments that learners can demonstrate on their own and the potential involves those that learners would require assistance or guidance. Vygotsky (1978) defined the ZPD as "the distance between the actual development level as determined by independent problem solving and the potential level as determined through problem-solving under adult guidance or in collaboration with more capable peers" (p. 89).

The ZPD is thus not a physical space situated in time but rather metaphoric imagery of observing and understanding the mediational and internalisation processes (Lantolf, 2000). Within the ZPD, mediational means can be object-regulated, where teachers rely on some cultural artefact in their environment to promote their learning (including journal or textbooks); other-regulated where assistance is sought from other colleague teachers or experts; or self-regulated, where teachers themselves gain mastery and control over their learning activities (Johnson & Golombek, 2003).

The stage of development within the ZPD involves the progression and transformation of an individual's external knowledge into inner knowledge by the guidance of someone more capable of promoting the development of the individual's cognitive level (Shi, 2017). A person can progress within the ZPD through social interaction and scaffolding. Through social interaction, a more knowledgeable participant can support a novice to extend current skills and knowledge to a higher level of competence (Turuk, 2008). Scaffolding extends the potential for learners' development through assisted performances; it implies assistance provided by an expert to a novice learner (Lantolf et al., 2015). Through scaffolding, learners who cannot complete tasks independently in their current situations can be assisted by more able others to build their knowledge and

abilities (Shi, 2017). However, once learners achieved their desired level of development, the scaffolding processes can be withdrawn.

In effect, the ZPD is created not just within the individual learner, but also is created in the interaction between the learner, co-participants and available tools during involvement in a common activity (Bonk & Cunningham, 2010). For teachers, the effectiveness of their learning within the ZPD will depend on the quality of the total interactive context, as well as their individual agencies towards learning.

### ***Community of Practice***

The community of practice (CoP) is another construct within SCT where learning is a subject domain viewed as a process of becoming a member of a community of practice (Lave & Wenger, 1991). A CoP also known as professional learning community (Riveros, Newton & Burgess, 2012), which refers to a group of people with specialised expertise in some significant areas of cultural practice (Nuthall, 1997). As members participate and interact within their CoP, they learn and become identified with the shared histories and commitments of their practice (Wenger, 1998).

The current study is framed within the broader notions of the sociocultural perspectives of learning discussed above. However, the concept of CoP unlike mediation, tools and ZPD concepts, is given minimal space within this study because the participating teachers did not identify as members of a CoP. Nonetheless, there were recommendations from teachers for the enactment of a ‘community of practice’ to shape learning and professional development.

SCT has influenced and been utilised in many studies on teacher development (Arshavskaya & Whitney, 2014; Lasky, 2005; Mansour et al., 2014), although it is not without its critics. According to Liu and Matthews (2005), using a SCT perspective with teachers may portray teachers as learners in the same way as children, due to the theory’s original intent in explaining how children learn and develop. Nevertheless, the previously given examples of research which use the lens of SCT provide access to the multilayered educational experiences of the research participants and is highly

appropriate for this study. The following section explains the suitability of SCT to the current study.

### **3.3.2 Implications of SCT to Teacher Learning and Professional Development**

Framing the current study within Vygostky's SCT is appropriate in that the SCT considers social interaction to be the primary source of human learning and development (Eun, 2008). SCT also provides grounds for the examination of the relationship between teachers as learners during CPD and the broader context within which their CPD practices are embedded. These will now be discussed.

First, SCT's postulation that learning is not an independent activity but occurs through participation and interaction within social practice implies that learning is a collaborative venture among participants. Learning as a collaborative activity ensures that CPD does not take place in isolation but instead occurs among groups of participants with similar teaching experiences who interact, dialogue and share ideas to inform their practice (Mansour et al., 2014). Such interaction fosters active learning among teacher participants, who then collaboratively co-construct professional knowledge rather than didactically receive instruction from 'experts'. However, teachers' interaction must be directed at specific goals if it is to lead to desirable development (Alfred, 2002).

In addition, the notion that learning is a mediated activity facilitated by tools and artefacts equally has implications for teachers' their CPD. Teachers' learning tools that help them extend their ZPD include expert guidance and assistance (Shabani, 2016), as well as teaching materials, textbooks, classroom equipment, and internal mediators like professional journals, newsletters, and online forums (Eun, 2010). Tools could also be the CPD policy document (John-Steiner & Mahn, 1996), which teachers must be aware of and use to guide their CPD practices. Eady and Lockyer (2013) and Lantolf (2004) also identify technology as part of teachers' professional 'toolbox' that can mediate their learning as well as their professional development. In the context of teachers' CPD, access to and use of learning tools can promote active learning for improved classroom performances. Teachers also require training manuals and other significant artefacts to mediate their learning during and after participation in CPD.

Likewise, the sociocultural perspective of ZPD provides a nuanced determination of both the achieved and the potential development of teachers (Mansour et al., 2014). Warford (2011) extends the concept of ZPD to teacher development and defines it as “the distance between what teaching candidates can do on their own without assistance and a proximal level they might attain through strategically mediated assistance from more capable others” (p. 253). Therefore, professional development programs for teachers must be able to assess the needs and goals of teacher participants accurately and guide teachers to their potential level of needs. If effective learning outcomes are to be assured, teachers must be involved in planning and designing their own CPD programs as an effective means to achieve their ZPD. More capable and experienced teachers can also scaffold and support novice teachers to facilitate their learning and development.

Finally, by suggesting that knowledge construction cannot be separated from the social, cultural and historical contexts, SCT emphasises the critical role of context in influencing teachers’ CPD engagements. Indeed, teacher learning and CPD are tied to the wider contexts of teachers’ professional practice (Borko, 2004; Hardy, 2012; Timperley et al., 2007). From these contexts emanate complex factors that interact to affect how teachers learn and develop; hence it is worth investigating such factors in CPD studies. CPD contextual factors are well grounded in this study to understand the conditions that will either constrict teacher CPD practice in Ghana or cause it to thrive.

In summary, learning is fundamental to teacher CPD. Avalos (2011) believes that at the core of CPD activities is the understanding of how teachers learn and how they transform their knowledge into practice. SCT provides a framework to understand such intricacies of teacher learning and CPD and to integrate the different models of professional development into one single unified framework that has a predictive and explanatory power to account for the diverse aspects of teacher development in different sociocultural settings (DiPardo & Potter, 2003), hence its applicability to this study of Ghanaian teachers.

### **3.4 Conceptual Frameworks**

This section describes the CPD frameworks of Kennedy (2005) and Desimone (2009) as analytical tools to inform the discussion and interpretation of the study. Whereas Kennedy's model allows for the possible examination of the different approaches to teacher CPD, Desimone's framework provides a lens to investigate teachers' participation experiences in the different CPD approaches. Both frameworks are used alongside SCT to explain the findings from this study. I shall start with Kennedy's framework of CPD models, and follow it with Desimone's framework on effective CPD.

#### **3.4.1 Kennedy's Framework of CPD Models**

CPD can be organised and structured in a different number of ways and for many different reasons. Kennedy (2005) identifies nine models of CPD practices and, based on their perceived purposes, proposed a framework for analysing teachers' CPD practices. These models of CPD practices are:

1. training;
2. award-bearing;
3. deficit;
4. cascade;
5. standards-based;
6. coaching/mentoring;
7. community of practice/learning communities;
8. action research/professional enquiry;
9. transformative.

According to Kennedy (2005), these models "attempt at identifying key characteristics of different types of CPD to enable deeper analysis of, and dialogue about, fundamental issues of purpose" (p. 237). I adapt this framework to categorise, compare and analyse basic schoolteachers' CPD practices (using teachers' experiences) in Ghana. The framework is illustrated in Figure 3.2 below:

Model of CPD	Purpose of Model
Training model Deficit model Cascade model	Transmissive
Award-bearing model Standards-based model Coaching/mentoring model Community of practice model	Transitional
Action research model/professional enquiry Transformative model	Transformative

Figure 3.2: Kennedy's CPD Model

Source: Kennedy (2005)

In Figure 3.2, the nine models of CPD are placed in a continuum based on their perceived purposes. Thus, CPD either serves transmissive, transitional (or malleable in the newer version) or transformative purposes.

CPD serves a transmissive purpose when it aims to endow teachers with the requisite skills, knowledge, and attitudes to conform to some educational reforms. Teachers' CPD is often viewed as a means of implementing reforms, policies or changes and thereby fulfilling the function of preparing teachers to implement those reforms and changes. Such approaches include training models (workshops and in-service training), which support a more technocratic view of teaching whereby CPD provides teachers with the opportunity to update their skills and knowledge to be able to demonstrate some level of competencies (Sywelem & Witte, 2013). The training models are delivered by 'experts' who design the content of CPD for teachers with limited or no teacher control in determining their own development needs.

In addition to the training models, there are also the deficit models and cascade models. In the deficit models, CPD is explicitly designed to address a perceived deficit in teacher performance, while the cascade models carry the expectation of teachers attending training events while disseminating information to other colleague teachers. According to Kennedy (2005), these transmissive models include teachers' participation in in-service training programs and workshops, and offer minimal space for teachers to

take charge of their own learning. These forms of CPD fail to “connect with the essential moral purposes that are at the heart of teachers professionalism” (Day, 1999, p. 49) and develop a type of controlled professionalism where teachers can best be described as craft workers (Sachs, 2007). Describing such approaches as delivery, empty-vessel and teacher-as-technician models, Dadds (2014) argues that they are inappropriate for developing a well-educated teaching force because they fail to account for the complexities of teacher learning and practice.

The purpose of the transformative models, on the other hand, is to support teachers to contribute to and to shape educational policy and their practice. Teachers are provided with experiences through action research to experiment with different methods to pursue and develop their practice. In an updated framework, Kennedy (2014) has introduced collaborative professional enquiry to replace the action research and transformative models as proposed in the original framework. By collaborative professional inquiry, Kennedy (2014) implies “experiences that include an element of collaborative problem identification and subsequent activity, where the subsequent activity involves inquiring into one’s practice and understanding more about other practice through engagement with existing research” (p. 693). Therefore, the transformative models provide teachers with much more autonomy and control to determine and pursue their learning pathways. They also guide teachers to become reflective practitioners who can understand, challenge and transform their practices and change educational agendas (Kennedy, 2014; Sachs, 2007).

Between the transmissive and transformative models are transitional or malleable approaches of teacher CPD, whose purpose is to empower teachers with the capacity to support the underlying agendas of either transmissive or transformative approaches. Included in this category are the award-bearing, standard-based, coaching/mentoring and CoP models. The award-bearing models of CPD are akin to teacher continuing education, where teachers complete academic programs validated usually but not exclusively by universities, while the standards-based models emphasise the need for evidence-based results on teacher effectiveness and students’ learning (Beyer, 2002). These models of CPD support students’ learning, but the standard-based models, in particular, do not allow teachers capacity for reflective and critical inquiry.

Underlying the coaching/mentoring models is the belief that professional learning can take place within the school context and be enhanced by sharing a dialogue with colleagues (Rhodes & Beneicke, 2002). These emphasise the relationships between novices and experienced teachers, or between two teachers, who interact and discuss issues to improve practice. According to Kennedy (2005), depending on the relationship, these models can either support a transmissive purpose where teachers are initiated into the “status quo” by more experienced colleagues or a transformative purpose where the “relationship provides a supportive, but challenging forum for both intellectual and affective interrogation of practice” (p. 243). Finally, CoP models evoke collaborative learning among teachers based more on interactions than on planned learning episodes.

Kennedy’s framework also emphasises the levels of teachers’ autonomy in their professional learning and illustrates how teachers develop capacity and autonomy as they progress from transmissive models to transformative models of CPD. The hierarchical framework demonstrates that the increased capacity for teachers’ professional autonomy is manifested through agency as teachers move towards transformative approaches. Kennedy (2014) argues that teacher autonomy is transformative only if it is translated into agency and enacted in a way that makes positive changes to practice.

Kennedy’s framework allows for a constructivist and SCT perspective on teacher learning and CPD. The framework aligns with SCT in its emphasis that CPD practices must foster interaction and collaboration among teacher-learners. Also, like mediation within the ZPD, Kennedy’s framework advocates individual teacher agency towards learning. CPD is thus useful if ‘expert packages’ are supplanted with more robust approaches that underscore human agency on the part of teachers to plan, initiate and direct their own learning needs for their professional growth and development.

Even though Kennedy’s framework highlights a range of CPD practices, the identified models or approaches are not mutually exclusive, though they may differ in their assumptions, expectations, and beliefs about teacher professional growth and development. Kennedy (2014), while calling for CPD with transformative purposes to

increase the capacity for teachers' autonomy did not suggest that all CPD must be transformative. This is because some knowledge and skills are better to be learned through the transmissive or malleable approaches of CPD. For instance, Guskey (2000) suggests that the diversity in CPD approaches makes it unlikely that a single approach will prove effective for all individuals and under all conditions. Hence, the appropriateness of each method will depend on the goals, the content and the context of implementation.

Borg (2015) identifies several other CPD forms that could be integrated into the range of CPD activities for teachers in Ghana:

- lesson study: where teachers engage in collaborative lesson planning, teaching and reflection
- reading groups for teachers: regular meetings to discuss materials relevant to their teaching
- reflection groups: where teachers share experiences of their teaching and to examine evidence from their lessons
- peer observations: where teachers work in pairs, visit one another's lessons and afterwards discuss them in quite a constructive manner without formal evaluations
- professional learning communities: through which groups of teachers meet regularly to examine critical issues in their schools and classrooms
- curriculum study groups: where teachers collaborate to examine in detail and further their understandings of a particular area of the curriculum they teach
- collaborative materials writing: where teachers work together to design units of material for particular groups of learners
- personal learning networks: where professional development is pursued through interactions via social media. (p. 3)

### **3.4.2 Desimone's Conceptual Framework of Effective CPD**

In their report for the Learning Policy Institute, Darling-Hammond et al. (2017) define effective CPD as "structured professional learning that results in changes to teacher knowledge and practices, and improvements in student learning outcomes" (p. 2). By implication, effective CPD leads to alterations in teachers' knowledge, skills, and

attitudes for improvement in classroom performance and enhancement of students' learning. There are two approaches to understanding what 'effective' means regarding CPD interventions: (1) the element or characteristics about the CPD; and (2) the transformative process of how CPD might lead to improved teacher and student learning (Calleja, 2018).

These two approaches are adequately captured in Desimone's (2009) framework, hence its appropriateness for the study. This framework also includes contextual factors that affect teachers' CPD practices. Despite the significance of Desimone's framework, scholars have cautioned about its particularity and applicability to specific situations and target groups as well as its practicality in leading to effective or successful professional development for teachers (Evans, 2014; Hill, Beisiegel, & Jacob, 2013; Opfer & Pedder, 2011). At this point it is also important to stress that my study does not aim to ascertain program effectiveness by evaluating teachers' CPD experiences; rather, Desimone's framework is used as a guide to explore teachers' familiarities with CPD and their perceptions of effective CPD practices.

In Desimone's (2009) framework, there are three major components: (1) a description of key characteristics of effective CPD; (2) an operational theory of how CPD works to influence teacher and student outcomes; and (3) contextual factors that influence CPD. According to Desimone (2009) the key features of CPD that are essential for increasing teacher knowledge and skills to improve practice and student achievements are content focus, active learning, coherence, duration, and collective participation. Content focus refers to what teachers learn through CPD (Garet et al., 2001), which must aim to increase teachers' subject matter and pedagogical content knowledge of how students learn that content. Desimone (2009) considers this feature to be the most significant of all CPD activities.

Active learning suggests the extent to which CPD provides opportunities for teachers to engage in the analysis of teaching and learning. It reflects a more constructivist view of learning where teachers are involved with the process of knowledge construction and reconstruction. This includes permitting teachers to observe expert teachers, or to be

observed developing and presenting lessons, coaching and mentoring, or interacting with other teachers to discuss steps for improving practice (Kang, Cha, & Ha, 2013).

Coherence also emphasises the extent to which CPD is consistent with teachers' prior knowledge and convictions, their other teacher learning opportunities, and school, district and state reform policies (Desimone, 2009; Kang et al., 2013); it is the connection between CPD and the reality of the classroom (Main & Pendergast, 2015). Duration means that CPD activities must be of sufficient period if they are to achieve the desired results. Duration in this regard is defined in terms of the number of contact hours of CPD and the length of time over which engagement in the activity spans (Hochberg & Desimone, 2010). Even though duration is an essential factor in ensuring the efficacy of CPD activities, Guskey (1999) advises that merely adding more time to professional development activities does not automatically equate to making them more effective, but rather it is the nature of what is done during the time that makes it useful. Lastly, collective participation denotes the extent to which multiple teachers from the same school participate in equal learning opportunities (Hochberg & Desimone, 2010). Collective participation emphasises collaborative learning with peer support that genuinely contributes to improvement in practice.

The second component of the framework - an operational theory of how CPD works to influence teacher and student outcomes - represents an interactive, non-recursive relationship between the critical features of CPD, teacher knowledge and beliefs, classroom practice and student outcomes. That is, effective CPD based on the characteristics listed above interact to influence its effects on teachers and students. Hence, effective CPD alters teachers' knowledge, skills, beliefs, and practices, which result in a change in teaching instruction and leads to improved student learning.

The final significant element in Desimone's (2009) framework is the context within which CPD is undertaken. The framework recognises context as a significant mediator and moderator. Desimone identifies individual student and teacher characteristics, along with policy conditions at the multiple levels - classroom, school and district - as contributing to the context in which CPD is undertaken. Figure 3.3 is a demonstration of Desimone's framework.

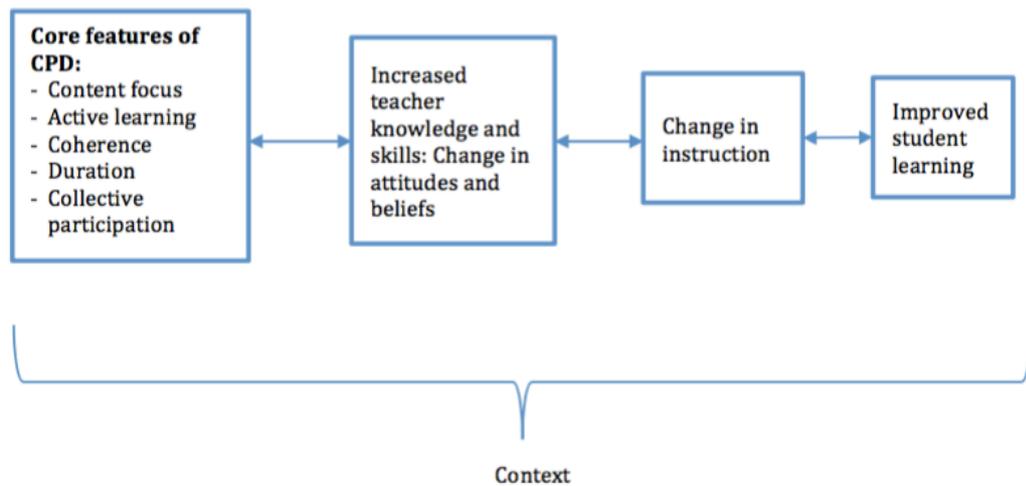


Figure 3.3: Desimone's Conceptual Framework

Source: Desimone (2009)

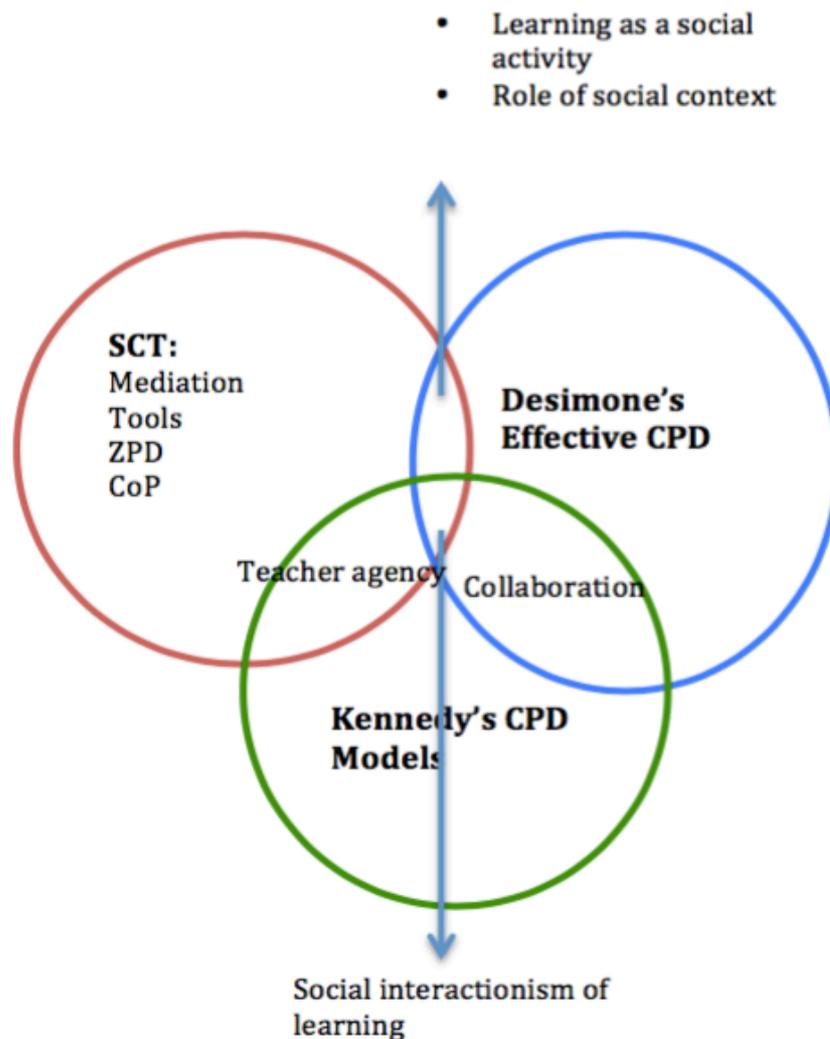
Given the complexities of CPD, Desimone's (2009) framework provides an ample basis within which CPD and teacher learning can be analysed and evaluated systematically. The framework allows for the examination of the effectiveness of CPD for teacher change and how this change influences teachers' teaching and students' achievement, all of which are necessary for the understanding of how CPD works (Wayne, Yoon, Zhu, Cronen, & Garet, 2008). Nevertheless, the framework is not without critics. Opfer and Pedder (2011), for instance, classify it as a process-product model in which the identified elements or characteristics do not allow for the prediction of teachers' learning, let alone students' learning. They therefore argue for the need to focus on more active consideration of a complete learning environment that enables professional learning. This flaw is surmounted in this study with the use of SCT, which enables further explorations of the processes of teacher learning. The study also proposes a new model to guide CPD practice that focuses on dynamic complex features and contexts that enable teachers' learning.

### 3.5 SCT, Kennedy's and Desimone's Frameworks

In this section I explore the use of Kennedy's and Desimone's frameworks as analytical tools that align with the conceptual tenets of SCT. The sociocultural belief that learning is the result of participation in social activity and interaction is emphasised in both

frameworks. Kennedy's framework presents a range of CPD approaches, while valuing the transformative CPD that occurs from collaboration and interactive learning activities. Similarly, Desimone's framework concurs with the sociocultural position that learning does not happen devoid of teachers' context of practice; hence, the need for consideration of contextual factors in understanding teachers' CPD.

Furthermore, teacher agency towards learning is emphasised in both SCT and Kennedy's framework. Sociocultural theorists argue for the human agency through self-regulated mediational means, while Kennedy (2014) argues for human agency in terms of teacher autonomy where teachers will be able to plan, initiate and direct their learning for their professional growth and development. Such interrelatedness of the theory and conceptual frames makes it possible for their integration and use in this current study. Using both enriches the analysis and interpretation of the research and hence, provides perspectives from which to understand the complexities of teacher CPD practice. The relationship between the theoretical and other conceptual frameworks of the study is represented in Figure 3.4.



*Figure 3.4: SCT, Desimone and Kennedy's Frameworks*

Source: Author's construct

I am also aware of the Westernised contexts of these frameworks, with their different social, cultural, economic and political histories from those of Ghana. Based on the argument that CPD is culturally specific and contextually different (Heba, Mansour, & Alshamrani, 2015), one would expect a more localised framework to explain the CPD situation in Ghana. However, these frameworks have been used and applied to studies within other African contexts (see Ball, 2016; Bergbauer & Van Staden, 2018; Venkat & Askew, 2018), and they provided more nuanced understandings from which to explore and examine the complexities in teacher CPD practices there. In adopting these frameworks to the Ghanaian context, while testing its suitability and applicability to

much larger audience, my study is positioned to advance further research into SCT generally and, Kennedy's (2005, 2014) and Desimone's (2009) frameworks.

### **3.6 Chapter Summary**

In this chapter I have explained the theoretical and conceptual frameworks that guide the conduct of this study. I used SCT as an overarching theory to help explain and understand the teacher learning processes in CPD. Also, Kennedy's and Desimone's conceptual frameworks provide complementary lenses to further discuss teacher CPD practices and experiences. Both the theory and conceptual frameworks are referred to during data analysis, interpretation and discussion, and function as anchors for this study.

The next chapter will review pertinent literature and empirical studies on teacher CPD activities.

## **CHAPTER 4 : TEACHER CONTINUING PROFESSIONAL DEVELOPMENT (CPD) IN PRACTICE**

### **4.1 Introduction**

In recent years there has been considerable research on teacher CPD, looking at the potential for CPD to improve not only teachers' practices but also students' learning. In this chapter, I examine relevant literature and empirical studies on teacher CPD to justify my study of CPD in Ghana and to contribute to the existing body of knowledge more generally. To cover adequately the phenomenon of study, literature is reviewed on broader themes that align with my research topic and focus. This chapter is thus structured as follows:

- Teachers as adult learners
- Teacher CPD practices
- Teacher professional development/learning needs
- Motivation to participate in CPD
- CPD contextual factors

### **4.2 Teachers as Adult Learners**

Sociocultural theory has also been widely applied to explain how children and students learn and there has been some criticism in its usage to explain teacher learning (Liu & Matthews, 2005). However, SCT is seen by many as a valid lens through which to examine adult learning (Alfred, 2002; Deveci, 2007; Lee, 2015; Shabani, 2016). This study is premised on the fact that basic schoolteachers are adult learners and must consistently be engaged in learning for their continuing professional development. Adult learning principles thus provide a rich perspective on teacher learning processes during CPD. In fact, Ganser (2000) argues for the need to take into account teachers as adult learners during CPD implementation to distinguish their learning from that of their students. This is useful to ensure effective CPD program designs that suit adults' needs and conditions for learning.

Knowles (1990) used the term andragogy to explain how adults learn, and he theorised six learning principles or assumptions that are significant to adults' participation in every learning situation. These andragogical assumptions imply that teachers be taught

differently from children during CPD program implementation. First, as adult learners, teachers have a self-concept that reflects their self-directedness and independence in learning. Due to this characteristic, adults are seen to develop a psychological need to be perceived by others as capable of taking responsibility for their learning and therefore will resist any imposition on their learning (Knowles, 1984). Such resistance is believed to occur when instructors use child-appropriate strategies with adult learners (Merriam & Bierema, 2014).

Second, adults possess an abundant accumulation of experiences that should form a starting point in any instruction with adults as learners (Merriam & Bierema, 2014). Teacher-learners bring on board prior knowledge of teaching practices, perspectives, and insights during CPD participation. Facilitators of teacher learning should draw upon such knowledge resources to foster their learning. When adult learners' experiences are ignored, they perceive it not just as a rejection of experiences but a rejection of themselves as learners (Knowles, Holton, & Swanson, 1998). Therefore, it is important that teachers' prior experiences are drawn upon and studied in CPD processes as resources.

The third assumption suggests that when adults find themselves in new roles and responsibilities or challenges, they will express a readiness to learn (Baumgartner, Caffarella, & Merriam, 2007). Fourth, adults are problem-oriented towards their learning; they are motivated to learn to deal with an issue or problem of immediate concern. According to Merriam and Bierema (2014), problem-centered learning is most preferred by adults because it is more engaging and lends itself to a direct application, which in turn solidifies the learning.

Fifth, adults' motivation for learning is intrinsically derived from their own volition, although there may be external factors that may push their participation in learning activities. There is the need to implement learning activities that increase and sustain teachers' drive for learning. Finally, adult learners need to know "how learning will be conducted, what learning will occur, and why learning is important" (Knowles et al., 1998, p.133). They need to know the potential usefulness of whatever knowledge or

skills are to be acquired to give their full commitment to it and participate in its acquisition.

It is imperative that such adult learning principles are recognised during the planning, designing, and implementing of CPD activities to ensure their effectiveness for teachers. Teachers must be empowered with some autonomy and self-directedness to diagnose their own learning needs and CPD goals, identify relevant tools for their learning, choose and implement appropriate strategies, and evaluate their learning (Hiemstra, 1994). When teachers discover they are capable of self-direction in their learning, they will experience an urge and motivation to continue the learning process (Terehoff, 2002). Teacher educators and facilitators must, therefore, encourage teachers to question, challenge and formulate their ideas, opinions, and conclusions during CPD implementation rather than didactically instructing and delivering information to them passively.

Also, as emphasised in the principles of problem-centeredness and adults needing to know, teachers' specific learning needs must drive the design of CPD program content. That is, CPD program content must be of significance to teachers' professional practice. This would foster teachers' self-direction as a way of achieving self-realisation, and recognition of their voice, dignity and high self-concept as determinant motivational factors for their participation as teacher learners (Ultanir, 2012), which are determinant motivational factors for their participation. CPD studies have successfully illustrated that programs that focus on the professional needs and practices of teachers have proven useful and effective (Desimone, 2009; Garet et al., 2001; Saunders, 2014).

Finally, positioning teachers as adult learners reinforce the significance of sociocultural theory (SCT) to the processes of teacher learning. With its demand for collaborative approaches in the operations of adult learning, andragogy emphasises a more constructivist approach to teacher learning (Deveci, 2007; Merriam, 2008). In such learning, facilitators must be seen to co-construct knowledge with teachers, give cognisance to teachers' self-concept and prior CPD experiences, and adapt teaching methods conducive to adult learning.

The current study holds these andragogical assumptions significant to basic schoolteachers' learning in CPD to emphasise that they contribute to effective design and implementation of CPD for teachers.

### **4.3 Overview of Empirical Studies on Teacher CPD Practices**

This section examines empirical studies on teacher CPD practices across different countries. The aim is to review the efficacy of current practices reported in the literature and to identify knowledge gaps that may also apply to the Ghanaian CPD practices and more significantly to provide insight into CPD practices to which this study will contribute new knowledge. It is also useful to stress that other empirical studies are also reported in different sections of this thesis where necessary. These studies were selected based on key words searches using Google scholar and other teacher education databases such as SCOPUS and EBSCO.

Tang and Choi (2009) investigated Hong Kong teachers' perspectives and experiences of CPD. Using five purposefully selected teachers, their study found the prevalence of award-bearing CPD where teachers took up a further course (or continuing education) as professional development (PD) tool for various reasons. There also existed school-based CPD where teachers worked with external agents (curriculum experts, teacher educators), and self-directed professional development activities in the form of mentoring and working with their senior teachers. Tang and Choi also found teacher agency to be minimal in teachers' academic pursuits and school-based CPD activities but was critical in teachers' self-directed CPD activities. While these findings enrich our understanding of the nature and possible effects of self-directed and externally driven CPD approaches on teachers' professional practice, the study's limited sample of five teachers makes a generalisation of these findings problematic.

In Singapore, Méndez et al. (2017) studied pre-school teachers' engagement in professional development activities. From a survey of 97 teachers, they report that teachers participated more in informal CPD activities that were collaborative and on an individual level than in formally organised CPD. There was also a positive relationship between participation and teachers' perceived usefulness of both formal and informal CPD activities. Informal CPD activities were thus found to be significant to teachers'

classroom practices and a strong predictor of teachers' self-efficacy beliefs. Although significant findings emerged from this study, the use of survey data alone tends to limit the range of possible situated perceptions of the teachers involved.

In a comparative study, Wermke (2011) used a survey to investigate the CPD activities of 418 teachers from Sweden and Germany. The study revealed similarities in existing CPD activities among teachers (participation in formal courses, conferences, and self-directed or voluntary CPD practices) in both countries. Teachers also identified other sources of learning, including colleague teachers, the Internet and relevant learning materials related to their work. Teachers perceived cooperation (working together with colleagues) as the most crucial aspect of their CPD practices in both countries but rated their preferred source of learning differently. There was also a significant difference in what influenced teachers' CPD practices within their schools. The National Curriculum Tests (NCTs) affected teachers CPD in Sweden but not Germany.

Wermke's (2011) study gives credence to calls for more comparative data on CPD studies (Bolam & McMahon, 2004) as it increases awareness about how CPD is influenced by the wider context and the settings within which it is practised. The differences in teachers' preferred sources of learning and the influences of different school systems on teachers' CPD within the two countries provide an understanding of why certain CPD models will be successful in one context and not another. Therefore it is imperative to investigate socio-cultural and historical factors when considering the adoption and implementation of alternative CPD practices (Heba et al., 2015).

In a quite different setting -Saudi Arabia- Mansour et al. (2014) conducted a similar study into science teachers' perspectives and experiences with CPD. Using a mixed method research approach, their study utilised multiple data sources of questionnaires from 304 teachers and interviews with nine teachers. The findings reveal the many ways teachers learn as part of their CPD, including participation in school-based CPD programs and initiation of their learning. Teachers reported that they learned best in CPD activities that were cooperative and enabled them to interact and dialogue with other teachers and to give presentations and receive feedback on their participation. In addition, this study identified factors related to teachers (motivation to change practice,

teacher workload, skills and abilities, extent of collaboration), school context (facilities, school administration, students and curriculum overload) and CPD programs (quality and frequency and the nature of the CPD program) that affected teachers' ability to implement CPD learning experiences in practice.

One significant feature of Mansour et al.'s (2014) study is its illustration of how teachers learn as part of their CPD, a focus that has been missing in other teacher CPD studies. The study also demonstrates how a wide range of contextual factors affect teachers' learning and enactment of their learning. Unlike Wermke's (2011) study, Mansour et al. (2014) combined both qualitative and quantitative data that provided rich information on teachers' CPD experiences.

In the African context, there is a lack of empirical evidence on teacher CPD activities. Nevertheless, attempts have been made to investigate in-service training activities of teachers and other areas of CPD. In Nigeria, Oluremi (2013) studied teacher CPD effectiveness and found teachers' engagement in rarely organised CPD activities such as in-service training, workshops, and seminars. There was also a wide utilisation of sandwich and distance learning programs as PD tools. This is supported by Garuba (2004) who found that the qualifications or award-bearing models of CPD were more predominant than any other models of CPD in Nigeria. In Senegal, Miyazaki (2016) investigated the impact of a CPD model 'Projet de Renforcement de l'Enseignement des Mathématiques, des Sciences et de la Technologie'<sup>4</sup> (PREMST) on teachers' pedagogical change. Using five teachers as case studies, Miyazaki found changes in teachers' teaching practices. Ironically such changes did not affect the learning of students. Miyazaki believes that this was because the model did not change how teachers think about teaching; therefore, pedagogical change must first build on the specific pedagogical skills of teachers. This finding contrasts the widely held view that teacher change from CPD participation leads to change in students learning (Clarke & Hollingsworth, 2002; Desimone, 2009; Geldenhuys & Oosthuizen, 2015).

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<sup>4</sup> Strengthening Mathematics, Science, and Technologies in Education Project.

Geldenhuys and Oosthuizen (2015) examined the challenges of teachers' involvement in CPD in South Africa. Using both questionnaires and interviews with 12 primary school teachers, they enumerated some challenges in teacher CPD practice that may also resonate in other African countries. The challenges identified include lack of school support for effective implementation of CPD activities, infrequent provision of CPD activities, lack of diversified practice, and teachers' reluctance to engage in CPD activities.

In Ghana, studies of teachers' CPD include teachers' participation in in-service training, exploration of perceptions on CPD, and the in-in-out policy of teacher training institutions as a way of developing teachers professionally. Atta and Mensah (2015) explored teachers' perspectives on available CPD activities for teachers in Ghana. Using both open- and closed-ended survey questionnaires, the study elicited responses from 32 senior high school teachers in the Sekyere East district in the Ashanti region of Ghana. The study found that most CPD was in the form of workshops, in-service training, conferences, and seminars. Although such CPD was seldom provided, teachers underscored its positive effects on their teaching practice and methodologies. Teachers also embraced distance learning and graduate courses as personal ways of developing themselves on the job. Likewise, other studies, Atta and Mensah's (2015) focus on one district in Ghana, makes it difficult to generalise the findings to all schoolteachers in the nation, especially considering the differences between rural and urban schools. The study's use of a survey for data collection is also a limitation.

In an evaluative study, Mensah and Jonathan (2016) investigated the impact of CPD on basic schoolteachers' classroom practices in Ghana. The study, which focused on 93 sampled Junior High School (JHS) teachers from the Kassena-Nankana West district in the Upper East region of Ghana, showed positive impacts of CPD on teachers' teaching practices. Teachers ascribed their improvement in knowledge and skills related to classroom practices, competency, and efficacy as the result of their participation in CPD activities. However, teachers failed to describe how teacher change had occurred, as the methods used in the study did not allow respondents to further detail their experiences on the changes that had occurred in their practice due to their participation in CPD activities.

Tamanja (2016) and Mereku (2014) reported on teachers' participation in sandwich and distance education programs, respectively, as alternative PD tools for Ghanaian teachers. Using teachers' experiences, their study found challenges with these award-bearing programs. For instance, Tamanja (2016) found that teachers' participation in sandwich programs lead to loss of 45 days of classroom instructional time in basic school, as well as effects on teachers' participation in other extra-curriculum activities within their schools. Mereku (2014), who examined teachers' experiences with distance education programs found that distance education programs fail to increase teachers' capacity to deliver better teaching in their classrooms. He, therefore, describes teachers' pursuit of further studies in Ghana as a manifestation of a 'diploma disease'.

It is apparent that the available literature on teacher CPD practices demonstrates both the conventional or traditional models and the democratic or socio-cultural models where teachers take an active role in their learning (Day & Sachs, 2004; Mansour et al., 2014). While traditional CPD practices continue to dominate professional development efforts, there are also calls for alternative approaches that foster teachers continuous learning. These studies justify the implementation and adoption of more effective CPD practices by looking at the conditions that help alternative practices thrive. Another critical characteristic of these studies is the utilisation of multiple approaches in studies on teacher CPD practices. However, what seems to be missing in the literature on teacher CPD activities is a demonstration of how teacher learning occurs as a result of participation. Although Mansour et al. (2014) and Tang and Choi (2009) attempt to illustrate how teachers learn in CPD and how it is implemented in classrooms, more research is needed to support an understanding of teacher learning as a result of CPD participation, which is a focus of my study.

There is also tremendous growth of literature documenting other aspects of teacher CPD. This ranges from descriptions of key effective characteristics to evaluating CPD outcomes and impacts on teacher change and students' performances, as well as analysis of CPD policy in particular contexts. Impact studies include King's (2014) "evaluating the impact of teacher professional development: an evidence-based framework"; Jones' (2018) "effect of PD on achievements of 4<sup>th</sup> grade students"; and Dennis and Hemmings' (2018) "influence of job-embedded CPD in supporting teacher

reading expertise”. As well, studies that report on effective CPD practices include: Saunders (2014) ; Darling-Hammond et al. (2017) ; Makopoulou (2018); and Main and Pendergast (2015).

While these studies contribute greatly to the theory and practice of teacher CPD, it may be argued that most do not provide evidence-based findings that can inform practice (Tatto, 2013; Goldacre, 2013). In her critique of CPD studies, Webster-Wright (2009) found that most research in CPD was atomistic, with a focus on specific elements of CPD that were unrelated to the experiences of learners. While a few studies have attempted to look holistically at teacher CPD (see Mansour et al., 2014; Tang & Choi, 2009), there is still the need for more research that considers the intricacies of teacher learners, their context, and their learning as a related whole. My study contributes to filling the gap in this knowledge by taking a holistic approach. Using the sociocultural theory, I examine CPD practices and experiences of basic schoolteachers in the Central region of Ghana, and I illustrate the relationships between teachers, their learning and the wider contexts that influence their CPD engagements.

#### **4.4 Teacher Agency and CPD Participation**

Agency is considered an essential aspect of teachers’ professionalism (Biesta & Tedder, 2006; Rogers & Wetzel, 2013). Hence, this notion is much debated in the literature with different theoretical framings. However, in this space, I focus only on explaining the phenomenon of teacher agency and how it is exercised with teachers’ learning.

Generally, agency refers to an individual’s ability to operate independently, notwithstanding possible constraints. It is the “capacity of actors to critically shape their responsiveness to problematic situations” (Emirbayer & Mische, 1998, p. 971) . These psychological perspectives of agency assume that the power and capability to act (based on agency) reside in the individual (Priestley, Edwards, Priestley, & Miller, 2012) however, other social factors affect actions based on agency. For this reason, I adopt a more socio-cultural notion of the concept of agency in this study.

From a socio-cultural perspective, an agency is considered relationally embedded across social circumstances, which are mediated by individuals and their interactions with the

tools, people and structures of a social setting (Kayi-Aydar, 2015; Lasky, 2005). Agency thus results from an interaction with an individual's capacity and disposition, and the affordances or resources of a particular socio-cultural context (Philpott & Oates, 2017) . According to Biesta and Tedder (2007), an agency is achieved from “an interplay of individuals efforts, available resources, and contextual and structural factors as they come together in particular and, in a sense, always unique situations” (p. 137). An implication is that actions based on agency go beyond human capabilities to include contingencies of the social environment within which such reactions occur (Priestley et al., 2012).

In teachers' practice, the notion of agency describes teachers' active efforts to make choices in intentional ways that make a significant difference to practice (Toom, Pyhäntö, & Rust, 2015). Teachers are placed in agentic positions when given the autonomy or control to make independent decisions regarding their professional practice as they adapt to constraints and challenges to improve what they do. In this regard, an agency is equated to teachers' autonomy to regulate their learning and development within the professional practice (Kennedy, 2014). According to Pyhäntö, Pietarinen, and Soini (2015), teachers demonstrate agency when they can use available resources (including persons and tools) at their disposal to construct and direct their learning as well those of others in different contexts and situations. While an agency may be regulated by the demands, opportunities and constraints that a situation in practice brings (Fullan, 2007; Vähäsantanen, Saarinen, & Eteläpelto, 2009), it also depends on teachers' zeal or commitment to change particular situations. For these reasons, a teacher's manifestation of and potential for an agency can change in different contexts and can be both positive and negative (Archer & Archer, 2000).

It is important to emphasise that teacher professional agency is more than just coping or adapting to challenges in professional situations. It can also involve well-justified opposition, starting initiatives for learning, and transforming dominant power relations within schools (Stronach, Corbin, McNamara, Stark, & Warne, 2002). The significance of agency is that it provides affordances for teachers to actively modify their teaching practices by adopting different and alternative strategies in the face of possible constraints and, regardless, create opportunities to foster their learning and

development. It enables creative teachers, reflective practitioners to counter their professional challenges (Priestley, Biesta, & Robinson, 2013; Pyhältö et al., 2015).

In the professional development literature, teacher agency has been widely studied in relation to teachers' enactment of professional learning (see Buxton et al., 2015; Reeves & I'Anson, 2014; Toom et al., 2015), teachers' professional identity (Hökkä, Eteläpelto, & Rasku-Puttonen, 2012) and enactment of professional learning communities, where professional learning communities are seen as affordances for the exercise of teacher agency (Philpott & Oates, 2017). Teacher agency has also been explained with the underlying philosophy of CPD practices, where calls are made for CPD models to support autonomy to transform professional practice (Kennedy, 2005, 2014; Sachs, 2007).

In this current study, teacher agency is used to explain basic schoolteachers' adaptation to contextual challenges and adoption of alternative CPD strategies to improve professional practice in Ghana. The study capitalises on teachers' demonstration of agency in constructing professional knowledge amidst contextual challenges to emphasise the need for legitimising other informal learning avenues as professional development for teachers in Ghana.

#### **4.5 Teacher Professional Development (PD)/Learning Needs**

This section highlights the various professional knowledges relevant to the teaching profession and argues that CPD should address the development and learning needs of participating teachers. The section also reviews some empirical studies to justify the call for CPD to be responsive to what teachers genuinely need to enhance program effectiveness.

Teaching is a highly complex activity that requires teachers' continuous learning and mastery of a wide range of knowledge and skills, and expertise in teaching depends on flexible access to highly organised systems of knowledge (Borko & Putnam, 1995; Mishra & Koehler, 2006; Shulman, 1987). ) Shulman (1987) describes the fundamental knowledges critical to the teaching profession as:

- Content/subject matter knowledge: This involves an understanding of the basic structure, concepts, facts, and principles of a subject discipline.
- General pedagogical knowledge: This includes broad principles and strategies of making subject matter understandable to others.
- Curriculum knowledge: The focus of this knowledge is on the particular grasp of the materials and programs that serve as tools for teachers to draw from.
- Pedagogical content knowledge (PCK): This is an amalgam of content and pedagogy that is uniquely the province of teachers, their own special form of professional understanding.
- Knowledge of educational contexts: This entails awareness of the workings of the groups or classroom, the governance, and financing of school districts to the character of communities and cultures.
- Knowledge of educational ends, purposes, and values and their philosophical and historical grounds. (p. 8)

While the knowledge bases of teachers have historically focused on content or pedagogical knowledge, in recent times the focus has shifted to pedagogical content knowledge (PCK) (Shulman, 1986). PCK is perceived to exist at the intersection of both content and pedagogy and goes beyond a simple consideration of the two concepts in isolation from one another (Mishra & Koehler, 2006). According to Shulman (1987) , PCK represents a blend of content and knowledge into an understanding of how particular topics, problems or issues are organised, represented and adapted to the diverse interests and abilities of learners and presented for instruction. To emphasise the significance of PCK to the teaching profession, Shulman (1986) suggested that teachers should be equipped with both knowledges (content and pedagogy) to employ “the aspects of content most germane to its teach-ability” (p. 9). Thus, teachers use PCK to deal with the content of teaching and to formulate and represent that content in ways that are comprehensible to others.

Even though teachers obtain strong foundational understandings of Schulman’s (1987) domain of knowledges during their teacher education programs, they also need to continually construct new ideas, skills, and practices throughout their professional careers (Darling-Hammond & Bransford, 2005). In this regard, participation in CPD

activities is needed. As argued in Section 4.3.2, CPD enriches and expands teachers' knowledge domains to support the learning of their students. Participation in CPD activities also empowers teachers to make complex decisions regarding practice and develop their abilities to identify and solve problems while enhancing their PCK to promote students learning (Shriki & Patkin, 2016). Ironically, teachers' participation in most CPD programs does not always guarantee their professional development because the contents of these programs do not necessarily satisfy the needs of the attending teachers (Guskey, 2002; Ríordáin, Paolucci, & O'Dwyer, 2017). This has increased the calls to ensure the effectiveness of CPD programs by having them be grounded in research and responsive to teachers' specific needs (Borko, 2004; Ríordáin et al., 2017).

One argument to support this call is that teachers have ongoing learning needs that develop at every stage in their professional trajectory. Huberman (1989), for instance, describes five stages or phases in teachers' professional lives. In the first phase (one to three years of practice), teachers go through 'reality shock' as they learn to cope with challenges of teaching; teachers' fixate on 'proper teaching' at the expense of students' learning (Shriki & Patkin, 2016) and participate in mentoring and peer observation more frequently than in any other phase (Richter, Kunter, Klusmann, Lüdtke, & Baumert, 2011). In the second phase (four to six years) teachers demonstrate a sense of commitment to teaching and focus on improving students' learning. In the third phase (seven to 18 years), teachers take up new challenges and try to change teaching methods while exploring new learning materials and other learning initiatives. Teachers in this category also involve themselves more in regularly scheduled collaboration and individual research activities, and they participate intensively in organised workshops relating to the subject and pedagogical teaching (Richter et al., 2011). Huberman (1989) explains that this stage is also typified by teachers' experiences of 'burn out' as crises cause them to contemplate continuing with their profession or quitting.

In the fourth stage (19 to 30 years), satisfied teachers find renewed energy for continuous development, whereas those who are disappointed exert little effort to improve teaching. Finally, in the fifth phase (31 to 40 years), teachers about to retire tend to be more conservative in their approaches to teaching. They adopt teaching methods they are comfortable with even though these could be ineffective for students'

learning. At this stage, teachers' commitment and career ambitions also reduce to more individualistic goals (Richter et al., 2011).

De Vries, Jansen, and van de Grift (2013) agree that at each phase of their career cycle, "teachers vary in their concerns and commitments, including their professional development behaviour and needs" (p. 118). Coldwell (2017) similarly observes that teachers' career stages influence their take up of different types of professional development and even the effectiveness of those activities. Each phase is characterised by its challenges and crises and requires different attitudes, knowledge, and competence. It is therefore vital that CPD activities are responsive to teachers' needs within each period of their professional cycle, and needs analyses are carried out to collect information and identify gaps in teachers' learning (Meissel, Parr, & Timperley, 2016). With their voices heard, teachers then become partners in designing CPD programs that motivate them to participate and address what they need to learn (Knowles et al., 1998; Timperley et al., 2007).

According to Khandehroo, Mukundan, and Alavi (2011) when teachers participate in CPD activities that are irrelevant to what they need, they see them as financial costs rather than opportunities for learning and improvement in practice. However, Shriki and Lavy (2012) caution that beyond responding to teachers' own perceived needs, it is also essential to identify ways to make teachers acknowledge other things that support their professional development.

Scholars have investigated the CPD needs of teachers across different contexts. While generally, PCK remains the focus of most teachers' professional development needs, there is also evidence of teachers' needing to cope with emerging challenges in education such as ICT integration in classrooms and teaching students with special learning needs. For instance, Shriki and Patkin (2016) found that teachers' main needs were associated with strengthening their didactical knowledge capability for dealing with emotional aspects of students' learning of mathematics, conducting mathematical discourse and becoming acquainted with learning materials. Teachers had less need in content areas of mathematics. Similarly, in a study of Australian teacher graduates, Crosswell and Beutel (2013) found they needed canonical skills for applying knowledge

to practice and behaviour management skills, which is a common concern for beginning teachers (Pietsch & Williamson, 2010).

In Zimbabwe, Mukeredzi (2016) investigated the CPD needs of rural secondary school teachers. Her study revealed that teachers needed development in the areas of pedagogy and PCK. Although teachers in her study expressed maximum confidence in their subject matter or content knowledge, they saw the need for CPD that would help them pedagogically to make comprehensible certain concepts and topics in their areas of teaching. This is consistent with the idea that disciplinary knowledge alone is insufficient if teachers lack the generic skills to apply and communicate that disciplinary knowledge effectively for the benefit of their students (Ball, 2000; Schulman, 1986; Yorke & Knight, 2009).

Studies have also shown that teachers' needs for professional development vary according to certain demographic factors. For example, novice teachers need different types of CPD activities than more experienced teachers (Kohl, 2005; Ríordáin, Paolucci, & O'Dwyer, 2017). In Shriki and Patkin's (2016) study, educational levels and age grouping affected the significance of the CPD activities, with the more experienced teachers perceiving the needs of the less experienced teachers as less significant their own. Similarly, in their study on English language CPD needs in Malaysia, Khandehroo et al. (2011) found a significant relationship between teacher characteristics (teaching experience, teaching school level and educational level) and their CPD needs.

In summary, teachers have different ongoing learning needs, and it is, therefore, the responsibility of CPD program designers and facilitators to identify those needs and help teachers adapt to the changes they have to generate in their teaching. These learning needs assessments must then serve as sources for the content of CPD programs if they are to be effective.

#### **4.6 Teacher Motivation to Participate in CPD**

In addition to the need for CPD to focus on teachers' learning needs, there are also calls to examine the role of motivation in teacher CPD activities (Schieb & Karabenick, 2011). This is because, in spite of its significance, the motivational component

underlying teacher CPD interventions is often overlooked during CPD implementation (Appova & Arbaugh, 2018; Heystek & Terhoven, 2015). For the current study, it is essential that such motivational factors be considered, especially those conditions that afford teachers' meaningful participation in CPD activities.

In the literature, motivation has been defined in diverse ways regarding the purposes and directions behind individual behaviours. For instance, Martin and Dowson (2009), define motivation as “a set of interrelated beliefs and emotions that influence and direct behaviour” (p. 328). It is also the tendency to behave in a purposive manner to achieve specific goals or needs (Kreitner, 1995; Lindner, 1998). Goetsch (2011) points out that to be motivated is to be “driven to do something” and “having a reason” to do it (p. 89). These definitions provide a more psychological basis for the reasons people behave in particular ways and suggest that people need a stimulus to energise them to engage or pursue a specific course of action. This is reflected in the underlying notions of motivational theories, which tend to suggest that human beings are hesitant and require some external stimulus to venture into activities and that motivation is internally stimulated (Bassett-Jones & Lloyd, 2005).

From these perspectives, motivation has been widely categorised into intrinsic and extrinsic forms. Intrinsic motivation refers to the inherent tendencies of people to seek out challenges, extend capacities and to explore and learn (Ryan & Deci, 2000), and the willingness to participate in an activity for its own sake (Porter, Bigley, & Steers, 2003). Extrinsic motivation refers to participating in an activity as a means to an end, for reasons other than the inherent satisfaction of the activity itself (Ryan & Deci, 2000).

In CPD, both types of motivation are vital in influencing teachers' decisions to engage and participate. Teachers make personal choices while considering one or two factors before investing in their participation. In CPD studies, teachers' intrinsic reasons for participation have been widely identified to include the willingness to learn for job satisfaction, recognition, or an increase in performance. In a recent study, Calleja (2018), identified teachers' intrinsic reasons for CPD engagements: the will to develop knowledge about teaching; beliefs about the significance of CPD activity; and the need to change classroom practice. Similarly, Avidov-Ungar (2016) found that teachers'

decisions to participate and engage in CPD activities were influenced by their beliefs about the significance of CPD, the desire to develop professionally, and personal responsibility to improve the learning of students. Appova and Arbaugh's (2018) study revealed that by observing students' struggle with the understanding of particular content, teachers became motivated to invest in their learning. Dissatisfaction with their teaching and a high sense of responsibility for their students' learning encouraged them to engage in CPD to become better teachers.

In South Africa, Heystek and Terhoven's (2015) study of the motivation for teacher development found that participation in CPD activities helped teachers gain more knowledge in subject matter and pedagogy, which boosted their self-confidence. These teachers said that involvement in CPD empowered them to manage their classes and improve their students' learning. In summary, the intrinsic motivation underlying teachers' participation and engagement in CPD activities come from their need for professional growth, care about their students' learning, and mastery in demonstrating teacher competencies.

In contrast, extrinsic factors emphasise teachers' participation in CPD based on certain separable consequences (Deci, Vallerand, Pelletier, & Ryan, 1991). One major extrinsic reason identified is the mandatory nature of some CPD activities, where teachers' participation is a policy requirement and a fulfilment of some accountability in practice (Appova & Arbaugh, 2018; McMillan, McConnell, & O'Sullivan, 2016; Mok, 2001). In this instance, students' measurable achievements, school environments and political contexts are critical factors that influence teachers' motivation to participate in CPD (Hardy & Rönnerman, 2011; Heystek & Terhoven, 2015). However, teachers' participation in this type of CPD is ineffective in most instances because the emphasis is placed on quantity rather than the quality of teachers' learning (Appova & Arbaugh, 2018).

Teachers' extrinsic reasons for participation in CPD have also been attributed to the need and desire to progress professionally, with its associated salary increment. Mok (2001) found that motivation for promotion exerted a stronger impact on teachers' participation in CPD than intrinsic motivators. Other extrinsic factors documented in

CPD studies include: benefits, job security, salary increment, collaborative partnerships, career advancement, and professional interpersonal relationships (Appova & Arbaugh, 2018; Heystek & Terhoven, 2015; McMillan et al., 2016). Also, teachers' non-participation in CPD activities has been reported as due to factors such as lack of funding, time constraints, lack of school and collegial support, and job stress (Kelani & Khourey-Bowers, 2012; Kwakman, 2003).

To conclude, teachers have fluid identities, and at various points in their careers, they will have different needs, motivations, and aspirations regarding professional development (Day, 2004). Depending on the circumstances, they may invest in CPD for intrinsic reasons or extrinsic reasons, or both at the same time.

#### **4.6.1 Teacher Investment in CPD**

One fundamental flaw in teacher motivation studies is that teachers' reasons are examined more psychologically, thereby neglecting the influences of social factors directing involvement in CPD activities. The psychological conception of motivation views teachers as having unitary or fixed identities and specific character traits to enable their participation in CPD activities (Darvin & Norton, 2015). However, it is widely known that teachers have multiple identities that affect their desires and aspirations at different points in their professional careers (Day, 2004). Hence, motivation is inadequate for not only explaining the variations in teachers' participation in CPD activities but also for capturing adequately the nuances of other significant sociocultural factors that shape teachers' decisions for engaging with it. For this reason, in this study, I apply Norton's (1995) theorisation of an investment to enrich the role of motivation in teacher CPD participation.

The notion of investment is considered a sociological complement to the psychological construct of motivation (Dörnyei & Ushioda, 2009). Investment holds that given a learning activity, learners will participate in order to acquire a wider range of resources (both material and symbolic), which will in turn increase the value of their cultural

capital<sup>5</sup> and social power (Darvin & Norton, 2015; Peirce, 1995). Learners' expectations of investment in participation are to have good returns that give them access to hitherto unattainable resources; investment then becomes possible if expected returns are commensurate with efforts expended on such participation (Peirce, 1995).

In effect, the notion of investment emphasises the role of “human agency [on the part of teachers] and identity in engaging with the task at hand [participation in CPD activities], in accumulating economic and symbolic capital, in having stakes in the endeavour, and in preserving in that endeavour” (Kramsch, 2013, p. 195). That is to say, teachers' decisions for participation are informed by their agency (capacity to act), the nature of their identity (as one with multiple desires), as well as motives for their learning (whether intrinsic or extrinsic) within much broader social contexts. In this regard, the influences on teachers' decisions for engagement in CPD activities transcend the psychological notion of motivation to include the interplay of much more complex factors found in teachers' professional contexts. These will be demonstrated in Chapter 10 with the analysis of the participating teachers' own experiences.

#### **4.7 CPD Contextual Factors**

This section reviews the literature and empirical studies on the contextual factors that affect teacher CPD practice. As explained in Section 3.2.1, teacher CPD is an ongoing learning process and a situated endeavour shaped by the contexts within which it emerges. Thus, there is a dialectical relationship between teachers' learning and development and the larger social-political and economic contexts of teachers' professional practice (Meaney, Lange, & Valero, 2010). These contexts produce complex factors that affect the enactment of teachers' learning and their CPD. Consequently, it has been suggested that CPD studies investigate such complexities (Borko, 2004; Hardy, 2012; Joyce & Showers, 2002). For the current research, the

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<sup>5</sup> Cultural capital refers to the knowledge and modes of thoughts that characterise different classes and groups in relation to specific sets of social forms (Bourdieu & Passeron, 1977 cited in Norton, 1995).

examinations into CPD contextual factors provide insights into the possible challenges and conditions that will energise the active participation, learning, and development of teachers in Ghana. These will also inform policy recommendations for effective practice.

Many complex factors contribute to the context in which CPD is undertaken. These may be broadly categorised into policy, school, wider community settings, and teacher characteristics (Desimone, 2009; Timperley, 2013). For this review, I re-classify these factors into two factors: macro level and micro level.

#### **4.7.1 Macro Level Factors**

Macro-level factors are large system-wide factors affecting teacher CPD practices. They include educational system policies, school-wide factors, and supportiveness of the school community. Specific factors to be examined in this study are the educational system/school policy, school culture, and leadership. These factors can affect teacher CPD either positively or negatively.

##### ***Educational/School Policy***

Policies provide a much broader framework for the conduct and implementation of teacher CPD activities. Policies are enacted at a higher institutional or government level and implemented through schools with teachers as agents (Cogill, 2008). In most developed countries, CPD policy enactments inform the conduct, implementation, and participation of teachers in CPD activities. For instance, in the United States, the UK, and Germany, educational policies oblige teachers to engage in CPD activities with stipulated standards to guide practice (De Vries et al., 2013; Jaquith, Mindich, Wei, & Darling-Hammond, 2010). Similarly, in Australia, the 'Quality Teacher Program' includes other programs (such as Australian Government Teacher Quality Program, Australian Professional Standard of Teachers) to provide standards for the conduct and implementation of CPD for teachers. In these instances, participation in CPD activities is a requirement for the renewal of professional teacher licenses.

In South Africa, the adoption in 2007 of the 'National Policy Framework for Teacher Education and Development' has provided standards for teacher participation in CPD

activities and allowed them to earn CPD points for the renewal of their licences (Geldenhuys & Oosthuizen, 2015; Steyn, 2010). In Senegal, the introduction of ‘*Projet de Renforcement de l’Enseignement des Mathématiques, des Sciences et de la Technologie*’ (PREMST) as a CPD model has given some impetus to teachers’ participation and involvement in CPD activities (Miyazaki, 2016). With this policy, Mathematics and Science teachers are required to participate in school and cluster-based, in-service training activities for four hours every month.

It is important to reiterate that although CPD policy enactments influence practices within schools (Hardy, 2012), teachers are seen as the final implementers of new policies. For this reason, it is argued that CPD policy introduction and initiatives take into account how a new policy would fit within the current modes of teaching and learning as well as the processes that a school may adopt to implement policy change (Cogill, 2008). This is because, teachers cannot just be made to implement change and teach differently (Borko & Putnam, 1995). They also need to perceive policy as relevant to their professional practice to receive maximum support for implementation; there are also reports of policy failures because teachers’ perspectives were ignored (Borko, 2004).

Unlike some African countries, Ghana has yet to adopt and implement a national policy framework to guide teacher CPD activities. As was explained in Chapter 2, Ghana is about to implement a new teacher education reform that targets teacher professional development activities. This current study aims to provide evidence-based accounts from Ghanaian teachers’ CPD experiences and make practical recommendations to inform policy and effective design, conduct, and implementation of CPD for Ghanaian teachers.

### ***School Culture***

The concept of school culture has been used, often synonymously, with other concepts such as “climate”, “ethos” and “saga” (Deal, 1993). A school’s culture includes the beliefs, ethos, norms, and traditions that influence teachers’ behaviours within the school. Day (1999) explains school culture as “how values, beliefs, prejudices, and behaviour are played out within the micro-political processes of school life” (p.78).

Similarly, Avalos (2011) explains school culture as including the operations of the administrative and organisational structures and how they are played out to facilitate or constrict teacher learning in the school setting.

Such explanations imply that school cultures can support teacher CPD practice either positively or negatively. A positive school culture sets out opportunities for teachers to work collaboratively so that they can learn from each other, while a negative school culture inhibits teachers' growth in the workplace as well as constricting better conditions to facilitate learning (Bolam & McMahon, 2004). Different forms of school culture have different implications for teachers' work and professional development opportunities, including collaboration and collegiality.

Research suggests collaboration is critical in teacher professional development and school improvements (Levine & Marcus, 2010; Main & Pendergast, 2015; Riveros, Newton, & Burgess, 2012). Collaboration refers to working together with colleagues on a sustained basis (Cogill, 2008), involving greater sharing and interaction beyond mere cooperation (Forte & Flores, 2014). In CPD, collaboration takes different forms, including decision-making, team teaching, professional dialogue, research, and peer coaching and mentoring (Hargreaves, 1998; Little, 1990). Within schools, collaborative cultures foster and build qualities of openness, trust, and support among teachers (Forte & Flores, 2014). Collaborative cultures also allow teachers to gain new ideas by encouraging reflection on their professional practices and fostering authentic CPD. This has the potential of transforming teaching practice in ways that bring about improvements in school development and students learning (Riveros et al., 2012). Thus, it is necessary that appropriate collaborative cultures are created and nurtured in schools.

Related to collaborative culture is collegiality. While both concepts are often used interchangeably, collegiality is a practice that involves teachers working professionally together and supporting their colleagues socially and emotionally (Jarzabkowski, 2003). Collegial networks in schools have been observed to help teachers' learning activities, especially when supporting novice teachers to adapt and be confident in their teaching practices (Little, 1990). Day (1999) identifies contrived collegiality as an administrative

tool used by school leaders to foster collaboration among teachers in a bid to complete some specific assigned tasks. He uses the term ‘balkanisation’ to refer to how certain groups of teachers become loyal to a particular group at the expense of the larger school and learning is promoted among group members only. In promoting a collegial environment in schools, teacher colleagues also have roles to play by developing cordial interpersonal relationships that hone learning and development.

Studies have found that a supportive school culture positively influences teachers’ CPD activities (Fortes & Flores, 2013; McLaughlin & Talbert, 2006). If a culture is not hospitable to teachers’ learning and development, students’ achievements can suffer (Watson, 2001). Schools must, therefore, aim to create shared understandings, visions, and shared values among teachers for the building of supportive school cultures and ongoing teacher professional development.

### ***School Leadership***

In creating a supportive school culture, the role of school leadership cannot be overemphasised. School leaders or principals set the tone by creating a positive or negative school culture (McLaughlin & Talbert, 2006). Also, principals influence teachers’ participation in CPD activities both within and outside their schools. For this reason, school leaders need to have clear aims for promoting learning and be committed to the learning of their teachers. In their review of the principal’s critical role in teacher professional development, Payne and Wolfson (2000) suggest the role of a principal to

- be a role model for continual learning and motivates and inspires others to pursue learning opportunities and further their knowledge
- be a leader of a learning organisation, setting high expectations including the expectation of lifelong learning for everyone in the building
- motivate and support development by assisting teachers and removing the barriers and obstacles that frequently inhibit professional growth and prevent positive change
- provide resources essential to teachers’ growth
- facilitate teachers’ professional development activities.

The importance of these roles has been reinforced in other studies, for instance, Holland (2009) found that school principals contributed to the learning and growth of novice teachers, were aware of teachers' learning needs, and created structures to support novice teachers in addressing those learning needs. This included the assignment of mentors to novice teachers and organisation of staff development programs to ensure their growth and development. Similarly, Bredeson (2000) found that principals impacted on teacher learning by their acts as instructional leaders, including the creation of a learning environment within schools; involvement in the design, delivery, and content of CPD; and in their assessment of PD outcomes.

In South Africa, Geldenhuys and Oosthuizen's (2015) investigation into the challenges influencing teacher CPD involvement revealed that school management and departments could support individual teachers to increase their professional confidence by committing to the provision of effective PD activities for their teachers. School leadership can also encourage and motivate teachers to participate in CPD activities. This corroborates the claim of Schulz and Steyn (2003) that the need for support, assistance, and encouragement from school leaders remains significant to teachers' involvement in CPD activities. In the South African context, Heystek and Terhoven's (2015) study on teacher motivation for professional development identified that school leaders' acknowledgment of teachers' work in the form of a mere 'thank you' motivated teachers to participate in development activities. It was also observed that how principals informed teachers about CPD activities influenced their motivation to participate. In other words, leadership styles of school principals that are characterised by cooperation and democracy increase teacher motivation to participate in CPD activities.

In this connection, Smylie (1995) avers that school leaders must be able to share power and authority. Shared power demands participation in decision-making and recognition for teachers' talents and strengths, both of which can optimise the environment in which teachers' learning can grow. While this seems almost impossible in schools, it is important that school leaders adopt more democratic leadership styles in managing teachers and help to create environments that foster teachers' growth and development.

#### **4.7.2 Micro Level Factors**

Micro-level factors are internal factors that affect teachers' participation and engagement in CPD activities. These include teachers' beliefs and attitudes towards CPD activities, teachers' characteristics, time factors, and finance. Although these factors are explained at the personal level of teachers, they are heavily influenced by the wider social contexts of teachers' professional practice.

##### ***Teacher Beliefs and Attitudes towards CPD***

A belief is “a proposition which may be consciously or unconsciously held, is evaluative in that it is accepted as true by the individual and is therefore imbued with emotive commitment” (Borg, 2001, p. 186). Relating this to teachers, Kelchterman 2008 cited in De Vries, van de Grift, and Jansen (2014) suggests that teachers' beliefs about learning and teaching are what teachers develop over time in their pre-service and later years as teachers and now hold to be true. Teachers' beliefs about their learning have been observed to affect their decisions and engagements in CPD activities (De Vries et al., 2013, 2014) strongly, and their attitudes towards it (McLaughlin & Talbert, 2006; Steyn, 2010).

In their study of teachers' beliefs and continuing professional development, De Vries et al. (2014) found that, teachers' beliefs about learning and teaching affected participation in CPD activities. With beliefs about teaching and learning categorised as student-oriented and subject matter oriented, their study found a significant relationship between teachers' student-oriented beliefs and participation in CPD activities. That is, the more teachers were student-oriented, the more they participated in CPD activities. However, there was no significant relationship between teachers' subject matter beliefs and participation in CPD activities. Such beliefs did not influence teachers CPD activities either positively or negatively.

Aside from beliefs, teacher attitude is also identified as significant in producing variations in CPD participation. Mok (2001) defines two dimensions of attitudes as significant: attitudes towards involvement in CPD, and attitudes towards professional practice. These attitudes invariably affect teachers' commitment to participate in CPD activities. For instance, Kwakman's (2003) study on factors affecting teacher

participation in CPD in the Netherlands highlighted teachers' professional attitudes as a significant personal factor. Geldenhuys and Oosthuizen (2015) also showed that teachers' negative attitudes affected participation, as some teachers felt reluctant to engage in CPD activities. As well, in his Ph.D. study on the attitudes of veteran teachers towards professional development, Ruberto (2003) found no differences between veteran teachers and novice teachers in their attitudes towards CPD activities, with teachers maintaining positive attitudes about CPD activities when those activities were useful and related to their classroom teaching.

In contrast, with a focus on teachers' participation in continuing professional education (CPE), Mok (2001) found teachers' perceptions of the value of CPE and its necessity for practice, do not significantly relate to participation. Nevertheless, it is vital that CPD interventions with teachers combine reflections on beliefs about teaching and learning in addition to building positive attitudes among the teachers towards the significance of CPD activities to their teaching practice.

### ***Time Factor***

According to Merriam and Caffarella (1991), time and engagement are two common deterrents to adults' participation in learning activities. Time is considered essential for both determining teacher participation in CPD activities and ensuring the efficacy of CPD activities. Teachers' time factors relate to work-time and personal and family time. Work-time refers to the responsibilities of teaching and having to do daily tasks in the classroom. However, it has been observed that these responsibilities increase beyond just the time spent in the classroom to include other administrative tasks. Heavy teacher workloads thus take away much of teachers' free time as well as a reduction in their intentions to participate in CPD activities (Mok, 2001). Studies have also demonstrated how teacher workloads affect participation in CPD activities (Collinson & Cook, 2001; Kwakman, 2003; Postholm, 2011). In addition to the limited time caused by teacher workloads, teachers' time to engage meaningfully in CPD activities is also constrained by family responsibilities and other social and political commitments.

Studies have suggested strategies for providing adequate time for teachers to participate in CPD activities. Ozer (2004) for instance, proposed that CPD activities be integrated

into teachers' working schedules at school. Others have suggested extending the school day or year, taking out some time from existing school schedules and buying and restructuring time (Corcoran, 1995; Raywid, 1993).

### ***Finance***

In addition to the teacher time factor, finance or funding is also a determining factor for teacher participation in CPD activities. Funding affects not only teacher participation but also the design and implementation of their CPD activities (Birman et al., 2000; Corcoran, 1995; Postholm, 2011). At the school level, funding is required for frequent organisation and provision of CPD activities in addition to funding teachers' engagements in other external professional development activities. Similarly, with the high cost of most external CPD activities (for instance, teacher continuing education), coupled with teachers' financial commitment towards family responsibilities, teachers are handicapped by having to fund their CPD activities, hence their inability to participate.

### **4.8 Chapter Summary**

The purpose of this chapter was to review the literature and empirical studies on the phenomenon I seek to investigate for the study – CPD practices and experiences of teachers in Ghana. The chapter explained the position of teachers in this study as adult learners, the significance of teachers learning needs for their development, and the diverse reasons teachers have for their participation in CPD activities. Also, the chapter identified the factors likely to affect teacher CPD practices and enhances our understanding of the complexities involved.

The next chapter will outline the methodological processes that were followed to conduct this study.

## **CHAPTER 5 : RESEARCH METHODOLOGY**

### **5.1 Introduction**

In this chapter, I explain the methods, approaches and the procedures employed to gather and analyse data for this study. The chapter commences with a discussion about the research paradigm, the study's design and the rationale for the choice of combining both quantitative and qualitative approaches in this single study. This is followed by a description of the research procedures, first within the quantitative phase of the study and later the qualitative phase of the study. Issues of reliability and validity, ethical considerations and the limitations of the study are also discussed in this chapter. The methods, design and the procedures described in this chapter were guided by study's research questions:

1. What professional development/learning needs do basic schoolteachers have?
2. What are the CPD opportunities available for basic schoolteachers in Ghana?
3. What are the participation experiences of basic schoolteachers in CPD activities?
4. What factors motivate basic schoolteachers' decisions to participate in CPD activities?
5. How do contextual factors affect basic schoolteachers' CPD practice?

### **5.2 Research Paradigm**

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. I shall discuss first the constructivist worldview as a significant paradigm underpinning this study.

#### **5.2.1 Constructivist Paradigm**

The constructivist paradigm or worldview emerged from the ideas of Mannheim and the works of Berger and Luckman's (1967) *The Social Construction of Reality* and Lincoln

and Guba's (1985) *Naturalistic Inquiry*. The primary assumption underlying this paradigm is that knowledge is socially constructed and that researchers should attempt to understand the complex world of lived experiences from those who lived it (Schwandt, 2000). That is, human beings do not find or discover knowledge but rather construct or make knowledge out of their lived experiences.

By this postulation, researchers within the constructivist paradigm reject the possibility of an objective reality that can be known but rather emphasise that the researchers' goal is to understand the various social constructions of meaning and knowledge of their research participants (Creswell, 2013; Johnson & Onwuegbuzie, 2004). Also, this position underscores the role of researchers and participants in an interactive process influencing each other in a research process (Lincoln & Guba, 2000) and recognises the mutual creation of knowledge between the researcher and participants.

Within this paradigm the social context or setting of participants is of equal importance to researchers, as researchers are required to visit participants in their various settings to gather information personally (Creswell, 2013). Therefore, every researcher is to rely as much as possible on the participants' views of the situation being studied and a researcher must charge himself or herself with seeking the complexity of views from participants rather than narrowing meanings into a few categories (Creswell, 2013; Schwandt, 2000).

While the constructivist worldview is typical of qualitative research, researchers within this purview can equally rely on quantitative data collection methods to make meanings of the phenomenon under study (Cohen, Manion & Morrison, 2000; Mackenzie & Knipe, 2006). That is, in a qualitative study, quantitative data may be utilised in a way that supports or expands upon the qualitative data and effectively deepens the description.

I chose to conduct my study within the constructivist paradigm because its central tenets largely support the theoretical underpinnings of my study. Both the sociocultural theory (SCT) and the constructivist paradigm underscore social interaction in the construction of knowledge and recognise the influences of larger socio-cultural context affecting

human learning. Thus, by subsuming the study within these positions, I can explore and understand in-depth the phenomenon of teacher learning within the milieu of teachers' practice as well as contextual factors that influence teacher professional learning and development. This paradigm therefore enriches the analysis and interpretation of data within the broader theoretical position (SCT) of my study. Also, the symbolic role of the researcher as one of immersion during the research process also made the constructivist paradigm worthy of consideration as I undertook this study as a participant observer who brought her knowledge of the research context to the study. However, I acknowledge and understand the need to be an independent researcher, hence my role did not affect the trustworthiness of the research in anyway (see Section 5.5.7).

Constructivists like sociocultural researchers support the use of multiple research approaches. John-Steiner and Mahn (1996) argue that rather than seeing a dichotomy between quantitative and qualitative researches, in sociocultural research, approaches are chosen that emphasises process, development and multiple ways in which phenomenon can be understood. Such use of multiple research approaches affords better interpretations of meanings that are generated from the field (Mertens, 2014), hence its applicability to my study.

### **5.3 Research Design**

I adopted and implemented the mixed method research design in this study. The mixed method research design argues for the integration of both qualitative and quantitative approaches in a single study. From a mixed method perspective, the view that quantitative and qualitative approaches cannot be merged is seen as a threat to the advancement of sciences (Onwuegbuzie & Leech, 2005). Consequently, today mixed method research is widely acknowledged and used by social science researchers.

A mixed method research involves “the collection or analysis of both quantitative and/or qualitative data in a single study in which the data are collected concurrently or sequentially, are given a priority, and involve the integration of the data at one or more stages in the process of research” (Creswell, Plano Clark, Gutmann, & Hanson, 2003, p. 165). By a combination of two different orientations, a mixed method researcher can

generate complementary databases that include information that has both depth and breadth regarding the phenomenon under study (Teddlie & Yu, 2007).

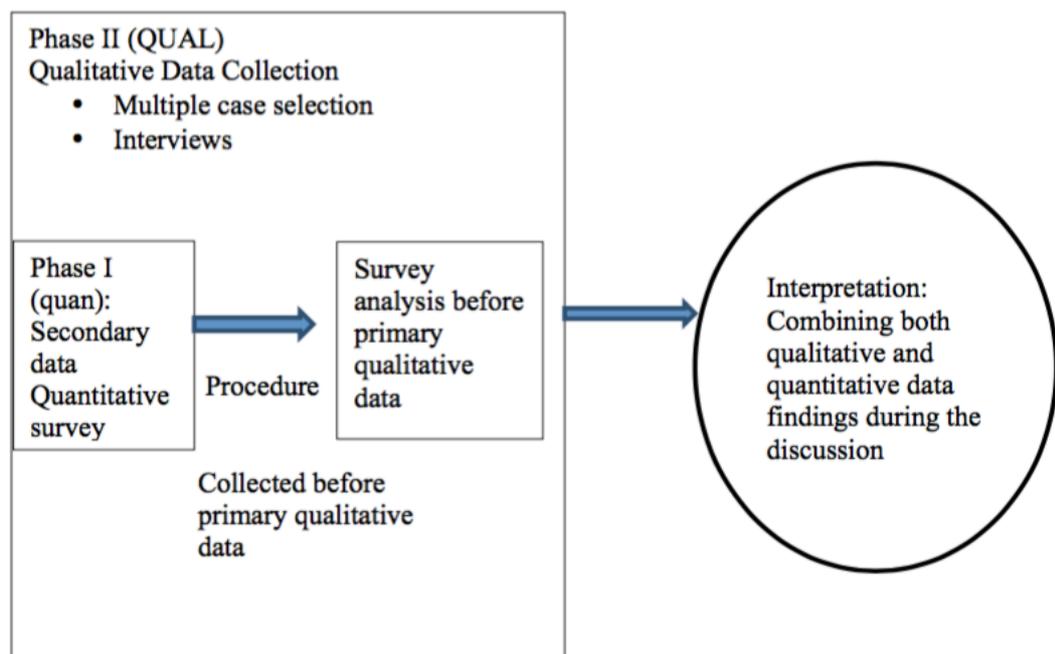
Mixed method designs are used for the purposes of triangulation (when a researcher seeks convergence, corroboration, and a correspondence of results from the different methods); complementarity (when seeking elaboration, illustration, enhancement and clarification of the results from one method with the findings from the other method); development (where the researcher uses the results from one method to help develop or inform the use of the other method); initiation (when the researcher is interested in discovering paradoxes, contradictions that lead to the research questions being reframed) and expansion (when seeking to extend the breadth and range of inquiry by using different methods for different inquiry components) (Molina-Azori, 2011).

The stated advantages associated with the use of mixed methods were the reasons that informed my decision to use this research design. I therefore used the mixed method design to serve the purposes of complementarity, development and expansion in this study. In so doing, the quantitative data set was used to enhance the development of the qualitative data and to interrogate further, findings in the survey during the qualitative phase in order to present a more holistic view about the phenomenon being studied. The quantitative data set was also used to extend the breadth of the investigation to a larger teacher population as a way of projecting what is happening in terms of teachers' professional development activities in Ghana.

### **5.3.1 The Embedded/Nested Mixed Method Design**

I employed the embedded or nested design of the mixed method research approach in this study. This design involves the collection and analysis of both quantitative and qualitative data within a traditional quantitative or qualitative design (Greene, 2007). That is, a researcher may add a qualitative strand within a quantitative design or add a quantitative strand within a qualitative design (Creswell, Klassen, Plano Clark, & Smith, 2011). Within this approach, the collection and analysis of the secondary data may occur before, during and after the implementation of the data collection and analysis procedures associated with the major traditional design (Creswell, 2013; Johnson & Onwuegbuzie, 2004).

For this study, I used the nested quantitative (quan) design within a much broader qualitative (QUAL) data framework. Quantitative data was used as a supplementary strand to map out the situation of teachers' CPD activities since very little is known about the phenomenon within the Ghanaian context. Therefore, the quantitative survey was used to provide a much broader picture of teachers' CPD undertakings in the Central region of Ghana by collecting data from a large sample of teachers. This design was also used to enhance the overall development of the qualitative research and aided in using the results from the quantitative data to inform, plan and recruit sample for the qualitative data. In all, this design enabled me to gain a much broader perspective on the phenomenon being investigated as opposed to using a predominant method alone. Figure 5.1 is a diagrammatic representation of the embedded design as used in the study.



*Figure 5.1: Embedded Mixed Method Design*

Source: Adapted from Creswell (2013)

#### **5.4 Phase 1: Quantitative Methods and Approaches**

I conducted a survey in the first stage, which was followed by the collection of qualitative data. The survey informed the sample selection for the qualitative data and

helped shape the design of the research instruments for the qualitative study. In this section, I describe the methods and the procedures used in the conduct of the quantitative study.

#### **5.4.1 Research Design**

The first phase involved the collection of quantitative data using a cross-sectional survey design. The cross-sectional survey allowed data to be gathered from a large pool of teacher respondents at a particular point in time (Fraenkel & Wallen, 2006). The survey design was also used to identify standards against which conditions can be compared and to determine some relationships that existed between some variables within the study (Cohen et al., 2000). Also, the survey design was adopted due to its economical and efficient abilities by allowing data to be collected from the sample selected to represent the population at a point in time. The unit of analysis for the survey were individual respondents sampled from the population of teachers from 12 districts in the Central region of Ghana.

As a secondary data to a major qualitative study, the survey was conducted before the qualitative data. According to Creswell et al. (2003), a researcher decides the procedure (that is whether secondary data is to be collected before, after or some combination) based on the purpose of the supplementary data within the larger design. In this study, the use of a secondary quantitative data was to map out the terrain of teacher CPD in Ghana. Furthermore, it was to allow for the planning and development of the major qualitative data collection processes. Hence, the survey was conducted before the qualitative study. Sections of the survey questions were scrutinised and analysed, which aided in the planning and collection of the qualitative data for the second phase of the study. The survey responses also helped in reframing and shaping some of the interview questions in order to elicit more detailed responses from the participants in the qualitative study.

#### **5.4.2 Population**

The research cohort comprised of basic schoolteachers in public schools in the Central region of Ghana. However, the accessible population was teachers who were teaching only at the Junior High Schools (JHSs) in public schools within the 12 selected districts.

### 5.4.3 Sample and Sampling Procedures

The sample for the cross-sectional survey was 522 teachers. To select individual teacher respondents, the following sampling procedures were followed.

Multiple probability sampling techniques (Teddlie & Yu, 2007) or multi-stage sampling strategies (Creswell, 2013) were used in the selection of teacher respondents. This sampling strategy involves the use of multiple quantitative sampling techniques in the same study at different stages. The strategy has the merit of excluding more and more units at each stage of the sampling process, thereby making the final sample more concise and less scattered than in ordinary one-stage sampling (Kumekpor, 2002). I used this strategy owing to the relatively large nature of the region under consideration and also due to the difficulty in securing a concise sampling frame for teachers in the region.

At the first stage of the sampling process, the 20 districts making up the Central region of Ghana were grouped using cluster sampling. Cluster sampling is used when the sampling unit is not an individual but a group or cluster, which occurs naturally in the population (Teddlie & Yu, 2007). Within this study, the 20 districts were clustered into four Zones of A, B, C and D based on their geographical locations and the proximity of the districts. Each of the Zones comprised five districts as shown in Table 5.1 below<sup>6</sup>:

**Table 5.1: Clustered Districts**

<b>Zone A</b>	<b>Zone B</b>	<b>Zone C</b>	<b>Zone D</b>
Ashaiman	Madina*	Agogo	Dome*
Tadi	Teshie*	Newtown*	Ashese
Nungua*	Dodowa	Anloga	Legon*
Siwdu*	Adenta	Gbawe*	Suhum
K'Dua*	Taifa*	Lashibi*	Tema*

\*Selected Districts included in the study

A simple random technique was used to select three districts from each Zone to be part of the study. Names of districts in each Zone were enlisted on pieces of paper and put in

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<sup>6</sup> For this study, the names as shown in Table 5.1 do not reflect the exact names of districts in the Central region of Ghana. These names are pseudonyms, and its usage was to safeguard the confidentiality promised research participants.

a container. A research colleague picked three out of the five names of districts from each zone. This was done to ensure that each of the districts had an equal chance of being part of the study and to prevent any possible bias on my part in the selection process. In all, 12 out of the 20 districts in the Central region were selected for inclusion in this study.

At the second stage of the sampling process, all public JHSs in each of the twelve districts were selected to constitute different sampling frames for each district. In each district, a systematic sampling approach was used to select five Junior High Schools within each district. Systematic sampling involves selecting every  $K^{th}$  member from a list of sampling frame where  $K$  typifies the population divided by the preferred sample size (Onwuegbuzie & Collins, 2007). The population of the JHSs in each district was divided by a sample size of five (5) to determine the sampling interval for each district. After the selection of the first school on the list of each school, the corresponding interval was used in the selection of subsequent schools. Table 5.2 summarises the 12 selected districts, the total number of JHSs and their corresponding sampling intervals used for the selection of the five schools.

**Table 5.2: Names of District with the corresponding number of JHSs and Sampling Interval**

<b>Name of District</b>	<b>Number of JHSs</b>	<b>Sampling Internal</b>
Gbawe	81	16 <sup>th</sup>
Tema	55	11 <sup>th</sup>
Taifa	81	16 <sup>th</sup>
Nungua	80	16 <sup>th</sup>
Legon	62	12 <sup>th</sup>
Lashibi	40	8 <sup>th</sup>
Teshie	65	13 <sup>th</sup>
Dome	69	14 <sup>th</sup>
Newtown	66	13 <sup>th</sup>
K'Dua	43	9 <sup>th</sup>
Siwdu	61	12 <sup>th</sup>
Madina	69	14 <sup>th</sup>

Source: Statistics on public schools was obtained from the Regional Education Office, Cape Coast

In all, 60 JHSs were selected to be part of the study. In the final stage of the sampling process, although I had intended to sample 250 teachers, on the field a census had to be conducted on all trained teachers from the selected schools. This decision became

necessary because of the differences I observed in the number of teachers within the schools especially among rural schools and urban schools. While in some urban schools, the staff strength was higher (about 11 and 12 staff), some rural schools had as low as three and four teachers at the JHS level who were teaching all the required subjects, thereby making sampling untenable. Therefore, to obtain views across both divides and to make feasible a possible generalisation with the research findings, I resolved to include all teachers in the 60 selected schools. Eventually, a total of 522 teachers within the 60 schools participated in the study.

#### **5.4.4 Data Collection Processes**

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 UTS Human Research Ethics Committee<sup>7</sup>. Permission was also sought from the Central Regional Educational Office of the Ghana Education Service and was granted with a formal letter of introduction allowing me to conduct the study on teachers in the region (see Appendix A).

The data collection process began with a first visit to the district education offices of the Ghana Education Service within the region. This involved informal interaction sessions with respective district educational directors to communicate the goals, objectives, and aims of the research. During these visits, I was given access to teachers' databases of which were used in the planning of the sampling processes and for the commencement of the research. In some cases, I was introduced to some of the schools within the communities where further interactions were made both with the head teachers and the teachers within the schools. During these sessions, an opportunity was also granted to observe teachers teach and to sit in one of the in-service training programs. These informal discussions opened up access to enter the research sites with much ease and to plan adequately for the study, especially for the survey.

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<sup>7</sup> UTS HREC REF NO. ETH16-0672

The questionnaire was the only data collection tool used for the survey (see Appendix B). The use of the questionnaire allowed the collection of information within a shorter time frame. It also allowed me to gain an overview of the phenomenon of the study more efficiently and conveniently, as its use can collect a large amount of quantifiable data reflecting general perspectives in an efficient way (Bryman, 2006). I developed the questionnaire with some adapted elements from the OECD Teaching and Learning International Survey (TALIS) Teacher Questionnaire. Sections of the TALIS instrument on teacher professional development were used in other to measure existing CPD forms in the context of Ghana against more standard and recognised forms of teacher CPD. The questionnaires were self-administered to the teachers involved in their various schools with the aid of four other research assistants.

Items on the questionnaire were categorised into six sections. The first section A gathered information on teachers' personal demographics. Section B solicited information on teachers' learning needs for professional development as well as information on the prevailing CPD practices. The focus of Sections C and D were to explore teachers' participation and experiences with CPD activities and their perceived usefulness to professional practice respectively. There were also questions on factors influencing teachers' CPD participation in Section E. The final Section F explored teachers' perceptions on the general CPD situation within their school (see Appendix B for the questionnaire).

#### **5.4.5 Reliability and Validity of the Research Instrument**

The reliability of the survey instrument was sought through the pre-testing of the survey questionnaire. The pre-test was conducted among 50 teachers from eight public schools in the Greater Accra region of Ghana. However, 32 out of the pre-test questionnaires were retrieved for analysis. The pre-test was done primarily to verify the reliability of the research instrument and to get the bugs out of the instruments so that respondents in the actual study will not have difficulties in completing it. The reliability test analysis done on the different sets of questions under each objective showed a reliability result of an average Cronbach's Alpha 0.832, indicating strong reliability of the research instruments used. In effect, the pre-test enabled me to remove ambiguities and

unnecessary items in the questionnaire and to crisscross and correct inconsistencies and inaccuracies that existed in the instruments before the actual survey.

The final instrument was then modified based on the feedback from the pre-testing. For instance, the total number of question items was reduced from 38 to 25 while some of the questions were rephrased for better understanding. The process of pre-testing also ensured that the questions on the instrument measured what it was intended to measure thereby ensuring the validity of the instrument. Again, the questionnaire was securitised by my two supervisors for feedback to ensure it adequately measures my research objectives. Finally, while in the field, the questionnaire was given to teacher education researchers at the University of Ghana for feedback. The final instrument was modified based both on expert advice and feedback from the pre-testing.

#### **5.4.6 Data Analysis Process**

The quantitative data analysis begun with the sorting, filtering, and removal of incomplete questionnaires from the 522 questionnaires sent out to teachers. In the end, 456 questionnaires were deemed fit for use in the quantitative analysis.

The quantitative data were subsequently analysed using the Statistical Package for Social Sciences (SPSS) version 23.0. The Likert scale and the close-ended items on the questionnaires from the field were coded and fed into a computer and quantified using the SPSS software. The results from the SPSS were analysed using descriptive and inferential statistics. The inferential statistics mainly, the chi-square was used to test the possible relationships between some demographics (age and years of experience) against some selected variables in the study (participation in CPD and learning needs).

The analysis did not involve rigorous statistical testings because of the locus of the quantitative data in the study. To reiterate, the study, which is predominantly, a qualitative study embedded the quantitative data in order to map out the terrain of teacher CPD within the Ghanaian context. Thus, descriptive statistics were mainly used in the analysis to describe the phenomenon of teacher learning and CPD as it pertains to teachers in the Central region of Ghana.

## **5.5 Phase II: Qualitative Methods and Approaches**

This section outlines the procedures employed during the qualitative phase of the study. It discusses issues such as the qualitative design, participants' recruitment and also addresses the issue of credibility and trustworthiness in qualitative research.

### **5.5.1 Qualitative Research Design**

In this phase, I employed a case study as a design to study in-depth teachers' CPD practices and experiences. A case study allows the investigation of contemporary real-life phenomenon through detailed contextual analysis of a limited number of events or conditions and their relationships (Zainal, 2007). Yin (2015) suggests that a case study design is considered when the focus of the study is to answer "how" and "why" questions; when the researcher cannot manipulate the behaviour of those involved in the study; when contextual conditions are deemed relevant to the phenomenon under study; or when the boundaries between the phenomenon and the context are not clearly explicit. Taking a cue from this, I considered this design as appropriate to permit the critical examination of teacher CPD practices and experiences. Also, case study designs have their philosophical grounds within the constructivist paradigm (Stake, 1995; Yin, 2015) under which the study is subsumed, thus its appropriateness for the study.

Multiple cases of four districts were selected to allow the exploration of possible differences in responses within and between cases selected (Zainal, 2007) and to analyse within each setting and across settings (Baxter & Jack, 2008). The case selection for the study was based on rural-urban dichotomy in order to ascertain possible differences or similarities in how CPD was practised and experienced by teachers in rural and urban districts in the Central region of Ghana. Consequently, two urban districts (Legon Metropolitan district and Newtown Municipal district) and two rural districts assemblies (Gbawe and Lashibi)<sup>8</sup> were selected as the cases for the study<sup>8</sup>. These districts are bounded systems and the unit of analysis was teachers' CPD experiences within the different schools in each district.

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<sup>8</sup> Their population density determines the rural and urban characteristics of districts. The 2010 population and housing census equally classify Legon and Newtown as an urban district with 76.1% and 50.4% urban characteristics respectively. On the other hand, Gbawe and Lashibi are deemed rural districts with a proportionate rural figure of 66.4% and 59.6%.

During the analysis, I could not observe significant differences in teachers' responses within the different case district selected. This is due to the similar CPD conditions and experiences within the districts selected as cases for the study, hence the decision to integrate the analysis and findings.

### **5.5.2 Research Participants**

Participants for the qualitative data were selected after their initial participation in the quantitative survey. Data was collected from both teachers, and other key informants made up of educational directors, head teachers and teacher association representatives in the region. The characteristics of the research participants in the qualitative study are found in Appendix D.

### **5.5.3 Recruitment of Participants**

While quantitative research typically involves the selection of large sample to make generalisations and inferences about the study population, qualitative research can involve sampling purposefully a smaller number of information-rich cases to enhance understanding of the phenomenon being studied (Patton, 1990). Consequently, the sample for the qualitative study was 25 with composition as follows: basic schoolteachers (16), District Education Directors (3), head teachers (3), one (1) training officer and one representation each from the two main teacher associations in Ghana (2).

Johnson and Christensen (2016) argue that selecting sampling designs for a mixed method study involve choosing the sampling scheme and sample size for both the quantitative and qualitative data. In choosing the sampling scheme or framework, Onwuegbuzie and Collins (2007) suggest two worthy considerations: time orientation and sample relationship criteria. In time orientation criterion, a researcher decides whether samples for the study will be taken concurrently or sequentially. On the other hand, sample relationship criterion refers to the relationship between the samples selected for the quantitative and qualitative phases of the study.

In this study, the time orientation adopted was sequential, that is, data obtained from the sample during the first phase of the study was used to shape or structure the sample

selection of the next qualitative phase (Johnson & Christensen, 2016). The relationship between the quantitative and qualitative samples was nested in that participants selected for the qualitative data were a subset of those who participated in the quantitative survey (Creswell et al., 2011; Johnson & Christensen, 2016).

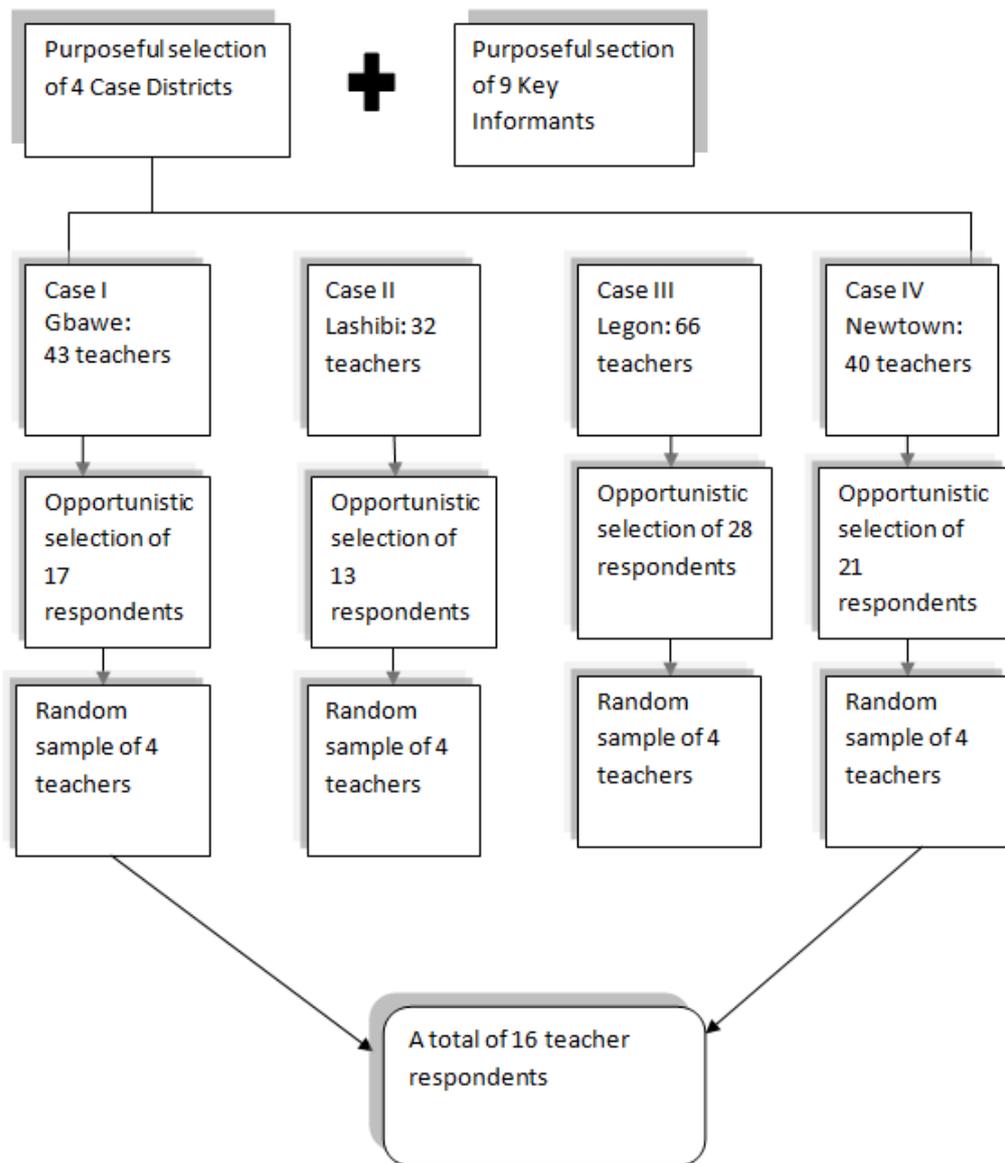
To be able to select individual respondents, multiple non-probability sampling techniques were used. This involved using two or more of non-probability sampling strategies (Teddlie & Yu, 2007). First, the selection of the four district cases was made purposefully. Purposeful sampling allows the selection of certain units or cases “based on a specific purpose rather than randomly” (Tashakkori & Teddlie, 2003, p. 713). In this study, the four district cases were selected based on their rural-urban characteristics. These four cases represent the larger region, as districts within the region are either urban or rural. Thus, two urban districts and rural districts were selected to represent the larger region. The selection was also made to enable analysis of any possible differences or similarities in teachers’ CPD experiences.

After the selection of the cases, I used responses from the survey to select participants for the qualitative interviews. The total number of participants in the survey by each case district was as follows: Legon (66 teachers), Newtown (40 teachers), Lashibi (32 teachers) and the Gbawe (43 teachers). I sorted and securitised individual responses for possible selection in the qualitative study using opportunistic sampling, that is, selection of cases based on specific characteristics (either typical, negative or extreme) to capitalise on developing events occurring during data collection (Onwuegbuzie & Collins, 2007).

The characteristics considered for inclusion were indication of participation in at least 5 CPD activities provided in the survey, number of years taught in a particular school, and also based on specific subject teaching (eg. Fantse, RME, social studies) who had indicated during the survey their non-participation in any CPD focusing on what they teach for the past 24months. The inclusion of this category of respondent was to explore diverse perspectives on teachers’ experiences with CPD activity situations within the schools.

After the first screening, the following numbers of participants were selected from each case district: Legon 28 participants, Newtown 21 participants, Gbawe 17 participants, Lashibi 13 participants. To ensure that each participant had an equal chance to be selected for interviews, simple random sampling was used to select four (4) participants from each of the district, making a total of 16 teacher participants. Onwuegbuzie and Leech (2005) argue that qualitative studies can employ random sampling methods, though the sampling approach is typically associated with quantitative studies. They further argue that such “false dichotomy” needs to be broken in order to increase significantly the options that both qualitative and quantitative researchers have for selecting their samples.

The study, in addition, relied on key informants to be able to address issues relating to policy and practice of teacher CPD. These key informants were stakeholders in teacher education activities in Ghana. Three district education directors were purposefully and conveniently selected to participate in the study. There were also three head teachers, a training officer and one member each from the two main teacher organisations in Ghana. The selection of these respondents was purposeful and based on availability at the time of data collection. Figure 5.3 is a representation of the qualitative sampling process.



*Figure 5.2: Recruitment of Interview Respondents*

Source: Fieldwork, 2017

#### **5.5.4 Piloting**

The interview guide (see Appendix C) was piloted with two teachers at the Heman basic school (pseudo) in the Greater Accra region of Ghana. This was done to test the efficacy of the questions in measuring what it was intended to measure. The outcome of the piloting enabled a rework on some of the questions on the interview guide. Some questions were rephrased while inclusions were also made to the guide. The feedback

from the piloting for instance compelled a much wider discussion on the community influences on teachers' CPD practices.

#### **5.5.5 Data Collection Processes**

Qualitative research uses a naturalistic approach that seeks to understand the phenomenon in their real world or natural settings (Patton, 2002). Due to this characteristic, qualitative researchers collect data in the field at the site where participants experience the issue of the problem under study (Creswell, 2013). Therefore, in the process of collecting data for the qualitative study, the research site and the role of the researcher as a key research instrument cannot be delineated from the process. Hence, a researcher in order to understand the field involves himself/herself in the setting where subjects are likely to be located.

The general approach of qualitative researchers has been to recognise the significance of access or entry into a qualitative research site (Devers & Frankel, 2000; Patton, 2002). A researcher can gain access to a research site by obtaining approval from "gatekeepers" (Creswell, 2013) in a form of securing permission from these "gatekeepers" or individuals who have control over the subjects of investigation (Devers & Frankel, 2000). These important prepositions informed data gathering for the qualitative study. I began the data collection process by obtaining access to the research sites and permission to conduct the study on the research participants. The "gatekeepers" identified for the study were the Regional Director of the Ghana Education Service, the District Educational Directors and the head teachers of the selected schools as well as the circuit supervisors for the selected schools.

At the regional level, an official letter was obtained for permission to conduct the study before the commencement of the data collection process. On the field, I presented the official letter to the institutional offices of the various selected districts where further discussions were held, and the purpose of the research communicated. Personal information on teachers was made available to me during this period. Also, I identified circuit supervisors for the schools who led me to the selected schools in different communities for interaction among the teachers as well as the head teachers. At the

school level, head teachers were made aware of the purposes at the onset of the research, as appointments were also booked for the interviews.

The qualitative data collection thus began after the survey questionnaire. After the sample had been drawn for each district, individual teacher respondents were identified by the code that was known only by me. This code linked each teacher to a particular completed questionnaire making the identification and selection for interviews easier. However, to reiterate, the coding system was only used to recruit teacher participants for the qualitative phase of the study and was de-identified after the selection process. It was also explained to teachers that they could be recruited for participation in a further study; hence, the codes on the questionnaire.

### ***Face-to-Face Interview***

In this qualitative phase, the face-to-face interviews were the primary data collection tool. In some cases, observations and personal notes were also made to make meanings of some non-verbal communication cues during and after the interviews. Interviews were conducted with 16 teachers and nine key informants. An in-depth interview approach was used because of its overwhelming strength of “richness” of the communication (Devers & Frankel, 2000). The face-to-face approach was equally used to yield more detailed responses, offer the opportunity to explore the phenomenon in in-depth and to allow me to explain or help clarify questions, thus increasing the likelihood of useful responses (Creswell, 2013).

With regards to the personal interviews, I initially booked an appointment with each of the participants involved and returned at the appointed time for the interview. While the interviews with teachers were carried out in their various schools, those with the key informants took place in their respective offices. The interviews were semi-structured and were guided by the broader research questions of which were converted into topics for deliberation. The interviews spanned between 40 minutes to an hour.

### **5.5.6 Data Analysis**

The qualitative data analysis began with the re-playing of the audio-recorded interviews of both teachers and key informants to ensure they were audible and complete. To

Cohen et al. (2000), analysing interview transcripts involves the processes of reflexivity, reactive interaction between the researcher, participants' responses and de-contextualisation of the data interpretations of the social encounter between interviewer and interviewee. Therefore, before analysing the interview transcripts, I transcribed all audio-recordings into text while I repeatedly listened to the audios before and after transcriptions to ascertain all responses had been captured correctly. I then subjected the transcribed texts to verification by allowing peers to crosscheck for any omissions or additions during the transcriptions to minimise data loss and errors (Morrow, 2005). Once this was done, I used the thematic analysis to analyse the transcripts as follows. All interviews were conducted in the English language.

### ***Thematic Analysis Process***

Thematic analysis was used firstly to organise the emerging categories and group codes into meaningful clusters and themes (Patton, 2002) that answered my research questions. Thematic analysis involves the process of identifying, analysing and reporting patterns or themes within a data (Braun & Clarke, 2006) that interprets the various aspects of a research topic (Boyatzis, 1998). I adopted Braun and Clarke's (2006) six stages of thematic analysis while analysing my data.

The first stage of *familiarisation* involved carefully reading and re-reading all my 25 transcribed texts in order to be familiar with the content of the scripts, the themes and to think through possible coding schemes that could emerge out of the data (Polit & Beck, 2004). This process is consistent with the assertion that data analysis begins with "careful reading and re-reading of the data" (Rice & Ezzy, 1999, p. 25). In the second phase, I *generated initial codes*. This involved identifying lists of ideas that could be generated into codes that provided a new structure for organising and analysing the data (Saunders, Lewis & Thornhill, 2007). Codes are "the most basic element of the raw data that can be assessed in a meaningful way" regarding the phenomenon under study (Boyatzis, 1998, p. 63). After getting a sense of the initial coding from my data, I began to reflect on the data to develop some potential themes that could address my research questions.

In the third phase, I collated the codes into themes while gathering all relevant codes to each potential theme. To Braun and Clarke (2006) this third phase of data analysis re-focuses the analysis at a broader level than codes. It is also at this stage that interpretive analysis of the data occurs (Boyatzis, 1998) because it is the analysis of the themes that explicate the data collected from the field (Burnard, Gill, Stewart, Treasure, & Chadwick, 2008). The fourth stage emphasises the iterative process of data analysis where themes are examined, categorised and re-classified in order to produce coherence and meaningful patterns. This stage involves two processes: reviewing and refining themes at the level of the coded data extracts and in relation to the entire data set (Braun & Clarke, 2006). In my analysis, this phase saw the collapsing of some redundant codes in the coding schemes as well as inclusions into the earlier codes that did not fit under earlier determined codes.

The fifth phase is *defining and naming themes*. At this stage, a researcher defines and further refines potential themes for presentation in the analysis. Data is thus analysed within these themes as extracts are collated for each theme and organised coherently and consistently to tell a story about the phenomenon investigated. In my analysis I generated broad descriptive themes such as teachers' learning/development needs, how teachers learn, CPD in practice, teachers' experiences in practice, teacher motivation and the role of context influencing CPD practice and teacher learning. These broad themes had sub-themes and during the analysis were redefined using elements in SCT while guided by the study's research questions.

The final phase is *producing the report*. The aim here is to tell an intricate story about your data in a manner meaningful to readers with the ability to convince them about the "merits and validity of the analysis" (Braun & Clarke, 2006, p. 93). Writing a report about qualitative findings involves two approaches (Burnard, 2004). First, a researcher can report the main findings under each category or theme while using relevant quotes reported to support the findings. This results in writing separate findings and discussion chapters where the later chapter is devoted to explaining and discussing the findings with the theory and existing literature (Burnard et al., 2008). In the second approach, the discussion is done concurrently while presenting the findings. I adopted the first

approach in this study where I present the findings in separate chapters while drawing on all the findings in a different chapter for discussion.

The analysis of the interview transcripts was more theoretically driven, where codes and themes were developed and analysed based on my theoretical and analytical interests (Braun & Clarke, 2006). For this reason, I coded specific research questions while looking for some predetermined codes and themes. Other codes and themes also emerged explicitly from the data. Both approaches thus helped to capture the complexity and comprehensiveness of the data I collected. Table 5.3 shows some of the codes developed for the study.

**Table 5.3: Some of the Codes for Analysis Transcripts**

<b>Earlier codes</b>	<b>Meaning</b>	<b>Later codes</b>	<b>Meaning</b>
LN	Learning needs	PROFK	Professional knowledge
COP	Community of practice	INFOR	Informal
COL	Collegiality	ORG	Organised
MED	Mediation	CON	Content
COXT	Context	PEDA	Pedagogy
PRAC	Practice	EFPRAC	Effective practice
EP	Effective practice	INVT	Investment
COM2L	Commitment to learning	AGN	Agency
MOT	Motivation	EXP	Experiences

Source: Fieldwork, 2017

### **5.5.7 A Framework of Data Analysis**

The emerging themes from the qualitative data were re-categorised into three frames based on the study's research questions: (1) teacher-learning, (2) practice, and (3) context. These frames are used to present the qualitative findings of the study based on the major research questions.

#### ***Teacher-Learning Frame***

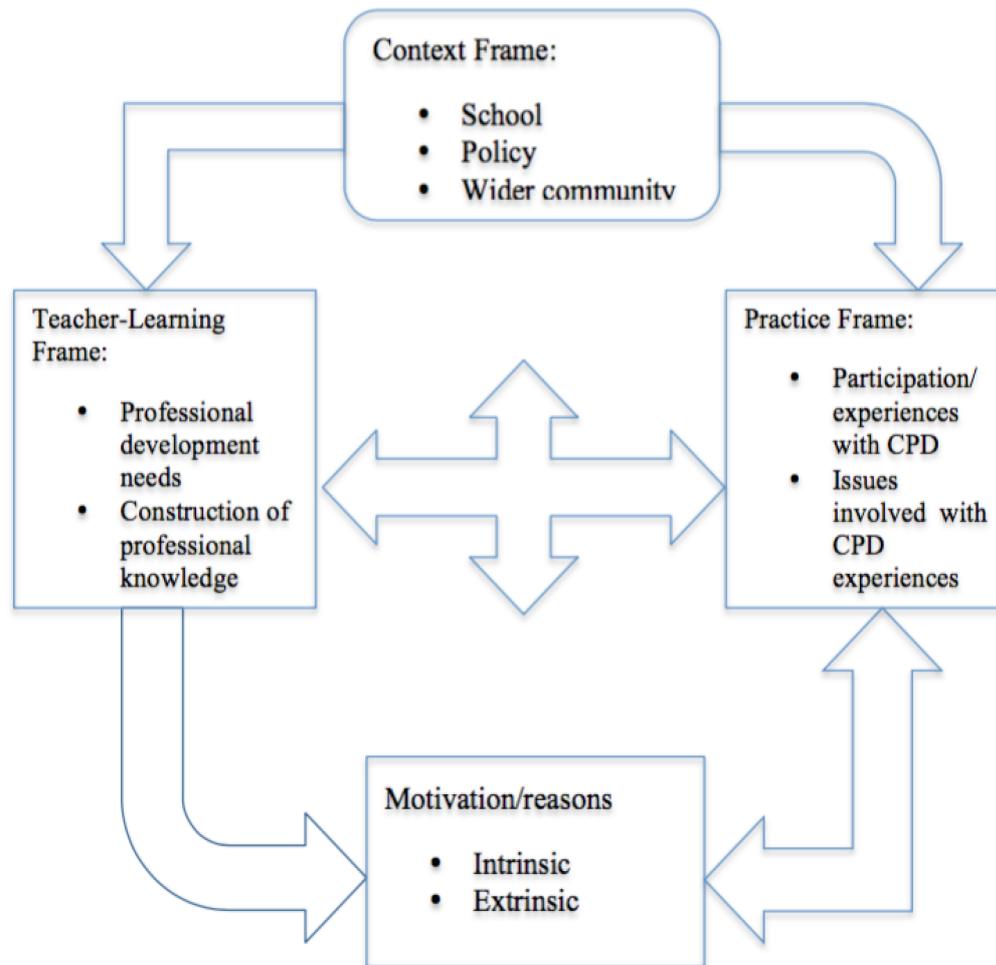
The teacher-learning frame identifies and categorise basic schoolteachers' learning needs and ways of constructing professional knowledge. The frame explains how CPD activities mediated teachers' learning for improved classroom practice. Findings within this frame are examined drawing on Kennedy's framework of CPD models as well as the sociocultural theory of learning (see Chapter 3) to explain how teachers learned as part of their professional development.

### ***Practice Frame***

The practice frame explains teachers' participation and experiences with CPD activities. It uses teachers' experiences from their participation to identify what should constitute effective CPD. This frame also explains teachers' contextualisation and transformation of CPD knowledge to inform classroom practices. Data themed around this frame are analysed and discussed within the SCT and using Desimone's conceptual tool. This frame thus shapes our understanding of the processes of teacher learning while signalling the adoption of effective strategies to guide CPD implementation for teachers in Ghana.

### ***Context Frame***

The context frame affects all other frames in this study. As learned in Chapter 4, CPD is shaped by the context within which the teacher practices (Timperley, 2011). Therefore, teachers' learning needs and construction of knowledge are shaped by conditions within their professional contexts. Similarly, teachers' experiences about their CPD activities are also shaped by their professional contexts. The study thus analyses and discusses the findings within this frame bearing in mind SCT and Desimone's conceptual framework.



*Figure 5.3: A Framework of Analysis*

Source: Author's construct

The framework of analysis shows the relationships between the study's research questions in providing a holistic understanding to the complexities in teacher CPD practice. Teachers' context of practice, that is school and social conditions, shaped their learning needs for development and how teachers developed and constructed professional knowledge. Teachers' context of practice also influenced their level of motivation for engaging and investing in CPD activities as well as determined the kind of participating experiences teacher had with CPD activities. Furthermore, the varied and urgency of teachers' learning/development needs influenced their motivation and participation in CPD activities.

### **5.5.8 Trustworthiness of Data**

While reliability and validity are essential criteria in judging the quality of a quantitative study, the quality of a qualitative study can be measured through criterion such as credibility, confirmability, dependability and applicability or transferability (Golafshani, 2003). The measurement of these benchmarks contributes to the trustworthiness of a qualitative study. This study measured trustworthiness against the four criteria as proposed by Guba (1981) for consideration in pursuit of a trustworthy study. These are credibility, dependability, transferability, and confirmability.

#### ***Credibility***

According to Merriam (1998) striving to achieve credibility in a qualitative study is having to deal with the question, how congruent are the findings with reality. Credibility refers to the assurance that can be placed in the certainty of the research findings (Macnee & McCabe, 2008). It is one of the most important elements in establishing the trustworthiness of a study (Lincoln & Guba, 1985). To ensure that my study's processes and findings were credible I adopted the following strategies.

First, I established an early familiarity with the culture of the participating organisation before the data collection process (Shenton, 2004). I read appropriate documents about the general education system, teacher education and policy documents on education reforms and CPD in Ghana. I also consulted teacher associations on their role in teacher development before the commencement of my data gathering. Through consultation with the Regional Educational Service Directorate, I was able to obtain data on teachers before planning for the data collection. I was also able to receive formal ethical approval for the conduct of my study. During the familiarisation process, I was able to identify potential gatekeepers who were mostly circuit supervisors who led me to likely participants and assisted during the data collection. However, during this process, I was wary of the potential threat that over familiarisation with the culture of the organisation as well as the potential participants (Lincoln & Guba, 1985). This caution was taken into consideration to ensure that my judgment was not impaired.

Secondly, participants were randomly selected as informants. Shenton (2004) argues that although qualitative studies widely involve selecting participants purposefully, a

random approach may negate charges of researcher bias in the selection of participants. This study employed both probability and non-probability sampling approaches in order to select individual teacher respondents for the qualitative interview (see Section 5.5.3). In the final stage of the sampling process, random sampling was used to select individual teachers from each of the purposefully selected case districts. This process provided the assurance that the selected participants were representative and thus eliminated my possible bias during the recruitment process.

Thirdly, I used iterative questioning and probes to get more detailed and credible responses from the participants. I interrogated further issues and responses that were inconsistent with the previous information given during the interview. This helped remove contradictions, which could have marred the credibility of the research finding. Besides, with the use of a semi-structured interview guide, I allowed myself to ask specific questions to ascertain validity in responses as provided by participants.

Finally, the use of diverse participants to serve triangulation via data sources also strengthened the credibility of the research findings of the study (Shenton, 2004). The wide range of key informants (educational directors, head teachers, union representatives) in the study served the purpose of verifying teachers' CPD practices and experiences. This created a much richer picture and enabled me to look for corroborations and contradictions, thus increasing the credibility of the study's findings.

### ***Confirmability***

Confirmability in qualitative research is akin to the concept of objectivity in quantitative studies (Shenton, 2004). It refers to the measures taken to ensure a neutral and unbiased understanding of the phenomenon under studied (Dalal & Priya, 2016). Shenton (2004) argues that in ensuring confirmability, steps must be taken to help ensure that the study's findings are the result of the experiences and ideas of the informants, rather than the characteristics and preferences of the researcher. The confirmability of this study has been enhanced through a detailed description of my research methods and approaches, my beliefs and decisions underpinning each of the methods used as well as an acknowledgment of the limitations of my study. Shenton (2004) believes that a

detailed methodological description will enable readers to determine how far the data and the construct emerging from it may be accepted.

### ***Dependability***

Dependability refers to the extent to which a study's results can be replicated in the same context, with the same methods and with the same participants (Merriam, 1998). Lincoln and Guba (1985) stress the closeness of credibility and dependability arguing that in practice, a demonstration of the former goes some distance in ensuring the latter. My study sought to ensure that the findings are dependable through a detailed report of the study's research design and implementation procedures and a description of the operational details of the data gathering process.

### ***Transferability***

Transferability emphasises the extent to which the results of the study can be transferred to other contexts using other participants. To Bitsch (2005) researchers may enhance a study's transferability through the employment of thick description and purposeful sampling. Lincoln and Guba (1985) also suggest that qualitative researchers can make their findings transferable by providing ample contextual information about the field site to enable readers to make the transfer. To augment the possibility of transference with the findings from the study, I have sought to provide adequate information on the research site as well as a thick description (Patton, 2002) of all research processes involved in the data collection and the analysis.

Figure 5.4 below, is a visual representation of the conduct of the two phases of the study.

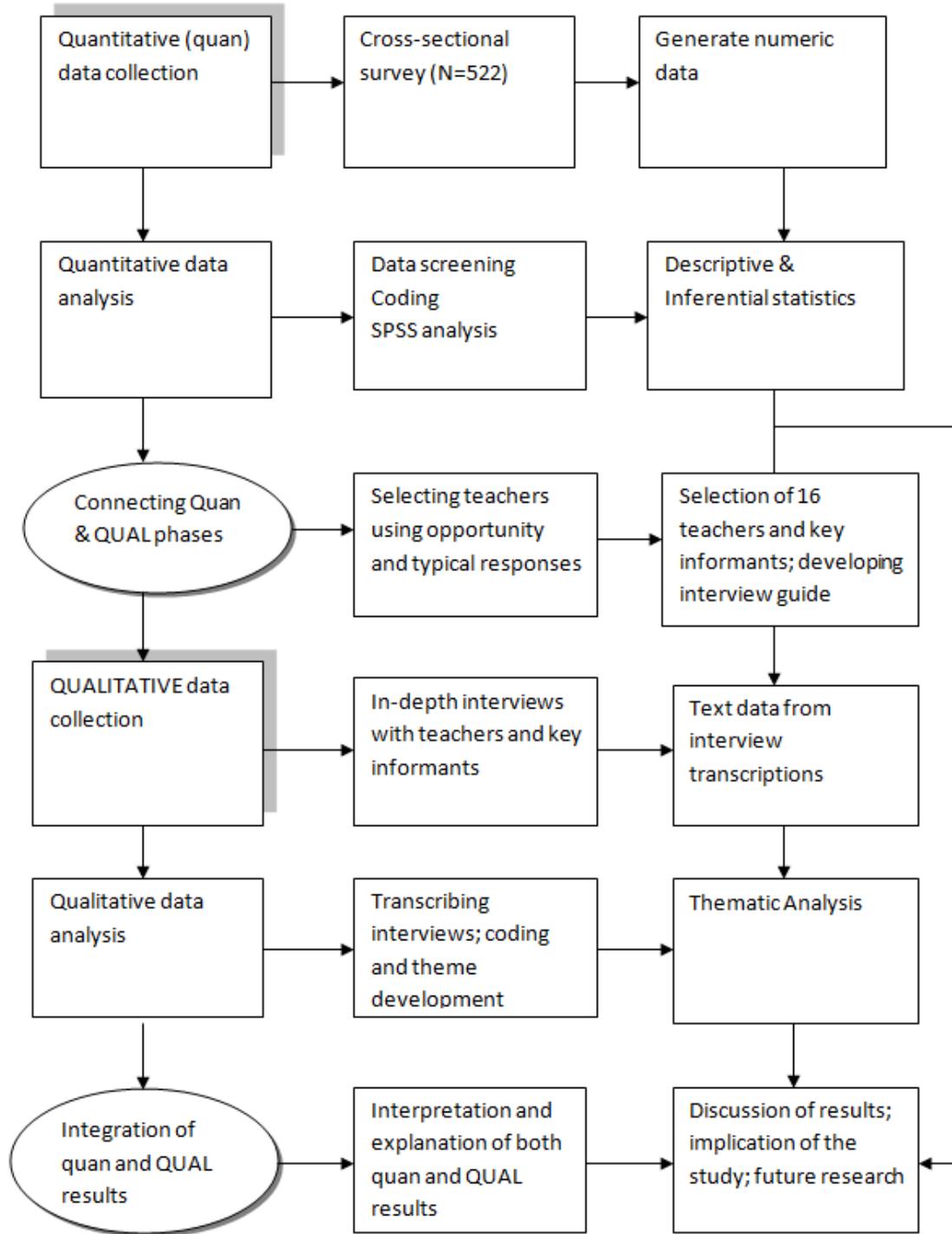


Figure 5.4: A Diagrammatical Representation on the Mixed Method Research Processes

Source: Fieldwork, 2017

## **5.6 Role of the Researcher**

Unluer (2012) argues that it is prudent for qualitative researchers to elucidate their roles in order to make their research credible. In this study though not an insider (I am neither a basic schoolteacher nor a department person), I possess an in-depth knowledge of the research context as someone who hails from the region and having received my basic education in one of the research communities. Such knowledge and experiences became valuable a resource during the conduct of the study as well as during the analysis and interpretation of the research findings.

First, my position afforded me the knowledge and understanding of the cultures, politics and the bureaucratic operations of Ghana's educational systems, which would have taken an external person quite a long time to acquire (Smyth & Holian, 2008). This made the immersion of the self in the data collection processes also easier than it usually would have been. Also, having received my formal education in the region, I was aware of some of the issues being investigated and could relate well with participants in the study. This was key to ascertain both the telling and judging of accuracy in participants' responses (Unluer, 2012).

Also, by my position as a member of the community, it was easier for me to identify 'gatekeepers' who assisted my entry into the communities — similarly being identified as one of 'their own' made the research participants more comfortable in sharing their opinions and experiences. My familiarity with the region made traveling into some of the research communities easier and aided in the timely collection of the survey responses.

However, my position in the research process was not without challenge and pitfalls. Being identified as one of 'their own' by research participants can breed familiarity, which can lead to loss of objectivity and the introduction of potential bias in the research process. Nonetheless, researchers facing such situations are advised to explicitly make known any possibility of potential bias in the research processes and to respect ethical issues relating to the anonymity of institutions and individual participants (Smyth & Holian, 2008). I fully understood the importance of being an independent observer throughout this study, hence, my role and my prior experiences with the region

did not compromise on the data collection processes in any way. A third-party member was used in the selection of districts and schools for inclusion in the study. Equally, no participant was coerced or compelled in any way due to my posture in the study. Issues of ethics and confidentiality are well addressed in the ensuing section.

### **5.7 Ethical Considerations**

The importance of ethics to every research endeavour cannot be overemphasised. Paying heed to ethical issues in research imply that researchers exercise common sense and moral responsibility towards research subjects by putting research participants first, the study next and themselves last (Marshall & Rossman, 2014). Ethical issues that pervade the conduct of research include plagiarism, participants' informed consents, data integrity, confidentiality and privacy and anonymity (Morgan & Symon, 2004).

The first ethical step to take in the conduct of this study was to participate and complete the two research integrity modules mandated by the Graduate School of the University of Technology Sydney for all Higher Degree Research students. Also, I obtained approval from the University of Technology Sydney (UTS) Human Research Ethics Committee (See Appendix E). With this approval, I was poised to commence fieldwork to collect data from research participants for the study.

While on the field, I again took the following ethical measures as far as the conduct of the study was concerned.

- First, I negotiated with gatekeepers (District educational Directors, Circuit Supervisors and head teachers of schools) by explaining the research focus and purposes in order to formally be permitted to conduct the study with teachers as participants. This became necessitated because gatekeepers can shape the direction of a research project as their non-authorisation can create a stigma that can inhibit the co-operation of participants. In the view of Devers and Frankel (2000) understanding gatekeepers' views is not only critical for negotiating and maintaining access but also for maintaining the integrity and credibility of research.
- The next important ethical step taken was to obtain the consent of the research participants before their participation. As part of the questionnaire for the cross-

sectional survey, a preamble was provided informing participants about the background of the researcher, the purpose of the study and assurance of participants' confidentiality to the information provided. Also, an information sheet was also attached to each questionnaire, and it was to reiterate to participants the voluntariness of their participation (see Appendix F). Thus, they could redraw at any point in the study. Participants for the interviews also filled out consent forms to indicate their willingness to participate in the study. Thus, no research participant was coerced to participate in the study.

- In cases where the questionnaire was given a unique code, it was explained to participants of the intent, that is, to allow easy identification of respondents for the second phase of the study. However, respondents were de-identified after the selection into the second phase of the study. Hence, no response was linked to a particular participant during the analysis. Names of interview participants were removed and replaced with pseudonyms and their identities not to be disclosed in reports and publications afterwards.
- I was also meticulous with cultural values within the setting in which data was collected. As such, I avoided the use of an abusive and derogatory language in dealings with teachers and the key informants. As a cultural value, I avoided the use of my left hand and crossing of legs during the conduct of interviews.
- Finally, data collected is undoubted to be used solely for academic purposes and not be made available to a third party for any financial gains. Further telephone interviews were conducted with interviewees on discussions of the responses provided and also to have them confirm their positions and responses indicated in the study.

### **5.8 Limitations of the Study**

Although I am not a novice in conducting research, this study is the first time I have used a well-developed mixed method research design. Hence, many skills were required in designing and implementing the embedded mixed method design. As suggested by Tashakkori and Teddlie (2003), designing and implementing mixed method research require a high level of expertise to use both the quantitative and qualitative research methods at the data collection, analysis, integration, and discussion phases of a study.

However, with the able guidance of my supervisors, these challenges associated with the use of the stated design were overcome.

Also, the study required a time-intensive data collection and analysis of both the quantitative and qualitative data. To enhance diversity among the respondents, the study used a census to include teachers in all the selected schools. This resulted in collecting information from 522 teachers across the length of the districts. While the districts are scattered posing a challenge in traveling, the cost involved in traveling to the twelve districts cannot be overemphasised. Also, teachers during the survey required to be given ample time to fill out the questionnaire. Appointments booked with interviewees were also re-scheduled requiring several return visits to the schools and offices of key informants, which were time-consuming. This delay to some extent affected the estimated duration of the fieldwork. Research assistants were used to facilitate the retrieval of the questionnaires, and in some cases, circuit supervisors of schools had to remind teachers of returning the completed forms. However, teachers were not in any way coerced to fill out the questions and were free not to complete it.

### **5.9 Chapter Summary**

In this chapter, I have outlined the philosophical stance for the conduct of my study, while justifying the adoption and use of the mixed method research design with its approaches and procedures. Having subsumed the research within the constructivist paradigm, the study holds that knowledge is socially constructed, therefore researchers should study and understand the complex world of lived experiences from those who lived it (Schwandt, 2000). For this reason, both quantitative and qualitative approaches were utilised in order to capture the CPD experiences of basic schoolteachers in Ghana adequately. While the survey (as a quantitative approach) was used to provide general information on teachers' CPD engagements, interviews (qualitative approach) offered detailed insights into the experiences of teachers in their CPD enactments. Both sets of data are thus integrated into the discussion chapter in presenting a holistic story about teachers' CPD practices and experiences in the Central region of Ghana.

The results from the study are presented in Chapters 6, 7, 8 and 9. The next Chapter 6 presents the results and findings from the survey.

## **CHAPTER 6 : MAPPING THE TERRAIN OF TEACHER CONTINUING PROFESSIONAL DEVELOPMENT (CPD) IN GHANA**

### **6.1 Introduction**

The area of teacher CPD boasts of numerous studies that have utilised different approaches within the dominant research paradigms (see Chapter 4). In Ghana, very few empirical studies have attempted investigations into current CPD practices among pre-tertiary schoolteachers. To provide an adequate understanding of the phenomenon, I used a survey to reach a broader teacher population to explore the current CPD situations within their schools.

This chapter thus provides the results of the analyses of the survey (see Appendix B for the questionnaire) conducted on the continuing professional development activities of basic schoolteachers in the Central region of Ghana. The survey results as presented in this chapter give a generic snapshot on CPD activities of basic schoolteachers and provided the basis for further interrogations into teachers' CPD experiences, which have been addressed more qualitatively in Chapters 7, 8 and 9.

### **6.2 Findings**

The results from the survey were analysed using inferential statistics and have been presented in tables and graphs in this chapter. These findings have been structured and presented as follows:

- Teachers' demographics
- Teachers' professional development/learning needs
- Teacher CPD practices
- Factors affecting teacher CPD participation
- General CPD situation within schools.

#### **6.2.1 Demographics of Respondents**

Information was sought among teachers on the following personal characteristics: age, gender, highest professional qualification, years of teaching (work experience) and

subjects taught. These demographic characteristics were used to test some significant relationships with other dependent variables in the study.

The descriptive results shown in Table 6.1 suggest that the majority of teachers in my study could be described as middle-aged (67.1%) between the ages of 31 and 50 years, 22.8% as young teachers (20-30 years) and 10.1% as older teachers. Approximately, 66% of the participants in the study were males. The majority of teachers had obtained some form of further education after their initial teacher training colleges (64.4%). There were only 4.8% of teachers who had a postgraduate degree, which was the highest qualification held. The most experienced teachers in my study had taught for more than 21 years (13.2%) but the majority (31.4%) of the participants had been teaching for a period between 6-10 years (31.4%). Approximately a third (36.8%) of teachers were teaching more than one subject in the schools as all subject teachers were represented in the study. Table 6.1 summarises the demographic details of the participants in my research.

**Table 6.1: Demographic characteristics of respondents**

<b>Demography</b>	<b>Frequency</b>	<b>Percentage</b>
Age		
20-30	104	22.8
31-40	213	46.7
41-50	93	20.4
51 and above	46	10.1
Gender		
Male	299	65.6
Female	157	34.4
Highest professional qualification		
Postgraduate	22	4.8
Bachelor's degree	272	59.6
Diploma	131	28.7
Certificate	29	6.4
Other	2	0.4
Years of teaching (work experience)		
1-5 years	103	22.6
6-10 years	143	31.4
11-15 years	92	20.2
16 -20 years	58	12.7
21 years and above	60	13.2
*Subjects taught		
English	104	22.8
Mathematics	87	19.1
Integrated science	70	15.4
Social studies	76	16.7
Information and Communication technology	60	13.2
Religious and moral education	74	16.2
French	15	3.3
Ghanaian language	68	14.9
Pre-technical skills	57	12.5
Home economics	22	4.8
Physical education	2	0.4
Number of subjects taught per teacher		
Only 1 subject	288	63.2
2 subjects	158	34.6
More than 2	10	2.2

\*Each respondent had a choice of more than one (multiple responses). Therefore, the percentages were obtained by the total number of teachers teaching a particular subject and not by the sample (N) of the entire respondents.

N = 456 (Source: Fieldwork, 2017)

### **6.2.2 Teachers' Learning Needs for Professional Development**

As discussed in Chapter 4, published studies have suggested that CPD for teachers will be effective and meaningful to participating teachers if it is based on teachers' own needs (Desimone, 2009; Garet et al., 2001; Meissel et al., 2016; Shriki & Patkin, 2016). This position is reiterated within the sociocultural (Eun, 2008, 2010) and adult learning principles (Merriam & Bierema, 2014; Terehoff, 2002), which equally suggest that learning becomes meaningful with purposeful content and in addressing particular

needs of teachers. Therefore, teacher CPD activities must have a significant bearing on the learning and development needs of participating teachers.

This necessitated the examination of the professional development/learning needs of the basic schoolteachers involved in the study. The identification of these needs enabled this study to investigate qualitatively other critical issues that were included in teachers' CPD experiences. Identifying these learning needs is also essential if teacher educators are to develop appropriate content for teachers' professional development to improve practice. Details of teachers' self-reported learning needs and rates can be found in Table 6.2.

**Table 6.2: Proportion of respondents rating their CPD learning needs as low, moderate or high**

<b>Teachers learning needs</b>	<b>Rating of CPD learning needs</b>				
	<b>Low</b>	<b>Moderate</b>	<b>High</b>	<b>Total</b>	
Knowledge of content in my main subject area	29.8	39.0	18.9	87.7	12.3
Knowledge about performance standards	27.2	43.2	18.6	89.0	11.0
Understanding teaching strategies	31.8	35.1	17.5	84.4	15.6
Understanding of the curriculum	26.8	36.2	19.1	82.0	18.0
Preparation of the lesson notes	23.7	16.4	11.4	51.5	48.5
Teaching students with special learning needs	16.9	37.1	37.7	91.7	8.3
Students assessment practices	26.1	32.9	16.0	75.0	25.0
Classroom management practices	26.8	28.0	13.8	68.6	31.4
ICT skills for teaching	12.3	27.9	52.1	92.3	7.7
Research and dissemination in teaching	14.7	35.3	42.8	92.8	7.2

Abbreviations: ICT: Information communication technology

N = 456. (Source: Fieldwork, 2017)

The teachers' self-reported learning needs suggested higher ratings in the areas of "ICT skills for teaching" (52.1%), "research and dissemination in teaching" (42.8%) and "teaching students with special learning needs" (37.7%) as essential needs for their professional development. In contrast, "understanding teaching strategies" (31.8%), "knowledge on contents in subject areas" (29.8%), and "knowledge about performance standards in subject areas" (27.2%) were rated, as low-level needs. Also, when asked if the school's CPD provisions addressed the self-identified professional learning needs, more than half of the teachers answered in the negative (58.8%).

### ***Teacher Characteristics and Perceived Learning Needs***

To ascertain a possible relationship between some teacher characteristics and the extent of perceived learning needs, a chi-square test was done. Table 6.3 shows the chi-square results with P-values.

**Table 6.3: Results of the Chi-square test on the influence of teachers' characteristics on their perceived (low, moderate and high) CPD learning needs**

	Teachers characteristics			
	P-value			
	Age	Gender	Years of teaching	Highest professional qualification
Knowledge of content in my main subject area	0.18	0.11	0.89	0.14
Knowledge about performance standards	0.37	0.48	0.82	0.80
Understanding teaching strategies	0.11	0.38	0.32	0.46
Understanding of the curriculum	0.97	0.40	0.33	0.70
Preparation of the lesson notes	0.53	0.74	0.77	0.27
Teaching students with special learning needs	0.89	0.66	0.20	0.72
Students assessment practices	0.21	0.97	0.97	0.36
Classroom management practices	0.08	0.81	0.78	0.46
ICT skills for teaching	0.47	0.11	0.14	0.22
Research and dissemination in teaching	0.60	0.11	0.10	0.38

Abbreviations: ICT: Information communication technology

N = 456 (Source: Fieldwork, 2017)

However, the test result as shown in Table 6.3 established no significant relationship between teacher characteristics (age, gender, years of teaching experience and teachers' professional qualification) and the extent of self-perceived learning needs ( $p > .05$ ). Therefore, teachers' characteristics did not influence the type of learning needs and the extent to which they perceived the significance of those needs for their professional development. In contrast to this finding, research has shown that teachers' need for professional development may vary with regards to certain demographic factors (see Khandehroo et al., 2011; Ríordáin et al., 2017).

Elsewhere, Shriki and Patkin (2016) report in a similar study that significant correlation exists between seniority teachers (teachers with highest teaching experience) and perceived significance of learning needs for their professional development. Their study found that the more experience teachers had, the less essential they viewed each of their learning needs. However, this study found otherwise. Teachers' unilateral perception of

their learning needs could be explained from the homogeneity of teachers' experiences as far as their working contexts and conditions are concerned. Thus, by explaining needs under the same systemic conditions, responses are more likely to be the same. Also, the lack of significant relationships relates to the lack of PD activities provided by the state (MOE and GES) to these teachers. This highlights the importance of the state in teacher CPD engagements.

### 6.2.3 CPD Practices among Basic Schoolteachers

CPD comprises of a variety of learning experiences, some that occur naturally and some that are planned, with an intended benefit to individuals, groups or schools and which contribute to students' learning outcomes in the classrooms (Day, 1999). This suggests a multiplicity of approaches through which to develop the professional teacher. This section explores the current CPD practices among basic schoolteachers in the Central region of Ghana. I used an amended form of the OECD's (2013), Teaching and Learning International Survey (TALIS) instrument, the section on teachers' professional development activities (see Appendix B for questionnaire). Teachers in this study were thus asked to indicate the prevalence of some standardised CPD activities within their schools. They were also asked to state the extent to which particular CPD activity was provided for their development.

Details of results on CPD availability and provisions are summarised in Table 6.4.

**Table 6.4: Proportion of respondents rating how frequently they were provided with CPD activities**

CPD Activity	Proportion of respondents				Total
	Often	Sometimes	Rarely	Total	
In-service training	24.3	51.5	9.2	85.1	14.9
Workshop	12.5	46.3	9.4	68.2	31.8
Education Conference	1.1	9.9	8.3	19.3	80.7
Further studies	27.0	48.0	6.8	81.8	18.2
Observation visits to other schools	5.3	20.4	7.9	33.6	66.4
Collaborative teaching	14.3	27.6	12.5	54.4	45.6
Study networks	2.2	7.9	7.0	17.1	82.9
Peer class observation	13.1	30.1	5.9	49.1	50.8
Mentoring/coaching	7.2	25.9	12.1	45.2	54.8
Independent/collaborative research	3.5	17.6	11.6	32.7	67.3
Action study	0.9	6.4	12.7	20.0	80.0
Publication	0.2	2.0	5.5	7.7	92.3

N=456 (Source: Fieldwork, 2017)

The results as shown in Table 6.4 reveal that the in-service training (85.1%), continuing education (81.8%) and workshops (68.2%) were the predominant forms of CPD activities. Although these practices were said to be available, teachers suggested they were infrequently provided in their schools. Opportunities for further studies were identified as the most frequent or often (27%) provided CPD activity for teachers. This was ostensibly so because access and participation in continuing education largely depended on teachers' quest for further studies and minimally on school's arrangement to develop professional teachers. It was therefore not surprising that when teachers were asked about the adequacy of CPD they received from their schools to assist in their professional development, the majority answered in the negative (71.9%).

### ***Teacher Participation in CPD Activities***

To further explore teachers' CPD practices, I examined the level of teachers' participation in CPD activities. The details are shown in Table 6.5.

**Table 6.5: Proportion of respondents rating how frequently they participated in CPD activities**

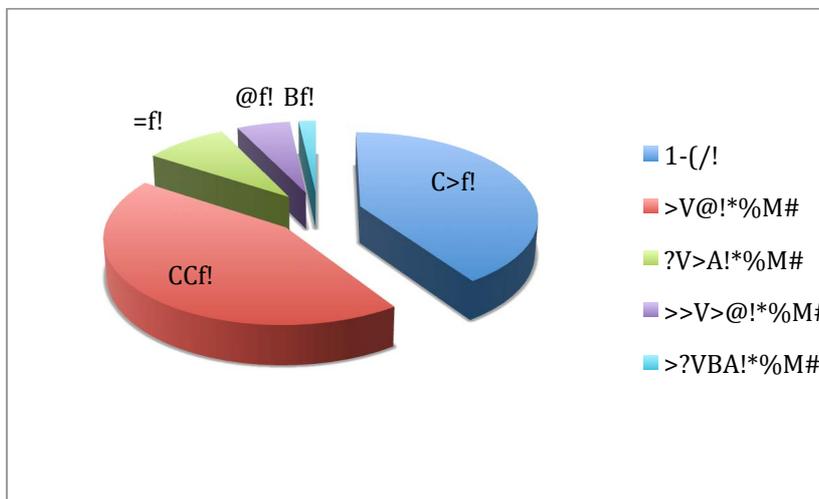
CPD Activity	Response to participation in CPD activities (%)				
	Yes				Never
	Proportion of respondents				
	Often	Sometimes	Rarely	Total	
In-service training	34.2	51.1	5.9	91.2	8.8
Workshop	19.5	59.3	9.4	88.1	11.8
Education Conference	3.5	15.4	12.5	31.4	68.6
Further studies	19.5	44.3	10.1	73.9	26.1
Observation visits to other schools	5.0	25.0	6.4	36.4	63.6
Collaborative teaching	12.1	31.1	8.3	51.5	48.5
Study networks	5.1	10.7	16.7	32.5	67.5
Peer class observation	13.4	28.3	10.3	52.0	48.0
Mentoring/coaching	16.5	34.2	8.1	58.8	41.2
Independent/collaborative research	6.6	25.7	10.7	43.0	67.0
Independent reading of professional literature	37.3	36.2	4.4	77.9	22.1
Informal dialogue with colleagues	47.4	39.5	2.4	89.3	10.7

N=456 (Source: Fieldwork, 2017)

The results as shown in Table 6.5 suggest that the irregular or low rate of provision of organised CPD (see Table 6.4) meant limited participation in those activities as well. Most teachers reported that they had participated in in-service training (91.2%), workshops (88.2%) and had engaged in further studies (73.9%). However, teachers'

participation in the said organised CPD (in-service training and workshops) was occasional but not frequent. Meanwhile, informal CPD activities were widely engaged in by the teachers. Teachers were often involved in informal dialoguing with colleagues (47.4%), in reading professional literature (37.3%) and in interaction with mentors<sup>9</sup> (16.5%) to improve practice. This suggests the need to institutionalise other informal learning experiences as part of teacher CPD practices in congruence with the assertion that teachers are bound to learn in an array of settings within the context of their practice (Borko, 2004; Timperley, 2011). Such an interactive nature of teacher learning is also in conformity with the sociocultural perspective that learning is situated within the context of the practice of teachers (Lave & Wenger, 1991) and often occurs as a result of social interaction occurring within such context (John-Steiner & Mahn, 1996).

To further ascertain the level of teachers' participation in CPD activities, respondents were asked to indicate the number of days of organised professional development activities they had taken part in during the past two years. Results on days of teachers' CPD participation are depicted in Figure 6.1.



*Figure 6.1: Days of CPD Participation*

N=456 (Source: Fieldwork, 2017)

<sup>9</sup> As will be later shown in Chapter 7, the process of mentoring was informal, based on teachers' own sought after academics who influenced teachers' learning and practice in one way or the other.

From the findings in Figure 6.1, there have not been many CPD activities organised for teachers in the last two years within the schools. There were only eight teachers who had taken part in as many as 16 to 20 days of CPD activities whereas even a significant number had not participated in any forms of CPD in the past two years (40.6%).

These findings illustrate that teachers' access to organised CPD activities in the region where this study was conducted is minimal though the majority of the teachers (80.7%) wished to have participated in more organised CPD activities.

### **Relationship Between Teacher Characteristics and Participation in CPD Activities**

Unlike teachers' learning needs, the chi-square test results showed a significant relationship between some teacher characteristics and participation in some CPD activities. This can be found in Table 6.6.

**Table 6.6: Results of the Chi-square test on the influence of teachers' characteristics on their rating of participation (low, moderate and high) in CPD activities**

	<b>Teachers characteristics</b>			
	<b>P-value</b>			
	<b>Age</b>	<b>Gender</b>	<b>Years of teaching</b>	<b>Professional qualification</b>
In-service training	0.000*	0.099	0.000*	0.000*
Workshop	0.023	1.000	0.014	0.003*
Education Conference	0.109	0.788	0.115	0.097
Further studies	0.005*	0.906	0.000*	0.000*
Observation visits to other schools	0.106	0.454	0.204	0.098
Collaborative teaching	0.214	1.000	0.349	0.087
Study networks	0.156	0.605	0.131	0.155
Peer class observation	0.546	0.442	0.338	0.178
Mentoring/coaching	0.161	0.397	0.007	0.369
Researching on a topic of interest	0.002*	0.839	0.026	0.018
Independent reading of professional literature	0.057	1.000	0.566	0.179
Informal dialogues with colleagues	0.003*	0.841	0.482	0.766

\*The areas marked show a significant relationship (Source: Fieldwork, 2017)

These differences were particularly so because while learning needs relate more to teachers' expectations of the education institution (thus working under similar conditions will more likely generate similar expectations), issues of participation are more individualistic, and therefore individual's experiences will be more likely to differ. For instance, age and years of teaching influenced teachers' in-service training

participation ( $\chi^2(3) = 20.552; p = 0.000; \chi^2(4) = 23.105; p = 0.000$ ). It was more likely for teachers with many years of teaching to participate in in-service training (INSET) activities than new or younger aged teachers who have not been in the profession for long. Ironically, years of teaching did not influence teachers' participation in organised workshops ( $\chi^2(4) = 12.430; p = 0.014$ ). This was because of the subject specificity of organised CPD; hence not all teachers had equal chances of participation. As will be later shown in Chapter 8, some language teachers regardless of their years of teaching had not had a single chance of participating in organised workshop or INSET activities that targeted their areas of teaching.

Also, as shown in Table 6.6, there were no significant relationships between gender and participation in any of the CPD forms. Professional qualification influenced participation in in-service training ( $\chi^2(4) = 21.341; p = 0.000$ ), workshops ( $\chi^2(4) = 15.895; p = 0.003$ ) and continuing education ( $\chi^2(4) = 67.609; p = 0.000$ ). Participation was higher among teachers with bachelor's degrees (96.0%) than those with a diploma (82.4%) and certificate (86.2%). This finding contradicts Mataka's (2018) study that suggested that teachers with a certificate are more positive towards participation in in-service training (INSET) and other CPD activities than diploma and degree holder teachers. In the current study, the "expert syndrome" as described as situations where teachers feel they had reached the maximum level of their education and did not need more self-improvement through participation in CPD activities (Mataka, 2011), was not reflected in the findings. I propose that this was so because, as opportunities for CPD were occasional, teachers tended to be rather receptive to any viable prospect targeting their professional development and thus expressed a positive attitude to participate and engage in them (see Chapter 8). The details of the findings are shown in Table 6.6.

### ***Perceived Usefulness of CPD Participation***

As was discussed in the literature reviewed (see Chapter 4), there is a positive relationship between teachers' participation in CPD and their teaching practice (Banilower, Heck, & Weiss, 2007; Desimone, Smith, Baker, & Ueno, 2005) as well as improvement in student learning (Garet et al., 2001; Supovitz & Turner, 2000). A vast majority of the teachers in my study (84.2%) responded that CPD helps in shaping their

professional lives. Using a four Likert scale of “no impact”, “less impact”, “moderate impact” and “large impact”, teachers were also asked to indicate the degree of impact they believe their participation in any of the CPD activity had had on their teaching in the classroom. Table 6.7 summarizes the results.

**Table 6.7: Proportion of teachers rating the impact of CPD activities on their development from ‘none’ to ‘a large impact’**

CPD Activity	No impact	Small impact	Moderate impact	Large impact	Total
In-service training	1.1	6.1	33.6	50.4	91.2
Workshop	1.1	6.8	37.3	43.0	88.2
Education Conference	0.2	4.4	12.5	14.3	31.4
Further studies	-	1.8	22.8	49.3	74.0
Observation visits to other schools	0.2	7.0	18.2	11.0	36.4
Collaborative teaching	0.2	6.6	25.7	19.1	51.5
Study networks	0.2	4.8	15.8	11.6	32.5
Peer class observation	0.7	8.6	25.7	17.1	52.0
Mentoring/coaching	0.2	8.1	27.9	11.6	58.8
Researching on a topic of interest	-	6.1	18.9	22.6	42.8
Independent reading of professional literature	0.2	1.3	25.7	17.8	77.8
Informal dialogue with colleagues	0.4	5.7	42.8	50.7	89.2

Source: Fieldwork, 2017

The results in Table 6.7 show that teachers perceived their engagements in informal CPD activities to have had a more significant impact on their development (with about half (i.e. 50.7%) of the teachers rating ‘informal dialogue with colleagues on how to improve teaching’ as the CPD activity that made the largest impact on their development) than organised CPD (in-service training (50.4%) and workshops (43.0%)). Teachers also found the pursuit of continuing education (49.3%) making significant impact on their development. Also, about 22.6% of teachers identified mentoring/coaching processes to have impacted positively on their development, although mentoring was never part of the formal school arrangements to develop professional teachers (this is explained in Chapter 7).

The limited impact of organised CPD activities raises concern primarily about the content of those activities in increasing teacher knowledge for effective teaching in the classroom. While some scholars have argued that CPD content must aim at improving teachers’ pedagogical content knowledge for use in the classroom (Mukeredzi, 2013;

Shriki & Patkin, 2016), it is also prudent for CPD to be responsive to the real learning needs required by teachers for use in the classroom. Teachers’ reliance on informal learning also solidifies the sociocultural position that learning emerges out of meaningful interaction between co-participants and an expert-novice relationship in the co-construction of professional knowledge (Lantolf et al., 2015; Turuk, 2008). As teachers found collaborative and informal learning useful, it is prudent to institutionalise more alternative CPD approaches that emphasise the sociocultural principles of learning.

#### 6.2.4 Influencing Factors for Teacher CPD Participation

Although CPD is purposed to improve teacher learning, there appear to be factors that influence a teacher’s intent for participation. This section explored factors likely to affect teachers’ engagement in CPD activities and otherwise.

Teachers were asked to rank some factors that explained their reasons for participating in CPD activities. The majority of teachers (40.6%) asserted that the primary reason for engaging in CPD activity was to develop teacher knowledge. Only a small number of teachers indicated their participation was motivated by seeking career promotions (3.7%).

**Table 6.8: The mean ranking of the factors that explained teachers’ reasons for participating in CPD activities**

<b>Factors</b>	<b>Mean</b>	<b>SD</b>
To develop myself as a teacher	1.79	1.084
Increase knowledge in my subject teaching	2.59	1.051
Help my students learn	3.20	1.410
Was compulsory	3.78	1.682
To seek promotion	4.79	1.273
Introduce new technology in my teaching	4.83	1.167

Source: Fieldwork, 2017

While ranking the influential factors, on a scale of 1 to 6, with 6 as the most significant factor and 1 as the least, teachers identified “to better develop myself as a teacher” as the most significant factor. Increasing knowledge in subject areas of teaching was considered the second most influential factor. Meanwhile, teachers ranked “to introduce new technologies” as the least significant factor, even though they had earlier suggested being developed in using ICT skills in their teaching (see results on Table 6.2).

The study also found that non-participation in CPD activities was mainly because schools provided no suitable CPD activities for teachers (65.1%). Poor information dissemination regarding CPD activities was also identified strongly by the teachers (52.2%) as one of the factors influencing their non-participation in CPD. The details of the results can be found in Table 6.9.

**Table 6.9: Factors affecting teachers’ CPD participation**

<b>Factors</b>	<b>Frequency</b>	<b>Percentage</b>
There was no suitable CPD offered	298	65.1
I did not have the pre-requisite information	238	52.2
There was a lack of school’s support	211	46.3
CPD was too expensive	162	35.5
I didn’t have time because of family responsibilities	55	12.1
Other	2	0.4

\*Multiple responses

As discussed in Chapter 4, the factors that affect teachers’ participation in CPD have been explored widely in the literature using different motivational theories (see Kwakman, 2003; Masuda, Ebersole, & Barrett, 2013; McMillan et al., 2016). Generally, some of the literature also suggests teachers participate in attaining certificates, to promote the school as well as personal teaching development (Mok, 2001). For teachers in this study, although CPD engagement was for personal teaching development, ironically, there was a subliminal motive of a more extrinsic purpose of movement on the salary scale (see Chapter 7). This was also reflected in teachers’ ‘hunt’ for certificates through participating in more award bearing CPD activities.

### **6.2.5 General CPD Situations within Schools**

This section sought teachers’ opinions about CPD situations within their schools. The details of results are shown in Table 6.10.

**Table 6.10: General CPD situation in school**

<b>Perception of CPD situation in schools</b>	<b>Agree Freq. (%)</b>	<b>Undecided Freq. (%)</b>	<b>Disagree Freq. (%)</b>
I feel that the CPD opportunities provided by my school are inadequate to help me develop	293 (64.2)	67 (14.7)	96 (21.1)
There are no periodic assessments done in my school To identify my PD needs	186 (40.8)	52 (11.4)	218 (47.8)
We are consistently encouraged to participate in CPD	336 (73.7)	44 (9.6)	76 (16.7)
In my opinion, CPD meets the needs of my school rather than my own needs	179 (39.2)	113 (24.8)	164 (36.0)
My school uses the needs of teachers identified during performance appraisal to design CPD	215 (47.1)	122 (26.8)	119 (26.1)
I have learnt new skills, knowledge, and competencies through my participation in CPD	369 (80.9)	47 (10.3)	40 (8.8)
CPD provided by my school has no bearing on what I do as a teacher	59 (12.9)	65 (14.3)	332 (72.8)

\*N=456 (Source: Fieldwork, 2017)

Using a Likert scale of five, which was re-coded into three; “agree”, “undecided” and “disagree”, the results affirms the significance of CPD to teachers’ professional practice (80.9%). This is in spite of the fact that the majority (64%) of teachers believed these CPD activities were inadequately provided in their schools.

Drawing from the responses, it can be concluded that while teachers perceived CPD as significant to their professional lives, its provision within the schools was not adequate to help them develop as effectively as they wished to. The schools’ support towards teachers’ professional development remained mainly as verbal encouragements for teachers to take up further courses as a way of upgrading their professional knowledge.

As emphasised earlier, the quantitative results of my study provided generic information about what needs to be known about the CPD activities of basic schoolteachers in Ghana. Such information is prudent in informing policy and practice in the area of teacher CPD in Ghana. To my study, these quantitative results also provided the need for further interrogations into teachers’ experiences with CPD activities. Consequently, I recruited participants from the survey into more qualitative in-depth interviews to explore further their experiences with CPD. The qualitative data, therefore, provides solid information into specific professional development needs of teachers as well as their CPD practices and participation experiences. The data also illuminates critical

issues that were involved with teachers' CPD practise. The analyses of the qualitative results are presented in subsequent chapters.

### **6.3 Chapter Summary**

The survey results have highlighted some important issues involved in teachers' CPD practices in the Central region of Ghana. The results point to the limited attention given to teacher learning and the CPD of teachers in Ghana. Currently, available CPD offerings for teachers are inadequate in terms of the provision and diversity in forms. The identified types of the in-service training, workshops and continuing education have been criticised widely in literature due to their ineffectiveness in fostering genuine development among teachers. It was therefore not surprising teachers identified its minimal impact on their overall development. As will be shown in the next chapter, the informal learning activities of teachers were also useful avenues for professional development. The next chapter provides detailed results on teachers' CPD activities and interrogates further teachers' learning needs for development.

## **CHAPTER 7 : ANALYSIS OF CONTINUING PROFESSIONAL DEVELOPMENT (CPD) NEEDS AND PRACTICES OF BASIC SCHOOL TEACHERS IN GHANA**

### **7.1 Introduction**

One major criticism of CPD is the limited impact it appears to have on teachers' development, as participation does not necessarily guarantee development (Ríordáin et al., 2017). To Guskey (2002), this is so because most content of CPD programs does not satisfy the needs of attending teachers. To understand teachers' CPD practices and participating experiences, the study considered the investigation into teachers' own professional development needs as the first point of call.

This chapter presents the qualitative results on teachers' learning needs and CPD opportunities for learning using the teacher-learning frame of analysis (see Chapter 5). Unlike the survey, the qualitative results provide detailed explanations to enhance the understanding of how CPD is practised and experienced by the basic schoolteachers in the Central region of Ghana. The main source of data was the in-depth interviews with teachers and some key informants who were stakeholders in teacher education activities in Ghana. In all, there were twenty-five interview respondents, made up of 16 teachers and nine key informants (see Chapter 5). The units of analysis are the themes that emerged from the data analysis within the case districts and the results are presented in themes and extracts from teachers' own responses. All names of teachers used in the narration are pseudonyms.

### **7.2 The Teacher-learning Frame**

CPD mediates teachers' learning, thus in this study, I use the teacher-learning frame to explain learning as a mechanism for CPD. The frame seeks to explain how teachers construct professional knowledge or how they learn in their professional development. In so doing, the frame identifies the various learning opportunities that were made available for teachers' professional development practice in Ghana. There are two components of the teacher-learning frame: (1) teachers' professional development/learning needs and (2) teachers' construction of professional knowledge

through professional learning opportunities. Consequently, the frame helps to address the first two research questions of this study:

- (1) What professional development/learning needs do basic schoolteachers have?
- (2) What are the CPD opportunities available for basic schoolteachers in Ghana?

The themes within the teacher-learning frame are illustrated with Figure 7.1. These themes were extracted from the analysis of interviews with the 16 teachers in all the four case districts.

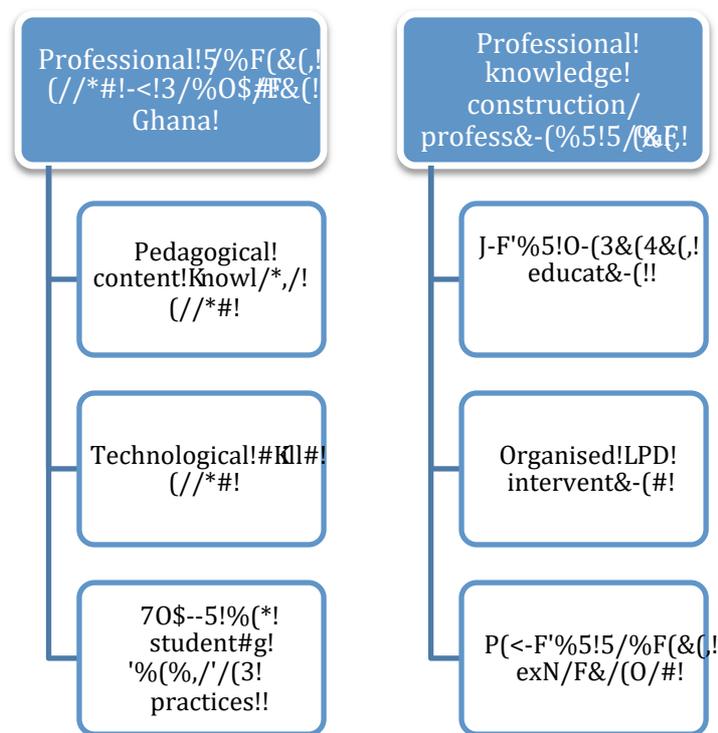


Figure 7.1: Teacher-learning Frame

Source: Fieldwork, 2017

### 7.3 Teacher Learning Needs

As was shown in the literature reviewed (see Chapter 4), there are increasing calls for teacher CPD programs and activities to be responsive to the specific learning needs of participating teachers in order to ensure program effectiveness (Borko, 2004; Ríordáin et al., 2017). The sociocultural theory (SCT) also emphasises the need for teacher learning activities to be goal-directed and content specific to the needs of teachers to facilitate knowledge transformation for use in real classrooms (see Chapter 3) (Eun,

2010; Johnson & Golombek, 2003). To identify the various learning needs of teachers, respondents were asked to describe specific areas within their practice that required further development. The thematic analysis of teachers' interview data revealed teachers' learning needs in the areas of pedagogy, content knowledge, ICT and technology tools usage, school management and student management practices. The details of teachers' needs are discussed below.

### **7.3.1 Pedagogical Content (PCK) Knowledge Need**

The significance of pedagogical content knowledge (PCK) in teacher CPD is explored in the literature review section of this thesis (see Chapter 4). Pedagogical content knowledge (PCK) involves two areas of knowledge: content or subject matter knowledge and pedagogy of making learning concepts meaningful to students (Mukeredzi, 2016). In this study, teachers identified pedagogical need as the most significant of their needs (all teachers underscored a need in this area), that is, knowledge about teaching methodologies and strategies to aid students' understanding of teaching concepts. Teachers expressed that certain content required specific pedagogies and strategies to help students' understanding. Thus, although teachers professed knowledge about the content, they still felt they needed development in the areas of relevant strategies and methodologies to enhance their teaching.

One of the teachers articulated his pedagogical needs in the following comments:

*As a teacher, I don't have much problem about the contents of what I teach but I think the children [students] do. When it comes to the chemical compounds for instance, how to balance chemical equations for them to change the chemical symbols of elements and then use them in equation forms, it becomes a problem. So as a teacher, how to explain it to the best understanding of the students becomes a problem. Maybe it is my teaching methods so perhaps I rather need assistance with my teaching methodologies. (Ato, participant 2-CaseII)*

An English teacher also shared similar sentiments regarding his pedagogical needs around teaching methods:

*As an English teacher, I can confidently say I know my content. When I sit down to read the syllabus, I can easily prepare my lesson notes to go and teach but then my major concern is whether the children will understand when I am*

*teaching. Many times, you will be teaching but you can tell that they are not grasping what you are doing...I will not say I don't teach well but maybe I don't use the best approach to get them to understand me. So, it is very important I get more knowledge on teaching methodologies in the English language. (Kojo, participant 2-Case I)*

Another teacher handling Social Studies commented on his quest to learn the use of teaching and learning materials to facilitate students' comprehension of some "abstract" concepts in the subject:

*I teach reading subjects, so it is not much of a problem knowing my contents, but my major challenge is how to explain some concepts especially in Social Studies to my students. You know concepts like democracy, legitimisation in Social Studies, how best at all or which teaching and learning tools can you employ to explain to your students. So, most of the times when I get to topics like that I struggle. [Therefore], what I need to learn is teaching methodologies. It will be helpful to be trained on how to teach some of these concepts in Social Studies. (Kwesi, participant 4-Case III)*

The results also showed that subject matter needs were required especially among "out-of-field" teachers. These teachers were assigned by head teachers to teach subjects which did not match their training or education, hence had limited knowledge about subject matter content of the subjects assigned to them to teach. In Ghana while this phenomenon is widely spread in basic schools, the problem owes much to teacher shortages and difficulties in getting adequately-trained teachers for deployment into various classrooms (Cobbold, 2015). The wide utilisation of out-of-field teachers could be precarious for students' learning if such teachers do not receive ongoing development in the areas that they teach. For such teachers in my study, they asked to be trained and be equipped with knowledge to teach specific content within their subject areas. For instance, Yaw, a Fantse language teacher who was initially trained in Basic Design and Technology, identified a need in his teaching of "asempru" ('clauses' in English). Similarly, Esi, who did not have a specialisation in sewing and was assigned to teach this component of the Home Economics subject, described her need for development to be able to teach practicals in sewing to her students. Fiifi, who had

pursued a further course in Business Communication but was teaching Science, identified a need for professional development in teaching chemical compounds.

Teachers' pedagogical content knowledge (PCK) needs were interrelated in that teachers needed more than content or subject matter and pedagogical knowledges. Both types of knowledge were required in addition to the abilities to employ appropriate pedagogies in teaching particular or specific subject content. Shulman (1986) puts PCK at the intersection of content and pedagogical knowledge to reflect such interrelatedness and to suggest that teachers need to be resourced to be able to address content and pedagogical issues in their professional practice by employing "the aspects of content most germane to its teachability (Shulman, 1986, p. 9).

### **7.3.2 Technological Knowledge Need**

Technological tools are an important part of a teachers' professional toolbox (Eady & Lockyer, 2013). Technological tools mediate teachers' as well as students' learning. These tools include teaching and learning materials used in the classroom (textbooks, classroom equipment) and technologies such as the Internet, computers, software and other applications that support teaching and learning (Eun, 2008; Lantolf, 2004; Mishra & Koehler, 2006).

The results on technological needs suggest that teachers were keen to shift from traditional teaching technologies into incorporating more advanced technological artefacts that could align their teaching more to 21<sup>st</sup> Century learning. In fact, teachers expressed some urgency with this need, to facilitate personal learning and for integration in classroom teaching. One teacher explained the essence of his development in the following remarks:

*If I have a computer and the knowledge of using it properly, I can integrate that into what I teach. So, even as a Science teacher, I need the opportunity to learn how to use computer [and its related technologies]. I also need to gain knowledge on how to show documentaries on Science topics and use the projector. When children are able to visualise what you teach them, they get to understand it better. (Ebo, participant 4-Case II)*

Another teacher emphasising the need for ICT skills to facilitate knowledge search and research also noted:

*I will be glad if I am trained on how to do certain things with the computer to enhance my teaching, like how to search for information and to do proper research. (Efe, participant 1-Case I)*

The teachers also reiterated that computer skills are one of the ICT skills they needed to aid them in the preparation of lesson notes and students' assessments. One teacher emphasised the need for ICT skills in his preparation of lesson notes, saying:

*We spend all our profitable time to prepare and writing our lesson notes. I need computer skills, and knowledge on applications that can enable me to do my lesson notes without having to write them manually in books and this will save us some time to use for other personal research to help in our teaching. (Fiifi, participant 3-Case IV)*

To be able to manage her students' grades and be able to teach her students some basic functions in computer usage, Baaba reported her needs in the following comments:

*I personally need computer skills to manage students' grades and report cards as well as how to store their grades on computer... The world is becoming a global village so I need to learn how to use the basic function of the computer as a teacher so that when my student asks me something about computers, I can be able to explain to them. (Baaba, participant 3-Case III)*

Although responses on knowledge and usage about computer literacies and other ICT tools may seem basic, this is not so for the Ghanaian teacher. In Ghana, the potential for ICT to transform the way teachers teach and the way students learn has not yet been realised (Mereku, 2013). The majority of Ghanaian teachers have never used ICT technologies in their classrooms (Buabeng-Andoh & Totimeh, 2012). However, teachers in my study demonstrated their readiness and willingness to adopt and integrate ICT technologies in their teaching and learning provided they have the knowledge and skills to do so.

Aside from digital technologies, teachers also required knowledge about the use of appropriate teaching and learning materials (TLMs). According to Eun (2008), TLMs

such as textbooks, classroom equipment, journals, newsletters significantly aid teachers' scaffolding. The teachers perceived that having knowledge about appropriate TLMs to teach some specific contents in their subject domains would help to improve their pedagogies. A mathematics teacher suggested that using TLMs could help make some abstract concepts in mathematics understandable to students:

*There are some topics you will need to have some TLMs and it is because those topics seem abstract to students. In maths, children already see mathematics as something, which is abstract, which is far from our real life experiences, but I tell you there is mathematics in all that we do...so personally I would wish to gain more knowledge on how I could improvise using some TLMs to explain what I teach to students so they can understand me faster than they usually do.*

(Nana, participant 1-Case II)

Another mathematics teacher also emphasised the need to be equipped with knowledge on how to use TLMs to facilitate his teaching:

*Sometimes I try very hard to explain to students some topics we cover in mathematics, but I think with some TLMs it could help in their understanding. I have been to workshops where we have been trained in using some of these TLMs but I still feel the need to know more about which TLM to use to treat which different topics so my students can understand whenever I teach those topics.* (Kacely, participant 1-Case I)

Teachers' desire to be trained in the usage of ICT and its related technology demonstrate the challenge of ICT integration into Ghanaian classroom teaching. Despite the introduction of ICT literacy skills in basic schools, the realisation of this goal is compromised because teachers themselves lack the requisite skills, knowledge and relevant tools to design meaningful learning experiences that embed technology. As argued by Eady and Lockyer (2013), just as it is essential for teachers to keep up to date with the content of their curriculum development, they need also to keep up date with the technological tools that are used in their classroom teaching. Within SCT, such tools could mediate teachers' teaching and learning and assist in their progression unto the next level of their development.

### 7.3.3 School Management Practices

In Chapters 3 and 4, it was revealed that teacher learning and CPD are influenced by the wider contexts of practice within which they occur (Eun, 2010; Hardy, 2012; John-Steiner & Mahn, 1996; Mansour et al., 2014). It is for this reason Shulman (1986) that includes in his forms of teacher knowledge the “knowledge of educational context” which denotes a teacher’s awareness of his/her working environment, the governance and financing of school districts as well as the character of communities and cultures (see Chapter 4).

In this study, teachers construed knowledge about their educational context as knowledge about practical areas regarding school management. Teachers underscored the need to be able to execute responsibilities both in the classrooms, within the schools and outside the schools. It is also significant to note that teachers who required such knowledge held some leadership positions within their schools. Explaining the importance of these needs, Kojo who was an assistant head teacher of a school remarked:

*You see the school is a place that must first be conducive to teaching and learning. So, when you are in a school and the atmosphere for teaching and learning isn't conducive you will have problems. You will always have a challenge. So, for me I feel I need that skills and knowledge so I can manage and make the school lively for learning, so that students will always feel happy to come to school to learn. (Kojo, participant 2-Case I)*

As an assistant headmaster of a school, Kwesi also noted that:

*I think I need to learn some basics about management practices, how to manage the school, attend to students' needs and even how to deal with parents... I need to gain these skills so that I can deal with conflicts among students and also among teachers. To me this is very essential. (Kwesi, participant 4-Case III)*

Also, Baaba, who shared a view on the need to be developed outside the classroom, commented:

*I need to learn about school management practices, how to even receive a parent or a visitor and everything about school administration. I think I don't only have to be developed for the classroom alone but to be able to also manage*

*whole school. A teacher can only be complete if he/she is able to do all these things.* (Baaba, participant 3-Case III)

The comments expressed by these teachers extend professional development from inside what goes on in the classroom to include other areas of equal relevance in order to increase and extend teacher professionalism. The peculiarity of this need lies in the fact that all teachers with some leadership roles within the schools expressed it. These teachers thus needed to be developed in their official skills and to be able to manage behaviours in and out of the schools. Grossman (1990) expresses that teachers require knowledge even about the background of students, school, community and district in order to function effectively. It was therefore not out of place that teachers requested to be developed in knowledge outside what they teach in their classrooms.

#### **7.3.4 Student Management**

In addition, for calls for development on school management skills, teachers also found it critical to be able to manage students' behaviour in and outside the school. Ghanaian teachers perform multiple roles aside from teaching to include counsellors and role models to students and assembly members and community leaders in their communities (see Chapter 2). Teachers emphasised that the ability to execute these roles aside from teaching contributes significantly to their effectiveness as professionals. Also, by having the knowledge to mould the life of students both academically and socially, teachers believed increased their professionalism. Commenting on professionalism as a teacher's ability to manage students, Kojo pointed out:

*A professional teacher should know his students inside out. He should know how to deal with his students both in the classroom and even outside because these children look up to the teachers a lot and if we will be able to do that I think teachers must also be trained in managing students, how to guide the students in dealing with all kinds of issues... I need that skill and it is important for all teachers to have as well.* (Kojo, participant 1-Case I)

Another teacher expressed that her zeal to shape the overall development of her students makes this learning need an imperative:

*As a teacher I should be able to manage the students that I teach well both in terms of their academic development and general well-being, where a student can confidently trust me as a teacher to share his/her problems with me. I need to have knowledge to deal with in such situations. (Efe, participant 1-Case IV)*

To be able to perform this role, a teacher for instance advocated for the establishment of counselling departments in schools. He commented:

*Schools must have counselling departments and teachers must be trained in psychology. At least for each school a teacher must have some basic knowledge in psychology and counselling... at the JHS level students are mostly teenagers and are much prone to peer influence. They go through a lot of crisis that we teachers don't know. Yes! Sometimes they come to me, they confide in me with their problems but to help them very well I feel if I had been trained as a psychologist then I can even identify their challenges even without them coming to me. You should be aware that not all of them would be bold to approach you the teacher... So, sometimes some counselling lessons and skills for teachers would be very important...it must not always be what we teach them, a little of the students welfare matters as well and together with skills in teaching and in managing them, I believe it makes us professional teachers. (Fiifi, participant 3-Case IV)*

According to the teachers in my study, increasing teacher professionalism meant the ability to manage students wholly in a capacity as teachers. To be able to execute this role, teachers identified a need to be equipped with guidance and counselling skills to be able to attend to students' psychological and emotional needs aside from their academic needs. This need particularly accentuates the role of teachers in Ghanaian societies. Teachers exert influence in the total development of school children and as well assume some degree of responsibility for their students (see Chapter 2). Therefore, although not explicitly spelt out to perform these roles, to the teachers themselves it is part of their moral responsibilities and thus, required further help to perform such roles.

The study's identification of learning needs suggests the different knowledge teachers require for development in their profession. These knowledges are fundamental to the

teaching profession and therefore teachers must have access to them in order to function effectively. The kinds of knowledge required by basic schoolteachers in Ghana as explicated through their learning needs include knowledge about content and pedagogy, technology and ICT skills and as well as knowledge to manage school and students' behaviours in and outside the classroom. For effective learning in CPD interventions for these teachers, it is expected that these needs serve as a focus for its content derivation. This is because, implementing CPD programs which considers teachers' own perceived needs, increases the effectiveness and motivation of teachers to participate in such programs. These findings are significant in consideration of effective CPD for Ghanaian teachers and as such will be further discussed in Chapter 10.

#### **7.4 Professional Knowledge Construction/professional learning**

The second theme under the teacher-learning frame is the professional knowledge construction. This is conceptualised as the teacher learning to improve and enhance practice, that is, how basic schoolteachers learn to update their professional knowledge after their training college formation. The results also expound on the prevailing CPD opportunities for teachers' practice in Ghana. The thematic analysis of the interview data revealed three pathways of professional learning/development pursuits: (1) by formally pursuing a further education or a university course, (2) participating in organised workshops or in-service training, and (3) self-initiated/informal learning activities. The professional knowledge construction sub-theme addresses the research question: What are the CPD opportunities available for basic schoolteachers in Ghana?

##### **7.4.1 Continuing Education**

In this study, continuing education denotes teachers' pursuit of further academic study leading to the award of a certificate. Teachers stated that formally, they embark on continuing education to update their professional knowledge to improve their practice. Their exposure to continuing education afforded them the opportunity to learn new things they were not exposed to in the training college professional formation. Other teachers also explained that, aside from the knowledge acquired, continuing education put them in touch with other teachers making it possible for interaction and sharing of experiences related to their practice. For instance, an English teacher recounted how

group discussions he had as part of his continuing education, informed his teaching philosophy and practice:

*There is this practice of forming group studies during examination period at the University. We meet, we discuss topics that were treated in class but then also we get to talk about our experiences as English teachers...personally it was during one of such discussions I learned about teaching philosophy. It is true we had learned about it at the training college, but I never paid attention to it once I started teaching but then when he mentioned it, I had to revisit and to develop my own personal philosophy for teaching. I even had to change some of my teaching approaches due to that [discussion]. (Ekow, participant 4-Case IV)*

Another teacher commented:

*When we go to campus to study, we form our own study groups. We discuss what we are taught in class and in addition we get to talk about other challenges happening in our various schools. We sometimes share similar experiences and while talking I get to pick some ideas to help address similar challenges when I get back to my school. (Ebo, participant 4-Case II)*

Continuing education not only equipped teachers with the opportunities to upgrade their professional knowledge, but it also provided an occasion for the assemblage of teachers where professional experiences were shared in order to improve practice. Interestingly, the dominant modes utilised by teachers for accessing continuing education were the distance and sandwich programs (see Chapter 2). The majority of the teachers who had undertaken further studies indicated having done so using these modes of learning. They shared the following experiences:

*The Ghana Education Service (GES) gives mandate to teachers who want to pursue further courses to upgrade themselves especially when it comes to the teaching and learning in the profession. For instance, if you are a certificate holder, you can upgrade to become a diploma or degree holder. I have used this opportunity. I passed out with a diploma, but I now have a degree in teaching of science at the basic level. (Ato, participant 2-Case II)*

Another teacher who utilised the distance mode to secure his diploma and degree qualifications also noted:

*When I passed out of the training college, I had certificate A qualification. I applied for study leave but I didn't get [it] so I had to wait for some number of years. Luckily, they brought the distance education program and as I speak with you now, I've done the diploma and now have degree as well. (Kacely, participant 1-Case I)*

Furthermore, Kuuku also explained his experience with the distance learning in the following ways:

*I did the certificate A at the College of Education for three years, but I now hold [a] Bachelor of Education in English. I did the distance learning, so I did the diploma for 3 years so from there, I continued to do the degree. (Kuuku, participant 1-Case III)*

The responses of the teachers showed that while distance education and sandwich modes were widely utilised, these were quite popular among young and middle-aged teachers. In contrast, older teachers explained having used the study leave opportunities (either with pay or without pay) as an avenue for upgrading themselves in the teaching profession. An older teacher (53 years) who had used the study leave opportunity had this to say:

*During my time, there were no such things like the sandwich or distance programs. After my certificate A, I taught for about 8 years. I then applied for study leave so I left the classroom to go and pursue my diploma. I then quickly did the degree so now I have my degree. (Fiifi, participant 3- Case IV)*

A female teacher who is 50 years old made this comment:

*When I started teaching we didn't have the distance program and sandwich programs running, so for me after my Certificate, after some years I applied for the study leave, I left the classroom and then went to University of Education in Winneba [in southern Ghana] where I obtained the diploma in teaching English at the basic level. (Baaba, participant 3- Case III)*

Although schools supported teachers' continuing education, participation depended on the teachers in the context of other demands on their personal and professional lives to do so, but not as a compulsion from the Ghana Education Service (GES). Meanwhile, the GES compelled "pupil teachers" through the Untrained Teachers Diploma in Basic

Education (UTDBE) program to embark on continuing education, lest they risked losing their teaching positions within the schools (see Chapter two). This policy also saw the majority of teachers undertaking professional development through continuing education at universities for accreditation.

#### **7.4.2 Organised CPD Interventions**

As explained in the sociocultural theory (see Chapter 3), teacher learning is mediated, facilitated by mediating agents (human, cultural or material artefacts). To Kozulin (2003) organised learning activities for teachers could mediate their progression and appropriation of knowledge for use in the classrooms. The study's results revealed that teachers learned substantially through their participation in organised CPD activities and were able to use knowledge gained in classroom situation.

The widely reckoned CPD interventions were in-service training (INSET) and the workshops. These interventions were periodically provided for teachers' development within the schools. Teachers identified two forms of INSET activities, school-based and cluster-based. Whereas the school-based INSET was practised among teachers within the same school, cluster-based activities were usually organised for teachers within certain geographical areas known as circuits. A circuit is made up of different towns clustered together by their proximity. Thus, such INSET features teachers from different schools drawn together. Workshops were also organised by the district education offices and other educational stakeholders (NGOs, teacher associations).

These training programs afforded teachers the opportunity to learn and to update their skills and knowledge to demonstrate competencies related to their teaching. Teachers acknowledged that they updated their knowledge and learned significantly through their periodic participation in organised INSET and workshops, though the programs were not provided as often as possible. One teacher said:

*Once in a while, I get the chance to go for workshops. And I do learn significantly when I go. During the last workshop I attended which was organised by the AIMS Ghana, I learned greatly, about things I wasn't taught in school and although I had upgraded myself at the university, those aspects of the methodologies that we did at the workshop were really beneficial to my teaching*

*in the classroom. I then asked myself, so what about those teachers who did not get the chance to participate? They will obviously miss out a lot in terms of their learning.* (Nana, participant 1- Case II)

Illuminating the utility of INSET and workshops another teacher said:

*The educational offices sometimes organise workshops an in-service training and these activities always help to keep me updated in my knowledge. Whenever we go for such programs, I am able to pick one or two things to help me in my teaching and even the school-based in-service training that we usually do. I am able to change and introduce [a] few things in my teaching because of that, so I must say they have become useful opportunities for me in terms of me learning to improve myself in what I do as a teacher.* (Ato, participant 2- Case II)

An English teacher also shared experiences of his learning in workshops:

*Personally, it is not all organised workshops that offer a better chance to learn something meaningful but in my last experience of the one I attended; it was very insightful. It was organised for English teachers when they [Ghana Education Service] introduced literature into the English curriculum, the “CockCrow”<sup>10</sup>. So, I learnt a lot during the workshop. Perhaps because I didn’t have knowledge about it, and I was teaching it using my own little knowledge. But after that particular workshop, I will say I learned a lot.* (Kuuku, participant 1- Case III)

For Ghanaian teachers, workshops and INSETs were the most organised and institutionalised CPD practice. These organised interventions remained a major source of learning for teachers to improve practice. However, in spite of their significance to teachers learning and development, workshops and INSET activities were infrequently provided (see survey results in Chapter 6). Also, organised CPD interventions were subject-specific thereby limiting access to other teachers’ participation. Finally, the results also suggested that effective learning in CPD depended on the extent to which teachers were introduced to new ideas, which they hitherto had no knowledge about.

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<sup>10</sup> CockCrow is the title of a new literature book introduced at the basic school level. With its introduction, teachers were now required to teach English literature at the basic level.

### **7.4.3 Self-initiated/Informal Learning Activities**

Within the position of SCT (see Chapter 3), learning can also occur in a myriad of ways within teachers' practice including "...a brief hallway conversation with a colleague" (Borko, 2004, p. 4). This presupposes that the informal settings also present useful avenues for teacher learning. The study established that as teachers engaged in the daily task of their work, they found some impetus to learn and initiated other learning avenues to improve their practice. These included their independent reading and researching for information to constantly update their knowledge, through peer-to-peer learning and through informal mentoring arrangements. This section is thus used to explore teachers' informal learning activities.

#### ***Independent Reading and Researching for Information***

Teachers constantly identified various sources of information in order to increase knowledge and to enhance their teaching. Information sought through reading relevant course materials and research was basically aimed to update and increase content knowledge in subject domains of teaching but less so for enhancing teaching strategies.

A teacher related his experience:

*As a teacher I read a lot, the required textbooks and sometimes, other relevant materials in my subject to identify what is current in what I teach. I do personal research too to seek for more information to help me teach a topic well... For instance, in the Religious and Moral Education (RME), I do read the Bible a lot just to gain more insight and I do all these things in order to improve myself and to ensure I am current in terms of the knowledge I need to teach in my subject areas. (Kwame, participant 2- Case IV)*

Another teacher who identified how he learned informally through reading shared his experience:

*What I usually do is to read the prescribed textbooks and seek other relevant materials so I can teach well. The content in the textbooks are mostly scanty so I*

*buy and read other books like the “Approachers Series<sup>11</sup>”. I also research through the Internet for information and I use my phone to do that a lot to enable me to learn more on definitions and to know what is new in my teaching area. (Ato, participant 2- Case II)*

In Ato’s experience, he also utilised mobile learning as a useful tool in obtaining relevant information pertaining to what he teaches in the classroom. Another female teacher summed up the relevance of mobile technologies in teachers’ professional development. She explained her experience:

*In the olden days, we were not having the Internet but this time we can get a lot of information using the Internet. So, I try to update myself by using the Internet. If there is anything that I don’t understand I look for the information on the Internet using my phone. I look out for definitions and reading more on topics I have to teach. Apart from this, I also read books and other materials I find useful to what I teach. (Efe, participant 1- Case IV)*

Two Social Studies teachers emphasised the use of media as a source of learning for their development:

*I do a lot of reading; the subject Social Studies focuses more on people and our society. So, when I teach I need to relate it to the community the children [students] are living in so I’m always interested in what is going on in the community and as a matter of fact what is going on in the whole Ghana and beyond. So, news and magazines, yeah! I do a lot of reading in that area and the textbooks I use too... I also listen to news on radio and television to be sure I am current in the Social Studies that I teach. (Kweku, participant 2- case III)*

*As a social studies teacher I do research a lot because you have to be current and the ICT too, I read a lot. I also listen to radios, newspaper reviews, and morning shows on topical issues trending in the country. I also read books that*

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<sup>11</sup> Approachers Series are supplementary Science and mathematics books used at both the JHS and SHS levels. Although not an official textbook, it is a compiled with relevant content from both curricular to be used by teachers and students.

*have been written by others within the subject area. (Kobby, participant 3- Case II)*

Regardless of the constraints in accessing organised CPD options, teachers informally engaged in continuous reading and researching in order to update their knowledge to perform well in what they do in the classroom.

### ***Peer-to-peer Learning***

Teachers also initiated peer-to-peer learning characterised by knowledge and information sharing among colleagues in the school setting. In this process, expert knowledge of colleagues was used as an avenue to shape learning and to improve and enhance performance. Within the sociocultural theory (SCT), this practice is an interactive process, which fosters the co-construction of knowledge, involving a more capable peer's support to a novice teacher to extend current skills and knowledge to attain some level of higher competence (Turuk, 2008). Teachers through this process of learning were scaffolded to achieve a higher level of development. Teachers relied on more knowledgeable peers to enhance performances in the classroom. One teacher said:

*Some of my colleague teachers directly or indirectly are like my role models. For some when some topics seem a bit perplexing I go to them. And because some are broad-minded, I share with them their knowledge and experiences and when they also need some information from me, I also make myself available and we learn together. So, among my teachers, I learn a lot from them (Ato, participant 2-Case II).*

Another science teacher who usually shared knowledge with a mathematics teacher in his school said:

*What I do usually is that I mostly consult the mathematics teacher in this school because there are Sections in the science that involved calculations and he's also taught science before. So, I do consultation a lot with him. Sometimes he teaches me, and we learn together. I even invite him to teach my students while I sit in the class with them. (Ebo, participant 4-Case II)*

Similarly, a Fantse language teacher utilised the expert knowledge of an English teacher in her school:

*Once in a while I also get useful information from colleagues and learn from my students as well. What I also do is that I mostly consult the English teacher in this school because there are Sections in the English that can be used to teach the Fantse language subject, so I do consultation a lot with her. She is also a Fantse by ethnicity so sometimes I do contact her to even teach my students while I sit in the class and learn. (Baaba, participant 3- Case III)*

Another Fantse language teacher also explained his experience in peer-to-peer learning in the following comments:

*I do have a teacher in another school nearby. Unlike me, he is trained to teach the Fantse subject so whenever I am in need of help regarding the Fantse I always do run to him because he is a pure Fantse man who is also trained in the subject. He has also taught the subject for long, so I go to him whenever I am in difficulty. He gives me some books as well which I use in teaching my students. (Yaw, participant 4-Case I)*

It is evident from teachers' experiences that peer-to-peer learning involves 'expert' teachers or more knowledgeable teachers in a process of scaffolding a rather less-experienced teacher to obtain and reach some degree of development. It is collaborative and emphasises knowledge creation and construction among teacher colleagues of different levels of development that aid each other in the process of learning in practice.

### ***Mentoring Based on Informal Arrangements***

In my study, the mentoring processes identified were informal arrangements based on what Rhodes and Beneicke (2002) described as "counselling and professional friendship". This relationship manifested between teachers and professional academics that had shaped the professional journey of the teachers. Individual teachers personally sought mentors who provided counselling and supported mentees based on the existing professional friendships.

A teacher drawing on his relationship with his former lecturer at the University for mentoring in his teaching profession said:

*I met my mentor when I went to the university for further studies. He happens to be one of my lecturers who took me through the course. After establishing a good rapport with him our relationship moved beyond student-lecturer. In fact, he is now my mentor, Yes! He is like a godfather to me now in terms of what I have to teach. I run back to him for assistance anytime I am confronted with a challenging topic to teach and I've been learning a lot from him. (Kojo, participant 2-Case I)*

Another teacher described the support she received from her mentor in the teaching of mathematics:

*I have a mentor who has been helping me a lot in terms of my teaching. He has been encouraging me and has supported me especially as a female mathematics teacher. I look up to him in so many ways and whenever I am challenged in teaching any topic, when I go to his office, he takes me through the processes all over. Sometimes I get to learn things I never did during my schooling days both at the training college and the University. Through our relationship I've really learnt a lot and used the new things I've learnt in teaching my children [students]. (Nana, participant 1-Case II)*

Kuuku received counselling support and teaching and learning aids from his mentor. He explained his relationship as follows:

*My mentor was my lecturer. I do receive a lot of reading and reference materials from him that I use for research purposes. Because of that I have a lot of English books and if I am not sure of anything, I still go to the University to find out from him, how to teach some topics and other things regarding what I teach. Actually, he has been helping in my learning a lot and whenever I need to take major decision, in my teaching and in my life I still do go to him. (Kuuku, participant 1-Case III)*

Although the mentorship process was informal among teachers, through such interaction, teachers obtained relevant knowledge to inform their classroom practices. Like peer-to-peer learning, mentoring was also based on knowledge construction with

more knowledgeable others. However, unlike peer-to-peer learning in the mentoring process more knowledgeable ‘experts’ aided in the scaffolding of teachers to some degree in their development. Nonetheless, both practices encouraged collaborative learning as teachers engaged in social construction of knowledge within the context of their practice, a position well entrenched within the SCT of learning.

### ***Staff Common Meetings***

Staff meetings are common practice for teachers where colleagues gather for information dissemination and discussions about professional practice. Such gatherings also presented meaningful opportunities for teacher learning. Teachers believed that the staff common meetings were medium for teachers to engage in relevant conversations and dialogues about their practice with people who were familiar with their context while seeking remedies for challenges they faced. The study also revealed that as teachers interacted during staff meetings ideas were shared towards CPD implementations in the classroom (see Chapter 8). Teachers expressed the following views about their staff meeting interactions:

*We talk about many issues at our staff meetings. Some teachers share with the rest what they learned after going for workshops. We also discuss about our teaching experiences in the classrooms, the challenges and we all suggest ways forward. At the end of the day, you are able to pick something new one or two things that you can change in your own class.* (Ekow, participant 4- Case IV)

Kacely also emphasised the nature of interaction in his comments below:

*It is during our staff meetings that we get to interact as teachers. We talk about a lot of things and share similar experiences so we could learn from ourselves. If teacher A is having particular problem in class, he/she brings it and we talk through how to solve it so that the next time teacher B faces the same situation he/she can implement what we talked about.* (Kacely, participant 1-Case I)

Discussion of teachers’ staff meetings emphasises the role of social interaction in teacher learning as espoused within the SCT. It also projects learning as a collaborative activity involving the active roles of participating teachers. Therefore, learning becomes more meaningful to teachers if they engage in co-construction of localised professional

knowledge rather than reliance on external experts, as was the case in most organised CPD interventions.

### ***Social Media as a Learning Platform***

Mobile computing devices can provide learning opportunities for students and teachers alike. Using mobile devices with social media allow for communication and enhance learning. For these reasons, students, teachers and faculty members are increasing usage of the social media to enhance teaching and learning (Rodriguez, 2011). It was revealed in the current study that, although it was common for teachers to use mobile technologies to engage in learning, there were limited opportunities for the utilisation of such mobile learning platforms to facilitate teacher learning and development. Mobile technology platforms were used to share information and to engage in other social activities, but they were rarely used as avenues to foster teachers' development. Information shared were mostly social activities but not job-related issues that could enhance their learning for teaching. However, Nana described her participation in a learning platform for mathematics teachers where daily information about the subject was shared and learned among group participants. She explained:

*We have a mobile phone platform for learning. All Lashibi district mathematics teachers are on that WhatsApp group platform. So sometimes when you have a problem, we post it there. Then teachers on the platform will bring ideas and we all contribute and get it solved and that also helps us... I will rate the effectiveness of the platform at about 45% but yet I still get to learn something new on the platform. (Nana, participant 1- Case II)*

It must be noted that this "WhatsApp group platform" was created and managed by teachers themselves as a way of sharing information and knowledge relating to mathematics teaching.

The findings presented under this theme suggest that apart from organised CPD practices, informal learning presented useful avenues for teachers' professional development. These informal practices exemplify teachers' self-directedness towards their learning and development. Unlike organised CPD practices, teachers' engagements in informal practices were seen to be ongoing, embedded within the context of practice. However, these informal activities were un-institutionalised, as they were based on

teachers' own personal initiatives towards their professional development. This, notwithstanding its informal status, impacted greatly on teachers' learning, teaching as well as students' learning (see Chapter 8).

The influence of teachers' informal learning activities on students' learning in my study cannot be overemphasised. A key finding of my study is the call for the need to legitimise informal learning activities as part of teachers' professional development. Teachers conceptualised their CPD as participation in organised INSET and workshops and continuing education, and therefore did not see informal learning activities as essential avenues for their professional development. There is thus the need to increase teachers' access to a repertoire of CPD practices that include more collaborative and co-operative learning. The findings on teachers' informal learning will further be elaborated in the discussion chapter (see Chapter 10) to make claims for the need for its legitimisation as potential practice for teacher CPD in Ghana.

### ***Teacher Agency***

A salient finding related to teachers' informal learning and CPD practices was the demonstration of agency regarding continuing professional development. As shown in Chapter 4, agency describes teachers capacity to "critically shape their responses to problematic situations" (Biesta & Tedder, 2006, p. 11). Teachers exhibited personal agency over constraints in access and limitations to CPD opportunities while seeking alternative strategies to address learning and development challenges.

To improve performance and students' learning, teachers initiated measures outside what schools provided to support their own learning and development. An ICT teacher utilised a computer school of a friend to engage in learning. He recounted:

*I have a friend in this community who operates an ICT school as well as an Internet café. Since in my school we don't have [an] ICT laboratory, what I do is that, I go to his school and his café and sometimes I learn from his teachers over there. I do all my necessary research there and sometimes I even arrange with him to have my students go to his school and café for practical sessions because you cannot teach ICT without practicals so I take my children there and*

*I teach them about computer hardwares and even how to use internet in looking for information. (Kobby, participant 3-Case II)*

Also, as an alternative solution, Nana personally purchased teaching and learning material to assist in her teaching of number planes to her students. She explained:

*I struggle to teach my students number plane but any time I seek for assistance from my school I was told to improvise. When I realised there was no help coming from anywhere, I had to do something by myself. I first consulted my mentor who took me through how to teach the topic using graph board and with that I bought my own graph board that I use to teach in class. (Nana, participant 1-Case II)*

Another teacher recounted how he purchased other relevant textbooks and reading materials for his learning to improve the teaching of his subject in the classroom:

*Sometimes it is even difficult to get the required textbooks, some of the teachers have also been sacrificing to have some other things to enhance the teaching and learning. Personally, have bought a textbook which is different from what we are using, and I've been getting other materials which is also helping me to get more information in the subjects that I am teaching so I can improve myself and what I teach. (Kwesi, participant 4-Case III)*

While teachers constantly bemoaned their meagre salaries (see Chapter 2), having to purchase own teaching and learning tools was a considerable act for these teachers. Their willingness to bear such financial cost indeed demonstrated the agency on their part to learn and to improve their classroom teaching.

Teacher agency was also demonstrated by a female respondent who used an ad hoc measure by seeking external assistance in teaching some content in a subject she had been given to teach in which she had no expertise. She acted proactively by bringing in an adjunct teacher, 'an outsider', to help her teach the subject. Even though she received opposition from her school head due to school politics (see Chapter 9), Nana identified the usefulness of her encounter with the adjunct teacher. She narrated her experience in the following:

*I was given social studies to teach but then Social Studies is not my area, so I was having problems teaching it from the beginning. I spoke to my head teacher a few times, but nothing was done to help me but then where I was staying there was a banker who had taught as a Social Studies teacher before. After telling him my challenges he was willing to even come to teach my students while I sit in the class with them...though I received opposition from the school in bringing him, I learned a lot from the man in order to teach my students. (Nana, participant 1- Case II)*

Similarly, in the absence of viable support from colleague teachers, a Home Economics teacher sought learning support from a teacher intern who had been posted to a different school:

*None of the teachers in my school did the course I had to teach so when I realised a new teacher had been posted to XYZ basic school, I personally took steps to contact the lady so I ended up learning most of the things I had to teach from her. I learnt how to cut shirt and to do other things with my students as far as teaching sewing is concerned and it is that knowledge that I am using to teach the kids now; it is not my area but I was forced to do that just so I can teach those kids well. (Esi, participant 3-Case I)*

The responses of the teachers point to the constraints they faced in their quest to teach their varied subject areas, however, they acted decisively and proactively by using diverse strategies to address the challenges. In making decisions to look out for alternatives to improve teaching and learning, teachers demonstrated an incredibly high level of resourcefulness and a sense of being part of a professional community. Such practices increased their autonomy in diagnosing their needs and determining what to do and learn in order to improve practice. However, the same could not be said in teachers' engagements in organised CPD. The actions and decisions made by these teachers resonates with Kennedy (2014) postulation that increasing capacity for professional autonomy requires that teachers' agency be enacted in ways that make positive change to their practice. Teachers' agency was again found to be ongoing embedded in the context of their practice, increasing teacher motivation for participation and engagements in CPD activities. Hence, agency is discussed as one of the central themes in the discussion chapter.

### **7.5 Chapter Summary**

This chapter presented the study's results on the interviews conducted among basic schoolteachers in the Central region of Ghana. Unlike the survey results in Chapter 6, this chapter offered a deeper insight into teacher learning needs and their learning, which I have presented using the teacher-learning frame. The results revealed the varied professional development needs of teachers including PCK and ICT skills for teaching. Also, available CPD offerings were predominantly in-service training, workshops and teachers' own pursuit of continuing education. There was also evidence of teachers' informal learning activities, which were characterised by teachers' own personal agency to their professional development. These findings are later discussed in Chapter 10 to demonstrate the processes of teacher learning. From these findings also, practical recommendations will also be made (see Chapter 11) to inform the design and implementation of more robust CPD activities for Ghanaian teachers.

The next chapter uses the practice frame of analyses to explore basic schoolteachers' participation and CPD experiences. There is also an exploration of the motivational factors for teachers' decisions to engage in CPD activities or otherwise in the next chapter.

## **CHAPTER 8 : ANALYSIS OF TEACHER PARTICIPATION AND CPD EXPERIENCES**

### **8.1 Introduction**

The previous analysis chapter (Chapter 7) reported on teachers' professional development needs and the prevalent CPD offerings for teachers in Ghana. This current chapter explores teachers' participation and experiences with CPD activities through the practice frame (see Chapter 5). In so doing, some critical issues involved in teachers' CPD participation experiences, such as access and frequency of activities, timing and duration, teacher involvement, and processes of learning are identified in this chapter. The motivational factors that affected teachers' decisions for participation and engagement in CPD activities are also presented. The chapter therefore contributes to answering the following research question of my study:

What are the participation experiences of basic schoolteachers in CPD activities?

In this chapter, I draw on the interview data from teachers and other information gathered from the key informants involved in this study.

### **8.2 The Practice Frame**

As was explained in Chapter 5, which dealt with the analytical framework for analysis, the practice frame interrogates the nature of CPD practice and identifies critical issues in teachers' participation experiences. There are two interrelated themes in this frame: (1) teachers' participation and CPD experiences and (2) teachers' implementation or transformation of CPD learning experiences into classroom practice. These themes will now be elaborated on.

### **8.3 Teachers' Participation and CPD Experiences**

It is widely argued that while initial education of teachers is important to enable them perform satisfactorily, it is perhaps inadequate for survival throughout the entire teaching career (Buchanan et al., 2013; Darling-Hammond & Bransford, 2005; Day & Sachs, 2004). For this reason, teachers need to constantly learn and participate in CPD activities throughout their careers in order to adapt to the changing needs of their

profession as well as their students (Day & Sachs, 2004). This section reports on the participation and experiences of basic schoolteachers in CPD activities in Ghana.

The interview data gathered indicated a wide range of responses to questions about teachers' participation and experiences with CPD. Teachers' responses about their experiences revealed the nature and the underlying purposes of the CPD events they had participated in as well as other critical issues worthy of consideration for the study. To ascertain some of the responses from teachers, this chapter also integrates perspectives from key informants: education directors, head teachers and teacher association representatives.

### **8.3.1 The Nature of Basic Schoolteachers' CPD Practices**

This section provides insights into the nature of organised CPD activities of basic schoolteachers in the Central region of Ghana. Teachers were asked to describe the major CPD activities offered by their schools as well as their participation in those activities.

As was identified in Chapter 7, teachers predominantly participated in forms of CPD such as in-service training (INSET), workshops, and continuing education. This also corroborates the survey results (see Chapter 6) that suggest that teacher CPD events were transmissive in nature (see Chapter 3). Additional to the survey findings, teachers revealed during the interviews that aside from continuing education, which was a personal quest of teachers who wanted to upgrade professional knowledge, the provision of workshops and the INSETs (both school and the cluster-based) by the schools was a mandatory professional development requirement. Consequently, district education officers and other stakeholders in education liaised occasionally to provide opportunities for teachers' learning through the organisation of workshops and cluster-based INSET, while head teachers remained responsible for the organisation of school-based INSETs.

However, CPD was rarely made available to teachers, even though it was mandatory. In validation of the findings in Chapter 6, all teachers during the interviews expressed concern about the inadequacy of CPD provisions (see Section 8.3.2). Indeed, education

directors and teacher associations who had a responsibility for the organisation of CPD admitted this inadequacy and attributed it to a lack of available funds and resources.

The results also show that dominant forms of CPD were delivered as ‘one-shots’, suggesting the lack of continuity in CPD as an ongoing learning process. Participation in organised CPD mostly depended on when a new element or content was introduced into the curriculum and during initiated projects, which targeted specific subject teachings. Such project-initiated workshops were planned and implemented by other educational stakeholders (mostly non-governmental organisations (NGOs) to equip teachers with some competencies yet, there were scarcely any organised feedback and evaluations from those training activities (Cece, education director 3, personal interview). Teachers identified a few project-based workshops that were pioneered by mostly NGOs and corporate bodies, such as the African Institute of Mathematical sciences (AIMS), UNICEF, and RLG communication networks, with each focusing on teachers in specific subject areas.

These findings resonate with the CPD situation in most other African countries. For instance, Niane (2004) reported in a study that CPD programs in Senegal were ad hoc measures, mostly supported by donor agencies and NGOs, where programs lacked continuity with no measures for evaluation and feedback for improvement. Asare et al (2012), in their study on in-service education in sub-Saharan African found that the nature of donor driven CPD programs in Ghana were uncoordinated with minimal effects of teachers’ development.

### ***The Cascade Nature of Organised CPD***

Teachers’ descriptions of their CPD participation also revealed the cascade approach to practice. CPD as a cascade approach involves the training of a number of teachers in a particular content so that they, in turn, can train their colleagues on the same content (Kennedy, 2005). In this approach, training is conducted at several levels by trainers who are drawn from a level above and are trained in order to decentralise knowledge to a lower level (Hayes, 2000). As teachers in this study described their experiences with CPD processes, the results revealed a two-tier cascade training level structure: (1) between head teachers and teachers in the same school, and (2) between teachers and

teachers. That is, head teachers attended workshops and were mandated to train their teachers in what they had learned. In addition, teachers also participated in organised CPD and upon return to school shared their knowledge and learning experiences with other colleagues. In this regard, the PTPDM policy document designates a teacher leading an INSET activity either school-based or cluster-based as the “curriculum leader”.

According to curriculum leader Ato:

*I do attend cluster-based INSET, which is organised for schools in all the districts, and when I come back, I sit with the house [teachers] then we discuss what I learned. (Ato, participant 2- case II)*

Kuuku, another curriculum leader, also said:

*When we go for training for curriculum leaders, we discuss ideas on topics that are perplexing to the teachers. We have resource persons who discuss with us so that when we come back to the school, we also discuss with the rest of the teachers in a school based INSET so that if they are also facing such problems in the classrooms they will also be able to use the knowledge to help them in the teaching and learning process. (Kuuku, participant 1- Case III)*

Other teachers also described their experiences with knowledge sharing after their participation in CPD activities. It is important to stress that it was only possible to ‘transfer’ generic knowledge (i.e. the content of CPD programs) to colleague teachers at the same JHS level because of the subject-specific nature of organised CPD. However, subject content knowledge and strategies were preferentially shared with teachers at the lower or primary levels. This was because at the primary level, teachers taught across all the subject areas. Nana and Ato, who cascaded their knowledge with primary teachers, described their experiences:

*I recently participated in a workshop program for mathematics teachers and during the workshop we learned about fractions. With fractions it cut across even from the kindergarten to JHS 3. And so, when we finished the workshop, which was organised only for JHS teachers we, the JHS teachers had to gather the primary teachers to teach them in an INSET program. (Nana, participant 1- Case II)*

*After our workshop on how we can teach some basic science concepts with TLMs, as a curriculum leader I also organised an INSET with the primary teachers and I spoke to them about what I had learned. (Ato, participant 2- case II)*

Kojo, an English language teacher, also explained his CPD experiences and how he shared knowledge in what was taught with colleague teachers at the primary level:

*I will say I have been an asset to teachers at the primary level. Based on what I learned in the University and sometimes also through the workshops I get to go to, I am like a resource person to most of the school-based INSET at the primary level. I get to share my knowledge and experiences with them sometimes on even how to teach the kids and using TLMs to teach even the reading. (Kojo, participant 2-Case I)*

Esi and Kobby, who shared more generic content knowledge with other colleagues, also shared their experiences:

*I have led a number of INSETs in the school where I had to share knowledge on what I learned during my participation in a workshop organised by the district or other NGOs. I have given a talk on sanitation, we went for a workshop so when I came back, I had to meet all the teachers to educate them on what we had learnt. (Esi, participant 3- Case I)*

*As an ICT teacher I have led some INSET activities in the school, and it was all based on what I went to learn in a workshop. As teachers we all need some level of knowledge in ICT not only the students... After the one-teacher-one-laptop workshop I also taught some few things to the teachers here. (Kobby, participant 3- Case II)*

It is important to emphasise that the cascade nature of CPD among the teachers in the Central region of Ghana was not an official or institutionalised means of reaching large number of teachers, as has been the principle behind the model in other contexts (Hayes, 2000; Kennedy, 2005). Rather, as shown in this study, it was a useful way of informally engaging teachers to share knowledge and to learn from each another, especially in situations where CPD activities in themselves were rarely organised. The cascade

practice was a strategy used by the schools to encourage teachers to share in their knowledge after participation in external CPD activities (workshops, cluster-based INSETs) to colleagues during school-based INSETs.

It is necessary to point out that this approach was not without flaws, as teachers themselves identified potential defects associated with such an approach. For instance, Ato, a curriculum leader who felt such approach usually ended in a distortion of important knowledge and information, said:

*I think curriculum leaders shouldn't be the only one appointed to go for trainings and workshops. Other teachers must be given the chance too so they can go and discuss their own challenges. It will be better than me as the curriculum leader going in for those trainings and coming back to teach them. In my effort to try to teach, in a way I may lose one or two things as I am transferring that knowledge to them. (Ato, participant 2- Case II)*

Aside from the criticism of the knowledge 'transference' associated with this practice, teachers also identified the minimal relevance of what they learned to the learning of other collegiate teachers. They explained that this was due to the subject specificity of some of the CPD activities. Therefore, the experiences of a Mathematics or Science teacher during CPD workshops may be less important to an English or other language teacher. Kweku, for example, reported:

*Usually when teachers go for workshops they are supposed to share with us what they learned but because we may not be teaching the same subjects they are teaching when they come back we don't get them to do that unless it was a general workshop that we all could learn something like the ESHEP (Enhanced School Health Education Program). (Kweku, participant 2- Case III)*

Efe also stated:

*Before you go for any workshops they identify particular subject teachers to go but when these teachers come back because we don't teach the same subjects with them it becomes difficult to share anything meaningful but sometimes too we pick up some few new things to add to what we know...but then as a teacher too you need to be all round so it helps sometimes. (Efe, participant 1-Case IV)*

The results on the cascade nature of teacher CPD among basic schoolteachers in Ghana suggest that, in spite of the challenge of knowledge ‘transference’, the cascade approach afforded teachers opportunities to share knowledge and CPD experiences in a collaborative learning manner, which is a principle well grounded within the SCT of learning. The SCT emphasises that the effectiveness of learning depends on the level of interaction with other humans and with both material and cultural tools (Vygotsky, 1978). For teachers in this study, social interaction with collegiate teachers mediated learning in their CPD and became meaningful in their contextualisation processes (see Section 8.5) to solve real problems in their classrooms.

### **8.3.2 CPD Fundamental Purpose and the Use of Standardised Tests**

As emphasised earlier, teachers’ descriptions of their experiences raised issues about the fundamental purposes of the CPD activities they had engaged in. Such information is essential to this study because it helps with understanding the motivations behind teachers’ CPD undertakings and the nature of professional knowledge or learning that is to be expected from teachers’ participation (Kennedy, 2005).

With regards to the purposes of CPD practices, the results demonstrate that CPD for Ghanaian basic schoolteachers aimed at training and retraining teachers to exhibit the competence to either to improve students’ performances or in conformity with educational requirements. For these reasons, the organisation of workshops and cluster-based INSET activities for teachers only became necessary whenever a new element was introduced into the curriculum or there was concern about students’ declining performances. In this regard, students’ outcomes in the standardised test of the Basic Education Certificate Examinations (BECE) (see Chapter 2) became the predictive factor for teachers’ learning in CPD. In her comments about the district’s support for teachers’ professional development, Herty, an education director, explained explicitly the purpose of CPD in the following way:

*When we realise that teachers are not doing well, we organise workshops or INSET activities for them. We usually use students’ performances in the BECE so that if in one particular subject the students did not perform well, we bring teachers in that subject area in all the districts and we do INSET for them... Now we have also included literature in the BECE so, we frequently organised*

*workshops for the English teachers so they will be able to teach those aspects of the literature. (Herty, Education director 1)*

Head teachers of schools who also attested that standardised tests in the case of the BECE results became a reason to develop teachers endorsed Herty's position. For instance, Katty, a head teacher, commented:

*From time to time the district also does some workshops for teachers when they realise teachers in some subject areas are not performing well. What they do is to look at the performances of students in that area during the BECE. So, if in Mathematics for instance, students perform poorly, they can then decide to do some INSET by bringing on board all Mathematics teachers in the district for training. (Katty, head teacher 1)*

### ***Problems Surrounding Standardised Tests***

The use of standardised tests as a basis for determining when to develop teachers ignited dissatisfaction among the majority of the teachers, who said the practice was not only unfair, but also led to the neglect of the actual development needs of the teachers. Ebo, for instance, registered his displeasure in the following comments:

*How they determine what to learn and when to learn is just ridiculous. They [GES] use the BECE performances of students so that if in Mathematics they [students] did not do well, they [GES] think it is the fault of the teachers. They [GES] review the examiners' report to identify where students failed to answer properly and then they [GES] ask us to go for training in those areas. It is good that we go but the problem is you cannot use the BECE to tell me I did not teach my students well. A lot of things go into the BECE and especially for those of us in the rural schools that don't get equal access to resources to teach the students. It will be unfair to assume that. (Ebo, participant 4-Case II)*

Fiifi echoed Ebo's comments:

*When our students don't do well, we get the entire backlash. I agree we influence students with what we teach them. But you can also teach, and the student will just not learn... Our previous education director once came to the school to lambast us just because the performances of our students during the BECE were poor. But you see you cannot blame the teachers entirely because there are other factors that work against students in the BECE. So, suggesting*

*we are incompetent just because our students fail the BECE is inappropriate.*  
(Fiifi, participant 3- Case IV)

Kojo called for the need to focus teacher development on the real needs of teachers rather than using students' performance as a determinant:

*I think the district must genuinely consider teachers development. It is when we are genuinely developed then we can teach our students better... I don't believe in the BECE results. You can have a bright student but during the BECE he/she may fail. So, as teachers they [GES] should really consider our challenges in teaching then they [GES] help us to build our knowledge in those areas but not to use the BECE results to determine our professional development areas.*  
(Kojo, participant 2-Case I)

Teachers' remarks were buttressed by the teacher associations' calling for authentic teacher learning, where effective diagnoses are based on teachers' needs for development, and not on pre-planning programs that use the BECE examiners' report. For instance, Dickson, a representative from the Ghana National Association of Teachers (GNAT), suggested:

*When we use BECE results to develop our teachers, we are not being fair to them. It goes to suggest that they didn't teach them well that is why they failed. The organisers may have good reasons for doing so but I personally think that we should look beyond the BECE results, conduct a better performance appraisal to determine the weaknesses of our teachers and develop them in those areas accordingly.* (Dickson, teacher association 1)

It is common for rural schools in Ghana to perform poorly during the BECE, with some schools performing as low as zero per cent (Ansong et al., 2015). While teachers are at the centre of the blame and responsibility towards their students' performances, as suggested by Ebo and Fiifi, there are also other factors that contribute to the students' abysmal performances. The inequitable access to teaching and learning materials and facilities in rural schools, for instance, pose a challenge to teachers' work as well as their professional development (see Chapter 9). Therefore, while CPD aims to improve

students' learning and performance, it is also imperative that CPD targets the real needs of teachers as the basis for their development.

The findings on the purposes of CPD suggest that CPD was provided for teachers in Ghana to enhance student learning through teacher learning. This was reflected in the types of the CPD approaches (workshops and INSETs) adopted to foster teachers' development. However, to maximise the effectiveness of the prevailing approaches, the findings suggest that it is also important to consider teacher learning as integral with students' learning. Also, whereas organised CPD activities were driven by students' learning (where CPD was used to address some perceived needs or deficiencies in teachers' performances) and conformity to policy implementation (where new curricula introduction necessitated CPD organisation), the nature of practice implied a transmissive, "one-off" events, which were pre-planned with a cascade approach. These findings are consistent with Kadingi's (2006) observation that teacher professional development programs in Ghana are only used as ad hoc and patchy measures "to retrain and reskill teachers in curriculum areas which they might have never studied in in-depth during their teacher training programs" (p. 14).

The next section identifies some key issues that were involved in teachers' CPD experiences. In Chapter 10, these issues will be discussed and integrated in a model proposed for the guidance of teacher CPD activities in Ghana.

### **8.3.3 Teachers' Perceptions about their CPD Experiences**

In this section I explore some critical issues teachers raised in their CPD experiences and participation. Teachers' responses were analysed in the context of Desimone's (2009) conceptual framework of effective CPD for teachers. Thus, through teachers' own experiences, indications were made about what should constitute effective CPD practice for basic schoolteachers in Ghana.

In their experiences, teachers expressed concerns about the quality, frequency, and the nature of the CPD programs they had participated in, and which had an impact on the level of active learning and the possible re-construction of professional knowledge to influence classroom practices. Teachers also noted issues about facilitation, duration

and time allocations for CPD programs. The teachers' CPD experiences resonated with the following themes:

- absence of teacher consultation
- infrequent CPD provisions and the politics of access to CPD opportunities
- duration and timing of CPD programs
- active learning processes
- coherence of CPD activities to teachers' classroom practice.

These themes will now be explained.

### ***Absence of Teacher Consultation***

Teacher consultation is conceptualised as the degree of involvement of teachers in setting the CPD agenda that affects their own learning. It refers to the degree of autonomy teachers wield in controlling their own learning prior to and during CPD participation. For teachers as adult learners, learning becomes more effective and meaningful if they can control their own learning with some degree of ownership (Knowles, 1990) and make relevant decisions regarding their learning activities. Day (1999) also believes that teachers cannot be developed passively; therefore, there is the need to centrally involve teachers in decisions concerning the direction and the processes of their learning.

These views were affirmed by teachers who explained that taking part in decisions regarding CPD learning activities was essential to both voicing their learning needs and determining the processes of their own learning during CPD implementation. However, in this study, participating teachers' descriptions of their CPD experiences portrayed them as passive learners who had little or no control in setting the agenda of most CPD activities they had participated in. Teachers were recruited into participation without consultation of what was to be learned and how learning was to be done. Consequently, teachers felt demoralised about the lack of consultation, which they also explained had consequences on their motivation and the degree of active learning during participation. In addition, the lack of teacher consultation prior to program implementation meant external 'experts' pre-planned and delivered CPD content with limited teacher

influence. Teachers expressed frustrations about this practice. For instance, Kwesi commented:

*There has never been a thing like teacher consultation before, during or after the programs. You will only be there, and a letter will come that on this particular date all teachers who are teaching this particular subject are to attend a workshop. Sometimes you get there and you don't even know what you are going to do. So, consultation is not done. You are only informed and because of that, you go there sometimes to realise that what is being taught is of no relevance to you in the classroom. (Kwesi, participant 4- Case III)*

While emphasising teachers' passivity during CPD, Fiifi and Esi remarked:

*I don't remember anything like consultation before the program and neither were our ideas sought regarding what we were going to learn, our duty has always been to just to go there and be participants in the program. (Fiifi, participant 3- Case IV)*

*We only receive memos that we should attend workshops. We are usually not involved in deciding the areas that we would want to learn so we only go there, and they teach us what they think we should know. (Esi, participant 3- Case I)*

In the comments expressed by Kwesi, the often-experienced ineffectiveness of CPD activities to improve teachers' classroom practices was due to the lack of teachers' involvements in planning CPD goals and contents. In fact, other teachers reported incidences where the content of participating CPD activities were either unrelated to the knowledge required for their classrooms or did not present any new knowledge for their learning (see the section on coherence). In addition, teachers' passive roles during CPD implementations limited their autonomy in learning, a situation that can affect teachers' tendencies to transform practice (Kennedy, 2005).

Nevertheless, unlike the externally driven workshops and cluster-based INSETs, there was some ownership in learning shown by teachers during school-based INSET activities. The nature of the school-based INSET, as a collaborative learning activity among colleague teachers, emphasised the self-directedness of the teachers in diagnosing and addressing their own learning needs. Therefore, teachers were seen co-

constructing professional knowledge by utilising members' expert knowledge and experiences in solving common problems. Seemingly, through monitoring and supervision, head teachers of schools were able to identify areas within the professional practice of teachers that required further development, and these formed the bases of content derivation for most of the school-based INSET activities. Efe and Kacely made the following remarks about their school-based INSET experiences:

*In school-based INSET, it is about what we want to learn... We decide on it at our staff meeting and then we identify among ourselves the best persons with the knowledge in such an area to lead.* (Efe, participant 1- Case IV)

*We plan our INSET in the school... So, once we all decide on what we want to learn, first we appoint one of us to lead as a form of peer teaching.* (Kacely, participant 1-Case I)

As explained in Chapter 7, the staff common meetings were identified as providing the ambient locations for teachers' interactions on how to improve practice. As well, the nature of social interaction in school-based INSETs promoted effective learning among teachers who relied on colleagues to support their learning and development. Thus, unlike organised workshops and cluster-based INSETs, where teachers felt alienated from their learning experiences, teachers were active in the whole learning activity processes during school-based INSETs. This re-echoes the need for the adoption of more sociocultural models of CPD that foster collaboration and social integration in learning to increase program effectiveness.

### ***Infrequent CPD and the politics of access to CPD Opportunities***

Issues about the frequency and accessibility to CPD opportunities were of major concern to the teachers, with all of them admitting to the inadequacy of opportunities for their development. While CPD interventions were rarely organised, their subject specificity also meant that some subject teachers were targeted for development while others were not. CPD interventions were prioritised for teachers in Mathematics, Science, English and ICT. According to Herty, an education director, emphasis is placed on Mathematics and Science because students perform poorly in these subjects

and to encourage teachers and students to veer towards specialisation in Mathematics and Science. She commented:

*We have always put more emphasis on Mathematics and Science because we want to encourage a lot of teachers to do Maths and Science, because that is where the students are lacking. And then we have the ICT too because it's a new thing that was introduced. We do the same things for the quota system too. We give much higher percentages for teachers in these areas so that a lot more teachers can be trained and come back to help our students. (Herty, education director 1)*

These comments suggest that CPD participation and access to development were not targeted evenly across teachers. It was also revealed that finance rendered most schools and the district education offices handicapped in their ability to provide frequent CPD activities. All the key informants in this study underscored financial issues as significantly affecting the frequent provision of CPD activities for teachers. Teachers who had opportunities to participate in CPD activities lamented the inadequacies of such programs to foster their development. For example, Kwesi, Efe, and Kobby commented about CPD frequency in their respective schools in the following ways:

*Once in a while, teachers within specific subject areas are called for workshops and other learning programs. But I wouldn't say what the teachers have is enough for their necessary development. The opportunity comes once in a while and also the school itself is not able to provide such activities for the teachers because of the lack of resources (Kwesi, participant 4- Case III).*

*I don't remember the last time we organised even the school-based INSET in the past two years, this term is almost ending but then there is no sign of a possible INSET to be organised. I think the problem is that after the INSET the head has to refresh the teachers involved and it seems that the heads do not have the money to do so and they end up not doing it at all. So, the problem has always been more of finance to be able to organise such programs (Efe, participant 1- Case IV).*

*You could be here for a whole year without any workshop, INSET, or any capacity building program And when you ask, your head will tell you the “top” [the educational directorate] has not instructed her to do this or that or she will tell you there is no money to do such things since the capitation grant is not coming. So, it’s been a bit challenging when you want to think about professional development within your career and especially for us the teachers who teach at the remote areas (Kobby, participant 3- Case II).*

While these comments may seem surprising, other teachers also identified the total neglect of their professional development as far as their subject teaching areas were concerned. This was due to the highly prioritised areas of Mathematics and Science at the expense of other generic subjects. For instance, none of the Ghanaian language teachers interviewed, regardless of teaching experiences, had had any opportunity to participate in CPD activity that targeted their teaching areas. These teachers explained that, apart from their further studies and personal learning to improve performance, no organised CPD intervention targeted their areas of teaching. Two such Fantse language teachers, Efe and Yaw, explained their situations:

*Most of the workshops are based on Science, Mathematics so it seems like some subjects have been sidelined and have not been factored so much, which is also not helping to develop the capacity of the teachers involved who teach those subjects. The NGOs come to organise workshops, but the emphasis always has been on math and science teachers. So, for me as a Fantse teacher I have never had the same chance to [participate], not even once in my teaching career. (Efe, participant 1- Case IV)*

*In Fantse, there has not been a thing like going for a workshop and the same goes for the social studies too. Ever since I came to this school no such thing has happened. (Yaw, participant 4- Case I)*

The situation was no different for other subject area teachers. For instance, Kwesi, a teacher of Social Studies and Religious and Moral Education (RME), shared his experience:

*For the subjects I teach now I haven't participated in any workshops or INSET that has a focus on that. I have taught them for two years now and have not received any INSET activity or attended a workshop on them, but I did attend some workshops when I was teaching Science in a different school. (Kwesi, participant 4- Case III)*

Kwame also explained that although he occasionally participated in school-based INSET, he had yet to participate in ones that focused on his subject areas (RME and Building and Technology):

*I am yet to go for workshops in the subjects that I am teaching now and that is if only it will happen. I have taught them for about six years now and I haven't heard about any programs to help me develop in those areas. (Kwame, participant 4- Case IV)*

Even though teachers were much concerned about the discriminatory target audiences for these CPD activities, there were mixed feelings about such discriminatory practices. While some teachers identified that the practice demoralised them, others were not particularly concerned, arguing that those organised CPD activities would have minimal impact on their classroom teaching. For instance, Yaw, a Social Studies and Fantse teacher who had never had the chance to participate in organised workshops or cluster-based INSET activities on his subject areas, expressed his concern:

*I would not say it has been all right for me that I don't get to develop like other teachers... Sometimes you feel very down when a workshop opportunity comes, and you realise that your area of teaching is not considered. (Yaw, participant 4- Case I)*

Kwame also said:

*It is a worry, when you are in the same school and people get the chance to go and seek more knowledge while you are not chosen. It is not as if you don't want to, but you see that thing [practice] makes you feel like some teachers are more important than the others and I tell you it is not a good feeling at all. (Kwame, participant 4- Case IV)*

Kwesi, on the other hand, had mixed feelings about his inability to attend organised CPD owing to the subjects that he was teaching. He commented:

*Sometimes you feel bad and sometimes you also feel okay because some of the workshops, sometimes we go to only have minimal impacts on what we teach in the classroom, so I don't get worried that much. But then also if it is about getting knowledge to also help you to impart more to the children [students], if you are not participating you will feel very bad about it and that is how I feel sometimes. (Kwesi, participant 4- Case III)*

The target of some supposedly 'special' subject teachers for CPD could be a recipe for tension and can affect teacher collegiality in schools. In the words of Efe, "*It takes a matured person to understand the situation.*" Such comments pose a caution on the need for CPD to evenly target teacher audiences to avoid possible grounds for tension among working colleagues. This is because when teachers get the impression, as Kwame pointed out, that "*...some teachers are more important than the others*", if not managed properly, the situation could aggravate teacher interaction and heighten power relations within the school (see Chapter 9).

These findings reveal teachers' challenges in gaining frequent and in equitable access to viable CPD support for their professional development. While Science and Mathematics teachers were privileged to participate in organised CPD, those activities were, however, seldom provided. On the other hand, organised CPD activities were literally non-existent for language and other generic subject teachers.

### ***Duration and Timing of CPD Programs***

Related to issues of frequency and access were duration and the length of time allocated for CPD activities. Available research suggests that effective CPD activities require sufficient duration regarding the span of time over which the activity is spread and the number of hours spent in the activity (Desimone, 2009; Hochberg & Desimone, 2010; Kang et al., 2013) However, the findings of this study suggest that limited time is apportioned for teachers' CPD activities in Ghana. According to the teachers, CPD duration spanned between a day and three days, often covering content which was to be learned in a term and which was condensed to fit within those short periods. In fact, this affected the degree of their possible learning, as content was not explored adequately because of the limited time period. Although research has not provided the exact

duration for CPD activities, there is evidence in literature to support that, CPD activities that are spread over a semester or a term are essential for effective learning during participation (Darling-Hammond et al., 2017; Desimone, 2009). In his assessment of his experiences, Kojo made the following observation about duration of CPD programs:

*The facilitators only managed to take us through the course outline, but it was too rushed I must say. I think it should have been a week program, but it was only organised in two days, which wasn't the best way to learn something meaningful.* (Kojo, participant 2- Case I)

Ato also demonstrated how timing and duration affected the effectiveness of the CPD programs he had participated in:

*I personally had a problem with the timing and the duration for those activities. How can you package what is supposed to be learned in a week to two or three days? It will obviously not be effective and that was exactly what happened.* (Ato, participant 2- Case II)

And Kwesi pointed out:

*The duration for most of our workshops is not enough. You cannot use a day for a workshop that is supposed to be going on for a week, because we need to get more details about whatever content it is to be learned. But if we spend just a day, we would not even have time to relax and when all the things are compacted in a day, it becomes very difficult to just grasp everything.* (Kwesi, participant 4- Case III)

Kojo also shared an experience where the limited time allotted affected the facilitation process during CPD implementation:

*For the activities I have participated in, I noted that the facilitation wasn't well coordinated owing to time constraints because if an ample time had been given, I think facilitators would have performed better than they did.* (Kojo, participant 2- Case I)

Certainly, duration remained an important feature of effective CPD design for teachers in the Central region of Ghana. The limited duration for teachers' CPD activities affected the facilitation of learning and the actual learning of the teachers in CPD.

Teachers thus felt that, their CPD learning experiences could have been more effective if CPD activities had spanned a longer period.

Related to duration was the scheduling or timing of the CPD events. It was found that organised CPD activities undertaken during instructional hours affected teachers' time available for teaching. However, teachers and key informants expressed different concerns about this. Whereas teachers identified that the timing for workshops and INSET activities affected instructional hours with their students, concerns from education directors were also that teacher continuing education (especially using distance education and sandwich modes) affected the quality of the time teachers engaged with their students in the classroom. It is important to emphasise that recent studies have identified that teachers' participation in continuing education using either the distance or the sandwich modes affects students learning through the loss of instructional hours and limited engagement with students in the classroom (Ananga et al., 2015; Mereku, 2014; Tamanja, 2016). It is been estimated that teachers who enrol in sandwich programs lose an average of 264 hours each of classroom instructional time with their students within an academic year (Tamanja, 2016).

Teachers who shared their experiences about timing of CPD activities suggested the need for CPD activities to be organised during the vacation so that students' learning is not affected. For example, Kacely said:

*My only problem during the participation was that instructional period was used for that workshop. It should have been done during the holidays so that the children will not lose the instructional contact hours that we should have with them in classroom but we used some of the regular school periods that is the instructional period for that workshop so we realised that though we were doing good we were doing so at the expense of the children [students]. (Kacely, participant 1- Case I)*

Ebo also noted:

*Sometimes when we have to leave the children to attend workshops, it is a bit worrying because you will miss your class periods...so I think all these activities must be done during vacation. (Ebo, participant 4- Case II)*

Duration and timing were essential for promoting teachers' active learning during participation in CPD. Consequently, the short-duration CPD programs resulted in limited time for teachers to observe and receive meaningful feedback for their learning. It also limited the extent to which teachers were involved in the process of learning, all of which are necessary ingredients for active learning. This study also found that the timing for CPD had consequential effects on instructional hours with students, as teachers left their classroom duties in order to participate. The process of teachers' learning in CPD is explored as the next theme.

### ***Active Learning Processes***

This theme explores the elements within the professional development systems that supported teachers' active learning in CPD. With the positioning of teachers as adult learners in this study, it is expected that they would be more active than passive in their learning and therefore should be involved in the processes of their learning to yield maximum impact on their practice. Teachers are involved in learning when given opportunities to observe and to participate, receive feedback and to make presentations during the learning process (Desimone, 2009). This suggests that teacher educators should be more like facilitators during teachers' learning in CPD programs rather than didactically impose learning on adult teachers.

The teachers in my study were of the view that the conduct and processes of the CPD learning activities, as well as the involved facilitators, affected how learning was constructed. Teachers preferred CPD activities that gave them opportunities to observe and participate in the learning process rather than to passively listen to lectures from facilitators. Such participatory approaches influenced teachers' learning and increased their motivation for participation. Teachers were also enthused about learning in situations where they were treated as adults and where adult teaching methodologies (see Chapter 4) were applied to their teaching. Kacely, who shared satisfaction about one such situation, observed:

*During the last workshop I attended, I will say teachers were given the due respect that they deserved. The facilitators themselves had actually taught teachers before so they never assumed, we were ordinary students that they*

*could handle anyhow. The respect that teachers deserved were given to us and for me that was very unique about that workshop. (Kacely, participant 1- Case I)*

Kojo also gave his impression:

*I never felt like I didn't know anything. During the program the facilitator didn't teach us like the way we do to our children [students] and personally it was one of the best workshops I have attended so far. (Kojo, participant 2- Case I)*

Indeed, facilitators played a major role in teachers' learning. Teachers' satisfaction about their learning and participation depended on the facilitation process, as well as the ability of facilitators in adopting strategies applicable to adult learners. Kuuku explained how a facilitator at a workshop influenced his continuing participation:

*We were treated like adults and for me even though the content of what we did was below me I decided to attend all the days and it wasn't only me there were many other teachers who came for all the days because of the facilitator. He made learning quite interesting and simple for all of us. (Kuuku, participant 1- case III)*

In addition to the identification of roles of facilitators, teachers also identified group tasks and presentations as effective learning approaches. Kojo and Nana emphasised how group tasks and presentations promoted collaborative learning among participants:

*In one of the districts INSET I attended; I must say I enjoyed whatever was taught. The facilitation was just great! We were grouped and as teachers we had the chance to exchange ideas. Group tasks were given, and I got to represent my group in that exercise to do presentation to the rest of the participants. It was really interesting, and I must be frank I learned really well, and it was very exciting. (Kojo, participant 2- case I)*

*You know when you go for workshops and the instructor lectures you it becomes very boring. You will sleep and end up coming back with no idea learnt from the program. But there was this Mathematics workshop I attended organised by AIMS Ghana. Facilitation was so on point. Even though we were not consulted prior to the program during the program they asked us to write down what we*

*expected to be taught. They also gave us some quizzes and I believe it was to determine our strengths and weakness in some of the topics we teach in Mathematics...it was very fruitful, and we learnt a lot. (Nana, participant- Case II)*

For the teachers in this study, their learning was greatly influenced by the processes of CPD and teaching approaches suitable to adult learning. Whereas Kacely's and Kuuku's comments reflect the tendencies of adult learners to bring their self-concept into learning situations, Kojo's and Nana's comments show learning is enhanced when teachers are able to interact collaboratively to share professional knowledge. Learning was also meaningful when teachers took an active role in the process of their learning. Teachers thus identified group tasks, presentations, the facilitative processes of learning, and opportunities for co-constructing professional knowledge as essential elements in CPD that nurtured their active learning.

On the other hand, there were also incidences where teachers felt undermined in their CPD experiences due to facilitators and the facilitation processes. In such situations, teachers identified the use of inexperienced facilitators who were unable to deliver adequately the content of the program for effective learning. However, teachers observed that even though the inability of facilitators to deliver effectively affected their learning, this was due to the limited time and duration apportioned to the CPD activities. Ato and Kacely, for instance, noted the following in different scenarios:

*The problems I've had with some workshops are that some tutors [facilitators] are unable to deliver [the content] very well so it affects learning. They come and it's as if we are in a lecture hall and they are dictating notes to us. This doesn't help our learning...so we leave just as we came without getting any knowledge. (Ato, participant 2- Case II)*

*I believe facilitators do play critical role in contributing to how we learn when we go for workshops. In a situation he/she [facilitator] is unable to adopt the right approaches, it affects how we learn... the learning environment and activities should be suitable for teachers to learn. You cannot come and treat us*

*like children and hoping that it will work, definitely not.* (Kacely, participant 1-Case I)

It is evident from teachers' responses that the processes of CPD affected how learning was constructed among teachers for subsequent use in real classrooms. Teachers considered learning as active and effective when facilitators adopted constructivist approaches that made them feel part of the learning process.

### ***Coherence of CPD Activities to Teachers' Classroom Practice***

As explained in Desimone's (2009) framework (see Chapter 3), coherence refers to the content, goals and activities of CPD, which must be consistent with a school's curriculum, teacher's knowledge and beliefs, and the needs of their students. I use the word 'coherence' in this study to refer to the degree to which the contents of CPD activities were significant to what teachers needed to know in order to improve performance in the classrooms. Such content must deepen teachers' knowledge in their various fields to improve teaching skills in the classroom, and keep teachers abreast of developments in order to generate and contribute new knowledge to the teaching profession (National Commission on Mathematics and Science Teaching, 2000)

The study's findings on coherence establish that CPD activities among basic schoolteachers had a focus on increasing subject matter knowledge, teaching methodologies using TLMs, and assessment practices. These content areas were typified in workshops and cluster-based INSETs, while more generic content was generated for school-based INSET activities. For Science teachers, much of their CPD content was on chemical compounds and basic electronics, while mathematics teachers identified content in the areas of fractions and integers. All English language teachers explained having learned about literature during their workshops, owing to the introduction of a new literature book, *Cock Crow*, into the English curriculum. The content of school-based INSET was generic, based on topics to improve teacher professionalism but not necessarily related to what teachers taught in the classrooms. Improving teachers' methodology had a focus on using and integrating teaching and learning materials to enhance students' understanding of content.

While the majority of teachers suggested their participation in CPD was meaningful for their classroom needs, others also felt CPD activities were ineffective due to the mismatch between the content and what they needed in real classrooms. Teachers' opinions were that participation would have been more useful if they had had a way to communicate their real challenges and needs to serve as sources for content of the programs. Others also explained that inasmuch as CPD events were irregular, even a small attempt was helpful to aid improvisation in the classroom. Kobby and Kojo suggested the content taught during participation was incongruent with the curriculum and shared these experiences:

*Of all the things that were taught during the workshop, I already had knowledge about them and though I got to learn about new things personally, like how to lock your computer for children not to get access to some important files or deleting it and then how to create files, but by the curriculum what we learnt there was above Junior High School (JHS) 1 to JHS 3. We are not even required to teach those content to the students. (Kobby, participant 3- Case II)*

*For one or two workshops that I have attended the content was good, it was good that I went through, but I don't think it helped me to address some challenges that I have in teaching my children. I also realised that the facilitators were not having a particular topic to teach. But they could have consulted us so that we the teachers would disclose to them our challenges then they can come in to pick the ones that are common to all of us. (Kojo, participant 2- Case I)*

For Esi, her participation did not introduce her to any new knowledge for use in the classroom:

*I participated in a workshop for Home Economic teachers...but for me because I did it at the University, I think I was already okay in terms of the content that was taught. So, I only saw the workshop as a refreshing course thing and for that matter did not introduce any new thing to me in terms of new knowledge. (Esi, participant 3- Case I)*

While it was observed that organised workshops and INSETs were incoherent with the knowledge teachers needed for use in their classrooms, teachers also explained that the situation occurred because they were not consulted prior to program implementation about which aspects of their professional practice needed to be improved. On the other hand, teachers whose participation was consistent with the knowledge needed in the classroom shared their experiences. For instance, Kuuku said:

*To a greater extent I will say the workshop addressed some of my learning needs. Before the workshop I was finding it difficult teaching some topics like the fractions. But during the workshop though not all areas were covered we were taught how to teach fractions in simpler ways for the children. (Kuuku, participant 1- Case III)*

Nana also emphasised that the CPD she attended in Mathematics helped her to adopt different approaches to teaching her students in the areas that had hitherto challenged their comprehension:

*I learnt a lot on methodologies like teaching fractions, additions, subtractions and multiplications with teaching and learning materials (TLMs). With these new approaches I now don't teach these topics in abstractions, which made it difficult for my students to understand. Now I have introduced my students to the TLMs like the Cuisenaire rod, paper folding, finger mathematics, which the students enjoy during lessons. (Nana, participant 1- Case II)*

Ato also described his experience:

*With the workshops I have attended, it addressed my problems. At first even teaching fractions I didn't know that the LCM that you have to find, you can even multiply the two denominators. In most cases, I make my children list the multiples of the two denominators then they select the least common one out of them. But after one of the workshops I attended I found this as a waste of time so now I've been using what I learned during that workshop, so I think it has facilitated how I teach the lesson now. I think the children really understand it better than before using that long process. In another workshop in Science too we were taken through the balancing of chemical equations I have realised it was very much useful especially when they introduced the LCM method of doing*

*it. Right now, most of my children are able to solve it without much difficulty.*  
(Ato, participant 2- Case II)

In conclusion, this study found a rather mixed reaction among teachers about CPD coherence with their classroom practices. Whereas some teachers reported that CPD content was congruent to their classroom needs, others pointed out the ineffectiveness of the content in addressing their particular classroom needs. Teachers measured the effectiveness of CPD with its relevance to their classroom teaching and learning. Such relevance of content to teachers' classroom needs was later found to be important in sustaining learning and the teachers' contextualisation processes. This is explored in the next section.

#### **8.4 Contextualisation/Implementation of CPD Learning Experiences**

The second emergent theme within the practice frame was teachers' implementation of their learning in real classrooms. For this reason, teachers' contextualisation is introduced here to refer to the ability of teachers to 'transfer' or transform knowledge gained during CPD participation for implementation in real classrooms. In other words, teachers need to understand the content and pedagogies of what was learned during participation in CPD along with its adaptability to suit the needs of students in own classroom contexts.

Teachers were asked about the changes in their classroom practices they could attribute to their engagement in CPD activities and how such knowledge was translated into practice. This transformation process is the significant output of CPD participation. As argued by Yoon, Duncan, Lee, Scarloss, and Shapley (2007), the outcome of CPD participation is the alteration in teachers' classroom behaviours, which inevitably affect the learning of their students. Within the sociocultural perspective, teachers need to participate in CPD as a social activity, use appropriate knowledge (mediating tools), and transform knowledge for use in real classroom situations (transformation). Such appropriation and transformation of knowledge leads to real learning, as participants are able to contextualise in their social practices (Lantolf, 2004).

Kolb (2014) supports a sociocultural perspective of learning with his argument that learning occurs if knowledge is created through the transformation of concrete experiences. The degree to which teachers learned during CPD intervention will therefore be determined by how well they are able to practise and implement those learning experiences in their classroom situations. This section thus presents the findings on how teachers in my study implemented and contextualised their CPD learning into their classroom teaching. The findings are based on teachers' perspectives and non-observable impacts through statistical test measurements. Finally, the section explores some barriers to teachers' implementation of their learning from CPD interventions. The details of these findings are now provided.

#### **8.4.1 Teachers' Implementation Strategies**

Generally, there were concerns from teachers about the issue of knowledge application and implementation to translate CPD learning experiences into real classroom contexts. While some teachers were dissatisfied about their learning experiences, most of majority of them were content with their learning and were keen to use the new knowledge to inform their practice. To do this, teachers identified two major strategies: (1) through reflection on practice and (2) through social interaction in the workplace.

##### ***Reflection on Practice***

To translate learning into practice, teachers engaged in a process of reflection while thinking about their performances in order to gain insight from their practice. Valli (1997) suggests that teachers' reflection on practice is essential for them to be able to "make judgements about their teaching, alter their teaching behaviours in the light of craft, research and ethical knowledge" (p. 70). For the teachers in this study, reflective practice was an opportunity for them to learn from their own experiences based on their participation in CPD interventions as well as their engagements in informal CPD activities. Reflection was also identified to be part of the teachers' professional practice, where periodic assessments were made about professional strengths and weaknesses and also where teachers decided on what to learn, how to transform what was learned and which aspects of practice needed alteration in order to improve their teaching and their students' learning.

Kacely explained his reflective practice processes:

*As a professional, learning to improve what I do means thinking, thinking about what is it I have to learn new and how I will bring those new things in my classroom teaching...so for me I do think a lot about my teaching and it allows me to strategise and to adopt the best practices to implement in my class. It also allows me to know where I fall short in my teaching and based on that I seek for the necessary help, where I need to consult then I consult, where I need to read I look for the necessary materials to read, from the Internet and other sources. (Kacely, participant 1- Case I)*

Ekow also said:

*The JHS teaching is such that there are free periods where a teacher may not have engagements or a class to teach. For me during that time is where I sit down to reflect on what I do and try to look at certain things closely to see how best I can present it to my students. In fact, those moments allow me to revisit my teaching strategies and even the content of what I taught and to learn and look out for how I can improve in my next class. (Ekow, participant 4- Case IV)*

Baaba summed up the essence of teachers' reflective practice:

*Thinking about what you need to do to improve your teaching is part of our professional lives and for me I do that a lot, though I don't know about the others. Doing that helps you a lot, you are able to identify your own flaws and then devise the best ways to learn to improve yourself and what you teach your students. (Baaba, participant 3- Case III)*

Teachers' reflection coalesced with some form of agency to enhance classroom practices and thus enabled teachers to engage in critical introspections about professional practice. While Kacely's, Ekow's and Baaba's comments suggest reflexivity based on professional practice, Ato and Nana identified that they often engaged in reflection as a strategy to implement new knowledge in their classroom after participation in CPD interventions. That is, through reflection, teachers planned to introduce new elements in their teaching, especially in their methodologies. These aided in the implementation of the CPD learning experiences. They shared the following views:

*Whenever I have to implement new things in my teaching, I sit down to think a lot about it. I usually do that at home at the end of any workshops. If we were taught how to use TLMs I even practice at home before I come to class to introduce the students to. This helps a lot because there are sometimes, I have to do try and errors with the TLMs before I could get it right as we were taught.* (Ato, participant 2-Case II)

*After each workshop, what I do is I note down the key things I learned and think through them to know how I can teach my students with the new knowledge I acquired. With the TLMs there are times I forget how to use them even after the workshops. So, I call colleague friends from other schools who were also participants for discussion and with that I am able to adjust my teaching for better understanding of my students.* (Nana, participant 1- Case II)

However, except for these two teachers, no teacher seemed to have engaged in this practice, especially after participation in organised workshops or INSET. Meanwhile, it was common for teachers to engage informally in reflection on practice as professionals who wanted to improve their teaching and the learning of students.

### ***Social Interaction in the Workplace***

The second implementation strategy adopted by the teachers was to engage in meaningful social interaction at the workplace. The sociocultural theory of learning assumes that knowledge is constructed as individuals engage and interact in social activities with other people, objects and events (Vygotsky, 1978). The staff common room and the staff meetings provided the context and activity for teachers' reflection on the implementation of possible learning that resulted from their participation in CPD activities (see also Chapter 7).

Through interactions involving colleague teachers, knowledge was co-constructed as CPD experiences were shared and ideas sought towards possible implementation in the classroom. Teachers also interacted with colleagues outside the school with whom they had engaged in similar CPD activities in order to refresh their ideas on what was learned and to seek best options towards contextualising their learning in real classrooms.

According to Nana, whenever there was the need to revisit knowledge gained in CPD participation for introduction in her classroom teaching, she consulted colleagues outside the school with whom she had had the same CPD experience. She commented:

*There was a time I wanted to introduce my students to a concept we had learned in one of our workshops I think it was about fractions and integers. Because we usually are not giving handout honestly, I had forgotten but when the need arose, I made some calls to people I had made friends with but in different school and I got help from them. (Nana, participant 1- Case II)*

Fifi also shared how his colleagues in the same school assisted in his contextualisation process:

*It is not only when I need to apply new knowledge after participation in CPD activities generally my colleagues here help me a lot. I went for a workshop and we were giving some CDs [compact disks] with things to demonstrate to students. When I came back, it was my teachers who helped me to do that as I was still not much prepared in using the computer. (Fifi, participant 3- Case IV)*

The results on CPD implementation suggest teachers learned more from collaborative activities embedded in practice than from passively attending workshops and INSETs. Even though teachers individually engaged in CPD activities, knowledge was best implemented through other colleagues within the school or outside it and with whom teachers had similar CPD experiences. Thus, this finding corroborates the sociocultural perspective that social interaction mediates learning. In addition, reflection and social interaction enabled teachers' contextualisation of their CPD learning experiences. It is important to acknowledge that these practices were more informal than formal arrangements as teachers acted based on their professional agency and self-directedness to improve their teaching.

#### **8.4.2 Teacher Change as a Result of CPD Participation**

The determinant of teachers' learning in CPD programs is their ability to implement those learning experiences in their classrooms. Tang and Choi (2009) contend that knowledge learned in CPD programs needs to be integrated with teachers' practical knowledge and contextualised in practice situations.

As emphasised earlier, this process of contextualisation was enabled through reflection, social interaction and active agency. This is consistent with the SCT perspective of learning emerging from the appropriation and transformation of knowledge to solve real social problems (Johnson & Golombek, 2003). This section explores the contextualisation process of the changes in teachers' classroom practices due to their participation in CPD activities. Teachers reported practical examples of the introduction of pieces of knowledge into classroom teaching to demonstrate how CPD has informed their teaching practices.

This study found that alterations in teachers' practices could be ascribed to their participation in CPD activities. As CPD influenced teachers' knowledge and skills, they recounted changes in their classroom methodologies and approaches to teaching that culminated in improvements in their students' learning. Based on their participation, different subject teachers presented case descriptions about specific implementations that were made and how these affected the teaching and learning of their students.

Esi, a teacher who had learned how to use teaching and learning materials to teach reading shared her experience of how she introduced those concepts in her class and its effects on students' learning:

*I went for a workshop on reading when I was teaching at the primary level. And before that workshop I was teaching reading only using the textbooks and then I guided my students to read. But during the workshop, we were taught how to use pictures in teaching reading. So, we can cut the pictures and as we are teaching them reading, we paste the pictures on the board. So, if it is a "bird on a tree" we have to cut a tree. So, we paste the tree on the board and ask them, what can you see? The pupils will say oh I can see a tree on the board. Then you attach the bird on the tree, then where is the bird the bird is on the tree...I must say ever since I introduced this in my teaching my students, they now read with meanings and understanding, their readings skills have also improved. (Esi, participant 3- Case I)*

Nana shared her experience of how she changed her approach to teaching Mathematics after participation in a workshop:

*In the one of the workshops I participated we were introduced to using some TLMs [teaching and learning materials] to help our students understand some of the concepts that we teach them. So now I have changed my methodology for example in teaching algebraic expression, algebraic expression is all about alphabets in mathematics,  $x$  and  $y$  find  $x$  or  $y$  those things. I now use stones or counters bottle tops anything that can be counted to represent the  $x$  and the  $y$  or any alphabet that is involved in the question. I then ask my students to group like terms example  $2x+3y$  can never be possible so you leave it there. Why because let's  $x$  represent mangoes lets  $y$  represent marbles. Can you add mangoes and marbles together to be uniform? No! So, I used that when I was teaching that topics and the children got the concepts very very clear. (Nana, participant 1- Case II)*

Kuuku also demonstrated how he changed his approach to teaching fractions to his students:

*With the knowledge I obtained from teaching fraction I introduced that to my students. I was able to design some of the TLM like the paper folding so what I now do is I give the students the papers to fold and then we go through shading. After shading they are able to tell the proportion for instance, when I ask them, they are now able to tell me I have shaded maybe  $2/3^{\text{rd}}$  out of this and so on. This has made my class practical and quite interesting too to the students. (Kuuku, participant 1- Case II)*

In Social Studies, Kweku recounted how he also changed his approach to teaching as well as his assessments of students:

*At the workshop we learned about questions and answers in the BECE. We were taken through some of the examination questions and how the children [students] could answer them. So, when I came back, the first thing I did was to let them know because it was for them not for myself so when I came, I told them what we were told and how they should tackle their questions. And I realised they were doing that. Also, I was initially teaching them paragraphing as a way of introducing ideas where you introduce your ideas before going to the main points in the essay. But then after the workshop I got to know it is rather a waste of time. Now when I give my students an essay, they know they mustn't waste*

*time but to go straight to their ideas. It is just to prepare them for the BECE because we learned do not look out for that, so you just go straight to the point and answer them. (Kweku, participant 2- Case III)*

Teachers also expressed their reception to new ideas and knowledge during their participation. For instance, Mathematics teacher Ato, acknowledged:

*There is this topic the circumference of a circle, until I attended this workshop and I got to know that the  $\pi$  square and the circumference of a circle thing is all about measuring a tin diameter the  $\pi$  to be 3.142 22/7. Until I attended that workshop, I didn't know that  $\pi$  was all about the number of diameters found within the circumference of a circle, I didn't know until that workshop. We were asked to bring in some empty tin and thread we measured we recorded. I got to know that pi is all about a relationship between a diameter and the circumference of a circle, which is pi. I didn't know so it really helped me, and I introduced the concept to my students, which I must say helped in their understanding. (Ato, participant 2- case II)*

Ebo also emphasised an improvement in his teaching:

*There were certain things we were teaching the students the same ways as we were taught back then when we were students in school. But later as I went for workshops and INSETs, I obtained better knowledge on those concepts and when I came back and effected the changes, I realised that my students were picking it better. (Ebo, participant 4- Case II)*

Furthermore, teachers recognised the significance of their informal learning activities on their classroom teachings. They introduced new elements in their teaching based on personal experiences of what they found useful in improving the learning of their students. For instance, Esi indicated that her engagement in peer learning enabled her to make her sewing lessons more practical:

*In the cutting of [a] shirt, at first, I was just teaching them [students] the theory. But after I learned it [from external resource person] I am able to practise some cutting with my students. And I think it is okay for them now because I take my time to cut one part the next day, we try to cut another part. So, now even if I ask a child from the classroom to cut it the child will be able to cut it without me*

*supporting him or her. And it is because I learnt it from that intern teacher and the seamstress the head brought as a resource person. (Esi, participant 3- Case I)*

Kobby, a Social Studies teacher, also established that engaging in informal learning activities such as listening to current debates and issues in both audio and print media increased his confidence in teaching:

*Personally, I learn a lot, through television, radio. Once I am on top of current issues it gave me some confidence when delivering to my students. The research that I do, reading newspapers, listening to current programs on TV and radio has all added up to my knowledge in what I teach in the Social Studies. (Kobby, participant 3- Case II)*

*Last term there was a debate among schools within the district and I must say my continual reading and researching enabled me to groom our contestants so well, so we emerged as the first runner up out of the lots of schools that participated. So, I can confidently say that the little learning that I do to improve myself, I am able to transfer the knowledge to my students especially in Social Studies. (Kobby, participant 3- Case II)*

Ebo, a Science teacher, noted:

*Initially my classroom seemed boring but as I search for new information; I think I have improved a lot. I am able to introduce some practical Sections and through my consistent researching I bring to class certain things as improvising to help my students and when I do that, the students grasp the concepts very well and understand what I teach way better than they initially would have. (Ebo, participant 4-Case II)*

And Ato made the following observation about improvement in students' performances in BECE in Mathematics and Science:

*My personal observation is that, there has been some improvement in student performances in the subjects that I teach both the math and science. This is because when I came to this school students' performance in the BECE was not that good. None of the students was able to get even 2 or 3 grade in the BECE but I can confidently say that during the last year's BECE two of my students got*

*grade 2 in science and it is because of the knowledge I transferred to them. It was because I always learn to make sure I deliver very well to the students that I teach. (Ato, participant 2- Case II)*

These results demonstrate the significance of CPD to teachers' professional practice as has been widely reported in literature. The survey results for instance, revealed that majority of teachers (81%) learned significantly from engaging in their CPD activities (see Chapter 6). Participation in CPD thus resulted in changes in teaching practices, which also affected positively the learning of students. This was made possible as teachers successfully contextualised their CPD learning experiences into their real classrooms to solve students' learning needs in practical situations. This finding may encourage Ghanaian education authorities to consider teacher CPD in their efforts to improve educational quality and students' learning outcomes.

#### **8.4.3 Barriers to Teachers' CPD Implementation**

Although teachers were able to implement to some degree their CPD experiences in their classrooms, this study also found that teachers' learning was not sustained due to various barriers. Teachers identified that the lack of evaluation and learning materials (tools) diminished their ability to track their own learning after participation and further implement their CPD learning experiences: there were no comprehensive systems to measure teachers' learning after participation. Some teachers explained that instituting mechanisms to monitor their participation and providing essential feedback on their participation could facilitate the transference of their knowledge to their classroom practices. For example, Kwesi and Ebo said:

*After your participation [CPD] it is supposed to reflect in your teaching your children. You should be able to do better than before. But sometimes because there are no ways to evaluate and monitor what you went out there to learn, you even come back and forget everything and you are unable to change any of your practices. (Kwesi, participant 4- Case III)*

*I think there should be ways for monitoring and feedback after participation. It will go a long way to help us identify our weakness and use what we learn to improve and do better in the classroom. If you go for these workshops and it*

*does not change any of your practices, it is definitely a waste of time and that is what happens.* (Ebo, participant 4- Case II)

Kweku also noted that there should be training manuals, which could serve as tools to mediate their learning:

*Organisers should have manual for us, manuals for whatever topic that we treat at workshops or INSETs should be given to us... We are humans and may end up forgetting some of the content so if we have the training manual, we can always revisit to refresh our memories* (Kweku, participant 2- Case III).

The findings on teachers' contextualisation suggest that participation in CPD activities alone, does not guarantee the development of teachers but rather their ability to translate and implement the newly acquired knowledge, skills and attitudes to bring about changes in the classroom. These findings also buttress the position about that the fundamental purpose and function of CPD is to bring about changes in teachers' classroom practices for improved students' learning (Clarke & Hollingsworth, 2002; Guskey, 2000). To facilitate such learning (change), the teachers in this study required significant tools to mediate their learning. Therefore, the lack of access to these tools (handouts, reading materials, TLMs) impaired their further learning and development. This was also found to have affected teachers' contextualisation processes.

In this section, the results of the findings on teachers' CPD participation as well as issues involved with teachers' CPD experiences were explored and presented using the practice frame of analysis. The results show that teachers' engagement in CPD activities was mainly characterised by the traditional transmissive approaches to teacher development, which aims to enhance students' learning through teacher learning. It was also identified that CPD activities for Ghanaian teachers were externally pre-planned by experts, with minimal involvement of teachers in their own learning and development. Consequently, there were trenchant critiques by teachers of their CPD engagement as being without teacher consultation, limited in duration and having an uneven targeted audience. As well, the findings show that teachers had mixed reactions in their CPD experiences. While some teachers reported the lack of CPD content focus on their real classroom needs, others found their participation facilitated their subsequent

implementation of changes in their classroom teachings. However, to successfully implement CPD learning experiences, teachers engaged in reflection and interacted informally among colleagues. These activities offered them opportunities to contextualise CPD learning experiences in practical situations in the classrooms.

### **8.7 Chapter Summary**

The chapter shows the results of the study using the practice frame on basic schoolteachers' CPD experiences and motivations for participation in CPD activities. The findings reveal participation in more transmissive approaches of CPD, which teachers themselves criticised against its very nature and purpose, and its inability to contribute to their learning and development. In their critiques, teachers proffered essential conditions of effective CPD activities. These included teacher involvement and consultation; adequate duration for CPD activities; equitable access to CPD opportunities; and coherence of CPD content in addressing teachers' needs. Teachers also preferred CPD activities that were based on principles of collaborative learning and afforded opportunities to be active in their learning. Teachers' transformation of learning (contextualisation) was spearheaded by social interaction and critical reflection. In addition, this chapter reports on factors that affected participation in CPD activities: the need to enhance professional competencies; personal growth; and improved learning of students. Participation was also based on the expectations of its benefits or resources and the costs that would be expended on it.

The findings also showed that teachers' participation and CPD experiences were influenced by the wider context of teachers' professional practice. Issues of contextual influences are explored in the next analysis chapter, Chapter 9.

## **CHAPTER 9 : INFLUENCE OF CONTEXT ON TEACHER CPD PRACTICES IN GHANA**

### **9.1 Introduction**

Chapters 6,7 and 8 have provided insights into the general CPD situation of basic schoolteachers in Ghana. Throughout these chapters, it was identified that the teachers' learning/development needs, and participation experiences have been influenced by the wider contexts of their professional practice. This finding is anchored in the sociocultural theory (SCT) that underpins this study. As well, the literature review identified factors that may either inspire or affect how teachers learn and develop and may be worth investigating (see Chapter 4). It is believed that such an investigation will help shape our understanding of the challenges that may confront teachers as far as their professional development is concerned. An awareness of such complex factors is essential for nurturing the conditions and dispositions likely to lead to improve teacher learning (Hardy, 2012). Hence, these factors were pivotal in understanding teacher CPD activities in this Ghanaian study.

This chapter provides findings that address the research question: How do contextual factors affect basic schoolteachers' CPD practice?

### **9.2 The Context Frame**

The final frame of analysis for this study is the context frame. This frame influences both the teacher-learning and the practice frames in order to identify the complex factors in teachers' professional milieu that facilitate or constrict their CPD engagements. In Chapter 5, these factors were analysed within the scope of the SCT and Desimone's CPD framework, both of which give credence to the role of context in shaping and understanding CPD practices of teachers. Using data from teachers and other key informants, themes that emerged are clustered around policy, school systems and structures, teacher identity, and the wider community settings where schools were located.

### 9.3 Policy Issues Involved with Teacher CPD in Ghana

At the micro level, schools are seen as implementers of government initiatives and policies (Cogill, 2008; Hopkins, 2003), regardless of the schools' their agreement or disagreement with them. Policy provides a much broader framework for the conduct and implementation of teacher CPD activities. In Ghana, CPD policies are enacted at the government level and decentralised through the MOE and GES for implementation within the schools by the teachers. It has been argued that policy enactments influence CPD practices within schools and that teachers need to perceive CPD policies as relevant in order to be successful (Hardy, 2012).

The current study asked questions about the contextual factors that affected teachers' CPD practices. Teachers' responses demonstrated how policy affected learning and development both positively and negatively. The identified policy issues centred on the inequitable access to the study leave policy and a recent regulation on teachers' continuing education to obtain further qualifications. Teachers' study-leave policy was implemented on a quota scheme that enabled teachers to pursue further studies with or without pay while maintaining their jobs. However, priorities were given to some subject teachers (notably of Mathematics, Science and ICT) to the neglect of others. Such inequalities in access compelled many teachers to either finance their own continuing education pursuits or not to engage in further studies at all (issues on finance are explored later in this chapter). In addition to this, teachers also identified bottlenecks and bureaucratic procedures associated with the implementation of the study leave policy such that they were deterred from accessing and utilising the study leave options.

For example, Esi said:

*It is not easy to get the study leave. For some of us we are not even considered in the quota [due to the subjects we teach]...even if you qualify and apply, hardly will you get it, the processes you may have to go through is one of a hell, so give up to look for your own way to finance your schooling... there are times, you even have to pay some people [who work at the secretariat] for your name to be included. (Esi, participant 3- Case I)*

Fiifi, a science teacher who had utilised the study-leave with pay option, shared his experiences and the challenges involved:

*I completed my diploma studies with a study leave with pay from the GES, but it didn't come without a challenge. Even though I qualified and left my post for school my name was removed from the payroll and from the GES staff list...in the end I had to reapply to the GES and the procedure wasn't easy. I practically had to stay out of work for about a year. (Fiifi, participant 3- Case IV)*

Kwesi, another science teacher who had applied without success, noted:

*I don't think the GES really implements the study-leave. To me I think it is just something they [GES] say it is there which isn't. Whether you apply for leave with pay or even without pay, you are just not given and if you force and go [for further studies] your name will be deleted from the system [GES staff list]. How then do they [GES] expect us to improve our knowledge? Most teachers are unable to further their studies without being given the study-leave. (Kwesi, participant 4- Case III)*

While from a policy perspective, teachers were not restricted to accessing the study-leave policy options, in practice, most of them teachers restrained from its utilisation for further studies due to perceived institutional and bureaucratic barriers. Indeed, only three indicated that they had benefited from the study leave policy for their continuing education pursuits. Meanwhile, the GES's regulation on the study leave policy was largely a way of preventing teachers using the policy to their benefit and subsequently exiting from the teaching force. According to Akyeampong (2003) , a majority of teachers have used the study leave policy to pursue unrelated courses in order to leave the profession for better jobs. All the education directors interviewed for this study corroborated Akyeampong's (2003) finding and suggested that a common factor for teacher attrition was the use of study leave options. Sharon, an education director, commented:

*We've had numerous cases where we [GES] give study-leave to teachers only for them not to come back to the classrooms. What they do is to pursue courses that will give them alternative jobs... this time around we [GES] have become very stringent with the study-leave. Initially, once a teacher applies, he/she is easily given but now not anymore. We have to investigate and scrutinise the*

*applications to ensure when we give it out, they will return back to help the kids in the classroom. (Sharon, Educational director 2)*

Another director, Cece, also commented on the quota and inequitable access:

*Some teachers might think implementing the quota is not fair especially to those we give limited quotas to like the social studies, RME teachers. But you see it's all about finance. We cannot give all teachers because we are challenged. What we do is to consider those subjects that students find difficulties and help the teachers to develop their strength in those areas. So, we give higher quotas to such subject teachers than the others. (Cece, education director 3)*

Furthermore, as teachers were unable to access study leave options, they were compelled to use the alternative distance education and sandwich modes as pathways for their continuing education. The distance education and the sandwich programs provide opportunities for teachers to engage in further studies while remaining at post. Even though most of the teachers involved in this study had used these mediums for further studies, its related costs also prevented some from embarking on continuing education. Teachers also identified related challenges, such as limited engagement with course contents and materials, lack of interaction in learning, and the highly theorised nature of the structure of content with minimal practicals for use in real classrooms. These concerns were also highlighted by Mereku (2014) in his study on teachers' participation in distance education programs. For these reasons the teachers called for an expansion in the quota system implementation under the study leave policy, as well as widening access to admit more teachers to utilise the study leave with pay policy options.

Another policy issue identified by the teachers was the introduction of a recent ban prohibiting newly posted teachers from undertaking further studies until they had served a minimum five years at post (Personal interviews, 2017). The introduction of this policy in 2015 was a way of streamlining teachers' continuing education (CE) activities to avert the loss of instructional hours with students in the classrooms (Herty-education director, 2017). However, teachers described this "instruction" as unfavourable as far as their learning and development were concerned. With irregular CPD activities organised, teachers felt their professional development was thwarted by this regulation.

It is important to stress that, regardless of this instruction, most teachers defied the regulation to pursue further studies; however, the repercussion was that the resulting qualifications were not recognised, and teachers could not use their certificates to seek professional promotions.

Teachers expressed varied opinions about how policy seemed to have affected their professional development. Efe, for instance, explained the ban:

*Recently, there was a circular that you cannot go back to school for further course. If you have a diploma and want to go and do your degree you should be in the system for seven years before you can be able to do that but previously, right after your diploma at the training college, you can use the distance mode to obtain your degree and when the person finishes he/she is upgraded... But lately it is not like that. (Efe, participant 1- Case IV)*

Kobby explained the effect of the ban on teachers' professional development and how it affected his motivation for pursuing a Masters' degree:

*I think that the policy is rather preventing teachers from going for further studies to improve themselves. If you go ahead and do it then you would have to put your certificate down without being upgraded. As it stands now, I would have wished to do my Masters, but the question is will that count for my promotion? Will GES recognise my certificate afterwards? So, these are some of the things I think of and it brings me down. It is true, in teaching field when you have more than the degree, they don't want to pay you. (Kobby, participant 3- Case II)*

Similarly, Esi shared her opinion about the policy and how it affected her zeal for engaging in Masters' studies:

*It is unfortunate that the GES is asking teachers to wait for some years before they can go to school with their own money. They are not giving us study leave with pay yet with your own money too they are now asking teachers to put on hold their education. I think it is not fair to the teachers but for me when I heard about that I said to myself "aaah well" why should I bother again to go and do my Masters? From there I gave up my motivation to go for further course again. (Esi, participant 3- Case I)*

Kacely, who was privileged to have used distance education prior to the introduction of the new policy, observed:

*Newly trained teachers now are defying the regulation to go and pursue further studies but when they come back, they are not upgraded they end up putting their certificates in their bags... It is not fair to these new teachers because aside what they learn from the training colleges what will be the other means for their development? Don't also forget that sometimes inductions are not even organised for these newly teachers and the INSET is also not forthcoming. (Kacely, participant 1- Case I)*

Teachers who perceived themselves as victims of the new policy reiterated Kacely's concerns. Ato, for instance, shared his experience:

*I completed my degree last two years and as I speak to you now my certificate is, I don't know whether I should say I have used it as a decoration in my room simply because they [GES] are saying that I have to wait for 7 years before I can be upgraded to a degree holder. So, those of us who completed the training college and the following year we bought forms to pursue the upgrading course we have to wait for that particular period to elapse before we can be upgraded to degree holders. (Ato, participant 2- Case II)*

Nana, who had recently graduated for her degree program in mathematics, explained how she had decided to put on hold her desire to start a Masters' program:

*Even though I was not supposed to, I had to. Knowledge is such that it keeps changing so I needed to update my professional knowledge... but because of the policy I have put my certificate down but then also I thought to go and do my Masters to further improve my learning but because of this policy I am thinking twice about that. After all, when I do it, I am not going to get any gains apart from the knowledge. Meanwhile I am receiving diploma salary but am using degree knowledge to teach. (Nana, participant 1- Case II)*

Related to the ban on teachers' continuing education was also the fact that the GES does not consider Masters' degree qualifications. Therefore, within the GES system, teachers with Masters degrees are put on the same salary pedestal as bachelor's degree holders.

This policy affected teachers' motivation to seek further studies and, in a way, made teachers content with their Bachelor degrees. Kuuku made the following observation:

*Because the GES does not recognise the Masters' program what happens is after the diploma we only strive to get the degrees and it ends there... because the salary after your Masters' is the same we would rather prefer to divert into a different field than to go and do Masters' and remain in the same teaching job.*  
(Kuuku, participant 1- Case III)

Ato also observed teachers' attitudes in his school regarding the Masters degree:

*Now teachers are like if I go and do the Masters' program, it will not really add any money to my salary. Our attitude is that since the Masters' degree doesn't add up to salary, we would rather look for something else doing that to pay school fees for a qualification that will not increase your salary in any way.*  
(Ato, participant 2- Case II)

Teachers' comments affirm that continuing education was tied to promotion and salary increment. Concerns were heightened about the possibility of being pegged on a salary scale commensurate with new qualifications rather than genuine learning and development. This increasing quest for educational for the case of promotions in the workplace resonates with Dore's (1997) description of the 'diploma disease', where acquisition of certificates for jobs replaces genuine learning and development.

At the same time, the introduction of such policies bestowed some urgency on the part of teachers to take up further courses in order to maintain their career advancement. For instance, the Untrained Teachers Diploma in Basic Education (UTDBE) policy (see Chapter 2) saw the case of teachers who were hitherto untrained engage in continuing education to safeguard their jobs as teachers. Also, the introduction of a diploma as a minimum qualification for teaching allowed many Certificates A and B qualified teachers to engage in further studies. Kacely shared his experience of the urgency with which he had to enrol in a diploma course after his initial Certificate qualification:

*When I came from the training college with the Certificate A, there was a government policy that required that teachers should teach with a minimum qualification of a diploma...to maintain my job I had to quickly enrol on a diploma program.* (Kacely, participant 1- Case I)

Another way in which policy affected teachers' CPD experiences was the implementation of a rationalisation policy by the GES. This policy was enacted to regularise teachers' development in subject areas they were teaching in the classrooms. Through this rationalisation policy, teachers who had hitherto obtained qualifications unrelated to what they were teaching were deployed to areas where such knowledge was required. For example, teachers with Bachelors degrees in basic education who had been teaching at the Senior High School levels were re-assigned to teach at the basic levels. In the same way, teachers at the basic school levels who had obtained qualifications in business related courses and other subjects taught at the SHS level were re-assigned to teach at the SHS levels.

It was argued that this rationalisation policy stabilised the system, which had seen many teachers embark on further studies in unrelated courses and not return to their classrooms. The policy effectively reduced the teacher attrition rate, especially at the basic school level, while compelling teachers to upgrade significantly in their subject areas (Cece, personal interview, 2017). Indeed, the majority of the teachers interviewed expressed their continuing education pursuits in areas relevant to what they were teaching in their respective schools.

The teachers' responses corroborate the position widely held within the literature that policy conditions and environments may either support or inhibit teachers' CPD practices (Desimone, 2009; Hardy, 2012). While the study leave and the rationalisation policies provided better ambiances for teachers' development, the ban on their use of the distance and sandwich programs for further education not only prevented teachers from upgrading professional knowledges but also dashed motivations to pursue higher qualifications. Issues on the paradox of CPD policies are further explained in the discussion chapter (Chapter 10) and recommendations made to that effect in the conclusion (Chapter 11)

#### **9.4 Organisational/School Level Factors**

Schools are social institutions with significant structures that may or may not support teachers' professional development activities. Mok (2001) identified several school characteristics that have significant effects on teachers' CPD engagement: school

culture, school structure, school/class size, leadership, staff support, and teacher control. In this study, teachers identified two school-level factors - leadership and school culture – that interacted to facilitate or constrain teachers’ learning and development within their schools. These factors are explained in more detail in the ensuing sections.

#### **9.4.1 School Leadership**

The role of school leaders (head teachers) is crucial in teachers’ professional development, especially when viewed through the lens of transformational leadership (Sharma & Bindal, 2013). Within schools, leadership is characteristically found in head teachers whose actions or inactions affect the extent of teachers’ learning and development (Day, 1999; Mullen & Hutinger, 2008). The findings of this study show mixed reactions from teachers about school leaders’ support for their CPD engagements. While in some schools, head teachers supported teachers’ development through improvising steps to foster growth, at other schools, there were teachers who reported neglect on the part of their school leaders towards their professional development.

For Esi, a Home Economics teacher, who was required to teach a sewing component in which she had no expertise, the head teacher of her school arranged to bring in an external resource person to aid in her development. She narrated her experience:

*When my madam [headmistress] realised I did not do sewing, what she did was to request for an intern who did sewing to be transferred to the school so I could learn from her. After she [the intern] left she [headmistress] again introduced me to a seamstress in town who usually will come around during practical sessions... she did all that for me so that I could learn and be able to teach my students well and I've learnt most of the practicals from these two people and I am also using that in my teaching. (Esi, participant 3-Case I)*

In the same way, Baaba narrated her experience of her head teacher’s support to ensure she finished her distance education program:

*What I had to do was to inform my head about coming examinations, he would then give me permission to leave to go and write my quizzes and examinations. He would ask that I prepare fully my lesson notes and sometimes he even*

*handled my classes for me. I was able to finish my course because of this support I received. (Baaba, participant 3- Case III)*

Another form of support that head teachers provided was general encouragement to teachers to undertake further courses as part of their professional development. Most of the teachers attested to the fact that the continual encouragements they received influenced their decisions to personally engage in continuing education. Comments from head teachers confirmed the schoolteachers' reports that school leaders' support towards teachers' CPD had been in the form of personal encouragements. As well, some head teachers reported having to put in flexible measures to enable their staff to embark on continuing education. For instance, Otoo, a head teacher, made the below submission when asked about his school's support for teachers' professional development activities:

*If my teachers want to go for further studies with the distance education course, I don't prevent them in any way, notwithstanding the GES new circular. Just like any other head teacher we "massage" the situation and help teachers so that they can go through. For instance, if a teacher has to take examination on Saturday or Friday before 12 o'clock if permission is sought, I will ask you to go. But before that I will ask you don't leave any work pending. You will have to finish all work so that in your absence there wouldn't be a vacuum created and that the children [students] won't suffer. (Otoo, head teacher 3)*

Katty, another head teacher, also described her role in teachers' continuing education:

*I have personally encouraged some of my teachers to go for top up courses especially the matured ones. Sometimes they feel relaxed and think they are of age and they can't cope up with studies, but I encourage them and counsel them to do so. And for those who are already on the program if you have an examination and you come and sit down with me I can give you a day or two so that you prepare for that examination but when you come back you just make the lost periods. (Katty, head teacher 1)*

These findings strongly support idea that the role of school leadership (head teachers or principals) towards the learning and development of their teachers (Gallucci, 2008) as well as participation in CPD (Heystek & Terhoven, 2015; Postholm, 2011) is

indispensable. With the increasing participation of teachers in distance and sandwich education programs, head teachers were commonly found supporting teachers' further studies. Such head teachers created enabling environments that supported teachers' growth and development in the face of impediments (for instance, having to leave the classroom for tutorials and examinations). Conversely, there were also incidences of leadership practices that negatively affected teachers' CPD opportunities and activities. These incidences will now be explained within the frame of power dynamics within the school system.

### ***School Leadership and Politics Within the School System***

Power relationships are inevitable in every social institution, especially when there are hierarchical structures. It is important, therefore, to consider power dynamics in this examination of the contextual factors influencing CPD practices within the Ghanaian basic school system. In CPD undertakings, such power dynamics reflect competing social and political tensions between CPD policy, teachers' work, and the individual teachers and groups who participate in practice (Hardy, 2012). Identified in this study were tensions between CPD policy and practice (see Section 9.2.1), between head teachers and teachers, and among individual teachers. Such tensions affected the ways in which teachers could develop professionally.

First, the data suggests the use of "power over", which refers to the capacity of some actors to override the agency of others through the exercise of authority, position, or other forms of coercion (Kabeer, 2005, p. 14). In this study, there was evidence of head teachers exercising power or authority over their teaching staff. Interviewees reported incidences of tension that were heightened by the exertion of control by experienced and older teachers over much younger teachers within the same school.

Such exercise of "power over" created competing tensions within the schools involved, which in turn negatively affected collegiality and teacher collaboration, both of which are essential ingredients for effective learning. For instance, five teachers reported "abuse" of power such that teachers felt victimised and discriminated against in some situations. Such cases affected these teachers' access to CPD opportunities and limited the support systems they could have accessed to foster their professional development.

Kuuku, who felt discriminated against in his access to CPD opportunities in his school, commented:

*In the school it is like some people are better off than the others. Even when opportunities come for a workshop or any capacity building program, it is always given to some people. It's like it is given to some special people and if you don't fall within that you don't get to go. (Kuuku, participant 1- Case III)*

It may be seen from Kuuku's comments that opportunities were given to head teachers' favourites, depending on the supposedly cordial relationship between these teachers and their school heads. While Kuuku's comments may ostensibly have been borne out of presumption, Kweku shared a personal experience where CPD opportunities at a previous school were given to another teacher due to his own sour relationship with the head of that school:

*I have been denied an opportunity to go for a workshop but not in this school. I was supposed to go for the workshop and the head told me that she didn't even know that I am the one in charge of that very subject. But if you are the head and you don't even know what I do in the school then it is very serious. It occurred on two occasions; one the workshop was for the JHS level, but she appointed a primary teacher instead to go... All these things demoralise you if you are a teacher in the school. To prevent further tension, I applied for transfer and I left the school. (Kweku, participant 2- Case III)*

In addition to complaining about how such exercise of authority discriminated against teachers attending CPD activities, teachers also reported that they were victimised because of their bad relationship with their head teachers. Kuuku, for instance, said:

*When I was going back to school, I didn't get any form of motivation that my colleague teachers in the same school had and I felt the head teacher was trying to intimidate me. I nearly gave up because I was frustrated, I wasn't given permission to go and write end of semester exams and it is during that time that he [head teacher] would give me assignment outside my teaching. I had to be disobedient while trying to ensure I completed my course. (Kuuku, participant 2- Case III)*

Fiifi shared a similar experience in a different school setting:

*I have come to realise that a head's commitment to learning in a way affect his teachers learning as well. If your head teacher has a Master's degree, he would want to see his teachers take learning seriously but if he has only a diploma and you are going for masters obviously there will be conflict...When I decided to go for further studies I had difficult situations with my head, he did everything to frustrate me. Eventually, I sought for transfer and went to a different school. (Fiifi, participant 3- Case IV)*

It must be stressed that while teachers reported evidence of abuse of power by head teachers, it was not a common practice. Nevertheless, such practices stifled some teachers' development and were uncondusive for teaching and learning activities within their schools. These situations also impaired cooperation and learning when they deepened factionalism among staff who were caught in a dilemma to support either the head or their colleague teachers. When situations of antagonism became more prevalent, teacher associations got involved for possible redress. In more serious scenarios, teachers involved were asked to seek transfers to another schools. Dickson, a representative of the teacher association, said in his interview that one of his duties was to resolve such situations in order to protect the interests of members.

A related effect was that, depending whether relationships were cordial or inimical, head teachers created limited opportunities for teachers' professional learning while discouraging teachers' own personal initiatives. According to Nana, her head teacher opposed her personal initiative to externally seek collaboration towards her learning because "*she was not in his good books*". She explained:

*I was given social studies to teach, which isn't my area and I still have some struggles. I once found someone who was once a social studies teacher, we had some discussions and I arranged to help me teach a topic with my form three students. But when I told the headmaster about it he told me that "3y3 dodow, me kyer3 adze dodow, 3y3a gyae ma obi nso y3bi" (literally meaning you are almost everywhere, you teach a lot, stop it and give space for someone else). He practically opposed me, more because I am not in his good books. (Nana, participant 1- Case II)*

The results so far suggest that teachers needed to be in good stance with their head teachers to avoid being victimised. As emphasised earlier, teacher associations have the responsibilities of mediating such instances of power tensions between their members and the schools. And even though not all schools were reported as having incidences of power tension, cordial relationships were essential to nurture teachers' professional development; teachers needed "*sound mind in order to give off their best*" (Kuuku, participant 1- Case III).

Another form of "power over" was evident in the relationship between younger teachers and older teachers. Though only two teachers spoke about this, such experiences are important and worthy of discussion here. The teachers concerned (who were younger) experienced occasional "bullying" from mature teachers who felt threatened by their qualifications. This was consequential to the salary discrepancies between more experienced teachers and younger teachers, who were promoted by virtue of their continuing education. Such rifts therefore prevented the possible tapping into the experienced learning resources of older colleagues and thereby deepening factionalism among teachers in these schools. Kobby explained this phenomenon:

*There are still old teachers within the system that we can learn so much from but that is not happening you know why? These teachers rather feel threatened by our presence. When we were in the primary schools, teachers were perceived of as old men and women. These teachers have been teaching for a very long time. Some of them did not go to any training college, others are still Certificate A holders, others are also pupil teachers who are still in the service due to long service. So when they see us the young ones that within three years we have the diploma and the degree, it seems to them like we are taking over from them in their various offices that they occupy, it seems to them like we are trying to be blockade, so they try to frustrate you in your work. (Kobby, participant 3- Case II)*

Ato also shared an experience:

*In my school I had one encounter where an elderly teacher, I mean he has taught for a very long time. He came to me while teaching and in front of my students suggested that whatever I was teaching was wrong. He could have*

*talked to me back in the staff room to discuss but he chose to do that in front of my students... We later discussed the issue during our staff meeting but instead other mature teachers supported what he did, and my younger colleagues also came to my defence. But clearly this could have been an opportunity to learn from this experienced teacher and not for him to embarrass me in front of my students. But then the tension is already there, and this tends to affect whatever you do as a teacher because a teacher without a sound mind can obviously not teach well. And the way they [matured teachers] even talk to you, they always comment like, “we used twenty years to get our degrees and you within just three years you already have a degree”, it really becomes worrying sometimes.*

(Ato, participant 2- Case II)

In sum, the context of teachers’ professional practice influences their CPD pursuits. As Timperley (2013) argues, such influences emanate from the school systems and the role of school leaders in creating procedures and environments to support teachers’ CPD endeavours. While Hardy (2012) also identified the role of individual teachers and groups within the school system in shaping CPD practices, the current study found that leadership and individual teachers affected not only CPD enactments but also the tendency to exercise “power over”. This emanated from the uneven power relations and control from head teachers of schools and among teachers themselves. These findings will be explained in details in the discussion chapter (Chapter 10).

These results on the power dynamics involved in CPD practices suggest that where power was enacted, the repercussions had a dire effect on the possible development of teachers. Such power rifts subdued healthy environments in schools, creating tensions that affected possible learning and the exchange of ideas among colleague teachers and between school heads and their staff.

#### **9.4.2 School Culture**

Within the context of teachers’ learning, school culture may support it both positively and negatively (Avalos, 2011; Day & Sachs, 2004). School culture refers to the operations of the administrative and organisational structures and how they are played out to facilitate or constrict teacher learning in the school setting (Avalos, 2011). School

cultures influence teachers' behaviours within the school, and they include schools' beliefs, ethos, and traditions. While a positive school culture sets out opportunities for teachers to work collaboratively so that they can learn from each other (Bolam & McMahon, 2004), a negative school culture inhibits teachers' growth in the workplace in addition to constricting conditions that facilitate learning.

The results of this study illuminate collaborative school learning, teacher individualism and balkanisation as cultures that interplayed to affect participating teachers' CPD practices and their learning and development, both positively and negatively.

### ***Collaborative Learning Culture***

Collaboration is a vital ingredient in the development of teachers' learning. It involves working together with group of teachers or professional colleagues on a sustained basis (Cordingley, Bell, Rundell, & Evans, 2003). Sharma and Bindal (2013) observed that teacher collaboration and cooperation promote friendly collegial relationships, which may be sources of emotional and psychological support for teachers and promote their professional development. Hence, learning is likely to thrive in a school that fosters a culture of collaboration among its teachers.

Evidence gathered in this study suggests that learning was sustained and teachers' development was assured in schools that promoted collaboration. Teachers within such schools attested that collaboration enabled favourable collegial systems where teachers could draw on knowledge and expertise of colleague teachers for their continuous learning and development. Within the different schools where Esi, Kaceley and Yaw were teaching, the prevalence of cooperative and friendly relationships among teachers promoted teacher collaboration that aimed at improving teaching and learning. Kojo also expressed his intention of involving the Home Economics teacher at his school in teaching essay writing using a topic "*How to prepare my favourite meal*". Kojo explained the importance of such collaborative teaching and his intended initiative as follows:

*As teachers, teamwork should come to the fore. You see you cannot be jack-of-all-trades so someone's idea can help you though the person might not be teaching in your subject. Today for instance I had the opportunity to discuss*

*team teaching with one of my colleagues. I am doing English language and may be writing composition on a topic like describe your favourite meal and how it is served, and this purely should be a collaborative teaching between the English teacher and the Home Economics teacher, so we are planning to do that. We will have to first plan on the topic, its presentation and the teaching and learning materials that will help to have a good presentation. (Kojo, participant 2- Case I)*

Kacely also made a case for the importance of teamwork and collaboration in a school as far as teaching and learning is concerned:

*I personally believe that knowledge does not reside with one person. It is good we all learn and benefit from each other and thankfully in our school that co-operation allows us to do that. During the school based INSET teachers are all willing to lead the discussion not only that, I usually exchange ideas with the science teacher a lot and the ICT teacher too. We all learn from each other so we should embrace collaboration and encourage it among the teachers, it goes a long way in our professional development. (Kacely, participant 1- Case I)*

As suggested by Sharma and Bindal (2013), teacher collaboration bred good collegial relationship and increased teachers' motivation for their own learning and development. Teachers also became sources of inspiration to colleagues who either sought to develop or were challenged to improve their practice. Thus, in Esi's view,

*Because most of us have upgraded here, in a way we encouraged and motivated those who weren't to do the same. If you still have a diploma here, you are urged to go back to school so now the only teacher with the diploma among us recently enrolled in a degree program. (Esi, participant 3- Case I)*

Ekow confirmed Esi's comments in his submission:

*Sometimes when you see how some of the teachers here are putting in much effort to help the children [students] that actually also motivates me as a teacher to do more especially when the BECE results come and you see that a particular teacher has done well you are also motivated to do more research to help the students to also do more so that you can also improve upon the performance of the students. So here we don't see ourselves alone, we motivate ourselves and try to do what we can to help our children. (Ekow, participant 4- Case IV)*

By contrast, this study also recorded evidence of cases where a lack of teacher collaborative culture and collegiality within a school affected how teachers learned and developed. It increased individualism and competitiveness (to be explained in the next section), which inhibited the possibilities for collaborative learning and knowledge sharing among teachers within the same school. For instance, reflecting on her own experience, Nana explained how a lack of collaborative culture in her school prevented the likely support she could have received to teach a subject she had no expertise in:

*When I needed help to teach the social studies, I contacted the ICT teacher and there was also a Fantse teacher who all mustered in Social Studies during their first degrees, but they were not ready to help. I talked to them first, but they were unwilling. Even the headmaster was a social studies teacher but then he wasn't also helping. So, I had to go outside to seek for help because I knew that the children [students] were failing my subject but then also it made matters worse, the tension rather grew from bad to worst. (Nana, participant 1- Case II)*

Similarly, the lack of collegiality in his school prevented Kuuku from accepting or providing support to other teachers. He categorically stated:

*I have stopped providing assistance to those I know they don't like me. When they [teachers] ask me questions about anything I pretend I do not know and I also do not ask them...why it is so, because here in this school we don't value teamwork, we survive on our own. The headmaster himself is also not welcoming. (Kuuku, participant 1, Case III)*

These comments illuminate the critical roles that school leaders need to play in creating positive cultures that support learning and development among their teachers. A school leaders' commitment in creating and shaping a collaborative culture within a school affects the behaviour of his/her teachers. Hence, it was unsurprising that in Nana's and Kuuku's cases, teachers were uncooperative to support each other's learning.

Indeed, the development of a collaborative learning culture within the schools positively affected teachers' CPD enactments. Collaborative cultures fostered teamwork among teachers, who would then collegially share ideas to develop professionally. However, sight must not also be lost on the fact that unfriendly collegial environment marred the possible support that could have been offered towards teachers' development in the

school settings. It is also important to state that accounts of non-collegial relationships, which were borne out of the absence of collaborative culture, were recorded in only two schools in two different districts and hence are not indicative of all schools in those districts.

### ***Teacher Individualism and Balkanisation***

Teacher individualism here is conceptualised as the feeling of “aloneness” as teachers carried out their duties in the school settings. This feeling arises in consequence of the absence of collaboration and teamwork such that teachers perceive themselves not a part of the larger school community. In this study, teacher individualism was a key characteristic of the schools reported to be without collaborative cultures. Within such environments, tensions were heightened and teachers became highly competitive and individualistic, focusing on their own learning while shunning support for each other’s growth. In describing the situation in her school, Nana succinctly put it:

*Here you tend to be alone nobody supports anyone. You do everything all alone. You finish you give the children exercises, when you are scoring you score alone and if you are supposed to record you do that one too alone. Nobody will help you. (Nana, participant 1- Case II)*

Kuuku also noted:

*In my school everybody minds his/her own business. It’s about you and how to survive in there. You always do your own thing in your corner, so nobody sees to get jealous of you. (Kuuku, participant 1- Case III)*

As emphasised earlier, the emerging consequence of this aloneness was that teachers became competitive, and this affected their possible learning and development. Kuuku explained how such unfriendly competition prevented possible learning:

*My colleagues think I am in a competition with them. During a staff meeting one asked me why I am competing with the rest of the teachers. But this teacher I am talking about teaches ICT while I teach mathematics so how can I compete with such a teacher? But when I inquired further, he told me he’s seen how I’ve been presenting my lesson notes and teaching my children. He could have learned from me but because he felt we were competing he asked my students how many exercises I give them after each lesson and when the children told him, that day,*

*he also gave the children a rather more exercises than I give them. (Kuuku, participant 1- Case III)*

Ato also expressed concern about competition among his colleague teachers:

*Most of the times, my colleagues think I am all round and everywhere and think my head teacher treats me differently. There are times I genuinely need help from my teachers even to help me teach when I go for meetings, but they don't. They think we are in a sort of competition so helping me will help me get more attention from my head teacher. So, this unnecessary competition sometimes prevents even sharing ideas in the staff common room. (Ato, participant 2- Case II)*

The feeling of unwarranted competition constricted teachers' collaborative learning and their sharing of professional knowledge to improve practice. It also deepened teacher individualism through working alone. Furthermore, individualism resulted in 'balkanisation' where factionalism was created and teachers became more loyal to a particular group (Day, 1999). Teachers were thus found to align themselves with one faction and thus truncating possible learning situations. Teachers became more loyal to their aligned faction than to the development of their other colleagues for the common good. As Kuuku aptly put it, "*When you are not part of them, forget it, they will never support you with your work.*"

In sum, contextual factors emanating from the school systems suggest that the intensity of co-operation and collegiality that arise out of collaborative cultures in schools depend to some degree on the role of school leaders in creating favourable conditions and opportunities to support teachers' learning and growth. Head teachers' who were committed to learning affected the learning and development of their teachers positively by creating the needed conditions and support systems needed to foster teachers' development within their schools. Finally, the findings also demonstrate the interplay of micro politics in affecting the way teachers developed professionally within schools (Kelchtermans, 2004). It is also worth mentioning here that the incidences reported were not common to all schools that participated in the study and therefore cannot be generalised as occurring in all Ghanaian schools.

The next section explores the influences of teachers' personal and professional characteristics on their possible learning and professional development. These factors are broadly thematised as teacher identity factors.

## **9.5 Teacher Identity Factors**

Teachers' identity factors affect their professional development. Identity is a broad concept in the teacher education literature and it evokes diverse meanings and interpretations. From a sociocultural perspective, teacher identity is perceived of as a process of an ongoing interaction and a product of various influences on the teacher (Olsen, 2008). However, identity, as used in the study, implies the personal and professional characteristics of a teacher's self that shaped their professional development enactments. These factors reflect the social conditions of teachers' lives and work, and their experiences, beliefs and practices that to a greater or lesser extent affect their ability to learn and develop (Day, Kington, Stobart, & Sammons, 2006). This section now presents teacher identity factors themed around the following: beliefs and attitudes towards learning and development; workloads and timing; economic status of teachers and teachers' personal reasons for participation in CPD activities.

### **9.5.1 Teachers' Personal Beliefs and Attitudes towards Professional Learning and Development**

Teacher beliefs and attitudes towards CPD have been found to influence participation in CPD activities (De Vries et al., 2013; De Vries et al., 2014; Geldenhuys & Oosthuizen, 2015; Kwakman, 2003). In this study, personal beliefs and attitudes were found to underlie teachers' personal value perceptions towards CPD and their reasons for engaging in CPD practices. Teachers' positive beliefs about CPD compelled some agency among teachers who were willing to develop, even in the absence of viable opportunities. This was in line with teachers' personal convictions about the role of CPD in their professional lives, which influenced greatly their zeal and decisions to learn and develop.

Regarding teachers' beliefs in CPD to affect professional life, Nana made the following observation from her own experience:

*As professionals it is crucial to engage in continuous learning in order to develop. Such activities update your knowledge and in effect help the children [students], that is, when teachers' use this knowledge in their delivery. That is why for me, I wasn't just satisfied with my diploma. Even when there was a ban restricting us, I took the risk to go for further studies and I learnt a lot especially during our methodology lessons. It was there that I realised that some of the things I learnt in school that I thought I was learning wasn't so. This has also influenced the way I teach my children [students]. Now, I make sure I prepare my lesson notes and do proper research before my lessons so that I don't end up polluting them. (Nana, participant 1- Case II)*

Nana's positive belief in CPD affected her teaching and influenced her decision to defy policy restrictions. This suggests that teachers' beliefs about the nature of knowledge and learning can influence their practice (Schommer, 1998). Kobby also commented on how his beliefs about the role of CPD in teachers' professional lives influenced his learning and development:

*When a teacher is fully developed and has upgraded professionally, output is different and the future of the children [students] that we teach depends mostly on us the teachers. So, to make sure I perform that duty very well I always want to learn sometime new to help my children. Whenever I hear of workshops or INSET, I do my very best to be part because you wouldn't know what you might have missed, no knowledge is small you know. (Kobby, participant 3- Case II)*

Using the 'blind man' metaphor, Yaw explained how his belief about CPD influenced his attitudes towards his professional development:

*You see, a blind man leading a blind man, they will all fall into a ditch and I don't want to be that blind man in this proverbial statement. So, even though I don't get to participate in workshops especially in my area of teaching, that doesn't deter me from learning. I always make sure I do my personal reading and research to impact some useful knowledge to the students that I teach. (Yaw, participant 4- Case I)*

Kojo was also keen to talk about his learning and development based on the belief that CPD is an essential tool for his survival as a professional teacher. He explained:

*We cannot repeatedly be doing the same things, teaching the same things over and over again as teachers. If I will be able to introduce new strategies, new methodologies to enhance students learning then I must continuously strive to learn and develop within this profession other than that I will become an insignificant teacher who does more harm to the children [students] in terms of the kind of knowledge that I will be imparting unto them. (Kojo, participant 2- Case I)*

Indeed, these teachers' responses demonstrate how beliefs influence decisions and attitudes towards CPD engagements. Teachers' beliefs that CPD tends to impact positively on their teaching and learning and students' learning outcomes guided their decisions to participate. This also presupposes that for teachers, participation in CPD is influenced by their held beliefs, which is related to the belief about the nature of knowledge to be accrued from participation. In order to increase the participation of teachers in CPD activities, it is essential to build positive attitudes toward professional development among teachers (Bayar, 2013).

Related to teachers' beliefs and attitudes towards CPD were also beliefs about whose responsibility it was to develop the professional teacher. This was found to have influenced the enactment of learning and participation in CPD activities. According to the teachers, they had an active role towards their own professional development. Teachers commented about the need to take some degree of responsibility towards own ongoing professional development, especially when the GES's opportunities were hardly forthcoming. The explanation given was that the teaching profession is a personal journey; therefore teachers must seek for own ways of developing their professional self. Kacely, while emphasising this perspective suggested:

*As teachers we should have the greatest responsibility towards our own development. The teaching job is such that you alone are in the classroom, you know your difficulties so if we're talking about whose responsibility it is, it is you the teacher, you must first act towards your own development. (Kacely, participant 1- Case I)*

Ebo also suggested teachers need to work out their own professional development pathways to remain significant as professionals:

*I think it is our [teachers] responsibilities to learn and develop while we remain significant in our profession. If there is the need for you to learn to improve yourself, you don't need the district office to come and tell you to. You as the teacher know best and you must take that effort to learn (Ebo, participant 4- case II).*

In addition, Kobby cautioned against the overreliance on GES's provisions as the only opportunity towards teachers' development. He said that teachers must exhibit personal agency towards their ongoing professional development:

*You know, the world is changing at a very fast pace. The things we knew are changing now and as a teacher you must learn. You cannot rely on the district education offices. The TLMs [teaching and learning materials] are inefficient and sometimes even scanty of what the children [students] are required to learn but you cannot also sit down. You must act by learning to improve yourself in knowledge and in terms of your teaching. (Kobby, participant 3- Case II)*

Teachers' strong preferences for responsibility towards their own learning helps to explain why most of the study sample had engaged in continuing education after their teacher training education. It also demonstrates teachers' motivation and enthusiasm towards active learning, which was also well demonstrated in their informal learning experiences (see Chapter 7). In spite of the challenges they faced in their quest to teach their various subject areas, they proactively used diverse alternative strategies to address them. It must also be emphasised that teachers' beliefs about their own responsibilities toward their professional development intrinsically motivated their participation in CPD activities and their willingness to actively shape their own professional development.

Notwithstanding the wide acknowledgement of their own responsibilities towards ongoing professional development, teachers also suggested that the Ministry of Education (MOE) and the GES, as well as teacher associations, should take some responsibility for it. The argument put forth by the teachers was that the GES has duties as an employer to ensure employees (teachers) are up to date with the requisite

knowledge, skills and attitudes required for effective performance in the classroom. In the same way, teachers called for the involvement of teacher associations (GNAT and NAGRAT) in the development of their members to complement efforts from the GES. It is important to emphasise that non-governmental organisations in Ghana are also involved in teachers' development through organising workshops (see findings from the survey in Chapter 6), teaching and learning materials (TLMs) and human resources towards teachers' professional development.

The results suggest the collaborative responsibility of both teachers and these other stakeholders towards basic schoolteachers' professional development in Ghana. However, teachers' strong opinions about their own responsibility for professional development typified their personal agency, which influenced intrinsically their CPD participation.

### **9.5.2 Teacher Workload and Time**

Teachers' workload and time are job characteristics that affect their CPD engagements. For adult learners, time and engagement are two common deterrents to participation in learning activities (Merriam & Caffarella, 1991). Therefore, when teachers are preoccupied with teaching and other administrative work such that much of their free time is taken away, teachers would likely reduce their intentions of participating in CPD activities (Mok, 2001).

In regards to time, most teachers in this study complained about the time they used in preparing their lesson notes, which to them could be used to engage in research to improve teaching. Kobby, for example, said:

*My challenge has always been the preparation of the lesson note. Lesson note consume a lot of time that you could have used to make your research or engage in other learning activities. With the lesson note you prepare for the whole week lessons around what you have to teach and preparing this can take the whole day of which to me it is irrelevant. And it is not only me most of the teachers do feel the same way too. The essence of the lesson note is that by the absence of you, a colleague teacher can use it to teach your class because it is structured in such a way that it indicates step-to-step topics or things that goes into the*

*teaching of a particular topic. It states the objectives the teaching and learning materials that must be applied, the core points and the evaluation. So, with that when you follow that you can teach. But the point is how many teachers take their lesson notes to the classroom, but you have to prepare and submit it for the head to vet. And the number of hours that you will take to prepare this lesson notes could have been used to do something better like doing research in your subject area. (Kobby, participant 3- Case II)*

For Kobby, the fact that teachers are unable to implement their lesson notes in class renders the exercise futile. Ato shared a similar opinion:

*Sometimes you will prepare the lesson notes all right but when you come to the classroom depending on what happens you may decide to change your methods instantly. But when they [circuit supervisors] come for supervision and they notice that you wrote that, but you are using this it becomes a problem, which I think, shouldn't be the case... We use all of our time to do the preparation that we don't even use it, and it waste our profitable time we could have rather used to learn more on delivery to suit different class conditions. But we prepare it straight forwards without innovations whatsoever so I think they should rather let us have more zeal in preparing the lesson note. We should be allowed some time to initiate some learning scenarios to rather help us practicalised what we do in the classrooms. (Ato, participant 2- Case II)*

Although teachers' lesson notes served as blueprints to their teaching, they became prototypes for examination purposes. Teachers used most of their time preparing lesson notes for examination, yet less of what was designed was implemented in the classrooms. Teachers therefore suggested that, the time "wasted" in the lesson note preparation should be used to encourage research and innovation into classroom teaching.

Furthermore, related to time was the issue of work overload resulting from large class sizes and other administrative burdens. Teachers described as worrying their having to deal with large class sizes, which they believed limited their free time for engagement in

other CPD activities because large class sizes meant more responsibilities. According to Kobby, who had about 100 students from Junior High School (JHS) 1 to JHS 3,

*When you have a lot of children enrolled in your class you feel burdened as a teacher. It would mean you have a lot of exercises to mark; I would say it is your responsibility as a teacher but then what it does is that you end up not given the children a lot of exercises in order to evaluate them. There is form 1, form 2 and form 3 and you cannot finish marking their exercises during the instructional hours in school, and you would have to take them home. So, the time you could use to read, study or possibly research on a possible topic to teach the next day is just not there. These are all hindrances to your learning. (Kobby, participant 3- Case III)*

Kuuku, who also felt burdened by his class size, explained how it was affecting his personal learning:

*I teach two subjects from JHS 1 to JHS 3. I have to give at least three exercises to students in all these subjects at the different levels. I then have to mark the assignments in addition to their end of term examinations and prepare their report cards all before the term ends. So, you can imagine, it is a burden. The little free time you get you will rather use it to mark assignments than to do some useful readings for your next lesson. So, the time, which is, not there is my major concern. I wish I could do more personal readings than I am doing now but the nature of the job itself doesn't permit it. (Kuuku, participant 1- Case III)*

In Ghana, the lack of teachers especially in rural schools (as teachers refuse to be posted to rural communities) increases the burden on the available few. This is also reinforced by the lack of structural facilities that compel teachers to deal with larger class enrolments. The consequences are that, teachers' daily tasks and responsibilities are increased, which invariably affects the time they could invest in CPD activities.

In addition to teachers' work tasks were other administrative and extra-curricula activities that limited their free time. Teachers who were mostly curriculum leaders of schools explained that their administrative tasks in addition to their teaching roles affected the time they could have used to engage in meaningful learning activities. For instance, Ato explained:

*I will say as a curriculum leader I have an extra task to do apart from my very own tasks as a teacher in the school. I am responsible in a way for the teachers here as far as their development is concerned. I represent the teachers here in other meetings outside the school. So, you are called upon at any time to go for meetings or discussions. Even sometimes you leave your students there and go so to me it is a challenge. You just don't have any time for yourself the least time you get you would rather use it to prepare your lesson note because that will be inspected. (Ato, participant 2- Case II)*

Other teachers also shared their opinions about extra-curricula activities in their schools.

For example, Esi said:

*Apart from your teaching, you are also called at any time by the head to do other things. For instance, I am the ESHEP (Enhanced School Health Education Program) coordinator for the school so in addition to my teaching I have to organised health talk and programs not only for the students sometimes for the teachers too. So, I hardly get the time I need to do extra learning. (Esi, participant 3- Case II)*

Baaba also noted:

*As a teacher you also called upon at any time, to help the children and sometimes do personal tasks assigned by your head teacher. There are also other activities like sporting, excursions, the "6<sup>th</sup> March Pass" which all require your time in supervising the children. All of these affect your potential time for learning. (Baaba, participant 3- Case III)*

Time is indeed critical for teachers' CPD practices. The results show that preoccupied teachers had limited time for engagement in personal learning. Activities that teachers considered to have impeded their professional learning included; preparation of lesson notes, large class sizes, and engagement in other extra-curricula activities. As suggested by Mok (2001), when teachers are heavily loaded with teaching and administrative work, and when overtime work takes away much of their free time, teachers reduce their intentions to participate in CPD activities. The next section examines the socio-economic status of teachers and how it affects on teachers' CPD undertakings.

#### 9.5.4 Socio-Economic Status of Teachers

Another personal level factor that influenced CPD practices was the social and economic status of teachers. The costs involved with financing CPD activities and the 'limited economic power'<sup>12</sup> of teachers affected their participation in CPD activities. While it was cost intensive to finance continuing education programs, the GES's inability to support teachers in terms of access to funding possibilities meant that teachers had to take full financial responsibility for their continuing education pursuits. Consequently, many teachers felt constrained about enrolling in continuing education programs. In addition, the occasional request for payment for participation in workshop activities affected their possible engagements in them. Kwame said:

*What has been preventing me has to do with funding the learning I would want to engage in. The GES is not funding your further studies and even if you seek for opportunities to go for outside workshops, the school is also not able to even pay part of your bills. (Kwame, participant 2- Case IV)*

Kobby, who only had a diploma and wished to study further explained his inability to do so:

*Sometimes even though you would want to further your studies you end up considering other things like finance and your responsibilities towards your family. So that has been my major challenge but then I manage with the little materials I have to support my learning. But sometimes I wish I could pursue an ICT course or going for more workshops to broaden my knowledge and to help improve my professional development but due to the money involved I am not able to do so, so funding seem to affect me a lot. (Kobby, participant 3- Case II)*

While Kobby and Kwame were affected by their financial positions to seek continuing education, other teachers declined their participation in workshops because of their inability to finance the costs involved. Ekow, for instance, recounted how he rejected an offer for participation in a workshop on ICT because of the associated costs:

*I received a memo to go for workshop and in the letter, it was stated that I had to pay some amount and my school wasn't willing to pay and as a matter of fact*

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<sup>12</sup> Teachers complained about low salary in comparison to other public servants

*I also couldn't pay for that amount. So, I ended up not going. (Ekow, participant 4- Case IV)*

Ebo also discontinued his participation during a workshop because he found that he would be liable to the cost involved with the issuance of certificates. He explained:

*When I found out that we had to pay before given certificates I got irritated because getting the certificate was particularly the reason I went for that workshop. And asking us to pay for something, which is supposed to be free, I just didn't understand. It was like being charged for participating in the program itself... So, for me I didn't go again for the remaining days. (Ebo, participant 4- Case II)*

Related to the cost involved in CPD participation was family responsibilities, which lowered teachers' financial strength as well as limited their time for engagement in CPD activities. Teachers' social statuses as parents increased their financial burdens and posed some difficulties in managing their family lives with their jobs. Esi, who reflected on her experience, suggested that her status as a mother at home affected the time she needed to engage in possible learning. Also, such roles come with financial commitment, which she has been unable to deal with vis-à-vis her desires to engage in further studies. Hence, she quelled her intent to pursue a Masters' degree in Home Economics. She stated:

*I am a mother I am catering for children at home so as it stands now, I have given up all my dreams of getting a Masters' degree because it is not easy. I can't combine family job with the school and then again decide to go back schooling. I won't get the time to study, do my lesson notes, go and teach in school and come back home to my family. Besides, the cost involved in doing the master's program is outrageous. (Esi, participant 3-Case I)*

Unlike Esi, Kacely, as a family man, was more concerned about the cost involved in further studies and financial responsibilities towards his family than the time factor to engage in possible learning. He explained:

*As a family man I have so many responsibilities in terms of finances. I have to provide financially for my family from the same salary that I earn. This makes it difficult for me to think about wanting to go back to school. For me I can*

*manage my job with schooling, but my only problem is the high school fees I would have to pay* (Kacely, participant 1- Case I).

From Esi and Kacely's responses, it may be seen that gender influenced their perceptions and willingness to learn and develop. Their responses also reflect the gendered roles and responsibilities in traditional societies such that women are preoccupied with household responsibilities that tend to affect their time factor to engage in meaningful learning activities, especially in their homes. As well, the findings suggest that family responsibilities affected teachers' financial capabilities and time they would need to engage in further studies as part of their CPD activities.

The next section delves into factors that accounted for teachers' personal decisions to participate in CPD activities in Ghana.

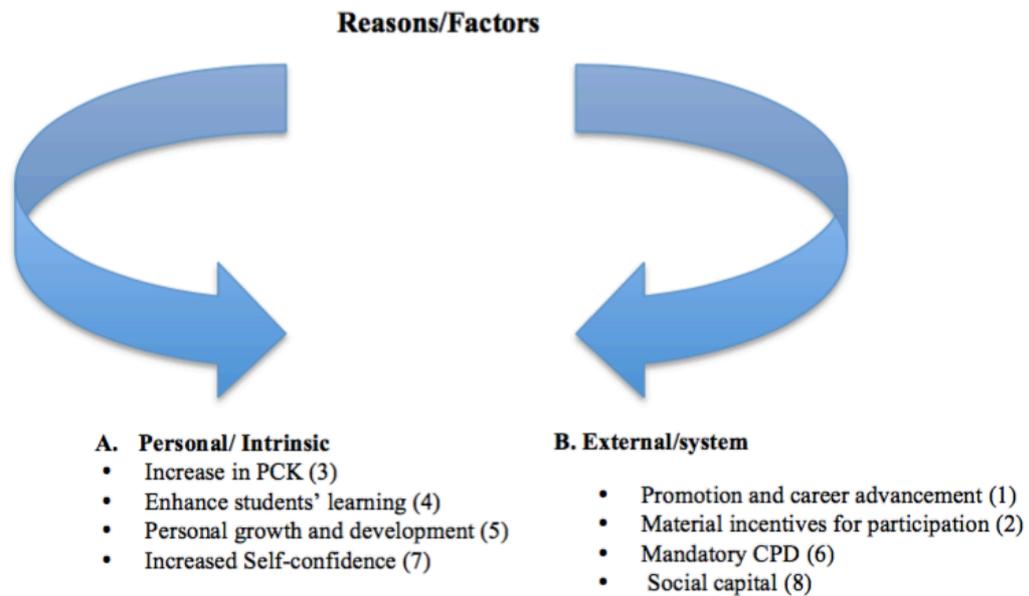
#### **9.5.5 Teachers' Reasons for Participation in CPD**

CPD as a social activity requires that teachers make choices about their how and why to participate in the light of their goals, values or beliefs (Norton, 1997). Such personal choices produce variations in teachers' participation in CPD activities and are worth considering in this study. As was explored in the literature review (Chapter 4), the decision to participate in CPD activities has been widely explained in reference to the psychological construct of motivation, which refers to the purposes and directions driving individual behaviours towards the achievement of specific goals or needs (Kreitner, 1995; Lindner, 1998).

In this study, it was found that complex factors influenced teachers' decisions to participate in CPD activities. These included both psychological and sociocultural factors as well as teacher agency and identity. The exposition on these factors provides useful information for designing effective and successful CPD programs, as well as aiding our understanding of the conditions necessary for teachers' meaningful participation and engagement in CPD.

The Ghanaian teachers' reasons for participation in CPD are categorised as follows (1) personal or intrinsic factors, and (2) system or external. These are represented in Figure

9.1. These themes are ranked from [1] – promotion and career advancement – as the most common factor to [8] - social capital – as the least identified factor.



*Figure 9.1: Reasons for CPD Participation*

Source: Fieldwork, 2017

***Personal/Intrinsic Factors***

In this study, personal or intrinsic motivators refer to teachers' free sense of participation without the expectation of material rewards (Deci et al., 1991). It explains their self-determination for participation and for the satisfaction derived from performing their roles as teachers. The overarching intrinsic factors identified by the teachers were the need to increase their pedagogical content knowledge (PCK) to enhance professional competencies; enhance students' learning; develop their own personal growth and development; and increase their self-confidence in the performance of their roles as teachers.

### **Increasing Pedagogical Content Knowledge**

Teachers' reasons for participation in CPD largely pointed to the personal desires to obtain knowledge for effective performance in the classroom. These desires were influenced by teachers' own goals to improve and enhance teaching and learning of students as well as own personal growth and development. Teachers considered these desires and needs fundamental because of the belief in CPD to provide the essentials (increased knowledge, skills and attitudes) needed for continuous survival in practice. Consequently, teachers were receptive to CPD opportunities and participated meaningfully and informally enacted their own learning to foster their development. Teachers' expectations from their participation were that CPD would increase their PCK in order to maintain competencies in their professional practice.

While explaining her decision to participate in organised workshops and INSETs in her district, Nana identified her reason as follows:

*It was for a personal reason that I wanted to know more in order to help my students. As a teacher, I need to have more knowledge to be able to teach my pupils to pass especially in the BECE. Nothing is more satisfaction to a teacher than to see his student pass and pass well...I also attend to ensure I have all the current knowledge is there to know to avoid going to class and am unable to answer questions when my students ask me. So, whenever I get the opportunity to go for a workshop to learn new things, I do my best to attend. (Nana, participant 1- Case II)*

In this regard, basic schoolteachers in the Central region of Ghana were motivated to participate by the CPD program content such as the PCK to be derived from participation and its significance to classroom. Teachers needed to be actively engaged in both the content and pedagogy, and CPD had to be meaningful to them (Birman, Desimone, Porter, & Garet, 2000). For instance, Kacely asserted that, teacher turnout was higher in CPD activities that were of relevant to teachers' classroom practices. He made the following observations about one of the workshops he had attended:

*Most of the times if we go for such programs and feel they are not really relevant especially to what we teach our students, you will see that first day most*

*of us will go but the second day the number will decrease and by the last day of the program only few people will be left. (Kacely, participant 1- Case I)*

Ato also observed:

*We go for the ones [CPD programs] that we think are important and that we can benefit in terms of using the acquired knowledge in the classrooms. Other than that, when we go and see that what they are teaching won't really benefit, we don't go again unless, there are other motivators such as transport allowance or that we will be giving some certificates after the last day. (Ato, participant 2- Case II)*

In addition to the need to gain mastery over PCK, basic schoolteachers also participated in CPD in order to enhance the learning of their students and their own self-efficacy and confidence in dealing with students' learning. This was explained by the need to participate in frequent CPD activities in order to prevent "embarrassing" situations with students where teachers are unable to address students' learning needs. For instance, Nana's reasons for participation were to acquire all relevant knowledge and "*to avoid going to class and [being] unable to answer questions when my students ask me*". This fear was reiterated by Kweku who also felt that, with the upsurge of technological influence on students' learning, he needed to be on "top of his game" in order to respond correctly to students learning needs:

*Students of today do a lot of things with mobile technologies and the least embarrassment I would want to have is for my students to ask me questions that I will be unable to answer. Especially with the subject that I am teaching [social studies], it is reading and knowing what is happening not only in Ghana but also around the world. And in this modern age students explore a lot for information. So, me as their teacher I need to engage in learning activities a lot to ensure that I am always on "top of my game". I need to know what is happening first, before a student comes to ask me about it so that I can confidently answer him/her correctly. (Kweku, participant 2- Case III)*

Nana's and Kweku's responses exemplify teachers' participation in order to prevent awkward situations in the classrooms where students may perceive teachers as incompetent in the fields. That is to say, participation was to increase teachers' self-

confidence in being able to gain mastery and control over their teaching as well as the learning of their students. Related to this reason were teachers' desires to update professional knowledge and to remain abreast of with emergent ideas as well as ensuring professional and human growth. Kacely, whose engagement was to seek updated knowledge in the field of practice noted:

*Professionally you cannot be sitting idle, you have to upgrade yourself to know the new things happening in your teaching field and also to broaden your professional horizon. So, any workshop that is in line with my subject I mustn't decline and even personally, I am planning to undertake certain workshops outside what the GES [Ghana Education Service] provides. (Kacely, participant 1- case I)*

Kacely's comment emphasises teachers' beliefs about their own role towards their professional development. Kojo also explained his reason for opting for further studies in his teaching of English:

*I choose to further my studies in order to give my best as an English teacher. I was teaching English though I didn't major in the teaching of English when I was doing the diploma. So, I saw the need to upgrade myself in the subject that I had been given to teach. So, I got upgraded in English language in my first degree. I could have done any other subject, but I saw the need to upgrade myself so that I could give my best as a teacher in that subject. (Kojo, participant 2- Case I)*

On a basis of a personal quest of learning and human development, Ato explained his reasons for participation in CPD activities as follows:

*As human beings, we have to learn always to improve ourselves. This is why I engage in learning activities in many ways as I can. You may think you know everything, but you may not know anything. So even though sometimes we teachers think the workshops are not effective in terms of helping us in what we do in the classroom, yet we are able to pick one or two things that may help us in the long run. So, for me personally I don't turn down invitations to go for such learning programs. (Ato, participant 2- Case II)*

Kobby also noted his reason for engagement as personal growth:

*The work we are doing if you limit yourself to a particular level maybe you may not be able to compete with your peers particularly as far as the knowledge is concerned. You need to have that quest for higher knowledge that will help you be able to impact effectively and that has always been my motivation for learning.* (Kobby, participant 2- Case II)

These results reveal that teachers engaged in CPD to satisfy a growing need for knowledge acquisition in a bid to improve practice and as a way of gaining personal and professional growth. Teachers' decisions for participation were also intricately related to the need to improve students learning such that underneath the identified personal reasons was the subliminal reason to improve students' learning. These motivation factors influenced teachers' formal and informal CPD engagements.

### ***System/External Motivators***

Aside from teachers' intrinsic or personal motivation factors, there were other external motivators that induced CPD participation among basic schoolteachers in Ghana. These external motivators were instrumental in nature and enabled teachers' participation, not from their personal interest but based on certain separable consequences (Deci et al., 1991). External factors recognised by the teachers in my study were: the mandatory nature of CPD; promotion and career advancement; incentives for participation; and social capital/relations.

### **Promotion and Career Advancement**

Among all the factors that influenced the teachers' participation, almost all recognised the seeking of promotion as the most important factor for their decision to engage in CPD activities (although the quantitative results proved otherwise, see Chapter 6). This was the case especially for teachers' participation in continuing education. Hence, although participation was aimed at increasing teachers' knowledge, the subliminal purpose was for them to obtain promotions and advance their careers, which was also linked with salary increment.

In the case of Esi, her quest for promotion and its associated financial benefits influenced her decision to pursue further studies. She commented:

*Continuing education is counted for your promotion, so that was my major source of motivation because I wanted to be promoted. With your qualification, it is easier to get your promotion even without attending interviews. (Esi, participant 3- Case I)*

Esi's comments also reveal how promotions are carried out for teachers in Ghana. Because there are no standards for teachers' CPD practices, teachers' higher qualifications have become the prerequisite for promotions. Also, while academic qualifications automatically elevate teachers in terms of career progression, teachers with long service who seek promotions are required to go through personal interviews and submit relevant documents related to practice. Therefore, to avoid the bureaucratic procedures for promotions, most teachers opted for further studies.

Kojo and Kweku also explained their decisions to engage in further studies because of the salary incentive that came with promotion:

*My source of motivation was that most of the teachers I happened to start with were taken better salary than I did and I considered that I was doing similar work with them...so it was the salary discrepancies that made me to go for further studies. (Kojo, participant 2- Case I)*

*Even though I went back to school to better myself, to be frank with you I did so because of the salary. And I will say I feel happy about my decision because I have actually improved in my teaching and my salary too has increased. (Kweku, participant 2- Case III)*

Externally, income associated with promotion influenced teachers' decision for participation in continuing education. However, this was not the case for organised CPD activities because in Ghana there are no standards requiring organised workshops and INSET activities to be counted towards teachers' career progression. Consequently, continuing education became the most plausible avenue for the teachers to update their professional qualifications and to be abreast of the changing knowledges within their

fields. It must also be stated that the increasing participation of teachers in further studies exerted some sort of financial pressure on the Ministry of Education (MOE), as teachers would be moved to a higher salary scale. To regularise the system, since 2015 the MOE has restricted teachers' continuing education, especially for new teachers until they have served a minimum of seven years (how this is affecting teachers CPD is explored in detail in the Chapter 9). While it can be argued that this ruling is unfair to the teachers involved, this finding justifies calls for more regularised ongoing CPD activities for teachers that stipulate the standards for practices as well as what counts towards teachers' professional development.

### **Incentives for Participation**

There were also other incentives that encouraged teachers to participate in CPD activities. Teachers were motivated to participate when they perceived the benefits to be accrued to be worth more than the costs involved in their participation. Teachers' expectations of benefits included the certificate as an investment, money, and other material and non-material gains (e.g. the satisfaction of CPD addressing their specific needs). Therefore, the desire to participate was weighed against the involvement of time and money. It is worth noting that the unavailability of these incentives became their reasons for non-participation as well.

According to Kobby, his decision and motivation for participation in a workshop was due to the "promise" of a laptop to be given after participation. He said:

*In fact, when I heard that RLG was going to give us one laptop I was happy and eager to go because it has always been my biggest problem to get a laptop to enhance my teaching. I went for that workshop because I knew I was going to get a laptop to help me in teaching my subject. (Kobby, participant 3- Case II)*

Other teachers were also motivated to participate in expectations of monetary benefits. For instance, in his explanation of what to look out for before participation in a workshop, Kwesi made known his motivation:

*If I am to travel to go for a workshop, I consider one or two things like if my transportation cost will be paid, if my feeding will be taken care of. As you know as for the knowledge it is good, but we must also be given certain basic things.*

*You cannot camp us from morning to evening without given us food. (Kwesi, participant 4- Case III)*

Kwesi further stated:

*In one of the workshops that I attended; it was stated I would be given some allowance as a form of transportation when I go... So, my transport cost was going to be catered for as well as provision of other things [snacks, lunch and water], so why not. (Kwesi, participant 4- Case III)*

Ato made a personal observation about school-based INSET activities in his school:

*If you call for any INSET program within the school and you don't provide refreshments for teachers, they won't come. To us we must get value for our time so you can't put us together and not given us water or drink or food. So usually because the head teachers are unable to provide these basic things, they don't organise it at all (Ato, participant 2- Case II).*

It therefore seems evident from these teachers' responses that although they expected to obtain knowledge from their participation, there were other pull factors that facilitated their decisions to attend organised CPD activities in and outside their schools.

Another factor that enticed teachers' participation in CPD activities was certification, which teachers demanded as a form of guarantee and evidence to validate participation. To the teachers, certificates legitimised participation, and they therefore expected that their participation would be recognised through the issuance of the certificates. Therefore, when teachers were certain to be given certificates, their participation was higher. Kuuku, participated in an organised workshop because of certification, stated:

*In the memo that was given to us, I got to know we would be given certificates. The thing is when you partake in some of these activities there must be something to show for it. So, when I knew I was going to be given certificate, why not, it was enough reason for me to go. (Kuuku, participant 1- Case III)*

Similarly, Kacely indicated that aside from the knowledge to be acquired, there was also the certificate factor that influenced him in attending workshops:

*Even though there is knowledge at stake, I mean I do go for these workshops to obtain knowledge to improve myself and help my students the certificate is also something I expect to get when I attend. I need something to show my participation so that in events I have to show my participation at any point, I will have something to show for. (Kacely, participant 1- Case I)*

Ato also observed:

*In the last workshop I attended in particular, teachers were full of enthusiasm in fact the interest of the participants was really high. The number of teachers who attended throughout the program was sustained and it was because we were informed, we would be given certificates after the participation. (Ato, participant 2- Case II)*

In instances where certificates were not guaranteed, teacher involvement was found to be low. For instance, Nana observed the following about teachers' involvement in school-based INSETs:

*As for the INSETs that we do in our schools, even though it helps you will find out that teachers themselves don't even take it seriously. After all, there are no certificates involved and hardly are we also provided some snacks and even water after participation. (Nana, participant 1- Case II)*

Nana's observation was collaborated by Becky who was a head teacher of one of the schools:

*Because we do not give teachers certificates after the INSET in the school, sometimes some teachers do not show up, maybe it is time the GES consider and issue certificates for teachers after they engage in any CPD activity. (Becky, head teacher 2)*

To these teachers, obtaining certificates of participation was significant to their decision to engage in organised CPD activities. Regardless of the knowledge, skills and attitudes, teachers, they needed some pull factors to induce their decisions to participate, especially in organised workshops and INSETs. These external factors were not in themselves motivators but were essential to induce the teachers' participation.

Therefore, predictors of meaningful CPD participation among basic schoolteachers in Ghana should not preclude external or contingency factors such as these.

### **Mandatory CPD**

As revealed in the review of teachers' CPD practices, organised CPD activities (for example, workshops and cluster-based INSET) were mandatory and teachers were compelled to participate. Therefore, it was unsurprising that teachers attributed their participation to the fact that it was compulsory. Teachers also explained that while organised CPD activities were carried out during instructional hours, their compulsory nature meant using instructional hours for engagement. However, even though organised CPD may have been compulsory, teachers' participation was based more on other factors, both intrinsic and extrinsic.

In most of Europe, CPD participation is state regulated, with teachers mandated to complete compulsory CPD activities as an investment towards their professional development and for renewal of their professional licenses to teach (De Vries et al., 2013). Such standards are, however, likely to differ from country to country. For instance, in the UK and Germany, teachers are compulsorily required to engage in CPD activities. In Poland, Portugal and Spain, CPD is optional but participation is allied to career advancement and salary increments whereas in France, Sweden and the Netherlands, CPD participation is a professional duty but optional and unlinked to either career advancement or salary increments (De Vries et al., 2013).

In Ghana, although CPD is mandated for practising teachers, there are no professional standards regulating participation, thus existing practices lack coherent national policy (Asare et al., 2012) (see Chapter 2). Aside from teachers' participation in further education, engagements in other CPD are linked to neither career advancement nor salary increment. Therefore, for teachers in this study, though they participated because they were required to, the choice for participation depended on the presence of other personal and extrinsic motivators.

## **Social Capital/Social Relationship**

Apart from the need to learn, teachers' participation was also influenced by the quest to seek new relationships (social capital) and to become more acquainted with teaching professionals in their fields. Houle (1961) described such teachers as activity-oriented learners who participate in learning not for the content but rather for the activity.

For such teachers in my study, CPD opportunities afforded them time outside the classrooms to seek and build meaningful social relationships, which are valuable for building professional social capital. For Nana, a mathematics teacher, her desire to meet an expert in her subject area led her to participate in a workshop that she believed was organised by an expert. She narrated her experience:

*When I heard the workshop was organised by AIMS (African Institute of Mathematical Sciences), which is owned by Professor Parry [pseudonym], I said to myself I have to be part. I had earlier on met him at program and I was wishing to meet him once so that I could interact with him more as far as the teaching of mathematics is concerned. So actually, I was wishing and praying to meet Professor Parry at the workshop and although he couldn't be part of the workshop at least I was able to gain some of his ideas through his workers at the workshop. (Nana, participant 1- Case II)*

Ato, also expressed his desire to meet experienced experts in his field:

*I wanted to meet a lot of experienced teachers in the field of mathematics. It was a big workshop and brought together some well-known mathematicians in Ghana, so I wanted to meet them in person, to interact with them and to learn from their experiences. (Ato, participant 2- Case II)*

And Ebo, who participated in order to identify and broaden his social network, noted:

*You see, when you go for workshops and the INSETs it is good. It is an opportunity for me to make new friends and friends help you in times of needs. Even apart from that you can benefit from each other's knowledge as far as teaching is concerned. (Ebo, participant 4- Case II)*

The results so far suggest that material and non-material outcomes were of equal importance in informing participation among these adult learners. While some teachers

participated because of the knowledge to be derived, for others it was the social interactions and the expansion of social networking that were of utmost importance to their engagement. It is important to emphasise that such teachers sought meaningful interactions and social networking that were significant for their professional careers.

### ***Reasons for Non-Participation***

Teachers also explained that the lack of incentives also affected their decisions not to participate in CPD activities. Even though non-participation was widely explained by the fact that no suitable CPD was offered, decisions not to participate were based on the lack of incentives such as transportation cost, few allowances and, in some cases, the cost involved in paying for the issuance of certificate after participation. Teachers also reckoned that the mismatch of CPD content to their classroom diminished their zeal for meaningful participation.

Kobby, who decided not to participate in an organised workshop because of the cost in obtaining the certificate, explained:

*There was this workshop for ICT teachers that was organised by GNAT, but they required us to pay so as to get some certification. It was such huge money, so I decided not to go. I was expecting the school to have even paid half at least for us but since they didn't, I also was unable to bear that cost so I didn't take part.*

(Kobby, participant 3- Case II)

Other teachers also attested that the costs involved in further studies hindered their pursuits of continuing education after training colleges and in pursuits of Masters' degrees. Ato's comments summarise the role of incentive in driving teachers CPD engagements:

*There is the issue of the incentives, if incentives are not there, teachers feel reluctant to go. For instance, if they are organizing an INSET in the next village, you would have to foot your own bill and when you go, you are only given GH¢2 without water or anything. So, most of the times teachers who are from afar and remote areas do not also get car to come so they have to walk. You take all these things into consideration and then when you come and you don't get anything, definitely the next time I won't bother to come. It is not like we don't think about the knowledge we may get to improve ourselves but then also we think about*

*what we are likely to derive should we come and participate. We should be able to get something tangible in return like transportation costs, certificate, also basic things like food and water. So, the incentive is very necessary to determine whether teachers will come for an organised learning program or not. (Ato, participant 2- Case II)*

Indeed, when given opportunities to participate in CPD activities, teachers suggested a wide range of intrinsic and extrinsic reasons for participating: expectations of acquiring knowledge, skills and attitudes for use in their professional practice; increasing their self-worth as teachers; and promotions and other material gains. To the extent that these resources could to be accrued, teachers invested in their participation. However, there were variations in teachers' expectations and investments that can be explained in the light of teachers' beliefs about CPD responsibilities. For instance, teachers in the middle of their careers participated for personal reasons, while most beginning teachers (one to five years teaching experience) were more driven by external motives, as in the case of their further education (see Appendix D for teacher characteristics). However, despite their different intentions for participation, all teachers in this study fostered an inherent love of learning and acknowledged the need for continuous growth within their professional practice.

The results on reasons for CPD participation suggest that both personal and extrinsic motivational factors interplayed to influence basic schoolteachers' decisions for participation in CPD activities. While teachers personally engaged in CPD for reasons such as the need to remain adept in knowledge of what they taught and to improve the learning of their students, such motivators were given impetus by other external factors such as the material benefits to be accrued from participation. As well, even though CPD may be mandatory in Ghana, teachers' decisions to participate or not still depend on their personal quests. Chapter 10 illustrates how agency and social conditions, in addition to motives, contributed to teachers' decisions to invest in CPD.

In sum, the theme of teacher individuality has explored the teachers' personal characteristics in the workplace that affected their CPD practices. The section first explored teachers' beliefs and attitudes towards their professional learning in order to

understand the teacher ‘self’ when it comes to professional development. The section also highlighted teachers’ financial and family responsibilities, workloads, available time, and motivation as essential ingredients that may affect basic schoolteachers’ CPD practices in Ghana

### **9.6 Wider Community Setting and the Type of School**

The community and society in which schools are situated, and the type of school and its characteristics, shape teachers’ CPD practices (Timperley, 2011). Schools that have higher socio-economic status (SES) and client power<sup>13</sup>, influence teachers’ orientation and need to be more efficacious, hence their investment in learning and development to achieve higher performance (Bidwell, Frank, & Quiroz, 1997; Mok, 2001). Mok (2001) explains that teachers working in schools of higher SES that have more parental power over schools’ operations tend to have higher levels of satisfactory performance demanded of them, which influences their professional development. Such scenarios manifested strongly among the participating basic schoolteachers in the Central region of Ghana. Also, the wider community setting, whether rural or urban, influenced the characteristics and type of school, and parental control. Schools that were located in urban communities had more client power and parental control over students’ learning, which invariably affected how teachers learned and developed.

It was observed that the type of community within which schools were located determined available learning opportunities as well as facilitated access to CPD events. While it was easier for teachers in urban communities to access resources for their learning such as libraries and ICT tools, teachers in remote communities were rather handicapped in this regard. Also, participation in CPD activities organised outside the schools were challenged by issues of transportation, as teachers in remote areas were hindered by their inability to access transport. For instance, when reporting on an organised workshop in her district, Nana made the following observation about fellow teachers from farther remote communities:

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<sup>13</sup> This refers to the control of stakeholders in school administration to ensure effective learning and teacher performance. Within communities, such clients or stakeholders include; parents, guardians, district education offices, local chiefs, religious authorities, assembly members or any other leader in the community.

*During the workshop, I observed that most of the teachers were coming late especially those who were coming from the interior or quite remote areas. Some got to the venue at the time we had already treated about two or more topics. I was lucky because I had a friend staying in the town where the workshop was organised, so it was easier commuting to the venue to go and learn but what about those who did not? How would they make up for the topics they missed out in learning? These were some of the questions I asked myself. (Nana, participant 2- Case II)*

The issue of transportation was critical, especially when CPD activities were organised outside the school areas. With unmotorable road networks and unreliable transport systems, teachers were not only affected when commuting for workshops, but also when travelling to their various universities during their continuing education. Ato, whose school was in a rural community, shared his experience during his continuing education:

*I once missed a quiz at the university because I could not get transport to the university that was located at the regional capital. Getting transport from here to even the district capital is a challenge and sometimes it becomes difficult to access relevant information even from the head office. (Ato, participant 2- Case II)*

The types of communities also determined the availability and access to learning facilities that teachers could utilise for their further development. Again, teachers in rural communities were disadvantaged, as CPD facilities were non-existent. Kobby, an ICT teacher, Kobby explained his challenges:

*When you find yourself in remote areas like this, getting access to some basic things to help in your teaching is difficult. Getting access to transportation to even go for your weekend classes at either Winneba or UCC is difficult. And when we come to the ICT that I teach; it is even very difficult. The children in this community don't have access to modern technologies and some have not even seen computers before, there is no internet cafes around so you could give them assignments to go and have practicals with it over there. All these things*

*make your learning as a teacher very difficult if you teach in such a community.*  
(Kobby, participant 3- Case II)

On the other hand, schools located in urban communities were privileged with access to some learning infrastructure such as libraries and Internet cafes that enhanced their CPD engagements. It was therefore not surprising that none of the teachers in urban schools raised issues about limited access to such facilities.

It was also noted that the SES of the schools, as well as parental involvement in students' learning, influenced teachers' learning. Teachers in high SES schools felt compelled to be efficacious in order to maintain some standard performances, especially in the Basic Education Certificate Examinations (BECE) results. This pressure was reinforced by parental power, in that, parents' interests in and supervision of their children's learning generated demand forces on teachers' performances. Consequently, teachers were challenged to engage in continuous learning in order to perform satisfactorily. Kweku, for instance, explained how parents' involvement in school activities positively affected teachers' learning in his school:

*I am happy that in this town, parents take some keen interests in the learning of their children as well as their performances. What it means is that I am always challenged to do proper research by reading and fishing out for relevant information to teach my students... this also enhances the image of our school in setting good pass records during the BECE.* (Kweku, participant 2- Case III)

Kwesi also shared a personal experience of how he was challenged to engage in continuous learning in his school:

*With the nature of the children in this school, you really have to come to school prepared, so you don't embarrass yourself. I once gave an assignment to class six pupils when I was teaching at the primary level. Then the next day one of my students came to me and said, "sir my dad says what I have in my book is wrong" and it's a good thing parents supervise children's learning. What it means then is that as a teacher I have to live up to expectation, so I am always prepared to do proper research on any topic I want to teach especially in the Social Studies which deals with issues around the society.* (Kwesi, participant 4- Case III)

In contrast, teachers in lower SES rural schools demonstrated how the lack of infrastructure and parental involvement affected their learning and development. This was also linked with community characteristics, whether rural or urban. Yaw reported:

*Because the community is typically a rural one parents don't take much interest in the learning of their children and this affect our work very much. There is no challenge to what you teach. Look I have taught at MFP (pseudo) basic school [a school with higher SES], and the kind of children will make you sweat, so you will always come to school very prepared before your class. You can give homework and the kids will come and tell you the dad or the mum says the work is not correct or what you are saying isn't the truth but here you can give homework and the kids will only be doing it in class, no parent supervision. So, in these two cases which one do you think the teacher will be challenged to learn? So, I think the community also counts a lot. You will be challenged or feel very okay in the kind of knowledge you have. (Yaw, participant 4- Case I)*

Kojo also explained how students' zeal and attitudes towards learning in rural schools affected how teachers learned and the developed:

*What I have realised with most students here is that, they don't challenge you the teacher. They don't challenge you in the sense that they don't push you the teacher to learn or do proper research before coming to the class. Whatever you teach it is taken and it is because they don't get serious with studies and their parents also don't have any interest in their children' studies. I will say it is the literacy level in the community but sometimes too I don't blame them. They don't have many of the resources to learn to begin with. (Kojo, participant 2- Case I)*

Kwame, who was teaching in a fishing community, had this to say about students' attitude towards learning:

*During fishing season, children get involved in the activities to support their parents. These activities in a way make the parents not concerned with their children's schooling. In many instances, these children don't come to the school at all. And so that has become a problem to some of the teachers in this community. So, I can say that the nature of the work in the community is affecting the schooling and the education of the children and in the same way*

*affect the work of the teachers as well. Of what benefit will it be for a teacher to struggle to search for information to come and teach only to meet an empty classroom or just a few students to teach? (Kwame, participant 2- Case IV)*

As emphasised by Kojo, rural schools lacked basic tools and resources that could mediate teachers' learning and development. Also, the characteristics of the communities (see Chapter 5) were such that children engaged in the economic activities of their parents, which meant that there was limited interest in their education shown by the students themselves and their parents or guardians. While teachers in such communities occasionally felt unchallenged in their teaching and learning, they nevertheless strived to improve the performance of their students by initiating their own personal learning and participating in CPD activities.

### **9.7 Chapter Summary**

This chapter has demonstrated how certain factors affected basic schoolteachers' CPD activities in Ghana. Factors identified include policy conditions, the role of school leadership and school culture, teacher identity, and the wider community settings where schools were located. These factors intertwined to create a rather complex practice of CPD. For instance, the macro policy framework of the GES affected teachers' CPD both positively and negatively. While study-leave and the UTDBE policies positively affected teachers' professional development, a ban on continuing education by newly posted teachers adversary affected their professional development, especially in the absence of regularly organised CPD. While teachers were expected to stay abreast of new knowledge to improve practice, they were at the same time prevented by GES's policy from doing so.

The next chapter will integrate the results from both the survey and the interviews for further discussions. The themes to be discussed are: the sociocultural perspective of teacher learning; CPD contextual challenges; teacher professional development/learning needs; basic schoolteachers' CPD practices; teacher agency; and motivation as an investment.

## **CHAPTER 10 : DISCUSSION**

### **10.1 Introduction**

In Chapters 6, 7, 8 and 9, the findings from this study were presented. These chapters highlighted the varied professional development/learning needs of basic schoolteachers, current CPD practices, teachers' participation, and CPD experiences, as well as contextual influences on teacher CPD practices in the Central region of Ghana. While Chapter 6 presented the survey findings, Chapters 7, 8 and 9 presented the results from the qualitative in-depth interviews. In this chapter, I discuss both the survey and interview findings through the lenses of SCT and Kennedy's (2005, 2014) and Desimone's (2009) conceptual frameworks (see Chapter 3), as well as the literature reviewed. I first explain the findings within the overarching theoretical position of the study and then discuss the major themes that emerged from the research findings. The major themes to be discussed are:

- CPD contextual challenges (policy, social and community constraints)
- Professional development/learning needs of basic schoolteachers
- Ghanaian basic schoolteachers' CPD practices
- Teacher agency in learning and CPD
- Motivation as investment

### **10.2 The Sociocultural Perspective of Teacher Learning**

Learning is an integral part of CPD. Therefore, an inquiry into teacher CPD activities and experiences required that I frame the study within a theory of learning. SCT proved to be the most appropriate because of its "tremendous explanatory power for understanding the processes of teacher learning" (Johnson & Golombek, 2003, p. 730) and the unique insights it allowed. Through the lens of SCT, my study provides astute explanations into how basic schoolteachers in the Central region of Ghana learned through the processes of mediation and appropriation, and their contextualisation and application of CPD learning experiences in real classroom situations.

I first discuss the results of the study within the key constructs of SCT (mediation, tools, ZPD) and demonstrate the processes of teacher learning from CPD participation.

### **10.2.1 Mediation Through Cultural Artefacts/tools**

As explained from a theoretical position in Chapter 3, learning is a mediated activity that arises through participation in socially organised activities and the individual's use of such knowledge as an aspect of their participation in social practice (through appropriation and transformation) (Greeno, 2003; Lave & Wenger, 1991). Mediational mechanisms include social interactions with humans, and cultural or symbolic tools that shape human learning (Lantolf, 2004; Vygotsky, 1978). My study supports these theoretical arguments and contributes to recent debates on the need to adopt more sociocultural approaches towards research into teachers' professional development (Mansour et al., 2014).

The participating basic schoolteachers' learning was mediated by organised CPD activities (workshops, in-service trainings (INSETs), continuing education), which functioned as cultural artefacts to promote learning. Cultural artefacts within SCT are perceived as "simultaneously material and conceptual aspects" that make up human goal-oriented activities (Thorne & Lantolf, 2006, p. 62). As a source of learning, CPD activities aimed at training and re-training teachers to attain some level of professional competencies while physically assembling them for their development. Thus, participation in CPD afforded the teachers useful opportunities to learn and re-construct professional knowledges collectively (through group tasks and other learning activities during participation) and from experts (facilitators) who influenced and challenged teachers' learning. Through participation, teachers obtained "knowledge-for practice" and "knowledge-of practice" (Cochran-Smith & Lytle, 1999, p. 250) that helped shape their learning by boosting their confidence and mastery over content and pedagogy in their teaching. This was buttressed by the survey results that showed 81% of teachers reporting that they learned new skills, knowledge, and competencies through participation in organised CPD, an indication also that CPD activities do have value for teachers' professional practice.

While the organised CPD opportunities assumed a semi-formal approach (in the form of workshops and INSET activities), the basic schoolteachers also learned informally by using symbolic tools to mediate their learning and development (see Chapter 7). For instance, 78% of teachers learned through tools such as textbooks and other professional

literature, teaching aids and ICT tools for personal research that helped them to appropriate and internalise new knowledges towards their professional development. Such engagement and personal searching for these tools reflects the collective agency on their part in seeking alternative ways to foster their learning and development (teacher agency is discussed in Section 10.6).

However, just as Johnson and Golombek (2011) observed, it emerged from my study that teachers' learning was not necessarily mediated by the physicality of these symbolic tools but rather by their sociality, or how these teachers used these tools to organise learning activities in the classroom. This was demonstrated in teachers' reported learning needs for development where, for instance, teachers required the physical presence of ICT tools (computers, projectors, internet) as well as the knowledge to use them for integration in classroom teaching. In addition to asking for teaching and learning tools to be made available, teachers also expressed the need to be trained in how to use them in real classrooms.

### **10.2.2 Mediation Through Human Beings (Social Interaction)**

My findings also underscore the role of human mediators (social interaction) in teacher learning. As explained in Chapter 3, Vygotsky (1978) emphasised this notion when he suggested that active learning emanates from the nature of social interaction between two or more people with varying degrees of skills and knowledge. Individuals are able to develop their psychological functions first in social interaction with other people before they appropriate and internalise knowledge for themselves (Vygotsky, 1978). Similarly, in this study, social interaction was a vital source of teacher learning, (see Chapter 7) at the same time as aided in teachers' appropriation and contextualisation processes (see Chapter 8). To support their learning and internalisation processes, the participating basic schoolteachers interacted with colleagues in peer learning contexts and informal dialogues in their workplaces and externally with 'experts' in a mentoring process.

Emphasising the social interactionism in peer learning and a vital source of learning for instance, Ato, made known the following:

*... when some topics seem a bit perplexing I go to them [colleague teachers]... I share with them their knowledge and experiences and when they also need some information from me, I also make myself available and we learn together. So, among my teachers, I learn a lot from them (Ato, participant 2-Case II).*

In basic schoolteachers' peer learning, colleagues in collaborative learning activities mediated each other's learning and development. Teachers shared learning as they interacted to co-construct professional knowledge to shape their teaching and other professional areas (see Chapter 7, Section 4.3). This was also well emphasised in school-based in-service training (INSET) activities where teachers collectively diagnosed their own needs and sought viable solutions to their challenges. Through this practice, teachers relied on others' strengths and expertise in developing themselves professionally. As well, the rotational nature of the school-based INSET was such that different teachers led different sessions, which ensured that learning was distributed, collaborative and reciprocal so that each member could benefit from each other's knowledge and expertise. For instance, Kacely aptly shared this about school-based INSET activities in his school:

*When we want to learn we appoint one of us with relevant expertise to lead... the next time depending on the topic, we appoint another person to lead.*  
(Kacely, participant 1-Case I)

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 (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 organised workshops and cluster-based INSETs adopt these principles in planning and implementation.

In addition, as was shown in the survey, 89% of participants engaged in informal dialogues with colleagues. This was explained during the interviews that such interaction occurred during teachers' staff common meetings where colleague teachers gather for information dissemination and discussions about professional practice (see Chapter 7). During such meetings, *"teachers interact together, we talk about a lot of*

*things and share similar experiences so we could learn from ourselves...*(Kacely, participant 1-Case I). Teachers also interacted and learned significantly through these informal conversations with colleagues in and outside the school while discussing shared experiences, knowledge and ideas to help shape each other's practice. Commonly referred to as reflective dialogues (Chien, 2013), such conversations also validate the assertion that indeed learning could take place in an array of settings (Borko, 2004; Lieberman, 1995; Villegas-Reimers, 2003). Eraut (2004) observed dialogues as beneficial for facilitating teacher CPD. Dialogues result in more reflective practices as teachers discuss and think through ways to improve their teaching practice (Chien, 2013). Therefore, through informal dialogues, basic schoolteachers in Ghana communicated their thoughts with teachers who shared different perspectives and thereby co-constructed professional knowledge to improve performances in the classroom.

Teachers' interactions in peer learning and reflective dialoguing were significant in creating a culture of collegiality among teachers in schools, and positively affected their learning and development (see Chapter 9). Also, social interactions with peers and reflective dialogues aided teachers' internalisation processes and contextualisation of CPD knowledge for classroom use (this will be discussed in the next section). About 51% of teachers identified this form of knowledge creation (based on social interaction and collaboration) as having a significantly more positive impact on their professional development than organised CPD activities where knowledge was pre-planned and given to teachers as "acquisition". Not surprisingly, teachers preferred forms of CPD that imbued these principles of collaboration and social interactivensess of learning.

In addition to learning collaboratively with peers, the participating basic schoolteachers also interacted with external persons who performed roles as mentors. Mentors served as academic advisors who provided counselling and professional friendship (Rhodes & Beneicke, 2002) to support teachers' learning and development. This practice typifies the notion of the zone of proximal development (ZPD) as explained in Chapter 3. The ZPD reflects the relationship between experts and novice or less capable teachers in their learning processes where the latter are guided by the former (Shi, 2017). Therefore, as the basic schoolteachers gained the knowledge and assistive guidance of 'experts' as mentors, they were scaffolded to obtain the next level of competency. However, depending on what was to be learned, the teachers also sought assistance

from their mentors to improve the teaching and learning of their students. This also suggests that the mentorship processes, as reflected in my study, were not continuous, but drawn based on teachers' needs. This demonstrates the agency and willingness of teachers to learn to improve practice (see mentoring based on the informal arrangement in Chapter 7).

The mediational means, whether social interactions, cultural artefacts or symbolic tools, were self-regulated by teachers to gain control over their learning and professional development when necessary. Teachers relied on mediational tools to develop and address particular challenges in their teaching practices at a point in time. However, when confronted with different challenges or the need to teach different content within the curriculum, teachers returned to appropriate mediators, whether tools (textbooks, training manuals) or social interactions (peers, mentors) to accomplish those tasks. This mirrors Johnson and Golombek's (2003) observation that the processes of teacher learning are indeed not linear but logical.

### **10.2.3 The CPD Learning Process**

One of the major criticisms of teacher CPD studies is their failure to explain how teachers learn from CPD activities (Borko, 2004; Opfer & Pedder, 2011) and the conditions that foster this learning (Clarke & Hollingsworth, 2002). The use of SCT in this study helps address this knowledge gap. Within the SCT, learning occurs from the participation in social activities (in this case CPD activities) and individual's use of the knowledge gained (through appropriation and internalisation) to transform classroom practices (see Chapter 3). This suggests that participation in CPD activities per se does not guarantee learning or development (Riordáin et al., 2017). Learning depends on teachers' contextualisation of their CPD knowledge gained to influence their classroom teaching.

From the findings described in Chapters 6 and 8, it was noted that 81% of the responding teachers learned significantly through their participation in CPD activities, although it was also reported that not all CPD interventions produced genuine learning. The teachers who reported that they had learned from their CPD participation explained how they were able to implement and contextualise the knowledge gained into their

classroom teaching and other areas of their professional lives. For instance, while some teachers changed their teaching philosophy after participation, others reformed their teaching methods and approaches in ways they believed would improve their teaching and their students' learning. For Esi, an English language teacher, her CPD experience of teaching reading with visual aids changed her methodologies in the classroom. She said such new approaches made her students *“read with meanings and understanding...and also improved their reading skills”* (Esi, participant 3, Case I), which hitherto was not the case. Similarly, Nana (participant 1, Case II), a mathematics teacher, modified her teaching approach by integrating teaching and learning materials (TLMs) and using techniques she had learned in a workshop to devise other practical ways of teaching abstract concepts in mathematics, such as algebra.

However, it was observed that these changes or teachers' appropriation and transformation of CPD knowledge into real classrooms did not happen automatically. There were other significant processes that facilitated the learning of teachers, even after participation in CPD. This finding affirms Johnson and Golebeck's (2011) observation that the process of teacher professional development is complex, dynamic, and never-ending one. Using teachers' own experiences interpreted through the SCT, I observed teachers' learning from CPD to follow a circuitous path involving five key stages: (1) CPD participation experience, (2) acquisition of relevant knowledge resources, (3) critical reflection, (4) re-conceptualisation, and (5) contextualisation. These phases are typical of any CPD learning. This is represented diagrammatically below in Figure 10.1.

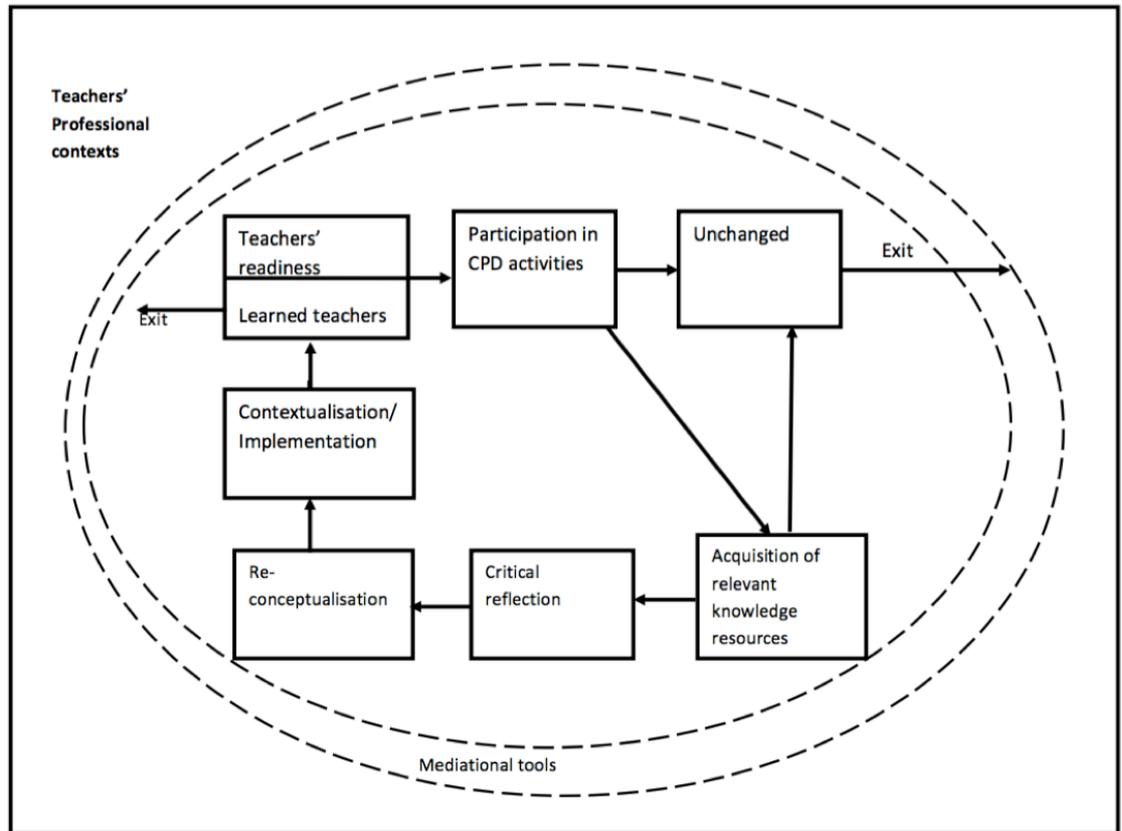


Figure 10.1: The CPD Learning Cycle

Source: Author's construct

Figure 10.1 represents the basic schoolteachers' participation in CPD activities and how they learned through such participation. The teachers' predispositions for learning and their perceptions that CPD was relevant and needed, gave some impetus to their CPD undertakings (see Chapter 9, Section 9.5.1). At the first stage, CPD opportunities became the sources of teachers' learning. Teachers participated in CPD activities, both formal and self-initiated, and hence were exposed to the CPD learning experience. However, some teachers' learning was truncated due to the irrelevance of the CPD content to their classroom needs, the lack of incentives for participation, and their feeling that their needs had already been fulfilled. These teachers discontinued their participation and I therefore classified them as having exited the CPD learning cycle.

In the second stage, the continuing teachers acquired relevant knowledge resources, which were in tandem with their PD needs and essential for use in their classroom

teaching. These included pedagogical and content knowledge to improve practice. At this stage also, some teachers could not complete the cycle because they were unable to engage further in other processes (such as critical reflection and contextualisation of knowledge) to establish their learning. For these teachers, although relevant knowledge were delivered, it was not evident that they were able to implement these in their classrooms. This was due to factors such as the lack of training manuals and tools to mediate further learning and the incoherence of the CPD content with curriculum requirements for teaching. For instance, Kobby, who was unable to implement new knowledge from CPD participation, noted:

*While I learned things for myself... we are not even required to teach those content to the students.* (Kobby, participant 3- Case II)

Also, Kweku (participant 2-case III) recounted that the lack of training manuals from CPD events made it difficult to continue with his learning after participation.

The third stage involved critical reflection where teachers reflected in practice and on-practice (Powell, 2005; Schön, 1987) both independently and through negotiating with others with similar CPD experiences (see Chapter 8 Section 8.4). This is consistent with Brookfield's (2000) and Powell's (2005) claim that teacher CPD should involve critical reflection on practice to be effective. At this stage, teachers engaged in a cognitive struggle (Johnson & Golombek, 2011; Chaiklin, 2003) while trying to juxtapose their newly acquired CPD knowledge with their prior teaching knowledges. As was found in Chapter 8, in this process, teachers received support from mediating tools including training manuals and interaction with colleagues with similar CPD experience. For instance, Nana described what she usually does after CPD participation:

*... I note down the key things I learned and think through them to know how I can teach my students with the new knowledge I acquired... I call colleague friends from other schools who were also participants for discussion and with that I am able to adjust my teaching for better understanding of my students.* (Nana, participant 1- Case II)

The fourth stage is the re-conceptualisation phase where, through the cognitive struggle, teachers appropriated and internalised their new knowledge for contextualisation in their classrooms. As earlier discussed in Chapter 3, appropriation is the change facilitated by teachers' critical reflection on their participation in CPD activities, (Johnson, 2000). Thus, it was observed that learning took place at this stage. Teachers then tried out their new learning experience in their classroom teaching to support the learning of their students at the fifth and final contextualisation stage. Through re-conceptualisation, teachers came to adapt and re-organise their CPD learning experiences for the benefit of their students' learning. It must be emphasised that most teachers rarely get to this stage because of the external nature of CPD activities, which fail to adequately address teachers learning needs for development.

Continuous support was needed within each of the stages by providing appropriate mediating tools, which were obtained within the broader context of teachers' professional space. This reinforces the role of context in influencing teachers' learning and professional development. Mediation agents that supported teachers' learning were CPD goal-directed activities (which acted as a cultural tool), and social interaction, as well as physical and symbolic tools.

While this learning cycle may be typical of learning in CPD, it must also be cautioned that teachers' learning processes within the context of a CPD program may vary (van den Bergh et al., 2015). For instance, teachers may need varying amounts and types of mediating support due to their different learning patterns (Vermunt & Endedijk, 2011) and to the affordances within teachers' contexts that may support or constrict learning.

In conclusion, the SCT stance of my study highlights the complexities in teachers' learning and their professional development. It enhances our understanding of such complications in teacher professional development and in so doing illustrates the various ways through which educators can intervene to support and improve teacher professional development. My study builds on and extends other studies in its attempt to

capture such a transformative process of teacher professional development using the CPD learning cycle.

The next theme demonstrates how teachers' CPD practices and experiences were influenced by the broader context of policy, school and community settings.

### **10.3 CPD Contextual Challenges**

CPD is culturally specific and contextually variable (Wermke, 2011), thereby making the examination of CPD contextual factors critical in this study. Such examinations conform to the study's theoretical position (see Chapter 3) and also provide understanding of the complexities that characterise basic schoolteachers' learning and their professional development, as well as the tensions and dilemmas within teachers' professional practice (Hardy & Melville, 2013). This section discusses three key issues from the findings described in Chapter 9 to demonstrate the significant role of three contextual factors in teacher CPD practices in Ghana: (1) the CPD policy paradox; (2) access to CPD opportunities and (3) school politics. These factors affected how CPD was practised as well as teachers' participation and experiences.

#### **10.3.1 CPD Policy Paradox**

Policies are enacted at multiple levels - macro (government), meso (school leadership and local authorities) and micro (teachers and schools) (Leask & Younie, 2013) - with teachers as implementers, whether they like it or not. Hardy (2012) argues enactment of CPD policy affects its practice within schools.

Within the current study, policy enactments affected basic schoolteachers' development, both positively and negatively. The Ghana Education Service's introduction of study leave, the Untrained Teachers Diploma in Basic Education (UTDBE), and rationalisation policies affected how teachers learned and developed. While the study leave policy, regardless of its challenges, afforded some teachers opportunities to embark on further studies to upgrade their professional knowledge, the UTDBE (see Chapter 2) and rationalisation policies were ad hoc measures to ensure that a cross section of teachers developed adequately to fit into their teaching roles. The UTDBE targeted 'pupil teachers' development through further studies whereas the

rationalisation policy regularised teachers' development in areas that had bearings on what they were teaching in the classrooms. This indeed affected the ways teachers developed, as most of the teachers subsequently engaged in further studies in areas that had bearing on their classroom teaching.

In spite of these positive developments, the conflict arose because of the implementation of a ban on teachers' continuing education pursuits. As an administrative tool, this ban aimed to restrict teachers' continuing education amidst concerns of loss of instructional hours and absenteeism owing to participation in distance and sandwich education programs (Personal interview, 2017). Newly posted teachers were thus instructed to serve a minimum of five years before pursuing further studies. When considering the significance of continuing education to teachers' professional development, it can be argued that this policy is unhealthy to teacher learning and development within schools, especially in a situation where organised CPD activities were in themselves inadequate (see survey results in Chapter 6), and also given that it is during the early years that teachers most need CPD. This was certainly problematic for the teachers as they expressed their displeasure and its effects on their professional development widely. The teacher continuing education ban thus created a paradox where even though basic schoolteachers were encouraged and mandated to improve their practice through updating their professional selves, they were at the same time restricted from doing so.

While some teachers in my study had defied the policy restriction to engage in continuing education, the consequence was that such certification was unrecognisable by the Ghana Education Service (GES), a situation that prevent many from pursuing higher qualification. For instance, Esi gave up her desire to pursue a Masters degree to upgrade her knowledge in the area of her teacher due to policy restrictions. She commented:

*It is unfortunate that the GES is asking teachers to wait for some years before they can go to school with their own money... it is not fair to the teachers but for me when I heard about that I said to myself "aaah well" why should I bother again to go and do my Masters? From there I gave up my motivation to go for further course again. (Esi, participant 3- Case I)*

It was also apparent that the lack of a broader CPD policy framework affected how teacher CPD was practised. The sporadic nature of CPD interventions for teachers, the lack of continuity in practice and the more transmissive approaches to teacher development (see Chapter 7) were all consequences of the absence of a coherent policy framework that informed CPD implementation. Accordingly, teachers had little conceptualisation about CPD, as their notion of CPD was limited to participation in workshops, continuing education, and in-service training activities. Letsatsi (2010), in a study in Lesotho, made a similar discovery that the lack of broader policy framework for teacher CPD affected participating teachers' understanding of CPD as they failed to identify CPD beyond workshops or induction activities. In contrast, broader policy frameworks inform the conduct, implementation and teachers' participation in CPD activities in most developed countries, for example, USA and Australia. Ghanaian policy requires the enactment and implementation of a framework for teacher CPD standards and for the design, implementation, and evaluation of teacher CPD activities.

### **10.3.2 Access to CPD Opportunities**

This study also found some social conditions and constraints that affected the extent of teachers' learning and development. The wider community and school settings, whether rural or urban, determined teachers' access to learning resources, which affected how teachers learned and developed. This supports claims that the community and society in which schools are situated shape teachers' CPD practices (Timperley, 2011). Access to professional development resources is also discussed in this section, in terms of subject specificity of CPD opportunities.

As explained in Chapter 9, the rural and urban characteristics of schools affected how teachers within those schools learned and developed. Indeed, the majority of the teachers, who were from rural schools, were challenged in their access to potential learning resources and infrastructure that could promote their learning and development. The remoteness of the schools from CPD venues, and erratic transportation between communities and major learning centres limited teachers' accessibility and affected their engagement and participation in CPD. These situations, made Nana, for instance, question the possibility of learning and development among teachers in remote or rural communities. She made this observation during a workshop:

*I observed that most of the teachers were coming late especially those who were coming from the interior or quite remote areas. Some got to the venue at the time we had already treated two or more topics. I was lucky because I had a friend staying in the town where the workshop was organised, so it was easier commuting to the venue to go and learn but what about those who did not? How would they make up for the topics they missed out in learning? (Nana, participant 2- Case II)*

Indeed, these questions were concerns of teachers in rural communities. Such situations affected not only teachers' development but also the task of teaching. For instance, Kobby, as an ICT teacher in a rural community, was both impaired in his access to learning facilities and challenged by teaching students who themselves had not seen a computer before. He said:

*When you find yourself in remote areas like this, getting access to some basic things to help in your teaching is difficult. Getting access to transportation to even go for your weekend classes at either Winneba or UCC is difficult. And when we come to the ICT that I teach; it is even very difficult. The children in this community don't have access to modern technologies, and some have not even seen computers before, there are no internet cafes around so you could give them assignments to go and have practicals with it over there. All these things make your learning as a teacher very difficult if you teach in such a community. (Kobby, participant 3- Case II)*

These findings are significant in understanding teachers' professional contexts in Ghana and how they enacted their learning and development. Teachers who had many disadvantages in access to their learning and development made more personal efforts to initiating their own professional development pathways in order to enhance the learning of their students. These situations typify teachers' agency (as will be explained later in this chapter) and help explain why teachers in my study rejected being labelled as incompetent when their students' performances or standardised tests were used to measure their competences for development (see Chapter 8).

Another manifestation of accessibility is related to CPD for different teaching specialisations, which fostered inequality in teachers' access to viable CPD support and other opportunities. For instance, whereas mathematics and science teachers frequently had access to organised CPD activities, none of the Ghanaian language teachers interviewed, regardless of teaching experiences, had had the opportunity to engage in any CPD activity that targeted their area of teaching. The politics around who gets access to participate in CPD activities became a recipe for tension and affected collegiality in schools given the impression that “... *some teachers are more important than the others*” (Kwame, participant 2, case IV). Even though the affected teachers resorted to other mediums to ensure their professional development, such neglect affected also the morale of the teachers concerned. Teachers instead felt disenfranchised and less significant in their areas of teaching. In Efe's opinion, “*it takes a mature person to understand the situation*”. This gives a hint of the possible tension that could arise from this oversight.

However, it can also be argued that the need to prioritise limited resources has inevitably resulted in this inequality. Finance and funding affect not only teachers' participation but also the design and implementation of CPD activities for all subject teachers (Birman et al., 2000; Postholm, 2011). For schools in Ghana, priorities have been given to science and mathematics teachers to raise students' performances in those subjects and to sustain their interests (Personal interview, 2017).

### **10.3.3 School Politics**

One attribute of effective school leaders is their ability to share power and authority, which optimises the environment in which teachers' learning can grow (Smylie, 1995). This can be made more feasible if school leaders adopt more democratic leadership styles. This study's findings on leadership influences within school settings show evidence of power tensions between head teachers and teachers and between experienced (older) teachers and younger teachers, although these incidences were not common to all schools.

Five (5) teachers in different schools reported cases of ‘power abuse’ on the part of their head teachers such that their access to CPD opportunities was somewhat thwarted.

These teachers felt victimised in their school environments, and this was found to also affect collegial school cultures and the potential support head teachers could have rendered to them. Kweku (participant 2-Case III) told a typical case where CPD opportunity was given to another teacher because of his bad relationship with his head teacher. He reported:

*I have been denied an opportunity to go for a workshop... It occurred on two occasions; one the workshop was for the JHS level, but she [head teacher] appointed a primary teacher instead to go...To prevent further tension, I applied for transfer and I left the school. (Kweku, participant 2- Case III)*

In Nana's (participant 1-CaseII) experience, her efforts to seek alternative sources of learning were thwarted by her head teacher because "... she was not in his good books"

Among the teachers themselves there were also interplays of politics and tension, which were heightened by the discrepancies in seniority of teachers and their academic qualifications. Young adult teachers felt bullied by more experienced teachers who had fewer minimal qualifications. Such incidences prevented collaborative learning and thus increased the 'balkanisation' within the schools.

While these cases were not pervasive in all schools, a singular act of using or abusing power would be worthy of discussion, especially when it was from persons who had the task of ensuring teachers' growth and development. School leaders foster learning and development of teachers, create co-habitable environments in schools and act as role models for the continual learning of teachers to motivate and inspire them to commit to learning opportunities that ensure their professional development (Geldenhuis & Oosthuizen, 2015; Payne & Wolfson, 2000). According to Heystek and Terhoven (2015), even school leaders' use of the phrase 'thank you' can motivate teachers to participate in CPD activities. However, problems arise when instead of fostering a cohesive environment for learning; head teachers or school leaders fuel tensions among their teachers. Head teachers contribute to student achievement through their impact on the school, its organisation and culture, and especially upon teachers and teaching (OECD, 2014).

In the next section, I discuss the various professional development/learning needs of basic schoolteachers in the Central region of Ghana and their significance for design of effective CPD interventions for teachers.

#### **10.4 Professional Development/learning Needs of Basic Schoolteachers in Ghana**

The content of CPD activities is crucial for equipping teachers with the subject matter knowledge and pedagogical content knowledge (PCK) that teachers use to make their instruction relevant and the subject accessible to students (Ball, 2000; Bausmith & Barry, 2011; Shulman, 1987).

The findings from my study revealed that, although subject matter knowledge was significant, teachers clearly articulated the need to be able to select from a range of pedagogical approaches that might best serve the learning needs of their students. This extended PCK, which as Shulman (1986) has argued is the essential “aspects of content most germane to its teachability” (p. 9). He further argued that knowing subject matter and general pedagogical strategies, though necessary, is not sufficient to encapsulate what teachers need to know and have as “good” teachers. This argument was underlined in my study when participating teachers explained that certain concepts are best taught in particular ways. Thus, although they may be confident in content and curriculum knowledge, they needed to be developed in making pedagogical decisions as to which strategies to adapt for particular topics or lessons in their respective subject areas.

This is not to suggest teachers in my study did not require development in subject matter knowledge. Eighty-eight per cent (88%) of teachers in the survey wanted to be developed in their subject areas, of whom 19% rated this need as high-level. However, it was revealed during interviews that such teachers were out-of-field teachers (see Chapter 2) who were assigned to teach subjects about they had little or no knowledge. This practice is a global phenomenon due to shortages of qualified teachers in specific subject areas (OECD, 2014). In Ghana, such out-of-field teachers are widely utilised in rural basic schools (Cobbold, 2015). As most selected schools for the study were rural, it was therefore not surprising that teachers had to teach more subjects than was ideal (see demographics in Chapter 6), including those they did not have adequate knowledge about how to teach. It must be admitted that this practice affects quality teaching

delivery, as such teachers struggle to teach not only the content of the assigned subjects but also to adopt appropriate pedagogies to make concepts comprehensible to their students. The fact that such teachers are continuously utilised in Ghanaian basic schools makes teachers' professional development essential for Ghanaian teachers. Borko (2004) argues that the teaching of untrained and out-of-field teachers can improve if they are supported by professional development activities that specifically target their learning needs.

Furthermore, based on both the survey and interviews, my study's results on teachers' ICT and related technologies illustrate the current state of ICT skills and technology adoption and integration in Ghanaian classrooms. An overwhelming 92% of teachers expressed a need to be developed in this area, highlighting its significance to teaching and learning. Indeed, from the perspective of SCT, technological tools and resources mediate learning and development, and, as Eady and Lockyer (2013) argue, it is essential that teachers be updated with technological skills and tools for classroom use. However, basic schoolteachers' needs for knowledge about technological tools and usage were found to be rudimentary (see Chapter 7). Teachers required basic ICT skills to be able to use computers to facilitate teaching and learning in their classrooms. This was foreseen, as Ghana is still struggling to up-skill teachers with ICT technologies to transform teaching and learning in basic schools.

Although policy frameworks exist (such as Ghana's ICT for Accelerated Development (ICT4AD) and ICT in Education Policy) to increase ICT literacy in basic schools, this goal has yielded minimum impact, with both teachers and students lacking in basic ICT knowledge and skills (Mereku, 2013). For instance, a study by Buabeng-Andoh and Totimeh (2012) on teachers' innovative use of ICT technologies in some selected schools revealed that the majority of Ghanaian teachers had never used ICT technologies in their classrooms. Similarly, Buabeng-Andoh and Yidana (2014) found that teachers lacked the confidence to integrate ICT in teaching because they lacked the knowledge of how to use it for integration in classroom teaching and learning.

Teachers in my study exhibited some keenness to learn and be developed in ICT and its associated technologies to adopt more advanced technological artefacts that align with

21<sup>st</sup>-century teaching and learning. Teachers identified ICT tools and knowledge of their usage as equally significant as their PCK. They therefore expressed this need with some urgency and enthusiasm to learn to use these tools and to integrate them into their classroom teaching. Teachers' sense of urgency to understand and use technological tools arose from the need to “*keep up with the pace of 21<sup>st</sup>-century school systems...and prepare students for roles in a highly technological society*” (Kobby, participant 3-Case II), “*to research for relevant and current information to update their knowledge*” (Kacely, participant 1- Case I) and to be “*able to integrate new technologies into classroom teaching*” (Kweku, participant 2- Case III) to make easily comprehensible what they teach their students.

Although teachers were willing to adopt ICT and its related technologies into their classroom teaching, they were, however, ‘unready’ due to the absence of ICT tools and the limited knowledge of their usage. This affirms the results of a study by Agyei and Voogt (2014) that the lack of teachers’ readiness to adopt ICT technologies in classrooms affected ICT integration in Ghanaian classrooms. While teachers in my study may have demonstrated willingness to integrate ICT in their classroom teaching, its adoption depended on its technological affordances to expedite learning and its availability, as most schools in Ghana are challenged by the absence of technical infrastructure and resources. Therefore, in addition to the need for teachers’ training in skills and knowledge about ICT technologies, schools must also be resourced with such tools to enable their integration in classroom teaching and learning.

There were some notable differences in the quantitative and qualitative findings on teachers’ reported learning needs. First, the types of teachers’ needs differed in both the survey and the interview results. Whereas pedagogical need was the most prominent need for teachers in the interview, ICT technologies were the most highly rated need for teachers in the survey (52.1%). Also, while the majority of teachers (91.7%) wanted to be prepared to teach students with special learning needs and rated this need as the second highest (37.7%), no such need was identified in the qualitative data. These differences are significant enough to justify the mixed method approach used in this study (see Chapter 5). Also, it can be argued that teachers were projecting their future needs for teaching students with special learning needs. Currently in Ghana, students

with special learning needs are separated from mainstream schooling. With recent debates and calls for inclusive education in Ghanaian classrooms<sup>14</sup> teachers perhaps foresaw the need to be equipped with the skills and knowledge to be able to teach students with special learning needs. By contrast, in the interviews, teachers spoke of their more immediate needs.

In sum, while teachers are most likely to obtain generic knowledge of content and pedagogy in their teacher education programs, they need to continually construct new ideas, skills, and practices throughout their professional careers (Borko, 2004; Darling-Hammond & Bransford, 2005). Within Desimone's (2009) framework and the SCT, it may be seen that learning becomes meaningful with purposeful content and in addressing particular needs of teachers (Desimone, 2009; Eun, 2010). As was also shown in the CPD learning cycle (Figure 10.1), teachers can contextualise their CPD experiences if the content of interventions is relevant to what they need to know and learn for their classroom teaching. When teachers participate in CPD activities that are irrelevant to what they need, they see those activities as financial costs rather than opportunities for learning and improvement in practice (Khandehroo et al., 2011). However, in addition to implementing CPD interventions relevant to teachers' own needs, teachers must also be made to acknowledge other elements as supporting their professional development (Shriki & Lavy, 2012).

Similar findings from this study have been reported by researchers in different countries: for example, Faragher and Clarke (2016) in Australia; Ríordáin et al. (2017) in Ireland; Mukeredzi, (2016) in Zimbabwe; Shriki and Patkin (2016) in Israel. In Ghana, studies on teachers' learning needs for professional development are lacking. In this regard, this study contributes to the Ghanaian literature on CPD. knowledge and literature in Ghana. The findings will assist policymakers and teacher educators to design and implement effective CPD for Ghanaian teachers by focusing on the explicated needs of teachers.

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<sup>14</sup> On the May 4 2016, the Ministry of Education successfully launched the Inclusive Education (IE) policy in Ghana, which defines the path for the government of Ghana for the education of all children with special learning needs. With this policy, children with special learning needs would have the opportunity to attend mainstream schools without any hindrance.

## **10.5 Ghanaian Basic Schoolteachers' CPD Practices**

In this section, I discuss the existing CPD practices of Ghanaian basic schoolteachers and their views on effective CPD.

### **10.5.1 CPD Prevalent Practices**

This study has revealed in both the survey (see Chapters 6) and interviews (see Chapter 7) that the transmissive CPD models of workshops, in-service training, and continuing education dominated CPD efforts for teachers in Ghana. In the survey, approximately 91% of teachers were found to engage in in-service training activities, while 88% participated in workshop activities, with 74% having pursued further studies as a way of upgrading their professional self. In addition to teachers' continuing education, workshops and INSET activities were organised for teachers in response to new curricular implementation and the need to retrain teachers to demonstrate some levels of competence to improve students' performances.

While the available approaches remained significant for teachers' learning and development, such CPD models have often been observed to be ineffective for fostering genuine learning among teachers (Borko, 2004; Boud & Hager, 2012). According to Kennedy (2005; 2014), these CPD approaches provide minimal space for teachers to be self-directed and to take charge of their own learning, as the CPD contents are pre-planned and delivered by external 'experts'. Sachs and Logan (1990) caution that, if such training models become the only route to teachers' professional development, teachers will be unreflective practitioners who will not be challenged to transform their practice. This is because such transmissive models encourage teacher dependency on external experts in creating and constructing knowledge, with teachers possessing no control over their learning and development (Hardy & Rönnerman, 2011). It was thus predictable that about 51% of the teachers in this study considered participation in informal learning activities to have had a more significant impact on their classroom practice than organised CPD activities (see Chapter 6). A study by Sofu and Abonyi (2018) on PD activities of school leaders in rural basic schools in Ghana also found engagement in informal and self-directed learning activities to be more significant for teachers' professional practice than organised and formal CPD activities.

In Ghana, teachers and their CPD activity providers take ‘deficit or transmissive’ approaches to teacher professional development rather than the ‘growth or transformative approaches’. The available INSET and workshop activities were based on the assumption that teachers are deficient in their training, subject matter and current educational development and as such INSET or CPD activities should be directed towards equipping teachers with new knowledge, specific skills and attitudes. This assumption and approaches contrast with Kennedy’s (2005) proposal for transformative CPD models where teachers’ genuine development is fostered through action research to experiment with different methods to pursue and develop practice. The transformative approach to CPD is bottom-up driven and focuses on activities that will make teachers determine their professional needs and support each other to develop their capacities to improve their instructional practices in the constantly changing teaching environment through collaborative culture and collegiality within the teachers’ schools.

The SCT is employed at the school level where the CPD is based on the transformative or growth approach. The respondents’ evidence in this study indicate they experienced CPD activities organized largely using the deficit approach and therefore they had little opportunity to determine their professional needs and support each other to develop their capacities to improve their instructional practices. The consequences were that some programs failed to address the needs of teachers for their professional development, while teachers’ agency and autonomy over learning were silenced. For instance, Kwesi made a personal observation about his participation in workshops:

*Because we are not consulted sometimes [you] go only to realise that what is being taught is of no relevance to you in the classroom”. (Kwesi, participant 4-Case III)*

Commenting on the critics of continuing education, Nana shared:

*The curricular at the universities are such that we [teachers] cannot determine what may be applicable to our teaching in the classrooms...regardless we do learn from engaging in further studies. (Nana, participant 1-Case II)*

Nevertheless, although the CPD offerings for Ghanaian teachers appeared mostly as transmissive models, they afforded teachers opportunities to learn and to improve practice. However, their limited impact suggests a need to incorporate much richer

constructivist offerings that foster genuine learning and enable teachers to contribute and shape educational policy and practice. Workshops, INSETs and continuing education approaches of CPD need be complemented with a broader repertoire of CPD experiences that increases teacher participation, knowledge sharing and construction, with the aim to move teachers from dependency on external experts to being initiators of their own learning based on agency. These may include action research, collaborative enquiry, mentoring, and reflection groups (see Chapter 3). Interestingly, teachers were also found to be engaging in some of these alternative approaches though they were informal and lacked recognition. Therefore, such activities rarely expanded into a broader notion of teacher professional development.

These informal learning activities were characterised by agency and were found to more significantly contribute to teachers' learning and development than did organised CPD activities. This resonates with Guskey's (1999) observation that informal learning where teachers plan for their professional development tend to be more effective and efficient than CPD organised by either school-based or district educators alone. Similar findings have also been reported in studies that found teachers' informal learning activities to positively impact on their learning and development (see Mansour et al., 2014; Méndez et al., 2017; Tang & Choi, 2009). In the views of Kennedy (2005; 2014) and Sachs (2007), informal learning possesses the agency and autonomy needed to guide teachers to become reflective practitioners who can understand, challenge and transform their practices and change educational agendas. The findings from my study allow me to understand the complications surrounding the legitimacy of informal learning activities. Therefore, the question to consider is, how is informal learning legitimized within CPD?

Another significant issue that emerged from the analysis of teachers' CPD practices in Ghana was the overreliance on continuing education as a PD tool. I discuss this in the next sub-section.

### ***Overreliance of Continuing Education***

As reported in the survey results, 73.9% of the teachers involved in this study had pursued further studies after their initial teacher training preparation. Although it can be

argued that, in the absence of regularly organised CPD, continuing education was the most viable PD tool for these teachers, there were problems associated with this practice that need further interrogation.

It was found that teachers sought to upgrade their professional knowledge using distance and sandwich education modes ostensibly because of the difficulties in accessing the Ghana Education Service (GES) quota scheme implementation on study leave (Atta & Mensah, 2015; Tamanja, 2016). Even though these mediums proved useful in providing ample opportunities for teachers' development, such formal approaches raised pertinent issues regarding the relevance of the theoretical and practical aspects of the curricula of the participating universities to teachers' real needs in the classroom. Mereku (2014) observed in a study on teachers' continuing education experiences that there is a lack of synergy between the theory of what is learned during teachers' distance education programs and the real needs of teachers in the classrooms. This affirms the numerous critiques of formal CPD practices, where teachers pursue courses of study that have insufficient program content for preparing teachers for the classroom (Boud & Hager, 2012; Sachs, 2007; Mereku, 2014).

Concerns were also raised by educational directors about the loss of instructional hours due to teachers' participation in distance education and sandwich programs. While teachers contested these concerns by the educational directors, studies have indeed reported teacher absenteeism owing to the use of instructional hours for continuing education pursuits (Ananga, et al., 2016; Tamanja, 2016; Mereku, 2014). Interestingly, while all teachers involved in the qualitative component of this research affirmed the value of their participation in continuing education, teachers' participation was rather a manifestation of the 'diploma disease', where participation was a means to secure certificates for career progression (Dore, 1997). Teachers explained the fundamental reason for participation by the fact that they could easily be promoted and obtain an increased salary. According to Esi:

*Continuing education is counted for your promotion, so that was my major source of motivation because I wanted to be promoted.* (Esi, participant 3- Case I)

Similarly, Kweku who had engaged in continuing education made known that,

*even though I went back to school to better myself, to be frank with you I did so because of the salary...* (Kweku, participant 2- Case III)

Thus, continuing education was used as a means for teachers' career progression instead of a genuine PD tool to foster teacher learning and development. This finding resonates with CPD situations in other African countries where the award-bearing models predominate in teacher CPD activities (Garuba, 2004; Niane, 2004; Oluremi, 2013).

In sum, the complexities in many Ghanaian classrooms today make it professionally impossible to expect that formal CPD programs will adequately prepare teachers for the challenging situations they encounter in their professional practice (Atta & Mensah, 2015). For teachers to adequately meet the challenges in the 21<sup>st</sup>-century classrooms in Ghana, there is the need to include more collaborative practices in the existing CPD offerings, ones that are responsive to teachers' needs and that enable teachers to self-direct and regulate their learning and development in their efforts to transform their classroom practices.

To guide the implementation of effective practice, in the next section I examine basic schoolteachers' views on CPD effectiveness.

### **10.5.2 Basic Schoolteachers' Views of Effective CPD**

As explained in Chapter 3, Desimone's (2009) framework of effective CPD practice was deemed the most appropriate for examining basic schoolteachers' CPD experiences for this study. This section discusses teachers' views on effective CPD based on their participation experiences.

There were mixed experiences regarding participation in organised CPD activities (see Chapter 8). While some teachers found their participation useful, others found that CPD failed to address their specific development needs. Regardless, the teachers in my study shared strong views on ways to enhance CPD program effectiveness. These views are organised into (1) the approach to CPD, and (2) community of practice (CoP).

About the CPD approach, teachers listed characteristics such as consultation, active learning, coherence, facilitators, duration, and feedback. For the teachers, the first point of call in ensuring effective CPD was teacher consultation in setting the CPD goal agenda through teacher consultation. According to Day (1999), this is central to ensuring that teachers are not developed passively but are involved in decisions concerning both content and the processes of teachers' learning. Interestingly, none of the teachers in the study recounted ever having been involved in decision-making regarding CPD program content. For instance, Kwesi recounted:

*There has never been a thing like a teacher consultation before, during or after the programs.* (Kwesi, participant 4- Case III)

Fiifi, in a different school, confirmed this:

*I don't remember anything like consultation before the program, and neither were our ideas sought regarding what we were going to learn.* (Fiifi, participant 3- Case IV)

Therefore, by calling for teacher consultation, these teachers were demanding some degree of ownership and authority over their development, which they had been denied.

The basic schoolteachers also valued CPD experiences that afforded them opportunities to actively engage with meaningful discussions and practical hands-on learning tasks. Desimone (2009) affirmed that teachers are involved in learning when given opportunities to observe and to participate, receive feedback and to make presentations during the learning process. Similarly, from the teachers' point of view, they would need to be immersed in the processes of their learning, where they will engage in collaborative learning with other colleagues through performance tasks, presentations and receiving feedback.

Teachers also identified the role of facilitators during CPD as crucial for effectiveness. They believed facilitators should possess the right expertise and be able to engage teachers and adopt appropriate strategies for adult learners. For instance, Kojo, who had participated in a workshop activity, gave his impression of the program as the best he had attended because

*the facilitator knew what he was teaching...[he] didn't teach us like the way we [teachers] teach our students.* (Kojo, participant 2- Case I)

Also, for Kuuku, the facilitators' role in adopting and using appropriate strategies during a CPD learning process sustained his participation for the duration of the program, which typically would not have happened. This finding supports a claim in the literature that the effectiveness of CPD typically relies on facilitators who are recognised as having the expertise to deliver content effective to transform practice; hence, the role of facilitators is of crucial importance during CPD implementation (Main & Pendergast, 2015; Makopoulou, 2018).

As with active learning, teachers also called for collaborative learning features in the construction of professional knowledge. This echoes the concept of learning as a social activity mediated by social interaction (Shi, 2017). The teachers' desire for a more collaborative approach to teacher development suggests a move from the traditional CPD approaches where didactic methodologies are used, to more constructivist models that foster co-construction of professional knowledge. Indeed, as was reported in Chapter 7, teachers learned significantly through peer learning, mentoring, and staff common meetings, all of which epitomised the social interaction nature of learning, as teachers engaged in co-construction of localised professional knowledge rather than reliance on external experts. The inclusion of the facilitative role in the processes of learning in CPD also reinforces the need for consideration of adult learning principles in the design and implementation of CPD for teachers. For the teachers in my study, effective CPD must take into consideration teachers as adult learners and must apply the principles of adult learning.

Another significant element considered by teachers was coherence, that is, the extent to which CPD program content aligned with the school curriculum and the needs of teachers in their classrooms (Desimone, 2009; Kang et al., 2013). Although in the teachers' experience this did not always happen, they were convinced that the effectiveness of CPD interventions lies in the ability of teachers to integrate new knowledge in classroom practice. Therefore, the coherence of CPD content did not only determine program effectiveness but was also significant in sustaining teachers' participation and learning in CPD implemented activities. Coherence was tied to CPD program content, which teachers said should be relevant to their PD needs in the

classroom. Other studies have also linked CPD effectiveness to coherent content (e.g. Desimone & Starkey, 2014; Jacob et al., 2017).

Participating basic teachers also emphasised the duration of CPD activities as fundamentally critical. They reported on the limited allocation of their CPD activities and suggested that such limitations affected their potential learning, as CPD content was inadequately explored due to the short time available. While teachers did not recommend a precise duration for CPD activities, evidence from the literature suggests that CPD activities must span over a semester or a term to be effective (Desimone, 2009; Garet et al., 2001). Studies also report that under certain conditions, short-term CPD programs can have long-term effects on participating teachers (Van den Bergh, Ros, & Beijaard, 2014).

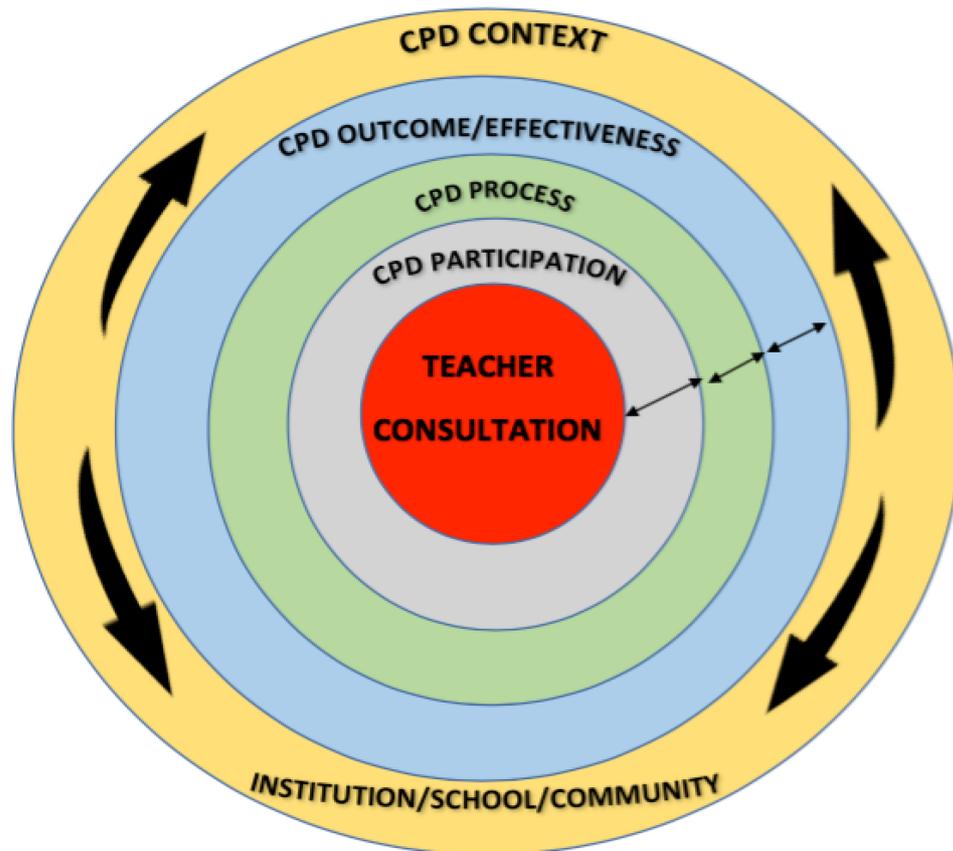
Similar views to those expressed by the basic schoolteachers on what should constitute effective CPD have been reported widely in the literature (Calleja, 2018; Darling-Hammond et al., 2017; Desimone, 2009; Guskey, 2000; Jacob et al., 2017; Loucks-Horsley, 2010; Saunders, 2014). By using Desimone's framework as an analytical lens, the findings from my study lend support to the central tenets within the framework. While the critical features of content, active learning, coherence, and timing manifested in teachers' experiences, my study also provides an extension to effective CPD characteristics by calling for an inclusion of the facilitator's role within teachers' active learning in CPD. Facilitators can nurture the active learning of teachers through their adoption of appropriate teaching approaches that are suited to adult learners.

To facilitate the processes of learning, teachers advocated for CPD experiences similar to those of a CoP to sustain their CPD learning, and also as an opportunity for their professional development. Also known as professional learning communities, CoP were scarce among basic schoolteachers in Ghana. Nevertheless, there was a belief that networks of teachers in similar subject areas within the same locality could be organised to support learning and development in their fields of teaching. Such descriptions support the CoP concept as teachers called for a community with a sense of belonging to support their learning and to sustain the implementation of CPD learning experiences. Communities of practice have been reported to be efficacious in teacher learning in

other contexts (Calleja, 2018; DuFour, 2004). For instance, Calleja (2018) reports similar findings from his study, in which a CoP enhanced members' learning through collegial support and also provided practice-based reflections of members who shared similar experiences over time. It was therefore not out of place that teachers advocated a CoP to sustain their learning for implementation in their classrooms.

The traditional CPD approaches continue to dominate professional development efforts for teachers in Ghanaian schools, despite calls for more sociocultural models. While these approaches aim to train basic schoolteachers with relevant knowledge and skills, they are often isolated training activities disconnected from teachers' practices. Consequently, some teachers perceived these practices to have minimally impacted on their classroom teaching, especially in addressing the teachers' particular learning needs. Alternatively, teachers engaged in informal learning activities even though those activities failed to expand into the wider notion of teacher CPD. Teachers attested that these practices meaningfully contributed to changes in their classroom teaching. To improve CPD effectiveness, basic schoolteachers identified key elements such as teacher consultation, active learning, coherence, and duration, all of which are essential elements within Desimone's (2009) framework. However, teachers also identified the facilitator's role among the elements of effective CPD. While other studies have extensively explored facilitation as important in ensuring CPD program effectiveness (Main & Pendergast, 2015; Makopoulou, 2018), within Desimone's framework minimal attention is given to the role of facilitators for effective CPD. Thus my study makes significant contribution towards an extension of Desimone's framework in particular, and discussions on effective CPD in general.

These findings will be considered in making recommendations to guide the planning, design, and implementation of effective CPD for Ghanaian teachers. Based on the findings of this study, I propose a CPD model to guide effective practice in Ghana (see Figure 10.2).



CPD CONTEXT	TEACHER CONSULTATION (TC)	CPD PARTICIPATION	CPD PROCESS	CPD OUTCOME/EFFECTIVENESS
Implementation of CPD policy framework to guide practice	TC in planning CPD content using identified teachers' learning needs	CPD to equip teachers with the relevant knowledges for classroom use	Active learning involving teachers	Teacher learning
Supportive school systems	TC in designing CPD programs and the processes of learning	Participation be based on teachers' needs for development	Increased Teacher agency	Changes in classroom practices
Increasing access to CPD opportunities through decentralisation of CPD events	TC in implementation including feedback and evaluation			Effect on student learning

Figure 10.2: A Model of Effective CPD (Author's Construct)

The proposed CPD model is based on the transformative approach to CPD, which is bottom-up driven with broad teacher consultation to determine the teachers' own CPD needs for development. The significance of this model lies in its demonstration of the complex features of teachers' professional contexts and how they coalesce to influence CPD effectiveness. The model is also significant in its attempt to move beyond a process-product model that characterises many effectiveness models (Meissel et al., 2016; Opfer & Pedder, 2011) to a more dynamic consideration of complex factors that facilitate teachers' learning within CPD context. The model suggests teacher consultation (TC) as integral in ensuring CPD effectiveness. TC should be employed at both the planning, designing and implementation stages of CPD program interventions. This gives room for teachers' active engagements in CPD, and designing appropriate interventions that satisfy adequately teachers' learning needs, while increasing their motivation and participation in CPD activities. By calling for TC also highlights the significant role of collaboration in teachers' learning and development and in the increasing agency of teachers towards their learning and professional development. All these are made possible with favourable CPD policy environment and supportive school systems that fosters teachers' development. CPD effectiveness thus depends on the following:

- degree of teachers' involvement/ consultation in setting CPD goals and objectives,
- extent to which CPD programs/content address the specific learning/development needs of teachers,
- degree of active and collaborative learning experiences,
- ability to translate and integrate CPD knowledge into effective classroom teaching.

### **10.6 Teacher Agency in Learning and CPD**

Agency is conceptualised in this study as basic schoolteachers "critically shap[ing] their responses to problematic situations" (Biesta & Tedder, 2006, p. 11). Here, agency is perceived not only as the capacity residing in teachers to act independently but also as something that is achieved through engagement with particular contextual conditions (Biesta & Tedder, 2006; Priestley et al., 2013). In this section, I discuss evidence of

basic schoolteachers' demonstration of agency towards their learning and development and agency about the CPD approaches that they engaged in.

### **10.6.1 Manifestation of Teacher Agency Towards Professional Development**

As demonstrated in Chapter 2, teachers in Ghana are challenged in the performance of their duties. There is a lack of teaching and learning support and resources, as well as low remuneration, poor working conditions, and delays in salary payment (among other things), which often spark teacher agitation (Amoako, 2015; Osei, 2006)<sup>15</sup>. These challenges are even more pronounced in rural districts when coupled with issues of access to CPD opportunities as discussed earlier in this chapter. However, teachers mostly drawn from rural districts, such contextual challenges did not deter most of them from devising possible ways to ensure their professional learning and development.

It was observed that where learning tools and resources were unavailable, some teachers improvised through purchasing, at their own expense, relevant tools and textbooks needed for their learning and development. Other teachers also sought and implemented ad hoc measures to promote their development. For instance, Esi who was a Home Economics teacher, in the absence of viable support from her colleague teachers, sought to learn from an external teacher who was an intern in a different school. Also, Kobby improvised his ICT teaching when he realised the school did not have an ICT laboratory. He utilised a friend's computer school in another community to engage in personal learning and used his Internet café as laboratory to support his students when they needed practical lessons. Nana, a mathematics teacher, purchased graph boards and Cuisenaire rods to facilitate her teaching of number planes and integers. What prompted these agentic actions from the basic schoolteachers were personal values attached to the significance of CPD for their professional practice and the need to improve the learning of their students.

In addition, when CPD opportunities were found to be inadequate within schools, some teachers continuously sought alternative means to learn and develop while practising

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<sup>15</sup> These challenges continue to persist as teachers in my study re-echoed them to register their dissatisfaction about their working conditions.

their profession. Teachers engaged in peer learning and independently sought academic mentors to scaffold their development. The same could also be seen in teachers' pursuits of continuing education, where many teachers defied policy restrictions on their further studies to ensure they remained current in emerging knowledges in their various fields of teaching (see Chapter 9). In all these learning events, basic schoolteachers were found to be making personal decisions and choices that overrode their current challenges by acting decisively and proactively to counter constraints in their working environments.

Furthermore, as was argued in Chapter 4, agency is socially relational and embedded across circumstances, tools and people (Kayi-Aydar, 2015; Vähäsantanen et al., 2009). Therefore, agency is achieved through engagements with other significant conditions in teachers' professional contexts (Priestley et al., 2013). An examination of the teachers' agency revealed that its construction was mediated, resulting from interaction between teachers' beliefs and their inclinations to CPD, resources or tools and the structure of the school system. Teachers' personal beliefs about CPD positioned them to act beyond constraints within their school systems. As mentioned earlier, this belief was tied to professional responsibility in wanting to improve the learning of students and also reflects basic schoolteachers' altruism in the face of significant obstacles. Hence, teachers' desires to improve their teaching to support students' learning also increased their willingness and agency to adopt alternative strategies in situations where they were constrained. Agency enabled them to search for relevant tools, both material and human (mentors, peers), to mediate their learning and development. Thus, for the teachers in my study, although the capacity to enact alternative CPD avenues resided in themselves based on agency, its construction depended further on the interplay of factors such as teachers' beliefs, tools and resources, and social interaction. These findings are coherent with the sociocultural notion of agency as espoused by Lasky (2005), Kayi-Aydar (2015), and Philpott and Oates (2017), as well as Biesta and Teddlers' (2007) ecological perspective of agency (see Chapter 4).

In his investigation of secondary school and trainee teachers in Ghana, Osei (2006) reached a similar conclusion: although teachers in Ghana were faced with many contextual challenges they did not lack the commitment towards their professional task

of teaching. While Osei (2006) described teachers' coping strategies in their professional teaching as a demonstration of enthusiasm and commitment, in the context of this study, these actions are rather perceived as signs of professional agency towards the task of teaching, despite the dissatisfaction and challenges in the teaching profession in Ghana. These findings debunk the negative imagery, stereotyping and public perception of Ghanaian teachers as "lazy" and unreceptive to learning initiatives (Bediako & Asare, 2010; Personal interviews, 2017). The teachers in my study were indeed proactive about their learning; nevertheless, Ghanaian teachers still need to be resourced with the appropriate tools to facilitate their learning and development.

### **10.6.2 Agency and the Type of CPD Activity**

There are increasing calls for CPD approaches that increase the agency of teachers to plan, initiate and transform their professional practices (Heba et al., 2015; Kennedy, 2005; Sachs, 2007). Kennedy (2005), in her framework (see Chapter 3), relates agency to teacher autonomy, which is found to increase as CPD moves from transmissive models to transformative models. The findings of this study provide evidence to support Kennedy's framework, in that agency was highly demonstrated in teachers' informal CPD activities where teachers were self-directed in learning and could diagnose their own learning needs while seeking personal avenues to address them.

In teachers' informal learning activities (see Chapter 7), they were afforded control to determine and pursue their learning pathways as they engaged in activities to transform their teaching practices. On the other hand, agency was found to be minimal in organised CPD activities (workshops and cluster-based INSET) because of the absence of opportunities for active participation, as the content and program designs adopted a top-down approach to teachers' professional development. Tang and Choi (2009) also found that agency was more critical in teachers' self-directed CPD activities more than formally implemented CPD.

However, while in Kennedy's (2005) estimation the transformative models of CPD are formalised structures, purposed to equip teachers with experiences to shape professional practice, such was not the case for teachers in my study. Rather, mentoring, peer learning, and the reading of professional literature were all self-initiated by teachers

(without institutional legitimisation) to pursue their professional practice. These informal approaches presented significant alternatives to teachers' professional development.

In summary, even though my intention was not to investigate how teachers exhibited agency towards their CPD engagements, it emerged as a significant finding that could not be dismissed. It is significant for understanding teacher learning and participation in CPD activities. While the theoretical framings of agency were not a central consideration for this study, my study has revealed the various ways agency was demonstrated by basic schoolteachers in Ghana, as well as its significance in CPD approaches to transform practice. These findings can shape our understandings of the contexts of teachers' professional practice in Ghana and, in addition, depict the fluid identity of Ghanaian teachers as reflective and creative actors who acted positively towards their professional development, regardless of their contextual constraints. These findings may also challenge educators to adopt more transformative approaches to teachers' development, as this would enable teachers to enact their learning to make positive changes to their practices.

I will now explain the teachers' reasons for CPD participation.

### **10.7 Motivation as Investment**

A significant factor underlying successful CPD programs is teacher motivation or reasons for participation (Heystek & Terhoven, 2015). However, the motivational component underlying teacher CPD interventions is often overlooked during their implementation (Mokehele & Jita, 2010; Appova & Arbaugh, 2018). The effect has been that many interventions have failed to yield positive results (Guskey, 2002; Mokehele & Jita, 2010). For this study, understanding teachers' CPD participation has also meant understanding the factors that motivated their decisions to participate and engage in those CPD activities.

As shown in Chapter 9, both intrinsic and extrinsic reasons provided the impetus for basic schoolteachers' participation in CPD activities. Generally, the teachers' intrinsic motivation was to increase professional competencies, which had the underlying motive

to acquire knowledge resources essential for the learning of students. As shown in the survey results (see Chapter 6), teachers ranked intrinsic factors (to develop as a teacher; to increase knowledge in subject teaching; and to help students learn (see Table 6.8)) as highly influential on their decisions to participate and engage in CPD activities.

Conversely, extrinsic factors were equally significant to drive teachers' participation in CPD activities. Teachers' participation was affected by factors such as the mandated nature of the CPD activity, career progression, and salary increases. Teachers' decisions to participate were also influenced by incentives from participation and the perceived significance of CPD knowledge to teaching practice. Interestingly, while intrinsic factors dominated teachers' reasons in the survey, the majority of the teachers expressed having participated for more extrinsic reasons in the interviews.

While these results corroborate findings from other research (see Appova & Arbaugh, 2018; Avidov-Ungar, 2016; Calleja, 2018; Heystek & Terhoven, 2015; Kwakman, 2003; McMillan et al., 2016), my study additionally calls for an alternative dimension to look at the reasons for teachers' participation in CPD activities. This is because, as was demonstrated in teachers' comments, there were other complex factors beyond intrinsic and extrinsic factors that coalesced to shape decisions for participation. These other factors are explained by the notion of 'investment' (Peirce, 1995) as another way to think about teacher motivation.

As discussed in Chapter 4, investment in learning is made possible when the expectations of good returns from participation are proportionate to the efforts expended on such participation (Peirce, 1995). For the teachers in my study, decisions to participate in CPD activities were observed to transcend their motivation to include their human agency and the nature of their identity, all of which are shaped by the social contexts of practice (Darvin & Norton, 2015; Peirce, 1995). Consequently, although teachers were highly motivated to engage in CPD activities, the degree of participation and investment in those activities varied depending on circumstances such as expected returns from the participation, the cost involved (including opportunity cost), the CPD program itself, and social conditions such as accessibility to the CPD events sites. It was

apparent that, aside from the motivational factors, these factors were essential to sustaining teachers' CPD participation.

Corroborating the 'investment' argument, teachers' participation in CPD was based on perceived attainable resources that they expected to accrue from their participation and their efforts or costs expended on such involvement. Teachers expected incentives to include both material and non-material resources, which were considered against possible costs of participation (including travel costs, time spent and payment that was to be made during participation) before deciding to invest or participate. In his explanation of what he looks out for before CPD participation, Kwesi said:

*If I am to travel to go for a workshop, I consider one or two things...if my transportation cost will be paid and if my feeding will be taken care of". He further explained, "as you know as for the knowledge it is good, but we must also be given certain basic things. You cannot camp us from morning to evening without giving us food. (Kwesi, participant 4- Case III)*

Similarly, Kweku, (participant 2- Case III) reinforced this position with his experience of attending workshops only when he is promised payment of transportation and food costs.

It was subsequently observed that in situations where teachers perceived the relationship between efforts and returns disparately, participation was found to be minimal and not sustainable. This was very typical of school-based INSET, where turnout was lower because of minimal returns expected from participation. For instance, Ato described the school-based INSET situation in his school:

*If you call for any INSET program within the school and you don't provide refreshments for teachers, they [teachers] won't come. To us, we must get value for our time so you can't put us together and not give us water or drink or food. So usually because the head teachers are unable to provide these basic things, they don't organise it at all. (Ato, participant 2- Case II)*

Head teachers who participated in the study also confirmed this observation and attributed the lower patronage of the school-based INSET activities to the schools' inability to provide incentives in the form of material returns for teachers who

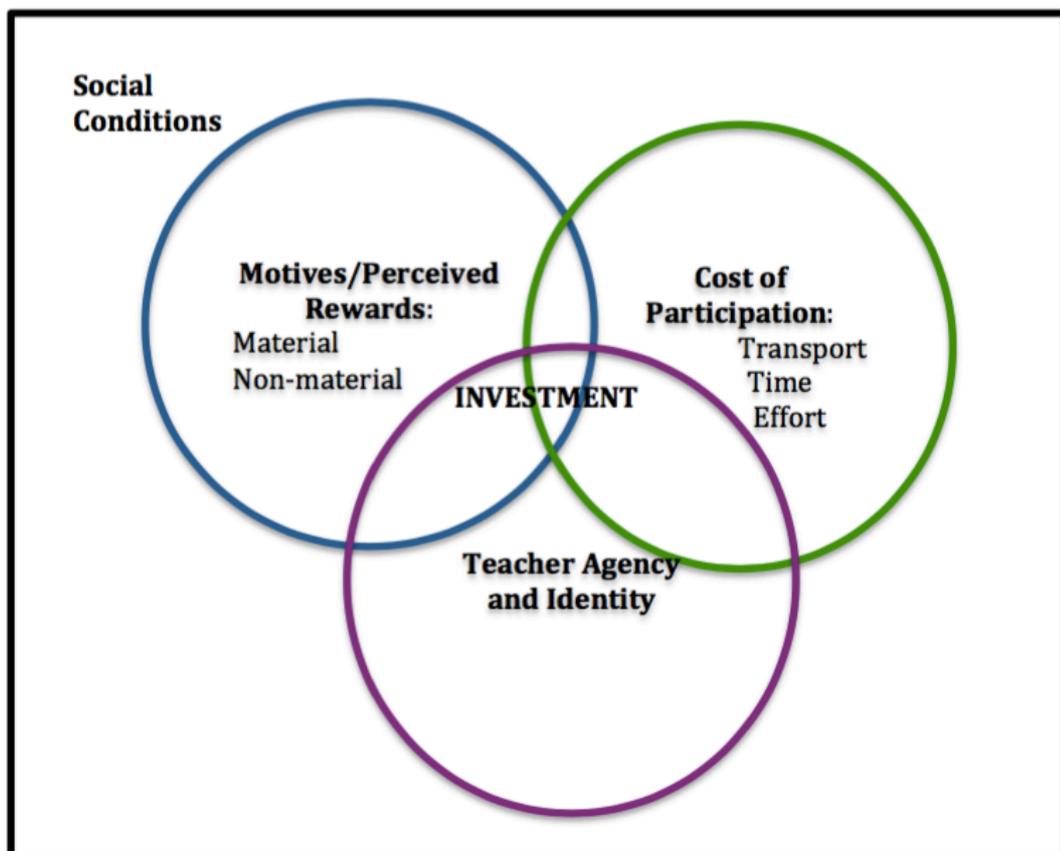
participate in those CPD activities. This finding confirms Masuda, Ebersole, and Barret's (2013) observation that teachers are willing to invest in CPD that they perceive as valuable when the benefits of what they are learning outweigh the costs of their precious time.

Teachers' considerations of the potential gains from participation and the cost involved were understandable considering the rural location of most of the schools. Hence, teachers travelled miles along un-motorable road networks to access CPD events, which the teachers described as tiring and daunting. Ato clearly explained the situation:

*If they are organising an INSET in the next village, you would have to foot your bill...sometimes teachers from afar and remote areas who do not get cars have to walk [to the venue]. We take all these things into consideration and then when you come, and you don't get anything, definitely the next time you won't bother to come. It is not like we [teachers] don't think about the knowledge we may get to improve ourselves but then also we think about what we are likely to derive should we come and participate. We should be able to get something tangible in return like transportation costs, certificate, also basic things like food and water. So, the incentive is vital to determine whether teachers will come for an organised learning program or not. (Ato, participant 2- Case II)*

Investment emphasises the complexities in motivation for participation and the significance of social contexts in influencing teachers' decisions and reasons for engaging in CPD activities. Although teachers were highly motivated to learn, some had little investment in CPD due to particular social conditions in their professional practice that prevented their possible investments. This was also the case for teachers' participation in continuing education, where unfavorable school policies affected their investment. This confirms that motivation is equally influenced by the social conditions of teachers' professional practice as argued by Lee (2014) and Pierce (1995), and that it is inadequate to explain teacher motivation as a psychological construct as has been done in many CPD studies (see Appova & Arbaugh, 2018; Kwakman, 2003; McMillan et al., 2016).

Although the notion of investment has widely been used to study teacher motivation in language learning and identity construction (Lee, 2014, Morita, 2004; Darvin & Norton, 2015), it has rarely been applied to explain teachers' reasons for engaging and participating in CPD activities. Thus, the current study contributes to this knowledge with its application of investment to support calls to examine teacher motivation in CPD beyond the psychological lenses of intrinsic and extrinsic factors. Such an application of investment provides the basis for understanding the complexities of motivation as a collective endeavour between individual teachers and their context of practice. The Ghanaian basic schoolteachers' CPD investment is represented in Figure 10.3.



*Figure 10.3: CPD Investment Model*

Source: Adapted from Darvin and Norton (2015)

In conclusion, the discussion of the study's findings illuminates the highly complex nature of teacher learning and CPD activities. The sociocultural approach adopted for this study underscored such complexities in teachers' learning and aided in understanding of how basic schoolteachers learned and developed as well as the conditions for their learning. Also, the absence of a wider CPD policy implementation framework affected how CPD was conceptualised and practised among basic schoolteachers in Ghana. Nevertheless, teachers participated in some organised CPD activities (INSET and workshops) to mediate their learning and development. At the same time, teachers acting on agency, engaged in informal and self-initiated learning episodes to foster their learning. While learning within the SCT is measured by teachers' use of the knowledge gained in CPD participation (through appropriation and internalisation) to transform classroom practices, it was observed that such transformation did not automatically happen. Teachers' engaged in further enactment of processes such as critical reflection, re-conceptualisation to foster their learning.

Also, CPD activities for teacher in Ghana were more 'transmissive' than 'transformative' with the underlying purpose to equip teachers with new knowledge, specific skills and attitude. This approach afforded teachers minimal opportunity to determine their professional needs and support each other to develop their capacities to improve their instructional practices. Unsurprisingly, basic schoolteachers found their engagement in informal CPD activities to have had more impact on their learning and classroom teaching than in organised CPD. To ensure CPD had meaningful impact on classroom practice, teachers' suggested more sociocultural approaches to CPD that imbibe principles of social interaction and collaboration in learning.

### **10.8 Chapter Summary**

This chapter has discussed the findings of the study within the theoretical and conceptual frames of the study as well as the pertinent literature. The chapter integrated findings from both the quantitative and qualitative components of the research. Issues discussed included the sociocultural perspective of teacher learning, teachers' CPD participation and experiences, professional development/learning needs, and CPD contextual challenges. In all, this chapter contributes to the existing literature in three ways. First, the findings provide evidence to support the central arguments within the

SCT that mediating agents such as tools and social interaction may support teachers' learning. Second, to illustrate teacher change through CPD participation, I introduced the CPD learning cycle to depict how teachers learned in and through their CPD participation. Third, the study extends calls to interrogate teachers' reasons for CPD participation beyond the psychological construct of motivation to include other sociocultural factors found in teachers' contexts.

The summary of the key findings will be reported in the next chapter. Chapter 11 will also provide evidence-based recommendations to inform policy for the implementation of an effective CPD for Ghanaian teachers.

## **CHAPTER 11 : SUMMARY, RECOMMENDATIONS AND CONCLUSION**

### **11.1 Introduction**

This chapter summarises and concludes this study. It also identifies its contribution to knowledge, makes recommendations based on its findings and suggests future research.

### **11.2 Summary**

The continuing professional development (CPD) of teachers remains at the heart of many educational improvement reforms and other efforts to ensure quality education. This is because if effective, the CPD of teachers can influence teachers' learning, the methods and practices of their teaching, and the learning of their students. Despite its significance, the area of teacher CPD has been of limited policy interest in educational improvement efforts in Ghana. With increasing concern for quality teaching and learning in basic schools, I sought to examine the existing CPD practices of teachers, as well as their experiences of participation in these activities. My aim has been to draw attention to the urgent need for teachers' learning and CPD to be integral to ensuring quality education in Ghana and to the formulation and the implementation of effective CPD policy interventions for Ghanaian teachers.

The key question that guided this study was:

How is CPD practised and experienced by basic schoolteachers in the Central region of Ghana?

The following sub-questions assisted the collection of data and organisation of themes.

1. What professional development/learning needs do basic schoolteachers have?
2. What are the CPD opportunities available for basic schoolteachers in Ghana?
3. What are the participation experiences of basic schoolteachers in CPD activities?
4. What factors motivate basic schoolteachers' decisions to participate in CPD activities?
5. How do contextual factors affect basic schoolteachers' CPD practice?

An important issue of concern in this study was that basic schoolteachers are adult learners; hence their learning processes must be designed in the light of adult education

principles. Theoretically, the study was grounded within Vygotsky's (1978) sociocultural theory of learning to explain teacher learning as it occurs in CPD participation. This was in addition to Kennedy's (2005; 2014) and Desimone's (2009) conceptual frameworks of CPD models and effective practice that were used to examine teacher CPD practices and experiences respectively. These three frameworks formed the analytical lenses with which I examined the data and interpreted the study's findings. To deepen the understanding of CPD and its potential to improve teacher learning, literature about CPD in general and areas relevant to the research context in particular were reviewed. These included the various definitions of CPD; teacher CPD practices; teacher professional development needs; CPD opportunities for Ghanaian teachers; and a review of teacher education systems and reforms in Ghana.

Methodologically, the constructivist paradigm underlined the research processes. Within this perspective, I employed the nested mixed method research design, which allowed me to collect and analyse quantitative data within a qualitative case study design. I used a cross-sectional survey with a sample of 522 teachers selected from different public schools across 12 out of the 20 districts in the Central region of Ghana. Qualitative data were collected from 16 teachers and nine other key informants who were stakeholders in education provision in Ghana. I used both probability (multi-stage cluster, systematic and simple random) and non-probability (purposeful, opportunistic, and typical case) sampling techniques to select teachers for the quantitative and qualitative components of the research. The data collection methods used were questionnaires, in-depth interviews, and personal observations. Data for the study were analysed quantitatively (using inferential statistics) and qualitatively (using thematic analysis) and examined through the study's theoretical position, the conceptual frameworks, and the literature reviewed.

### **11.3 Major Findings of the Study**

The following significant findings emerged from the study. They are organised based on the research sub-questions.

**Research question 1:** What professional development/learning needs do basic schoolteachers have?

There were four critical professional development/learning needs of basic schoolteachers: (1) ICT skills for teaching and research; (2) pedagogical content knowledge; (3) teaching students with special learning needs; and (4) students' and school management practices. I found that while teachers were confident in their subject area knowledges, there was a general weakness in their pedagogical content knowledge, hence they struggled in adopting appropriate pedagogies when teaching some concepts. I also found that out-of-field teachers, unlike qualified teachers, required to be developed in both subject matter knowledge and pedagogies. Similarly, school and student management needs were required by school leaders to be able to execute their responsibilities efficiently.

There was no significant relationship between teacher characteristics (age, gender, years of teaching experience, and professional qualifications) and the perceived learning needs of teachers. This contrasts with existing literature that had established that; teachers' needs for professional development vary according to specific demographic characteristics (Ríordáin et al., 2017; Shriki & Patkin, 2016). The unusual case for Ghana may be attributable to the lack of CPD activities offered by Ministry of Education (MOE) and Ghana Education Service (GES) for teachers' development. Thus, regardless of these characteristics, basic schoolteachers' needs were found to be the same.

***Research question 2:*** What are the CPD opportunities available for basic schoolteachers in Ghana?

I found that the traditional CPD forms of in-service training, continuing education, and workshops predominated the CPD offerings for Ghanaian teachers. The traditional CPD forms of in-service training (or continuing education and workshops) which predominated the CPD offerings, were top-down externally pre-planned with teachers having little opportunity to determine their professional needs and support each other to develop their capacities to improve their instructional practices. While these opportunities existed, they were rarely made available to teachers.

The provision of the available CPD activities (INSET and workshops) was to train and retrain teachers in specific competencies to improve students' performances and to conform to new curricular requirements. Accordingly, the GES used students' performances, especially in the Basic Education Certificate Examinations (BECE), as a determiner of when to develop teachers. Teachers were also developed upon the introduction of any new elements within the curriculum. Due to the ad hoc determination of when teachers needed CPD, there was an apparent lack of continuity in the provision of opportunities for teachers' development.

Furthermore, though informal learning practices (such as peer learning, reflective dialogues, mentoring) existed among basic schoolteachers, these practices rarely expanded into more significant notion of CPD. As well, the schools or the GES rarely legitimised these activities as forms of CPD.

**Research question 3:** What are the participation experiences of basic schoolteachers in CPD activities?

I found teachers' participation in organised CPD activities to be minimal. About 41% of teachers reported not having participated in any organised CPD within the last 24 months in their professional career. This was because of infrequent CPD offerings for teachers rather than teachers' reluctance to participate. Meanwhile, there was overwhelming participation in distance and sandwich modes of continuing education. However, these practices raised issues of teacher absenteeism and loss of instructional hours, which educational directors believed affected students' learning.

I also found that teachers' access to CPD opportunities was uneven. Priorities were given to mathematics and science teachers at the expense of language and other generic teachers, the latter often not given a chance to participate in organised workshops and cluster-based INSET activities.

As far as teachers' participation experiences were concerned, I found mixed reactions in organised CPD activities. For most teachers (81%), participation in CPD activities equipped them with new skills, knowledge, and competencies with which they were

able to implement and contextualise new CPD knowledges to improve their classroom teaching. On the other hand, there were also reports of CPD ineffectiveness, especially in organised CPD. This was because the CPD program content did not address the development needs of those teachers. Regardless, teachers found value in their participation and engagements in CPD activities.

There was a lack of teacher consultation in the identification of their needs for development and during CPD implementation. Organised CPD activities were externally pre-planned with a top-down approach in which teachers were passive learners with limited or no control over the planning, design, and implementation of CPD learning goals and objectives.

Teachers reported that effective CPD experiences allowed self-directedness, active learning, and collaboration to co-construct professional knowledge. They also perceived CPD as useful to the extent that program content significantly addressed their learning needs and new knowledge could be integrated in classroom practice.

***Research question 4:*** What factors motivate basic schoolteachers' decisions to participate in CPD activities?

Intrinsically, basic schoolteachers participated in CPD activities to increase their professional competencies, for personal growth, and to improve the learning of their students. Teachers' participation was also externally motivated by the need to acquire resources such as monetary incentives, certificates of participation, and enhanced social capital.

In addition to the motivation factors, I found that the teachers' decisions to participate were more aptly described as an investment rather than motivation. Teachers' participation depended on social factors such as agency, teachers' identity, CPD offerings and practices, and social conditions. The positive interplay of these factors informed teachers' decisions to invest in CPD activities.

**Research question 5:** How do contextual factors affect basic schoolteachers' CPD practice?

The larger CPD policy framework of the GES affected how teachers learned and developed. First, the lack of a broader and more coherent CPD policy framework affected how CPD was practised and experienced by teachers. Teachers perceived CPD as limited to workshops and in-service training activities. Also, the GES's policies affected teachers' learning and development. Whereas study leave, rationalisation and the Untrained Teachers Diploma in Basic Education (UTDBE) policies positively affected teachers' professional development, the ban on continuing education for newly posted teachers adversely affected their learning and development.

At the school level, the role of head teachers was crucial in teachers' development. In some schools, head teachers supported and encourage the learning and development of teachers by creating enabling school environments that fostered collaboration and learning among colleague teachers. At the same time, it was found that the autocratic leadership styles of some head teachers prevented collegiality and diminished teachers' support for each other's learning and development.

With regard to teachers' characteristics, I found that positive beliefs about CPD influenced the way they learned and developed. The belief in the significance of CPD to their professional career of teachers encouraged them to engage in CPD activities.

Teachers' workloads when dealing with large class sizes, preparation of lesson notes and other extracurricular activities (such as sports activities, 6<sup>th</sup> March parade) within and outside the schools (family and other social commitments) were found to negatively affect their learning possibilities.

The communities where schools were located shaped teachers' learning and development. Teachers in rural schools had limited access to CPD resources and infrastructure, unlike some urban schools.

I also found that the type of community setting influenced a school's characteristics. Schools in most urban communities had higher socio-economic status and parents' involvements in students' learning. This affected how teachers learned and developed in such schools. Within most urban schools, the need to improve students' performance records in the BECE exerted some pressure on teachers' learning and development. In contrast, most schools in rural communities had lower social and economic standards with minimal or no parental control in students' learning. However, while teachers in such schools occasionally described adverse effects on their learning and development, they nevertheless strived to improve their school standings through personal initiatives to improve students' learning and to increase performance in the BECE.

***Other significant insights:*** In addition to the findings based on the research sub-questions, other significant insights emerged from the study.

Learning among basic schoolteachers was mediated and facilitated by both symbolic and cultural tools, as well as social interactions. As cultural tools, organised CPD activities became sources of teachers learning. Teachers also sought symbolic tools such as teaching aids, ICT tools, and textbooks during their informal learning. As well, social interaction was an essential source of peer and collaborative learning in the workplace as teachers co-constructed professional knowledge to shape their teaching and other professional areas.

Teachers relied on mediational tools to develop and address particular challenges in their teaching practices in a timely way. These processes were logical but did not necessarily follow a step-by-step plan. Therefore, depending on when and what they wanted to learn, teachers returned to appropriate mediators, whether tools or social interaction to accomplish those tasks.

Participation in CPD activities did not guarantee teachers' learning and development. Teachers needed to enact other activities to further their transformation processes. These included participating in CPD with content relevant to classroom teaching, engaging in critical reflection, and reconceptualising and contextualising CPD experiences.

I also found basic schoolteachers demonstrated high levels of agency towards their professional learning and development, despite contextual challenges. Teachers defied policy restrictions about their professional development and initiated and implemented alternative strategies to foster their learning and development. Teachers' active agency was also found to be higher in their informal learning activities than in organised CPD forms.

Teachers' construction of agency was, however, mediated by interactions between their beliefs and their inclinations to CPD, the resources and tools at their disposal, and the structures of their school systems.

#### **11.4 Contribution of This Research**

This study is unique in its holistic approach to investigating different systematic aspects of CPD (teachers' needs, learning experiences, and contextual factors) within a single study. It also researches a population of teachers that have not previously been given attention; investigates the ways learning occurred in the CPD activities, and methodologically adopts mixed method research to explore the phenomenon of teacher learning and CPD adequately. The findings contribute to the field of teacher learning and CPD at both national (Ghana) and international levels.

The results and discussions from my study provide significant insights to the body of knowledge of CPD that are consistent with and go beyond the existing literature. The results and discussions from the study have added new theoretical perspectives in the field of teacher learning and CPD through my use of sociocultural theory. I found that teachers' learning from CPD participation involved intricate processes that ensured the transformation of knowledge for classroom use. Such transformation and learning processes have rarely been captured in the existing literature. Based on participating teachers' experiences, I developed the CPD learning cycle (Figure 10.1) to explain how teachers learn and transform their knowledge. To understand the complexities in teachers' participation in CPD activities, this study also provides new perspective in investigating teacher motivation for participation through the CPD investment model (Figure 10.3). CPD investment model allows the examination of teacher motivation

beyond intrinsic and extrinsic factors to include other social conditions and agency as they interweave to influence decisions to participate in CPD activities.

My study also makes significant contribution to new knowledge with an extension of Desimone's conceptual framework to include the role of facilitators in active learning processes. The study also proposes a new CPD effectiveness model that adopts a more bottom-up approach to teachers' development to guide the design and implementation of CPD for teachers in Ghana (see Figure 10.2).

Within the teacher professional development literature, there are debates for CPD practices to move beyond the dominant traditional approaches to more constructivist approaches that foster genuine learning of teachers. While the findings and discussions from my study augment these calls, it was also observed that the adoption of these alternative CPD practices within the Ghanaian context would first require the enactment of a more systematised and coherent CPD policy framework to provide the basis, standards and evaluation measures for them. The present study, therefore, argues that the implementation of more robust and highly effective CPD practices for Ghanaian teachers can help address the problems that characterise the provision of quality basic education in Ghana.

### **11.5 Recommendations**

It is widely established that the CPD of teachers affects their learning and classroom practices, their students' learning, and other general education outcomes. As the findings of this study demonstrate, the CPD situations of teachers in Ghana lack continuity, consultation, and a broader policy framework to guide practice. Consequently, there has been fragmentation of CPD activities and participation. To realise the goal of quality education, the following 13 recommendations are offered for consideration by educational stakeholders, including the Ministry of Education, Ghana Education Service and teacher educators in order to help improve policy, design, practice, and implementation of high-quality CPD for Ghanaian teachers.

***Recommendation 1:*** 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 Ghana 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.
- Time and financial resourcing were identified as instrumental barriers to teacher CPD participation. For this reason, I also recommend time and resources be factored into schools' development plans, with budgets for planning CPD events. The resourcing of teacher CPD should be prioritised while at the same time encouraging other innovative ways of funding. This may include legitimising the informal learning experiences of teachers.

**Recommendation 2:** There is a necessity for GES to revise the ban on teachers' participation in continuing education through the DE or sandwich modes.

- The distance and sandwich education programs have provided opportunities to many teachers to upgrade their professional knowledge. I recommend the GES liaise with the responsible providers to align academic calendars so that the periods for the sandwich and DE programs do not affect students in basic schools. The GES should also expand access to the study-leave policy to cover all subject teachers and thereby reduce the overreliance on distance and sandwich programs. Supervision within the schools should also be increased to monitor teacher activities in the classrooms.

The study's identification of the different learning needs of teachers has numerous implications for the design of effective interventions for teachers. Recommendations 3 and 4 address these.

**Recommendation 3:** There is the need for the adoption of a bottom-up approach to CPD program planning and implementation, where teachers decide which aspects of their practice need further development. I therefore recommend CPD content be based on teachers' professional and scientific needs, rather than reliance on pre-planned external packages. This may increase teachers' self-directedness in learning and ensure they are ready for changes in their classroom practice.

**Recommendation 4:** Teacher consultation should be pivotal in planning and delivering PD interventions for teachers to increase teachers' learning in CPD participation.

- Involving teachers in CPD planning and implementation will help teachers complete the CPD learning cycle in order to affect the learning of their students. To re-engage those teachers who were not able to continue their learning and/participation, I recommend evaluation, follow-ups, and feedback be integrated into program design in order to identify such teachers and to plan meaningful learning episodes to foster their genuine learning. As cautioned by Fiszer (2004), without follow-ups, teachers might even abandon the new skills learned during CPD participation.
- As identified through the findings, such involvement may increase teachers' contributions to program design, their motivation for participation, and the sustainability of their learning, as their needs and goals would be reflected in the activities and components of the programs.

**Recommendation 5:** The organisation of CPD events and activities should be decentralised to enable rural teachers' participation. To ease rural teachers' challenges in accessing CPD opportunities, I recommend schools be strengthened and resourced to provide adequate CPD activities for their teachers. CPD could also be organised at the community level, with teachers at neighbouring schools converging to learn professionally.

**Recommendation 6:** Teachers must have equal access to CPD opportunities regardless of the subjects they teach.

- While it is imperative that government prioritise resources, such prioritisation as was found in this study was inimical to other teachers' development as it also affected collegiality in schools. I recommend the Ghanaian government and GES widen access to the study leave-policy, workshops, and INSET activities to cover all subject teachers.

**Recommendation 7:** 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.

**Recommendation 8:** Teachers' engagements in informal learning must count towards their promotion, and teachers be supported in their informal learning activities.

- I recommend that informal learning experiences be legitimised as useful CPD approaches. For instance, funding could be provided for teachers' individual research activities and purchase of learning resources. Peer learning, mentoring could also be arranged for teachers with their schools' support.

**Recommendation 9:** Community of practice (CoP) type activities would be of benefits and need be incorporated into the range of teachers' CPD practices.

- Although CoPs were not functioning at the time of this research, teachers believed that this type of organisation has potential for their ongoing development. I recommend CoPs be arranged for teachers in similar subject areas within circuits so that they can interact, learn, and share histories and identifiers of their practice.

**Recommendation 10:** Teachers must be allowed some degree of autonomy in CPD activities.

- I recommend CPD be self-directed, allowing teachers' active agency to plan, initiate, and direct their learning. Teacher educators and facilitators may guide teachers' learning by allowing them to create, generate, and reflect on their learning, but they should adopt teaching pedagogues that are conducive to adult learning and ensure more active participation among teacher-learners. There is also the need to integrate feedback and evaluative systems into CPD activities so that each teacher's progress can be measured.

**Recommendation 11:** CPD can be integrated into teachers' professional work as ongoing learning activities.

- I recommend the GES regularly provide CPD activities to support teachers' learning on an ongoing basis. Teachers must also be encouraged to take up personal initiatives and activities would count towards their meeting professional standards.

**Recommendation 12:** Head teachers in schools should support cohesion, collegiality, and collaborative cultures within schools in ways that encourage teachers to support each other's professional growth and development.

- Head teachers of schools, as well as educational directors, have a role to play in teachers' professional development. I recommend head teachers create favourable conditions for teacher learning within their schools and adopt democratic leadership styles that involve teachers in making decisions about their own professional development.

**Recommendation 13:** For effective planning and implementation of CPD interventions for Ghanaian basic schoolteachers, I recommend the adoption of the effective model shown in Figure 10.2 to guide practice.

## **11.6 Suggestions for Future Research**

This study adopted a holistic approach towards investigating teacher learning and CPD by looking at the relationship between teachers' learning in the broader context of their practice. While the findings have shaped understandings of the complexities involved in teacher learning and CPD and led to the recommendations outlined in the previous section, there are still some important areas for future researchers to study.

There is a potential for a future study into the effectiveness of different types of CPD programs using the model proposed in Figure 10.2. It is hoped that such research will provide evidence to strengthen the model.

Another area that could be investigated is the impact of teachers' informal learning on their professional development. Such research would support calls to recognise 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 programs.

## **11.7 Conclusion**

The significance of CPD to teachers' professional lives cannot be overemphasised. CPD ensures that teachers are current in their practices and form a competent and skilled teaching force that positively affects students' learning. My study revealed that the CPD provisions for Ghanaian basic schoolteachers were woefully inadequate. CPD opportunities were limited to workshops and in-service training activities. Although teachers identified various learning needs, to some extent these needs did not inform CPD program content. Hence, teachers felt their voices were not heard in regard to CPD implementation. Nevertheless, participation in CPD activities was found to have significantly improved teachers' practice, as teachers were able to contextualise and implement new knowledges in classroom situations. These notwithstanding, teachers' participation and engagements were affected by contextual challenges such as unfriendly policy and inequitable access to CPD opportunities and learning resources.

This research thus contributes to the field of teacher learning and CPD, especially in the Ghanaian context, and it has provided insights that should be useful for policymakers and stakeholders in the educational sector, and for teachers themselves. For policymakers the findings are highly significant for knowing what works best for teachers' learning and professional development and under what conditions their practices may thrive. The study calls on policymakers to enact and implement a much more coherent CPD policy framework to guide practice and to design and implement high-quality CPD programs for Ghanaian teachers.

## APPENDICES

### APPENDIX A: Permission Letter From the Central Regional Education Office

**GHANA EDUCATION SERVICE**



*In case of reply the number and date of this letter should be quoted*

Republic of Ghana

Regional Education Office  
P.O. Box 111  
Cape Coast.

Tel: 03321-32333  
Fax: 03321-32333  
Email: [gscentral@educ@gmail.com](mailto:gscentral@educ@gmail.com)  
My Ref. No. GES/CR/49/VOL38/53.

18<sup>th</sup> October, 2016.

Your Ref. No.....

**RE: PERMISSION TO CONDUCT A STUDY ON  
TEACHERS IN THE CENTRAL REGION**

In response to your letter dated 17<sup>th</sup> October, 2016 concerning the above-named subject, I am pleased to inform you that permission has been granted for you to conduct your study on teachers in the Central Region.

I am by this letter, entreating all Metropolitan/Municipal and District Directors concerned to grant Ms. Ellen Abakah the needed assistance for a successful research.

Best Regards.

  
DAVID AFRAM (MR.)  
REGIONAL DIRECTOR OF EDUCATION  
CENTRAL

MS. ELLEN ABAKAH,  
FACULTY OF ARTS AND SOCIAL SCIENCES,  
SCHOOL OF EDUCATION,  
UNIVERSITY OF TECHNOLOGY,  
SYDNEY, AUSTRALIA

**APPENDIX B: Survey Questionnaire**

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**This survey questionnaire solicits views on the continuing professional development (CPD) practices among basic schoolteachers in the Central region of Ghana. It also seeks information on teachers’ participation in CPD as well as factors that affect participation and the possible impacts of CPD on teachers’ classroom practices. In this survey CPD is defined as all activities that develop an individual’s skills, knowledge and other characteristics as a teacher.**

**\*NB: Please be informed that you may be contacted for further participation in a one-on-one interview.**

**Section A: Demographic characteristics**

1. Age:            20-30 [ ]                      31-40 [ ]                      41-50 [ ]            51+ [ ]
  
2. Gender:      Male [ ]                      Female [ ]
  
3. Highest professional qualification: Certificate [ ] Diploma [ ] Bachelor’s Degree [ ]  
Post Graduate [ ]      Other (please specify) .....
  
4. Please indicate the subject(s) that you teach  
.....  
.....
  
5. How many years have you been in the teaching profession?  
1-5 years [ ]    6-10 years [ ]    11-15 years [ ]    16-20 years [ ]    21+ [ ]

**Section B: This section seeks information on teachers’ CPD practices as well as identifying teachers’ professional development needs.**

6. Does your school provide any of the following CPD activities for teachers?

CPD Activity	Yes	No
In-service training		
Workshops/short courses		
Education conferences		
Opportunity for continuing education		
Observation visits to other schools		

Collaborative teaching		
Study networks among teachers		
Peer class observations		
Mentoring/coaching as part of formal school arrangement		
Collaborative research on a topic of interest professionally		
Action study		
Publications		
Other, please describe		

7. How often are the following CPD activities provided for teachers in your school?

CPD Activity	Always	Very Often	Sometimes	Rarely	Never
In-service training					
Workshops/short courses					
Education conferences					
Continuing education					
Observation visits to other schools					
Collaborative teaching					
Study networks among teachers					
Peer class observations					
Mentoring/coaching as part of formal school arrangement					
Collaborative research on a topic of interest professionally					
Action study					
Publications					

8. Do you think what your school provide as CPD is adequate to help you develop in your profession? Yes [ ] No [ ]

9. Do you need any further development in the following areas in your career as a teacher?

Need	Yes	No
Knowledge on the content in my main subject field		
Knowledge about performance standards in my subject field		
Understanding of teaching strategies in my main subject teaching		
Knowledge and understanding of the curriculum		
Preparation of lesson notes		
Teaching students with special learning needs		
Student assessment practices		
Classroom management practices		

ICT for teaching		
Research and dissemination in teaching strategies		

10. Thinking of your own professional development needs, please indicate the extent to which you have such needs in each of the areas listed:

Need	No need at all	Low level of need	Moderate need	High level of need
Knowledge on the content in my main subject field				
Knowledge about performance standards in my subject field				
Understanding of teaching strategies in my main subject teaching				
Knowledge and understanding of the curriculum				
Preparation of lesson notes				
Teaching students with special learning needs				
Student assessment practices				
Classroom management practices				
ICT for teaching				
Research and dissemination in teaching strategies				

11. Does your school CPD provisions address your professional development needs?  
Yes  No .

12. If Yes, to what extent does your school's CPD address your professional development needs? Greater extent  Some extent  Undecided  Lesser extent  Not at all

**Section C: This section seeks information on your participation and experiences with CPD**

13. Have you participated in any of the following CPD activities after your initial teacher education programme?

CPD Activity	Yes	No
In-service training		
Workshops/short courses		
Education conferences		
Higher academic study		
Observation visits to other schools		
Collaborative teaching		

Study networks among teachers		
Peer class observations		
Mentoring/coaching as part of formal school arrangement		
Collaborative research on a topic of interest professionally		
Independent reading of professional literature (eg. Journal, books, reports)		
Engaging in informal dialogue with colleagues on how to improve teaching		

14. How often have you participated in the said CPD activities as a teacher?

CPD Activity	Always	Very Often	Sometimes	Rarely	Never
In-service training					
Workshops/short courses					
Education conferences					
Higher academic study					
Observation visits to other schools					
Collaborative teaching					
Study networks among teachers					
Peer class observations					
Mentoring/coaching as part of formal school arrangement					
Collaborative research on a topic of interest professionally					
Independent reading of professional literature (eg. Journal, books, reports)					
Engaging in informal dialogue with colleagues on how to improve teaching					

15. For any of the CPD activities that you have participated in how did you finance your participation? **Tick as many as applicable:** School/GES Sponsored  Self-sponsored  Teacher association sponsored  NGO/CSO  Other please specify.....

16. For the CPD you participated, did you receive any allowance/promotion or incentive for participation?  
Yes  No

17. In all, how many days of professional development did you attend during the last 24 months? Please round to whole days. Write 0 (zero) if none. ....

**Section D: This section explores your perceptions on CPD usefulness on your professional practice**

18. Thinking of the CPD activities that you have participated in, how useful do you think it has been to your career as a teacher?

Very useful [ ] Useful [ ] Undecided [ ] Slightly useful [ ] Not useful [ ]

19. Of any of the CPD activity that you have participated, did you take your time to reflect on what was learned in relation to you teaching practices? Yes [ ] No [ ]

20. In any of the CPD activity that you have participated in, what has been the impact of these activities on your development as a teacher?

CPD Activity	No impact	A small impact	Moderate impact	A large extent	Never participated
In-service training					
Workshops/short courses					
Education conferences					
Higher academic study					
Observation visits to other schools					
Collaborative teaching					
Study networks among teachers					
Peer class observations					
Mentoring/coaching as part of formal school arrangement					
Collaborative research on a topic of interest professionally					
Independent reading of professional literature (eg. Journal, books, reports)					
Engaging in informal dialogue with colleagues on how to improve teaching					

**Section E: This sections seeks to identify factors that influence CPD participation and practices within school**

21. What influenced your participation in any of the CPD activity? Please rank these influencing factors **using # 1 as the most significant factor to # 6 as the least influencing factor.**

CPD Activity	1	2	3	4	5	6
It was compulsory for me to participate						
To better develop myself as a teacher						
To increase my knowledge in the subject that I teach						
To seek promotion in my career						
To help my students learn better						

To be able to introduce new technologies in my teaching						
Any other factor? Please describe:						

22. During the last 24 months did you wish to have participated more in CPD than you did? Yes [ ] No [ ]

23. Which of the following reasons best explain what prevented you from participating in more CPD than you did. Please tick as many as applicable

Reasons	Tick
I did not have the pre-requisites information	
CPD was too expensive	
There was the lack of school's support	
CPD activities conflicted with my work schedule	
I didn't have time because of my family responsibilities	
There was no suitable CPD offered by the school	
If other, Please specify:	

24. Are you aware of any CPD policy that is currently being implemented by your school or the Ghana Education Service? Yes [ ] No [ ]

If Yes briefly describe.....

**Section F: This section explores general CPD situation in your school. To what extent do you agree or disagree with the following statements:**

25.

Statements	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
I feel that CPD opportunities provided by my school are inadequate to help me develop.					
There are no periodic assessments done in my school to identify my professional development needs.					
We are consistently encouraged to participate in CPD as a way of developing ourselves					
In my opinion, CPD meets the needs of the school rather than my own learning needs					
My school uses the needs					

of teachers identified during performance appraisal to design CPD for teachers					
I have learnt new skills, knowledge and competencies through my participation in CPD activities					
CPD provided by my school have no bearing on what I do as a teacher					

**\*Please note you may be contacted further for an interview session. Thank you for your participation in this survey!**

## **APPENDIX C: Interview Guide**

### **A. For Teachers**

#### **Background questions:**

1. Would you please tell me about yourself? (With focus on your teaching career: qualification, what you teach, number of experiences with teaching, subjects that you teach, number of years teaching in a school(s).
2. In your daily life as a teacher, what do you do?

#### **How teachers learn/ teachers learning needs**

1. How have you been learning to improve yourself in what you do as a classroom teacher?
2. What are some of the things that you do to ensure that you are up to date with the knowledge or current trends in your area of teaching and as a teacher?
3. Can you describe areas in what you teach that you think you need or require further development to enable you perform better?
4. How has your school addressed these areas of need over the years?
5. Considering the last 24months have you undertaken any form of CPD activity organised by your school of GES?

#### **CPD opportunities in schools/experiences and participation**

1. Describe the major forms of CPD activities that your school provide for teachers' professional development?
2. Describe your participation in any CPD activity that you have taken part after your initial teacher training?
3. Of the CPD activity that you participated; would you say it addressed your professional development need as a teacher? How and why?
4. What were some of your own personal observations about the CPD activity that you participated in?
5. What should have been done to increase the program effectiveness?

#### **Motivation for CPD participation**

1. Of any of the CPD activity that you engaged in, what motivated your participation?
2. What factors influenced your non-participation in those that you could not participate

#### **Contextual factors affect teachers CPD practices**

1. Among your colleague teachers and in your school, what practices seem to affect your professional learning and development?
2. Is there any specific attitude/some culture within your school/GES that you think inhibit your ability to develop yourself as a teacher?
3. What about the community where the school is located?
4. Do the structures the GES impose any challenge to your development and learning as teachers? How?
5. What in your daily life as a teacher affects your capacity to learn professionally?

#### **How CPD improve teachers' classroom practices**

1. Of the CPD activity you participated, can you describe any possible effect or improvement it brought in your practice as a teacher?
2. Do you think your participation in professional learning and development activities improved your students' learning and performances in the classrooms? Can you please describe a real-life demonstration or a case?
3. Can you describe any changes in your classroom practices that you can attribute to your participation in any CPD activity?

**Other**

1. Are you aware of any CPD policy implementation?
2. If GES/MOE wants to develop a model of CPD for teachers' participation, what you recommend to be included in the design

**B. Key Informants (Head Teachers/ Educational Directors)**

1. What do you have to say about the ongoing professional development for basic schoolteachers in Ghana?
2. How has your school supported teachers' CPD over the years?
3. What policy framework support teachers CPD in your school?
4. Would you say the current CPD provided for your teachers are adequate to develop them professionally?
5. What has been your ways of identifying and addressing teachers' professional learning needs?
6. What are the barriers to teachers' CPD practices in your school?
7. In what ways can we ensure effective CPD practices among teachers in your schools?

#### APPENDIX D: Characteristics of Interview Participants

Participants	Teaching Qualification	Years of Teaching	Subject Teaching	Case District
Kacely	B.Ed. Mathematics	14	Science/Math	Participant1 Case I
Kojo	B.Ed. English	10	English	Participant 2 Case I
Esi	B.Ed. Home Economics	12	Home Economics	Participant 3 Case I
Yaw	Post-Dip Social Studies	17	Social Studies/Fantse	Participant 4 Case I
Nana	B.Ed. Mathematics	5	Math/Social Studies	Participant 1 Case II
Ato	B.Ed. Science	5	Science/Math	Participant 2 Case II
Kobby	Diploma Social Studies	7	ICT/Social Studies	Participant 3 Case II
Ebo	BSc Psychology	16	Science	Participant 4 Case II
Kuuku	B.Ed. English	11	English & Math	Participant 1 Case III
Kweku	B.Ed. Social Studies	10	Social Studies & Physical Education	Participant 2 Case III
Baaba	Diploma Basic Education	23	English/Fantse	Participant 3 Case III
Kwesi	B.Ed. Science	10	Social Studies/RME*	Participant 4 Case III
Efe	Diploma Basic Education	8	English/Fantse	Participant 1 Case IV
Kwame	Post-Dip Construction technology in Education	6	RME/BDT*	Participant 2 Case IV
Fiifi	Bachelor of Commerce	27	Science	Participant 3 Case IV
Ekow	B.Ed. English	13	English/ Social Studies	Participant 4 Case IV

\* ME: Religious and Moral Education; BDT: Building design and technology

## APPENDIX E: Ethical Clearance



Research.Ethics@uts.edu.au

Wed 16/11/2016 17:39

Jacquie Widin; Ellen Abakah; Research Ethics ▾



Dear Applicant

Thank you for your response to the Committee's comments for your project titled, "Teacher Learning and Professional Development: Assessing the Continuing Professional Development Practices and Experiences of Basic School Teachers in the Central Region of Ghana.". Your response satisfactorily addresses the concerns and questions raised by the Committee who agreed that the application now meets the requirements of the NHMRC National Statement on Ethical Conduct in Human Research (2007). I am pleased to inform you that ethics approval is now granted.

Your approval number is UTS HREC REF NO. ETH16-0672.

Approval will be for a period of five (5) years from the date of this correspondence subject to the provision of annual reports.

Your approval number must be included in all participant material and advertisements. Any advertisements on the UTS Staff Connect without an approval number will be removed.

Please note that the ethical conduct of research is an on-going process. The National Statement on Ethical Conduct in Research Involving Humans requires us to obtain a report about the progress of the research, and in particular about any changes to the research which may have ethical implications. This report form must be completed at least annually from the date of approval, and at the end of the project (if it takes more than a year). The Ethics Secretariat will contact you when it is time to complete your first report.

I also refer you to the AVCC guidelines relating to the storage of data, which require that data be kept for a minimum of 5 years after publication of research. However, in NSW, longer retention requirements are required for research on human subjects with potential long-term effects, research with long-term environmental effects, or research considered of national or international significance, importance, or controversy. If the data from this research project falls into one of these categories, contact University Records for advice on long-term retention.

You should consider this your official letter of approval. If you require a hardcopy please contact Research.Ethics@uts.edu.au.

## APPENDIX F: Consent and Information Sheets

### Informed consent form

#### **Teacher Learning and Professional Development: Assessing the Continuing Professional Development Practices and Experiences of Basic School Teachers in the Central Region of Ghana.**

I \_\_\_\_\_ agree to participate in the research project Teacher Learning and Professional Development: Assessing the Continuing Professional Development Practices and Experiences of Basic School Teachers in the Central Region of Ghana being conducted by Ellen Abakah ( ) of the University of Technology Sydney for her degree of Doctor of Philosophy, Education.

I understand that the purpose of this study is to investigate into the continuing professional development practices and experiences of basic schoolteachers. I understand that I have been asked to participate in this research because I am a trained teacher and professional development is core to my professional practice. My participation in this research will involve participating in a focus group/interviews of approximately one hour in duration with other teachers. The focus group/interview sessions will be audiotaped and information provided will not be linked to any of the teachers involved. I consent to sharing my experiences in continuing professional development activities in my school. I understand topics to be discussed include identifying my professional learning needs, my participation in on going professional development activities, factors likely to affect my participation and school practices and cultures that affect continuing professional development.

I agree to be:

- Audio recorded
- Video recorded
- Photographed

I agree that the research data gathered from this project may be published in a form that:

- Identifies me
- Does not identify me in any way
- May be used for future research purposes

I am aware that I can contact Ellen Abakah or her supervisors (Jacqueline Widin and Nina BurrIDGE) if I have any concerns about the research. I also understand that I am free to withdraw my participation from this research project at any time I wish, without consequences, and without giving a reason.

I agree that Ellen Abakah has answered all my questions fully and clearly.

\_\_\_\_\_ / \_\_\_\_ / \_\_\_\_

Name and Signature (participant)

Date

\_\_\_\_\_

\_\_\_\_/\_\_\_\_/\_\_\_\_

Name and Signature (researcher or delegate)

Date

**NOTE:** This study has been approved by the University of Technology Sydney Human Research Ethics Committee (UTS HREC). If you have any concerns or complaints about any aspect of the conduct of this research, please contact the Ethics Secretariat on ph.: +61 2 9514 2478 or email: [Research.Ethics@uts.edu.au](mailto:Research.Ethics@uts.edu.au). Any matter raised will be treated confidentially, investigated and you will be informed of the outcome.

**Participant Information Sheet**  
**Teacher Learning and Professional Development: Assessing the Continuing Professional Development Practices and Experiences of Basic School Teachers in the Central Region of Ghana.**

**WHO IS DOING THE RESEARCH?**

My name is *Ellen Abakah* ( ) and I am a student at UTS. My supervisor is Jacqueline Widin (+61295143744)

**WHAT IS THIS RESEARCH ABOUT?**

I am conducting this research with teachers who teach at the basic schools. The research is part of my studies for a PhD in Education. Generally, this study aims to assess CPD practices and experiences of teachers. The study objects to find out how CPD activities are informed by teachers' own professional learning needs. It explores factors individually and contextually that influence CPD practices among teachers. Finally the study will explore teachers' perspectives on the impact of CPD in their classroom practices.

**IF I SAY YES, WHAT WILL IT INVOLVE?**

The study will require you to fill out a questionnaire that will take approximately 30 to 45 minutes to complete. You may also be required to participate in a focus group discussion/interview session, which will be taped recorded and transcribed later. The researcher with the help of two other research assistants will facilitate the focus group sessions. Refreshment will be provided at the end of the focus group discussions/interview sessions.

**ARE THERE ANY RISKS/INCONVENIENCE?**

There is the possibility of being uncomfortable in providing certain responses to the questions asked regarding your school culture and CPD practices. However, you are assured that any responses provided will be treated with outmost confidentiality and would not be linked to individual teachers who participate in the study.

**WHY HAVE I BEEN ASKED?**

You have been approached because you are a trained teacher. To be eligible for this study you should have had an initial basic teacher education and must also be teaching at the Junior High School Level. You should have also participated in some form of continuing professional development activities to be eligible for participation in the focus group discussions and the interviews.

**DO I HAVE TO SAY YES?**

Participation in this research is voluntary.

**WHAT WILL HAPPEN IF I SAY NO?**

You are free to withdraw from participating in this research at any time without consequences. I will thank you for your time so far and won't contact you about this research again.

**IF I SAY YES, CAN I CHANGE MY MIND LATER?**

You can change your mind at any time. However, changing your mind after data collection may affect analysis and research outcomes. Please advise as soon as possible of any intention to withdraw. I will thank you for your time so far.

**WHAT IF I HAVE CONCERNS OR A COMPLAINT?**

If you have concerns about the research that you think I can help you with, please feel free to contact me on +[REDACTED].

**NOTE:**

This study has been approved by the University of Technology Sydney Human Research Ethics Committee (UTS HREC). If you have any concerns or complaints about any aspect of the conduct of this research, please contact the Ethics Secretariat on ph.: +61 2 9514 2478 or email: [Research.Ethics@uts.edu.au](mailto:Research.Ethics@uts.edu.au), and quote the UTS HREC reference number. Any matter raised will be treated confidentially, investigated and you will be informed of the outcome.

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