UNIVERSITY OF CAPE COAST

EXPLORING THE PROFESSIONAL LEARNING OF TUTORS

THROUGH SCHOOL-BASED PROFESSIONAL DEVELOPMENT: THE

CASE OF HOLY CHILD COLLEGE OF EDUCATION, TAKORADI,

GHANA

BY

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Thesis submitted to the Institute for Educational Planning and Administration,
School of Educational Development and Outreach, College of Education
Studies, University of Cape Coast, in partial fulfilment of the requirements for
the award of Master of Philosophy degree in Educational Administration

MARCH 2018

DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original research and

that no part of it has been presented for another degree in this university or

elsewhere.

Candidate's Signature: ………………………… Date……………………..

Name: …………………………………………………………………….
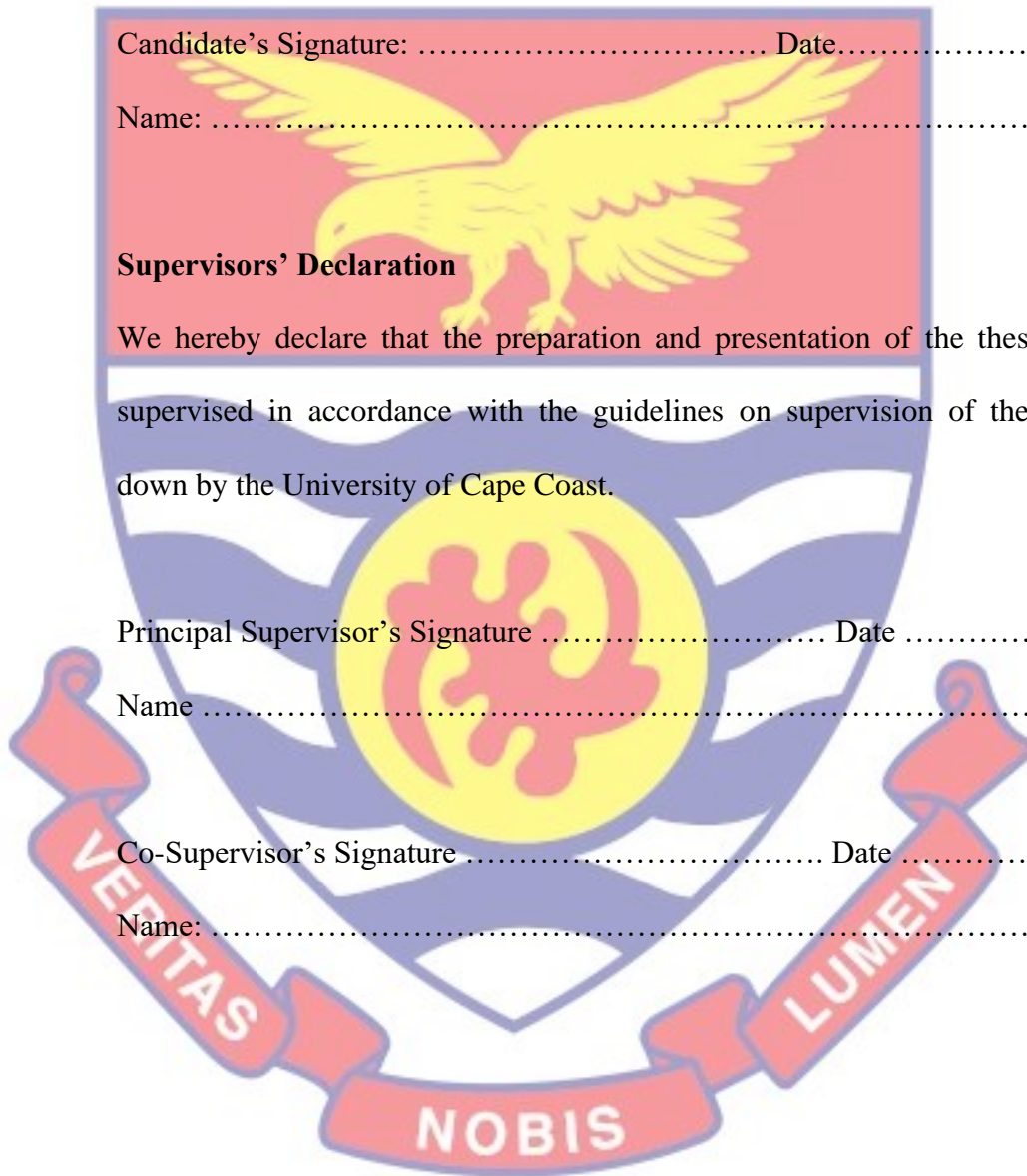
Supervisors' Declaration

We hereby declare that the preparation and presentation of the thesis were

supervised in accordance with the guidelines on supervision of thesis laid

down by the University of Cape Coast.

Principal Supervisor's Signature ……………………… Date ………………..

Name …………………………………………………………………………

Co-Supervisor's Signature …………………………. Date …………………

Name: …………………………………………………………………...

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ABSTRACT

This research project explored what tutors at the Holy Child College of Education, Takoradi, Ghana, learn and how they professionally develop through school-based professional development (SBPD). The research design is a case study, which employed a qualitative approach in data collection, through semi-structured interview. The sample involved 20 participants; 16 tutors, the Principal of the College, the Vice Principal and two Coordinators of the SBPD, using a purposive sampling technique. Four interview guides were developed for the four categories of participants. Drawing on the qualitative data from the interviews, data were analysed using the thematic approach. The major findings of the study revealed that SBPD programmes at HCCOE, Takoradi, Ghana, has benefitted the tutors immensely and contributed to the learning outcomes of the student teachers through the use of student-centred learning strategies, experiential learning, innovative learning and creative learning approaches. However, the tutors at the College, were constrained by inadequate and irregular contact hours in ICT skills-acquisition, top-down SBPD initiatives, workload, and inadequate ICT facilities. It is therefore recommended that management of HCCOE and NCTE provide adequate ICT support and use more constructivist models in the SBPD programmes to improve the tutors' professional learning, and enhance student teachers' learning outcomes.

KEY WORDS

Change in practice

Holy Child College of Education

Professional learning

School-Based Professional Development

Teacher knowledge

Tutors

ACKNOWLEDGEMENTS

I thank my principal and co-supervisors, Dr. (Mrs.) Marie A. B. Bakah and Dr. (Mrs.) Janet Koomson, for their guidance and encouragement throughout the writing of this thesis. I am also grateful to the principal and staff at Holy Child College of Education for their cooperation during the gathering of data for this study.

To my family, I owe immense of gratitude. To the Provincial Leadership Team, Rev. Sisters Alberta Bonle and Joana Duker, Mrs. Adaora Uzoefuna Jnr, Prof. (Mrs.) Rosemond Boohene, Mr. Jeff Onyame, Prof. Eric Wilmot, Dr. (Bro.) M. Amakyi, Mr. Theodore Danso, and all who supported me throughout my programme, I pray for God's abundant blessings.
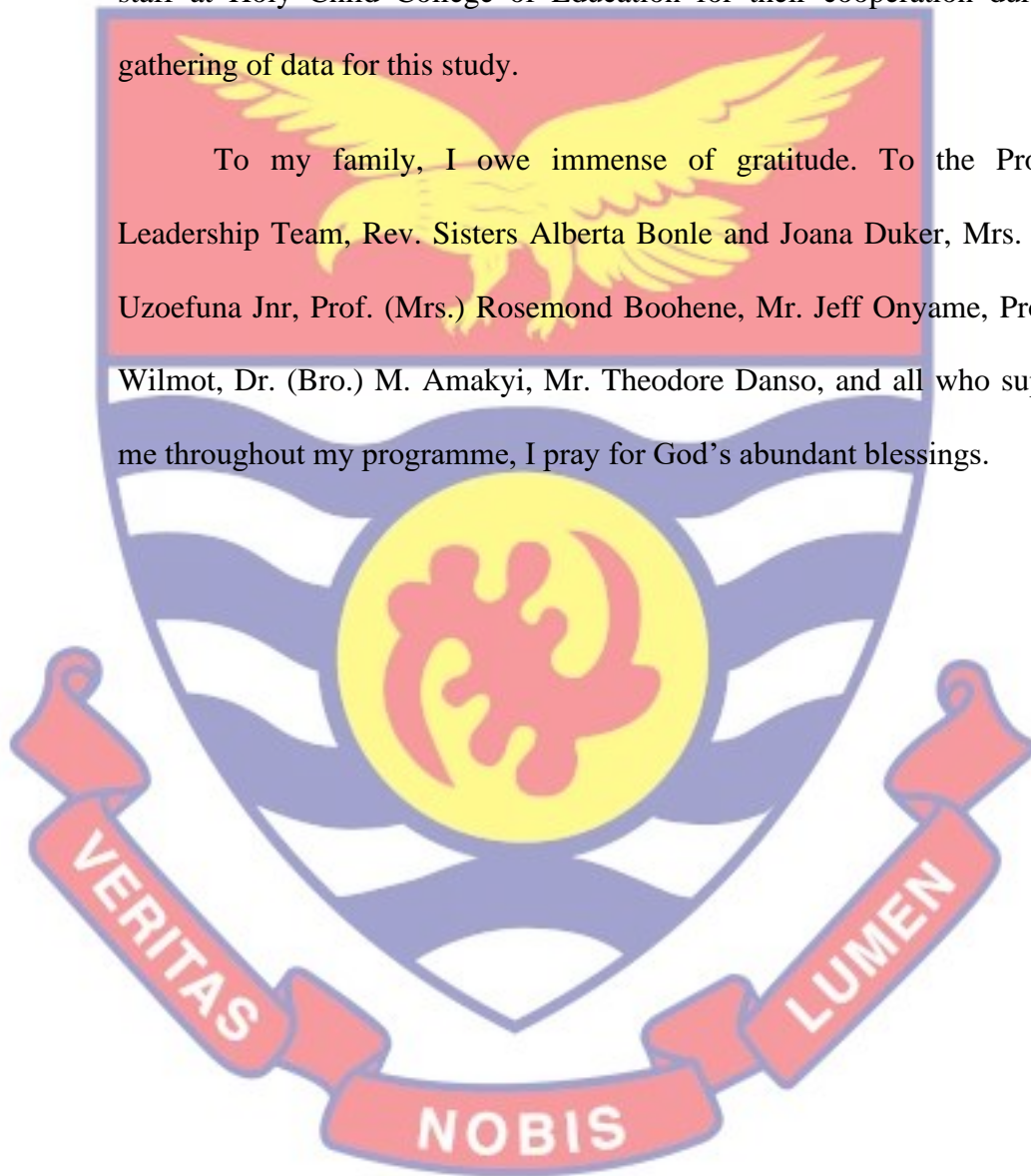
DEDICATION

In memory of my brother, Daniel and my dad, Alphonsus Uzogara.

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LIST OF ACRONYMS

CEMIS	Colleges of Education Management Information System
COEs	Colleges of Education
DFID	Department For International Development
ESPR	Education Sector Performance Report
HCCOE	Holy Child College of Education
INSET	In-Service Training
NAB	National Accreditation Board
NCTE	National Council for Tertiary Education
NGOs	Non-Governmental Organisations
OECD	Organisation for Economic Cooperation and Development
OERs	Online Educational Resources
PDCs	Professional Development Coordinators
PTPDM	Pre-tertiary Teacher Professional Development and Management
RTTT	Reducing Teacher Talk Time
SABRE	Saving Africa By Rural Endeavours
SBPD	School-Based Professional Development
TESSA	Teacher Education for Sub-Saharan Africa
T-TEL	Transforming Teacher Education and Learning
TTIs	Teacher Training Institutions
UKAID	United Kingdom Agency for International Development
USAID	United States Agency for International Development

CHAPTER ONE

INRODUCTION

Background to the Study

The quest for quality in teacher education programmes to enhance teaching and learning has become a need in the education sector. This phenomenon is accentuated based on the staggering realities of today's education and demands made on teachers from the basic schools to the tertiary institutions. We live in an ever changing world, where every day new knowledge continues to emerge that challenges teachers to keep seeking avenues to keep abreast with 21st century education in order to meet the needs of their learners and the society.

Research has argued for educators to pay attention to what teachers as trainers need to know, and what support institutions need to put in place to meet with the demands of preparing teachers for 21st century education (Bertram, 2011; Cochran-Smith, 2003). This is an imperative in teacher education.

In Ghana, teacher education has gone through various forms of modifications as means of meeting the goals and aspirations of the various governments since the pre-colonial era based on the recommendation of the Advisory Committee on Education (McWilliam & Kwamena-Poh, 1975). The present day Colleges of Education were formerly known as Teacher Training Institutes (TTIs). TTIs initially offered 2-year Post-Middle Certificate "B" programmes, then followed the 4-year Post-Middle Certificate "A" and lastly a 2-year Post–Secondary Certificate "A" programmes. The 2-year programme was later extended to a 3-year programme, but ran alongside the 4-year

certificate "A" programmes until 1991 when it was phased out completely (Addo-Obeng, 2008). Reforms over the past decades to train and develop teachers highlight the importance successive governments place on education as a pivot on which the human resource capital of the nation can be developed, sustained and empowered (Presidential Committee on Education, 2002).

Interestingly, following the Education Reform of 2007, a review of the educational system in Ghana was made to have a comprehensive teacher education policy. One of the strategies for achieving this goal was the upgrading of Teacher Training Institutions (TTIs) into diploma-awarding institutions and affiliated universities (Government of Ghana, 2012). In this regard, 38 Colleges were re-designated as Colleges of Education (COEs) to offer tertiary education in 2008. Consequently, the Colleges of Education Act, Act 847 was passed to give legal backing to the new status of these colleges in 2012. The institutions have therefore been placed under the National Council for Tertiary Education (NCTE), being the government agency responsible for the regulation of tertiary education institutions in Ghana but the content and delivery of their programmes remain the same (Government of Ghana, 2012).

Thus, it is argued that teacher training systems in Ghana are not easily affected by reforms in education, though the success of any education system depends on the availability of competent teachers (Akyeampong, 2003). Akyeampong contended that quality education is the hallmark of every educational enterprise, and can only be provided through effective teacher preparation and on-going professional development.

Currently, initial teacher preparation is rolled out in 38 public and 3 private Colleges of Education (COEs) in Ghana (Education Sector

Performance Report, 2016). The University of Cape Coast (UCC) and University of Education Winneba (UEW) run the Diploma in Basic Education (DBE), and also trains teachers through the Faculty of Education to obtain a bachelor's and Master's degree in order to teach in the basic/high schools and COEs respectively. Albeit, some graduates who have qualifications in their subject areas and in general education that are not specific to the training of teachers. A Bachelor's degree in Education designed in the appropriate subject(s) for a BA/ BSc (in any teaching subject) in addition to a post-graduate diploma in education (PGDE) or its equivalent is required for professional teachers. Teachers who teach in the Colleges of Education fall into two categories, that is, professionally qualified and non-professionally qualified.

Akyeampong and Stephens (2002) posited that teacher education systems in Ghana, should be prioritized and given every attention in order to sieve out what teachers bring with them when coming into the teaching field. This, they contend will help ascertain teachers' training needs, future expectations, and act as pointers to teacher educators as to what in-service training (INSET) or professional development (PD) to give teachers, despite their levels and qualification. These assertions resonate with Fareo (2013) who attests that initial teacher preparation in Africa is grossly inadequate, as most teachers are found wanting in practice, a situation which calls for continuous INSET.

Scholars in the field of teacher education corroborate the need for continuing professional development (CPD) for teachers to foster the knowledge, expertise, skills, collaboration and attitudes needed for optimal

teaching; and maintain that these cannot be fully developed in preservice teacher education programmes alone (Bakah, 2011; Fraser, Kennedy, Reid, & Mckinney, 2007; Villegas-Reimers, 2003). Fraser et al. posit that, professional development consists of processes that result in specific changes in the professional knowledge, skills, attitudes, beliefs or actions of teachers, which is aimed at developing teachers' competence in their practice. Day (1999) contended that CPD is the pivot for effective teaching and learning, hence his definition:

> *"CPD 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…"* (p.4).

Professional development programmes for tutors in the Colleges of Education in Ghana focus on – English, Mathematics and Science, Early Childhood Development and Technical Skills – to facilitate trainees' learning. But, the Councils of Colleges of Education cannot on their own mount programmes in these institutions without the approval of the Ministry of Education (GOG, 2012).

However, in pursuit of quality teacher education, the Ministry of Education through the Pre-tertiary Teacher Professional Development and Management (PTPDM) policy, had ensured that teachers in COEs (then TTIs) received in-service training for sustenance of their practice, and achievement of the aims and objectives of pre-tertiary education in Ghana (Education Act,

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2008). Enshrined in Act 778, Section 10, of the Education Act, is the establishment of the National Teaching Council, which has as one of its key responsibilities to provide continuous INSET for teachers in Ghana. Through the Directorates of the Ghana Education Service (GES), Teacher Unions, Accredited Colleges and Universities this mandate is supposed to be met.

According to Kelly (2006) and Borko (2004) it is recognised internationally that teacher professional learning and development is often best promoted within the context of school. Hence, the importance of ongoing and lifelong professional learning situated/embedded in schools as a natural and expected component of teachers' professional activities and a key component of school improvement cannot be overlooked.

Presently in Ghana, COEs engage in school-based professional development programmes known as Transforming Teacher Education and Learning (T-TEL), and other school-based PD programmes such as Teacher Education for Sub-Saharan Africa (TESSA), Saving Africa by Rural Endeavours (SABRE). The National Teaching Council (NTC) with support from the T-TEL initiated activities to create a set of coordinated National Teacher Standards (NTS), which will ensure Ghana's teachers consistently demonstrate standards of excellence across the country and also support Colleges of Education to make effective transition to being autonomous (T-TEL, 2015). To this effect the policy briefs of the government stipulate that:

> *"T-TEL is organised to help teacher training institutions*
>
> *in Ghana produce teachers… to teach the school*
>
> *curriculum when they first take up their posts in the*
>
> *classroom; understand and address the language needs*

of their students; use a learner-centred pedagogy and inclusive approach…" (T-TEL, 2017a, p. 1).

Significantly, all these collaborative efforts are targeted to improve teaching and coaching for tutors in the Colleges of Education in their subject areas and pedagogical skills. Thus, from the foregoing, it has been envisioned that professional development of teachers in the COEs would be on-going, through the PTPDM, T-TEL and other Private organisations. To this end, stakeholders such as NCTE, NTC, University of Cape Coast, National Accreditation Board (NAB), UNESCO, UKAID, etc., demand quality teaching from these COEs (T-TEL, 2017b). Thus, COEs are being supported to develop and implement an institutionally-based system of continuing professional development (CPD) for their tutors, which is one of the requirement from NAB for their tertiary status (Education Sector Performance Report, 2016; MOE, 2012).

However, Brodie (2013) contended that, the effectiveness of every teacher education programme lies not only in supporting teachers' professional development, but on collaboration and shared understanding, a focus on teachers' needs, and sufficient duration to ensure progressive gains in knowledge acquired by the teachers. This assertion is corroborated by Fletcher and Shepherd (2016) who revealed that though T-TEL is still in its pilot phase, the current practices through the leadership and management component of T-TEL and government, at making COEs tertiary centres of excellence for training the next generation of teachers may be compromised. This they alluded to top-down policies over the management component of the professional development of the tutors. A situation they argue may hinder the

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COEs efforts at autonomy, fail to meet the needs of teachers' professional learning and jeopardise trainees' learning outcomes.

Research studies in Ghana posited that given the right circumstances, teachers can reflect on their experiences, and produce a more sophisticated teacher learning and practice for themselves (Acquah, Adzifome, & Afful-Broni, 2013; Agbenyega & Deku, 2011; Akyeampong, Pryor, & Ampiah, 2006). Hence, emphasis is on teacher professional learning that embodies shared reflections with dialogue and active participation through school-based teacher PD initiatives, with teachers at the hem of their own learning. These studies are in line with Fareo's (2013) study. Fareo contends that the falling standards of education in Africa can be attributed to the use of teachers whose practices are sometimes obsolete for instructional purposes, and are limited by top-down policies in the teaching profession. This, is a great concern for all stakeholders in education especially in a country like Ghana where the responsibility of teacher education is vested in multiplicity of institutions. These institutions are supervised by different quality control bodies and so the problem of uniformity of curriculum, content and pedagogy in what teachers learn and practice can be compromised (Asare, Mereku, Anamua-Mensah, & Oduro, 2012).

Subsequently, few studies seem to focus on what kind of professional development (PD) programmes that can advance teacher learning, teacher knowledge and most importantly cause innovative changes in teachers' beliefs and practices (Bertram, 2011). Bertram opines for pre-service and later continuous INSET for teachers through School-based PD programmes, with teachers' experiential learning and reflection at the core.

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Currently, Holy Child College of Education (HCCOE), Takoradi, is among the 38 public COEs that were upgraded to tertiary status in Ghana, and the tutors have been engaged in the SBPD programmes over the years. Since its formal opening in 1946, HCCOE has trained some of the best female teachers in Ghana. HCCOE offers the cert 'A' 3year Post-Secondary Course and offers general courses that prepare teachers for both primary and junior secondary schools. As a Catholic institution that was founded by the nuns of Society of the Holy Child Jesus, it had the mission of providing training for the teachers through on-going school-based professional development (SBPD) programmes over the years (Eze, 2000; SHCJ Constitutions, 1985). These programmes included Holy Child Philosophy of Education, Communication Skills, Reflection, and Time Management. Despite the continuous mounting of SBPD workshops, the question as to what the tutors benefitted through these programmes has not been explored.

Statement of the Problem

Research studies argue that many conventional forms of teacher professional development programmes (workshops, seminars, conferences, meetings, etc.) are often off-site, one-shot, top-down and not quite related to school and classroom realities to have any noticeable impact on teachers' classroom practice (Bertram, 2011; Darling-Hammond, 2006; Guskey, 2002; Kennedy, 2005), these studies contend that school-based PD is the answer to this shift.

Related studies in Ghana support these assertions on school-based PD for enhancing teacher reflection, professional learning experiences and classroom practice (Agbenyega & Deku, 2011; Agezo, 2010; Akyeampong,

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2003; Akyeampong et al., 2006). Interestingly, tutors at Holy Child College of Education have over the years engaged in school-based PD programmes such as Cornelia Connelly Philosophy of Education, communication skills, reflection and time management, based on its mission of continuing professional development of teachers and holistic formation of the students.

However, despite this unprecedented interest and mounting of these school-based PD in the College, there seems to be no study on the professional learning, collegial discussions, and the putting into practice of knowledge acquired when the tutors return to their classrooms to make any meaningful change in their practice. Therefore, this study seeks to explore, what tutors at HCCOE learn, how they learn, and any possible change in their practice.

Purpose of the Study

The focus of the study is to explore the professional learning of tutors at Holy Child College of Education, Takoradi, through School-based PD Programmes, to understand what the tutors benefit through the programmes.

Research Questions

The study was guided by the following research questions:

1. What school-based professional development programmes are mounted for tutors at Holy Child College of Education?

2. What do tutors at Holy Child College of Education learn through school-based professional development programmes?

3. How do tutors at Holy Child College of Education learn through school-based PD programmes?

4. In what ways do tutors at Holy Child College of Education change their practice through school-based PD programmes?

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Significance of the Study

This research project explored the professional learning of tutors at the Holy Child College of Education, through school-based PD. Therefore, it is envisaged that it would provide the management of HCCOE, and other stakeholders with practical approaches to teacher professional learning through school-based professional development programmes. These programmes might enhance teachers' practice and improve student learning outcomes at various levels in the educational system in Ghana. The research findings will be made known to the public through policy/media briefs, journals, media release, community forums, workshops, launching, and study expo.

Delimitation

The study was conducted at Holy Child College of Education, Takoradi, Ghana. The accessible population was the Faculty of Holy Child College of Education who have engaged in School-based PD programmes for at least three years. The study focused on the tutors' professional learning through SBPD.

Limitations

The study was carried out through a qualitative study, using a purposive sampling technique, and based primarily on participants' self-report data. Thus, the limitations of this study are essentially those that are inherent in any qualitative inquiry. Qualitative data is subjective to a degree (Dawson, 2002; Cohen, Manion, & Morrison, 2007). Furthermore, Dawson (2002) maintains that this subjective quality is not a failing. Rather the subjectivity is an essential element to the understanding of the investigation. However, this

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study incorporated a respectable concern for checking reliability through strict adherence to the rigours of a qualitative research.

Definition of Terms

School-based PD - Professional development organised in the school

CPD - Continuing professional development programmes

Professional learning - Teacher engagement activities in the school-based PD

Trainees - Student teachers at Holy Child College of Education

Tutors - Teachers at Holy Child College of Education

Principal - The Head of the Holy Child College of Education

Vice Principal - The Assistant Head of Holy Child College of Education

In-service Training (INSET) - Professional development programmes

Organization of the Study

The thesis is organized into five chapters. Chapter one is an overview of the study. It comprised of the background to the study, problem statement, purpose of the study and the research questions. Chapter two is a review of related literature on SBPD programmes: Characteristics and Relevance, Teacher knowledge in SBPD, Teacher learning in SBPD and Teachers' Change in practice. Chapter three is the research methods, which includes the research design, study population, sampling procedure, data collection instrument, and procedures employed in the collection and analysis of the data. In Chapter four, is the results and the discussions of the study. Finally, in Chapter five the summary of the study, major findings, conclusions, recommendations and suggestions for further research are presented.

CHAPTER TWO

LITERATURE REVIEW

This chapter focuses on the review of literature related to the purpose of the study and the research questions. The purpose of this study is to explore the professional learning of tutors at Holy Child College of Education (HCCOE) through school-based professional development (SBPD). The chapter starts with the theoretical framework that underpins the study. Related literature was reviewed on SBPD programmes, Teacher knowledge activities in SBPD, Teacher learning in SBPD and Teachers' change in practice through SBPD. The related literature presented in this chapter is arranged conceptually and drawn from local, regional and global sources.

Theoretical Framework

According to Henning, Van Rensburg, and Smith (2005, p. 3) a theoretical framework is a "lens" on which the researcher positions his or her study. It reflects the stance adopted by the researcher and thus frames the work, facilitating dialogue between the literature and the study. A theoretical framework helps with the formulation of the assumptions about the study and how it connects with the world (Miles & Huberman, 1994). Thus, the theoretical framework for the study is underpinned by three assumptions namely: two theories of learning; The Experiential Learning Style of Kolb (1984) and Illeris' (2009) Types of Learning, which is quite similar to Kolb's. Where Illeris share the same view with Kolb, there is a simultaneous discussion; and the third assumption that underpins the study is Shulman's (1987) Categories of Teacher knowledge.

Kolb (1984) provided a holistic model of the learning process and a multi-dimensional model of adult development; Shulman (1987) propounded what teacher knowledge is required in building up teacher learning, while Illeris (2009) provided a process of human learning from simple to complex (cumulative/mechanical, assimilation, accommodative and transformative) stage that brings about change through internalisation. These theories were used to conceptualise the tutors' learning experiences through the school-based PD workshops at the HCCOE.

Kolb's (1984) and Illeris' (2009) learning theories

Kolb's (1984) Experiential Learning theory works on two levels; a four stage cycle of learning and four separate learning styles. This study adopted the four learning styles which helped to unpack how the tutors learnt in the SBPD at HCCOE. Kolb explained that different people naturally prefer a certain style of learning. Various factors influence a person's preferred style. For example, social environment, educational experiences, or the basic cognitive structure of the individual. The four learning styles are: diverging, assimilating, converging, and accommodating.

Diverging style

Kolb (1984) propounded that the diverging style's dominant learning abilities are; concrete experience and reflective observation. Individuals with this learning style are best at viewing concrete situations from many different points of view. It also involves generation of ideas through individuals' experiences as well as through brainstorming discussions and activities. In formal learning situations, people with the diverging style prefer to work in groups, listening with an open mind and receiving personalized feedback.

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Thus, this theory helped in gaining an understanding of how the tutors who engaged in the SBPD programmes at HCCOE, learned through observations, discussions, brainstorming on ideas, and reflections during the sessions.

Assimilation style

Kolb (1984) and Illeris (2009) share similar views on assimilation as a process of learning. Illeris posited that assimilation learning has to do with linking a new learning to a previous learning, which gives more relevance and understanding to the new element. It establishes a link to a scheme or pattern. While Kolb opined that, assimilating style's dominant learning abilities are abstract conceptualisation and reflective observation. When a concrete situation is presented, just like the case of the SBPD at the HCCOE, learning occurs when the individuals begin to conceptualise, and to think through it (reflect). This means, that the prior knowledge and previous experiences of the tutors about their teaching practice over the years is brought into the SBPD programmes in learning and acquiring the new knowledge in the programmes. In other words, assimilation occurs when the new knowledge fits easily into what is already known. More so, everything we learn is connected to our previous and daily experiences, and what is relevant in our context. This explained the tutors' interest in the acquisition of more relevant skills in ICT and Research/Publications in the SBPD, especially in the T-TEL programme which formed a major part of the tutors' professional learning (See Chapter four page 101).

Converging style

The converging style's dominant learning abilities are abstract conceptualization and active experimentation (Kolb, 1984). According to Kolb

(1984) people who adopt this learning style are best at finding practical uses from ideas and theories. In formal learning situations, people with this style prefer to experiment with new ideas, simulation, technology and practical applications (hands-on tasks). The tutors at HCCOE, learnt new pedagogic approaches and innovative strategies through the SBPD, however, their theoretical knowledge in ICT was not supported adequately with practical technological skills that could have enhanced and made their learning experiences through the SBPD more meaningful (See p.115).

Accommodating style

The accommodating style's dominant abilities are concrete experience and also active experimentation (Kolb, 1984). The learners in this contexts are at home with new challenges and good at executing plans (Illeris, 2009; Kolb, 1984). Illeris and Kolb posited that accommodative or transcendent learning is connected to a shift in learning of what the learner cannot understand or relate to, but because it seems interesting or important, the learning takes place anyways. Illeris stated that this type of learning implies that one breaks down parts of an existing scheme and transforms it, so that the new situation can be 'linked in' (p. 13). Furthermore, the results of accommodative learning are characterised by the fact that they can be recalled and applied in many difficult, but relevant contexts. This learning style featured exceedingly in the learning experiences of the tutors in the HCCOE, in enhancing their practice. Majority of the tutors' change in practice and beliefs is linked to accommodating style of learning in the SBPD (See page 117).

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Transformative learning style

Transformative learning is defined "as the process by which we transform problematic frames of reference (mind-set, habits of mind, meaning perspectives), set of assumptions and expectation to make them more inclusive, discriminating, open, reflective and emotionally able to change" (Illeris, 2009 p. 92). This learning implies personality changes or changes in the organisation of the self. It is characterised by simultaneous restructuring of a whole cluster of schemes and patterns in all of the three (cumulative, assimilation, and accommodation) learning dimensions, thereby changing one's practice completely, leading one to internalisation of the learning outcome. Furthermore, transformative learning is a very demanding process that changes the very special or identity of an individual. It occurs only in very special situations and is of profound significance for the learner, usually involving task-oriented learning and critical self-reflection.

Kolb's experiential learning theory and Illeris' theories of learning, support activity-based learning through practice. They were appropriate for the study which was contextualised in Holy Child College of Education and explored the tutors' professional learning through SBPD programme which is an activity-based programme. The third assumption in this theoretical framework is discussed further:

Shulman's (1987) categories of teacher knowledge

Shulman (1987) was one of the first researchers to describe a knowledge base for teaching. Shulman described seven categories of teacher knowledge namely "knowledge of content, knowledge of pedagogy, knowledge of curriculum, knowledge of learners and learning; knowledge of

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contexts of schooling, pedagogical content knowledge and knowledge of educational philosophies, goals and objectives" (p.127).

However, Grossman (1990) summarised these seven categories into four domains of knowledge. These domains include; general pedagogical knowledge, subject matter knowledge, pedagogical content knowledge, and knowledge of context. Grossman argued that these domains of knowledge are essential for every teacher and forms the base of all teaching and learning activities. These four domains helped in unpacking what knowledge the tutors at HCCOE learnt/acquired through the SBPD. Therefore, the two theories of learning, and the concept of teacher knowledge were complementary throughout the study in the gathering and analysis of data at HCCOE.
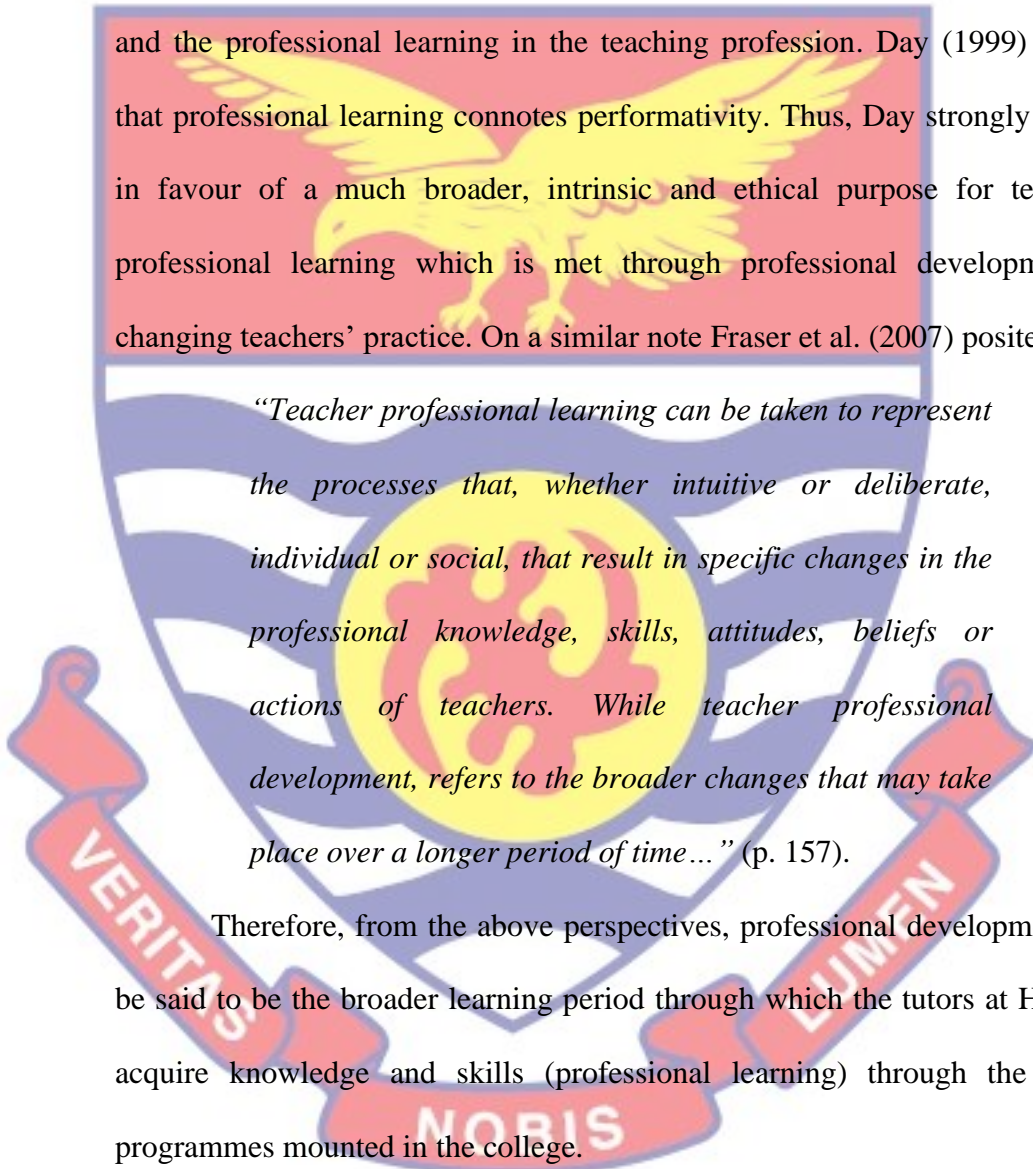
Concepts of Professional Learning and Development

The conceptualisation of teachers' professional learning and professional development is pertinent in this study to remove any form of ambiguity and to present a clear picture of the SBPD programmes at HCCOE. This is necessary to create a distinction between the two concepts in this study. Research suggests that the discourse about professional development is typified by 'conceptual vagueness' (Coffield, 2000, p. 3). Whilst Friedman and Philips (2004) argued that professional development is an ambiguous and contested concept, Hoban (2002) draws a clear distinction between professional learning and professional development. This shows the varying views on the meanings of these two terms in professional discourses.

Friedman and Philips (2004, p. 362) proffered that features of PD include; lifelong learning, personal development, a means of assuring a wary public that professionals are indeed up-to-date given the rapid pace of

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technological advancement, and a means for employers to garner a competent, adaptable workforce. Therefore, the term professional development tend to imply a broader, more general meaning than professional learning. Fraser et al. (2007) contended that confusion arise from the use of the term 'professional development' to mean both the development of the individual, and the professional learning in the teaching profession. Day (1999) opined that professional learning connotes performativity. Thus, Day strongly argued in favour of a much broader, intrinsic and ethical purpose for teachers' professional learning which is met through professional development in changing teachers' practice. On a similar note Fraser et al. (2007) posited that:
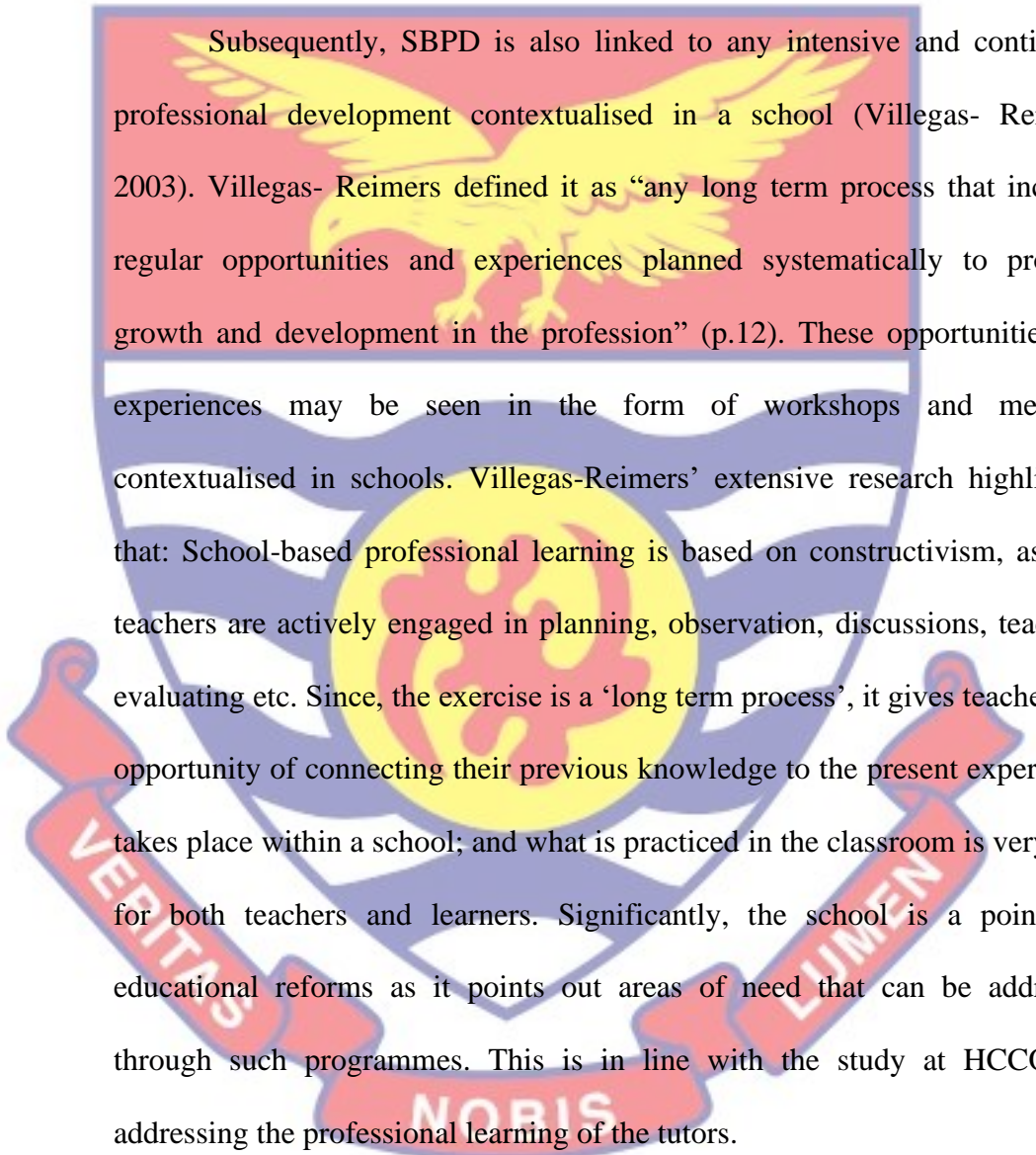
> *"Teacher professional learning can be taken to represent the processes that, whether intuitive or deliberate, individual or social, that result in specific changes in the professional knowledge, skills, attitudes, beliefs or actions of teachers. While teacher professional development, refers to the broader changes that may take place over a longer period of time…"* (p. 157).

Therefore, from the above perspectives, professional development can be said to be the broader learning period through which the tutors at HCCOE acquire knowledge and skills (professional learning) through the SBPD programmes mounted in the college.

School-Based Professional Development

More than twenty years ago many educators advocated the creation of school-university partnerships called professional development schools (PDS) as a strong vehicle for educational change and professional training for all

educators (Bondy, 2001; Polly, Heafner, Chapman & Spooner, 2014). Professional development schools are seen as spaces where prospective teaching and mentoring becomes experimental, grounded in teacher collaboration, connectedness of teachers' work with their students, and sustained by intensive learning (Darling-Hammond & Richardson, 2009).

Subsequently, SBPD is also linked to any intensive and continuous professional development contextualised in a school (Villegas- Reimers, 2003). Villegas- Reimers defined it as "any long term process that includes regular opportunities and experiences planned systematically to promote growth and development in the profession" (p.12). These opportunities and experiences may be seen in the form of workshops and meetings contextualised in schools. Villegas-Reimers' extensive research highlighted that: School-based professional learning is based on constructivism, as such teachers are actively engaged in planning, observation, discussions, teaching, evaluating etc. Since, the exercise is a 'long term process', it gives teachers the opportunity of connecting their previous knowledge to the present experience; takes place within a school; and what is practiced in the classroom is very vital for both teachers and learners. Significantly, the school is a pointer to educational reforms as it points out areas of need that can be addressed through such programmes. This is in line with the study at HCCOE in addressing the professional learning of the tutors.

According to Kennedy (2005) Constructivism in SBPD turns teachers into facilitators who own their learning, and offer the same support to their students. It encourages divergent thinking and experiential learning as opined by Kolb (1984), thereby leading to discovery learning. Constructivists' ideas

encourage constructive and active learning, where teachers learn to resolve problems that arise as they participate in CPD programmes (Timperley, 2008). SBPD programmes are designed in a way that pre-service and in-service teachers are consistently trained through task-oriented activities that enhance their knowledge in-practice (Alton-Lee, 2005). Therefore, task-oriented, reflective and collaborative tactics are encouraged repeatedly in the programmes.

Villegas-Reimers and Reimers (2000), proffered seven variables that are very pertinent to school-based professional development programmes:

1. Teachers' stage in their careers

2. Teachers' cognitive development stage

3. Stage of institutional development

4. Characteristics of students and communities

5. Socio-cultural factors impinging upon the institutional life of the school

6. Time to engage in professional learning activities

7. Financial support for teachers and programmes, (p. 49).

However, in this study the stage of tutors' careers in the teaching profession, collegiality and teamwork enhanced the SBPD, while institutional facilities, political decisions, time constraints, inadequate financial and ICT support constrained the SBPD at HCCOE (See pages 101, 114 and 128).

Some School-Based Professional Development in COEs

In Ghana School-based professional development (SBPD) comes in the form of School-Based In-service training (SBI) (GES, 2002a). The Ghana Education Service (GES) has stressed on the need for PD programmes to be

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more relevant and suited for meeting the peculiar needs of teachers in their respective classrooms. The GES had recommended that SBPD and Cluster-Based In-service training (CBI) be organized more often than the general In-Service Teachers training programmes (GES, 2002a; GOG, 2002). This is because SBPD has been found to be continuous in improving quality teaching/learning in most institutions in Ghana. School-based PD programmes are INSETs to solve some special needs or deficiencies identified by teachers themselves or by lead teachers and Curriculum leaders (GES, 2002b).

Currently in the COEs in Ghana apart from T-TEL programme, which forms a major chunk of the SBPD programmes organised for tutors in the COEs across the country, there are other SBPD programmes such as; Teacher Education for Sub-Saharan Africa (TESSA) programme, which is organised by UNESCO, World Bank and other private NGOs. There is also the Saving Africa By Rural Endeavour (SABRE) programme, which is mounted by SABRE Trust in partnership with UKAID and the government of Ghana (MOE, 2015; SABRE, 2017). While the T-TEL programme is an initiative of the Department For International Development (DFID), which is a UK Agency for International Development and the Government of Ghana with the mandate of developing laudable SBPD programmes for the tutors to teach effectively in the elevated Colleges of Education.

An assessment study of six Colleges of Education in Ghana; St Francis College of Education, OLA College of Education, Wesley College of Education, St Joseph's College of Education, Tamale College of Education and St John Bosco College of Education, was carried out in order to develop a better understanding of the way Colleges of Education function and the

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instructional challenges they encounter. The report showed that there is need for incentives and support services to be set up for each COE to improve on their management and training of the tutors through ongoing SBPD initiatives (T-TEL, 2015). The current study at HCCOE revealed that tutors in this college are also engaged in continuing SBPD, however, the focus of the study is not on incentives received by the management or the tutors.

However, it is envisaged that through the T-TEL there will be improved governance, management and pedagogical direction in all the 38 public Colleges of Education with direct participation of over 200 senior leaders. Therefore, T-TEL has designed a college-based tutor professional development programme which is supported by coaches, and provide free accessible online teaching and learning materials to over 1,500 tutors. In addition, 35,000 student teachers will be prepared and empowered for a career dedicated to improving young people (Education Sector Performance Report, 2016).

Conversely, this development have been criticised, based on the fact that most in-service and college-based tutor PD programmes fall short in their transmission models by covering a wide range of Colleges of Education, but are lacking in depth in addressing the current tutor practices and maximising student learning outcomes (Akomaning & Koomson, 2015; Fletcher & Shepherd, 2016). These studies are in line with the current study at HCCOE, where the tutors complained of single-shot and irregular workshops which do not meet individual tutors' professional needs, and lack adequate Research and ICT skills through the SBPD programmes (See page 113).

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T-TEL as school-based professional development

According to the Education Sector Performance Report (2016), T-TEL which is currently the vector for school-based tutor professional development in Colleges of Education in Ghana, undertook the following activities to strengthen the delivery of quality teacher education in Ghana:

1. Developed a National Teaching Standard in collaboration with NCTE and National Teaching Council.

2. Initiated Leadership and Management programme for College leaders.

3. Developed a draft Quality Assurance Toolkit and Self-assessment document in collaboration with NAB in the assessment and accreditation of Colleges of Education.

4. Initiated the training of Governing Council Members of the Colleges of Education in collaboration with NCTE.

5. Provided access to grants under the 'Challenge and the Payment by Results Funds' to promote innovation and incentivise COEs (p.76).

In addition, T-TEL is supporting the development of Colleges of Education Management Information System (CEMIS), to provide a framework for the management of teacher education data in Colleges of Education (Addae-Boahene, Awuku, Akummey, Alimo, & Anamuah-Mensah, 2016). The CEMIS is managed by NCTE. The present study revealed that T-TEL is the major and mandatory SBPD programme organised consistently every week for the tutors at HCCOE (See page 99).

SABRE as school-based professional development

The SABRE Trust Charity programme is a partnership between two independent Charities in the UK, and the Charity Commission in Ghana with

the Department of Social Development through DFID. It aims at improving the future of the Ghanaian child through investment in the area of Early Childhood Education (Ministry of Education, 2015).

The SABRE Trust initiatives was established since 14 years ago with GES. The GES, has made concerted efforts with concentration on intervention opportunities for Early Childhood education (SABRE, 2017). The SABRE Trust has made tutors and trainee teachers to be innovative in handling the kids at the kindergarten school levels, and it is also addressing the challenges of poor learning environment and weak teacher capacity (Colenso, 2009). With the increasing attention given to the improvement of Early Childhood education in the country by the various government, Brighter Future Programmes are delivered through two linked initiatives; Building Better Schools and Transforming Teacher Training. Currently, SABRE is in partnership with two COEs in the country, graduating newly qualified teachers, and setting up engaging learning school environment. The tutors are trained through SABRE programmes to eradicate the rote-based-chalk and talk way of learning, and adopt a more effective active and play-based approaches (MOE, 2015). Thus, through SABRE tutors learn through teamwork, student-centred and collaborative approaches. T-TEL and other NGOs provide technical expertise and support consultancy for the tutors and the student teachers. However, a major challenge facing these SBPD initiatives is in funding for principals to implement the new models in their colleges to enhance the tutors and trainees skills in early childhood programmes. The study at HCCOE corroborates these findings (See page119).

TESSA as school-based professional development

TESSA started in 2005 with 18 consortium, made up of 13 African institutions and 5 international organisations, delivering teacher education in 9 African countries; Ghana, Nigeria, Kenya, Rwanda, Zambia, South Africa, Sudan, Uganda and Tanzania (Thakrar, Wolfenden, & Zinn, 2009). TESSA is a research project and development programme fashioned to provide teachers and teacher educators with Online Educational Resources (OERs) to promote their school-based teacher professional development and practices. TESSA works through the consortium of the 18 institutions using a template for study units and web page that address each country's context. It is funded by private organisations and the Charity Trust.

The aim of TESSA is to provide quality assurance for teacher development at the local levels in the Ghanaian educational system. The collaborative learning, teamwork and PLCs within institutions and individuals contribute to the production of knowledge and the learning process in TESSA (Smith & Casserly, 2006). The inclusion of TESSA in SBPD is very imperative in providing Online Educational Resources (OERs), which aims at exposing tutors and students to local examples of case studies and resources which many text books do not provide, thus hindering the tutors practices in the classroom (Thakrar et al., 2009).

According to Moon (2008) TESSA provides new methods of finding, doing, and talking in the classroom. Thus, these new methods of adapting and sharing educational resources are targeted to address social and educational issues in the context of the COEs. TESSA, advocates for community partnership, and distributed management, where autonomy for teachers,

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lecturers and students is key in selecting OERs that best address the needs in their contexts. TESSA attempts to provide platforms to support teacher learning especially where local educational resources are scarce in addressing the realities of practical classroom teaching activities. Approaches in TESSA SBPD encourage collaborative designs, and subsequent integration of TESSA OERs into the Colleges of Education.

Barriers to effective SBPD in Ghana

Generally, among the barriers to effective SBPD programmes in schools and cluster schools is the challenge of the cost involved in running these programmes, inadequate resources and facilities. Even among cluster schools it is expensive, cost is borne by the respective schools (GES, 2002a; UNESCO, 2006). Time constraints in planning and implementing SBPD workshops has also been found to be a problem.

Another barrier that hampers the smooth organisation of the SBPD activities by teachers themselves, stems from petty misunderstanding among teachers, domineering attitude, lack of collaboration/teamwork, and poor leadership styles (GES, 2002a; UNESCO, 2006). However, if these are carefully managed, unnecessary competitions could be eliminated, and the goals achieved and professional learning outcomes will be met.

According to the GES (2002b) accessibility to internet, inadequate resources, support for teachers, and inadequate funding are among the major huddles that pose challenges to the SBPD programmes. Research has shown that the teachers who engage in SBPD and other teacher education programmes in Ghana just like their counterparts in many developing countries are constrained by government policies and those of accrediting

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institutions (OECD, 2008; Tharkrar, et al., 2009). These practices hinder autonomy of the teachers in addressing their professional needs and those of their students. The findings from the study at HCCOE corroborates this assertion as the constructivist approach to learning is compromised in the T-TEL workshops in addressing specific areas of the tutors' professional needs, but are geared towards achieving the reform agenda proposed by the government and accrediting institutions (See page 97). Also, the study at HCCOE is in line with Moon's (2008) findings, where the data revealed that the tutors who engage in the SABRE, T-TEL, and TESSA SBPD workshops find the programmes beneficial. However, they are constrained by time and inadequate ICT skills and facilities to access and engage with the Online Educational Resources (OERs) provided in the SBPD programmes at HCCOE (See page 126).

Related Studies in Africa

A review of some of the major challenges confronting developing nations in terms of adopting a technology driven teacher education and development, show that information and communications technologies are beneficial in all aspects of teacher professional development especially in the Science-related subjects. In a study that explored the potentials of ICTs for and in teachers' professional learning and development in Colleges of Education in Nigeria, and other developing countries. The findings point to the need to adopt an ICT driven approach to the pre-service and in-service training of teachers (Olakulehin, 2007). This is an enormous challenge for most SBPD programmes where teachers' pedagogy calls for some kind of enquiry and creativity in the teaching/learning activities in their classroom.

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Studies have shown that most SBPD across developing countries still use the one-shot fits all professional development to train teachers. This is true, especially in the Ghanaian context where such initiatives are used in training and upgrading teachers in various teacher education programmes (Akyeampong, 2003; OECD, 2009). This one-size fits all approach is a misnomer because studies have shown that individual teachers are unique and are at different levels in their professional development and career (Adekola, 2007; Fareo, 2013).

Similarly, a study conducted in Nigeria on teacher education on both pre-and in-service programmes for teachers show varying degrees of success. However, data gathered show that various problems still confront the programmes with far reaching consequences in Nigeria's educational system, as a result of top-down policies in education which are at variance with SBPD teacher professional development programmes (Ogunyinka, Innocent, & Adedoyin, 2015).The study suggests solutions to more innovative and holistic approach to better the lots of teacher education in Nigeria. Thus, we see in some developing countries in Africa a trend of going back to the old ways of doing things, while we crave for new innovations and constructivism and autonomy of teachers in their professional development.

Research study in South Africa carried out through a survey of 220 secondary school teachers suggests that teachers' performance are enhanced in school-based teachers professional learning activities when they are part of designing the PD programmes (Luneta, 2012). This study elucidates the study at HCCOE, where the tutors expressed satisfaction in addressing the

challenges they encounter in their teaching/learning activities, through the departmental workshops (See page 102).

The debates around continuous school-based teacher professional development by teachers themselves to enhance their professional learning and their students' performance is not different in Sub-Saharan Africa. This is seen through a study conducted in Dakar by UNESCO, the International Institute for Capacity Building in Africa (IICBA), the Association for the Development of Education in Africa (ADEA) and some other groups. These bodies engaged consultants who conducted surveys on SBPD programmes for teachers through different approaches in eight countries; the Central African Republic, Ghana, Madagascar, Mozambique, Niger, Nigeria, Senegal and Zambia. The findings revealed that given the right school environment and available resources for learning, teachers will be able to create sophisticated learning by and for themselves and make meaningful contributions to their own professional development, without the top-down interventions of policy makers (Junaid & Maka, 2015). The findings from the study at HCCOE, corroborate this study (See page 102).

In Botswana, the University of Botswana designed a training programme for in-service science teachers which was school-based. This programme blended online interaction with 'face-to-face workshops' in the school-based learning. However, it was unsuccessful because of lack of internet, ample time, and teachers' apathy towards the use of online modules that did not relate to teachers' classroom practice (Boitshwarelo, 2009, p. 10). This study was in the university, while the present study was conducted in at

HCCOE, which explored what and how the college tutors learn through SBPD.

The use of technology as a powerful tool in supporting inquiry-based learning that is constructivist in nature in the context of a school has been proffered by research studies (Hennessy, Harrison, & Wamakote, 2010; Tondeur et al., 2012; Voogt, Tilya, & van den Akker, 2009). These assertions resonated with Agezo (2010) who contended that CPDs must be technologically supported, to enhance discovery learning in the classroom, and curb the attrition of some teachers who show apathy to the use of technology in the teaching profession in Ghana. The study at HCCOE revealed the need for ICT to be adequately and continuously used in the SBPD workshops to make the professional learning of the tutors more meaningful, interesting and ultimately improve the student teachers' learning outcomes.

On a similar note, a study conducted in Nigeria examined the relationship between teachers' instructional tasks and their qualifications and teaching experience (Ayeni, 2011). The descriptive survey design was used in the study. Respondents included 60 principals and 540 teachers randomly selected from 60 secondary schools. Data collected using Teachers' Instructional Task Performance Rating Scale (TITPRS), Interview Guide for Principals (IGP) and Teachers' Focus Group Discussion Guide (TFGDG) showed significant relationships between teachers' qualifications and instructional task performance and between teachers' teaching experience and instructional task performance. However, the findings from the study suggested that challenges that teachers face in the tasks of instructional inputs and curriculum delivery require effective capacity development through CPD

during service, so as to improve the quality of teaching and the overall quality of the education system. Thus, teachers' prior experience are vital in learning outcomes but still needs to continuously improve through CPD in their context as is with the case study at HCCOE.

In a related study in Zimbabwe and South Africa on pre-service teachers' conceptions of what they learn and how they professionally develop through their teaching roles. The study showed that conceptualisation of the curriculum and learning materials were key variables to actualising classroom practice and learner achievement since they influence teachers' pedagogic approaches and choice of materials, content, and learner activities (Mukeredzi, 2013). This study is similar to the study at HCCOE, however, the focus is on what and how the tutors learn and possible changes in their practice through SBPD programmes.

Teachers are responsible for the translation and implementation of educational policies, thus the quality of teachers' instruction have significant impact on students' academic performance (Ejima, 2012). This key factor among others determines the extent to which institutions can achieve the national educational objectives set by government in their educational policies. It is a known fact that most recent educational reform agenda in Ghana is largely politically driven and teachers are entrusted with the task of translating these policies into actions. Teachers are therefore known as agents of change even in this instance (Asare & Nti, 2014). In order for this change to manifest, dimensions of a school's capacity must be addressed including the professional community and individual teachers' skill through continuous SBPD for teachers.

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Related Works in Other Regions

The findings of a survey conducted in China on the need for technological pedagogy in the professional learning of teachers in selected secondary schools, revealed that out of the 92% Science and English teachers in the study, 43% of the chemistry and English teachers never put their fingers on computer, and only 10% of the teachers were able to operate educational software. This was alluded to apathy on the part of the teachers to the use of computers in their classroom practice (Fang & Shao, 2007). Similarly, extensive research carried out in the United States of America, Canada, Australia and many European countries show growing trends and interest across developed countries in the use of technology in SBPD, as government and educators are making good use of SBPD as a tool for the attainment of curriculum reforms and goals of education (Day & Sachs, 2005; Easton, 2013, UNESCO, 2004).

Studies have also shown that professional development opportunities contextualised in schools and cluster of schools have been found to address the individual needs of teachers and specific school contexts needs (Alberta Teachers Association, 2007; Brodie, 2013). While supporting the contextualization of professional development (PD), Garet, Porter, Desimone, Birman, and Yoon (2001) asserted that the effectiveness of PDs lies in their sustainability over time, with intensive learning experiences at the core. These studies were conducted in China and USA, but the present study explored the professional learning of tutors at HCCOE through SBPD programmes.

A related study in China, showed that SBPD had great potentials of being the most effective and popular mode in delivery in rural China because

it was on-going, contextualised in school, with flexible timetable, and therefore reduced the interference of teachers' routine work to the minimum (McQuaide, 2011). In addition, training activities were organized specifically to respond to teachers' professional needs, and being able to best combine theoretical learning with practices. Coupled with these, was the fact that it had the lowest cost in comparison with other forms of training. In the same vein, Easton (2013) conducted studies in different countries that corroborated these variables as having influence on professional development of teachers contextualised in schools.

Significantly, institutions that have a kind of collegial learning embedded in school-based initiatives consider some of these variables, and promote a form of inquiry-driven atmosphere where they recognise that a decision taken at one stage may no longer address the situation because events keep evolving especially within the era of 21st century education, while values that are threatened to be eroded completely, are kept alive through reflection, re-evaluation and practice (Stoll, Bolam, McMahon, Wallace, & Thomas, 2006). Their study is in line with the study at HCCOE, which explored the professional learning of tutors through SBPD programmes. A report issued by the Department of Education and Science in Britain stated that: "Every school should regard the continued training of its teachers an essential part of its task, for which all members of staff share responsibility" (Bridges, 1995, p. 12). This buttresses the fact that institutional/school support, collaborative strategies and collegial learning are essential to ensuring the continuous professional development of teachers through school-based programmes as is the case of the target school in this study (See page 111).

According to Beare (1991), school-based learning driven by political rather than educational considerations are recurrent among developing countries. This study is in line with the study at HCCOE which elucidated the top-down practice of the T-TEL workshops in the SBPD at HCCOE, which is used in driving the reform agenda of the government of Ghana for the COEs across the country. Cochran-Smith and Lytle (1999) contended that teachers make a difference not only in terms of student learning outcomes, but in all areas of school reform. This assertion is in line with Darling-Hammond (2008) who posited that not only do teachers make a difference in students' learning, but suggests that teachers make all the difference as change agents through their teaching. A paucity of research studies support a link between students' achievement and the quality of teaching and teacher behaviours contextualised in the school (Chappuis, Chappuis, & Stiggins, 2009; Guskey & Sparks, 2002). Thus, quality teacher development and student learning is premium in any teacher development programme within the auspices of the school.

Research studies argue that many conventional forms of PD initiatives are often one-shot and unrelated to teachers practice and do not impact positively on teacher learning (Garet et al., 2001; Guskey, 2002; Villegas-Reimers, 2003; Wei, Darling-Hammond, Andree, Richardson, & Orphanos, 2009). Bertram (2011) and Garet et al. (2001) asserted that many of these initiatives are found to reach many teachers as possible in a short time, but proved problematic in assessing teachers' needs and performance. These non-school-based PDs are rarely able to make teachers change paradigm and improve their classroom practices. Guskey (2002) also agreed that, teachers need to experience changes positively in real-life contexts (school) in order to

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have a life changing impact on their own learning and subsequently on their learners.

Research is proving that any worthwhile teacher learning opportunity is often a slow, difficult, gradual, and sometimes an uncertain process, and are more realistic when contextualised in school (Borko, 2004; Richardson, 2003). Thus, school context plays a paramount role in a thorough preview of teachers' work, competences, knowledge, expectations and professional development needs in informing the organisers of such PDs. This assertions had implications for the management and tutors at the target school of study, where the tutors have experienced long standing SBPD to have meaningful impact on their classroom practices and improve the students' performance.

Teachers need to experience consistent sessions of learning, collaboration, and application, accompanied by school- and classroom-based support systems, over an ample time period to enable them internalise what they learn (Kennedy, 1991; Killion, 2006). Thus, in this scenario attention needs to be focused on the teachers as learners rather than as teachers. Thus, meaningful school-based teacher learning is advocated for in order to address teachers' specific development needs and conditions that make such learning successful (Guskey, 2002; McLaughlin & Talbert, 2006; Timperley, 2008). It is also reported that schools that are unusually effective, have in-service training and on-site professional development that are on-going, and are focused on practical considerations in teachers' professional learning (Ingersoll, 2012).

The Alberta Teachers' Association (2007) proffered that SBPD programme is the way by which individual school staff plan and implement

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teacher education programmes for their school staff. This may be in addition to or instead of participating in a system-wide professional learning initiative. Thus, school-based PDs are systematic efforts to bring about change in the classroom practices of teachers, in their attitudes and beliefs, and in the learning outcomes of students; which is considered an essential mechanism for deepening teachers' content knowledge and developing their teaching practice (ATA, 2007; Desimone, 2009; Guskey, 2003). The case study of the T-TEL, TESSA and SABRE, are designed along these systematic efforts to increase the standards of the tutors at the HCCOE to meet with their tertiary status.

According to Easton (2013, p. 10) in Poland, professional development comes in the form of school-based 'pedagog' who gives assistance to teachers and other colleagues with instructional strategies. This kind of professional training supports teachers with the instructional methods they need in teaching specific subjects, with collaboration as a major theme among such learning programmes. The professional learning is traditionally subject-oriented. Similarly, studies in Alberta and Canada show that school-based professional learning provides a wealth of support to teachers from both the Alberta Teachers' Association and Alberta Education (the ministry), which cooperated to devise teacher standards and worked collaboratively with other organizations to produce a bevy of support tools for teachers' professional learning (ATA, 2007).

In Chile the SBPD professional learning activities involves a teacher evaluation system which is based on self-evaluation, a portfolio, peer evaluation by an outside evaluator, and a third-party reference report. Teachers who do not perform well on the evaluations are given training, which may not

be adequate though. Those who perform well are offered rewards, common incentives which boost their motivation. However, the report revealed that the professional development was not of consistent quality and ineffective (Easton. 2013). The extrinsic motivation though present did not have impact on the adult learning (Knowles, Holton, Elwood & Swanson, 2014). Subsequently, a constructivist context, and the desire to learn (intrinsic motivation) could have achieved the learning objectives. This is based on the fact that teachers as adult learners want relevance in their professional learning to enable them meet the needs of their learners as seen in the case study at HCCOE (See pages 109 and 125).

Conversely, research studies also suggest that SBPD initiatives that give prominence to the subject matter knowledge of what is being taught, how it is learned and how to teach it, tend to facilitate more active school-based professional learning processes (Alton-Lee, 2005). Alton-Lee also contended that effective teacher professional learning involves collaborative learning, experiential learning, cognition and reflection on practice. Thus, SBPD is a process as well as a product, because it is a life-long process, which at same time aims at solving a problem in education.

A study in Georgia, which sought to determine teachers' perceptions of professional development activities which result in successful classroom integration of instructional technologies in schools found out that teachers perceive peer support or mentoring and technology personnel support or modelling, to be the two most effective forms of professional development activities which result in successful classroom integration of instructional technologies (Blackmon, 2013). The study further proffered that workshops

provided by school districts or outside consultants were perceived by teachers to be the most ineffective. Findings also showed that there was no correlation between teachers' age, years of experience, degree level and technology use. Unfortunately, many of the teachers reported being inadequately prepared to utilize instructional technologies in their classrooms. However, in this study the workshops were school-based, and the tutors perceived them as beneficial, but reported they were one-shot workshops and inadequate technological training in the SBPD needed in their teaching at HCCOE.

Similarly, a longitudinal study conducted in the United States by Desimone, Garet, Yoon, and Birman (2002) using a purposefully selected sample of about 207 teachers in 30 schools, in 10 districts in five states, examined features of teachers' professional development and its effects on changing teaching practice in mathematics and science teachers from 1996-1999. Findings show that CPD focused on specific instructional practices increases teachers' use of those practices in the classroom. Furthermore, that specific features such as active learning opportunities increase the effect of the professional development on teacher's instruction. This study is related to the case in HCCOE, as it explored what and how teachers learn through SBPD, and how their learning change their practice and student learning outcomes.

In New Zealand, a study was conducted on an evaluation of teachers' professional learning, data was generated from 25 teachers and 14 advisers in four schools. The focus was to evaluate the impact of the SBPD on how and what teachers learnt about teaching Physical Education, and how their learning impacted upon their classroom practices. The findings highlighted the difficulty of accommodating the teacher as a learner within a one size fits all

approach (Petrie & McGee, 2012). The study argued that providers of SBPD need to understand the unique complex web of contextual factors that impact upon each teacher, and that each teacher's learning needs is unique. This study is related to the study at the HCCOE, where the SBPD is the one-size fits all approach, and did not consider individual tutors' career stage, content area, aspirations and other professional needs. Thus, the need assessment of the tutors is imperative to what and how the tutors should learn through the SBPD.

Characteristics of School-Based Professional Development

Evidence based studies show that school-based PD programmes are characterised by certain attributes that are perceived to be relevant and applicable to school and classroom settings (Darling-Hammond, 2006; Easton, 2013; Guskey, 2002). The case of the top-down and one-size fits all is somehow taken care of as teachers in the same school or cluster schools take into account teachers' prior knowledge, experiences and needs in planning their professional development programmes (Darling-Hammond, 2006; Morrow, 2007).

According to the Alberta Teachers Association (2007), salient features of SBPD include: staff involvement in planning; based on the PD of the staff; on-going; a narrower focus with emphasis on depth coverage; focused on student learning and allowance for coaching and other forms of follow up. These assertions are supported by Hustler, McNamara, Jarvis, Londra, and Campbell (2003), who opined that SBPD invovled variety in relation to the different school contexts, career progression, and experiences of teachers. Features of SBPD include:

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1. Inter-relationships among teachers within the school, which is a very key in promoting collegiality, subject affiliations and prevents the isolation of any group of teachers. These foster reflection and interests acting as incentive for motivation, which invariably influence teachers' practice in the attainment of their students learning outcomes.

2. It enhances opportunities for professional control and self-regulation among teachers and their learning communities, as most teachers play out as mentors, group and team leaders.

3. Adult learners (tutors) are more motivated to learn in SBPD as individual differences are recognised as learners have some control over what and how they learn; and learning by doing is an important feature and a basic component of SBPD. As adult learners (tutors) are known to find more meaning in learning practical things which relates to their practice than abstracts.

4. Supportive leadership that collaborates with administrators and learners in designing and implementing PD activities (p.87).

In this study at HCCOE, the data showed that the tutors are not involved in planning the T-TEL workshops, while the tutors had representatives through their PDCs in the SABRE and TESSA workshops. But, with the departmental SBPD, the tutors plan and organise the workshops with the Management and HODs of the various departments. However, the study revealed some degree of collaboration, mentoring, and leadership support (See pages 102, 111 and 115).

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Relevance of School-Based Professional Development

Schools and institutions that promote SBPD enhance teachers' as well as students' development, because close attention is given to school context, departmental, grade levels, subject areas and other individual and organisational needs (Guskey & Yoon, 2009). As investment increases in SBPD, policy makers are increasingly asking for evidence about its effects not only on classroom practice, but also on student learning outcomes. They are also looking for research that can guide them in designing programmes that are more likely to lead to significant and sustained improvement in students' opportunities to learn. There is a need, therefore, for more sophisticated methods and innovative approaches for meeting these needs.

The time is long past when many professional development courses placed teachers in the role of an audience who answer to questionnaires distributed at the door as they make their exit from such workshops (Hudson, 2012). Strategies for continuing professional development of teachers have now become much more complex, long term and embedded in schools, and in most cases with teachers at the hem of their learning programmes.

Presently, the relevance of SBPD is also linked to the idea of teachers having the expertise to develop, implement, and evaluate SBPD goals and programmes; support and respect for the professional judgements of teachers by allowing them to determine their needs; providing them with time release, developing curriculum support materials, and on-line learning which enhances such initiatives (ATA, 2007). The relevance of the SBPD is in the shared responsibility of planning, collaboration, making informed decisions about practice, and respect for teachers' views about their learning. These invariably

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make teacher learning more meaningful and ultimately leads to improvement in the students' learning outcomes. In this study, the T-TEL and TESSA workshops in the SBPD at HCCOE, are top-down in their approach. A more bottom-up approach as seen in the Departmental workshops make the tutors more responsible for their professional learning, and meeting their professional needs and those of the student teachers

Studies have shown that SBPD learning strategies involved teachers in utilising a range of delivery models such as; action research, coaching, mentoring and teamwork (Ingvarson, Meiers, & Beavis, 2005). These strategies of institutional learning help to facilitate understanding of research findings and best practices that can assist participating teachers to have participant satisfaction, expand their pedagogy and improve student learning outcomes due to continuity in learning and practice contextualised in the school.

Little (2002, p. 190) stressed on the slogan "Examining student work for what matters most." This was coined nearly two decades ago and implied that systematic and collective attention to student work help to advance school-based teacher development and school reforms in every institution of learning. This study is similar to the SBPD strategies used by the tutors to enhance their professional learning.

Teacher Knowledge in School-Based Professional Learning

A knowledge base for teaching is not fixed or final. Teaching is one of the world's oldest professions, however, educational research on the systematic study of teaching, is a relatively new enterprise (Hartley & Whitehead, 2006). This is because much of the proposed knowledge base for

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teachers and the teaching profession is still evolving with research. The teacher is presumably one who knows something not understood by his/her students (Fenstermacher, 1986). Thus, the teacher can transform understanding, performance skills, or desired attitudes or values into pedagogical representations and actions. However, these conceptions about the teacher and teaching is limited. Teaching is therefore, more than the enhancement of understanding.

According to Hartley and Whitehead (2006) teaching as a profession requires a knowledge base that consists at minimum:

1. Content Knowledge

2. General pedagogical knowledge, special reference to those broad principles and strategies of classroom management and organisation that appear to transcend subject matter;

3. Curriculum knowledge, with particular grasp of the materials and programmes that serve as 'tools of the trade' for teachers;

4. Pedagogical content knowledge, that special amalgam of content and pedagogy that is uniquely the province of teachers, their own special form of professional understanding;

5. Knowledge of the learners and their characteristics;

6. Knowledge of educational contexts, ranging from the workings of the group classroom, governance and financing of school districts, to the character of communities and cultures; and

7. Knowledge of educational ends, purposes, and values and their philosophical and historical grounds (p. 127).

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Current research has suggested that more experienced teacher educators still need expertise in curriculum development and assessment; a focus on research and inquiry-based learning to make significant changes in their practice as well as advance teacher knowledge acquisition (Dengerink, Lunenberg, & Kool, 2015; Kavanoz, Yüksel, & Varol, 2017). The present study at HCCOE corroborates these assertions, as the findings showed that the need for more teacher knowledge activities in research and publication in the SBPD initiatives to enhance the tutors' practice and improve student learning outcomes (See page 110).

Freeman (2002), argued that teachers' mental lives represent the concealed side of teaching. Examining how teacher learning and teacher knowledge, are central to their mental lives which have been conceptualized and studied over decades, Freeman (2002), traced connections to similar work in English language teaching (ELT), and suggested four issues for analysis: how teachers learn content and teaching practices, how teachers' mental processes are conceived, the role of prior knowledge in learning to teach, and the role of social and institutional context. Taken together, these areas suggest what Second language teachers in English should learn. This is related to the study which explored what and how tutors learn at HCCOE through SBPD.

According to Verloop, Van Driel, and Meijer (2001) "Teacher knowledge is the total knowledge that a teacher has at his or her disposal at a particular moment which, by definition underlies his or her actions" (p.5). Thus, teacher knowledge is the knowledge that teachers must have prior to teaching practice and built on continuously through CPDs such as SBPD activities. This kind of knowledge is difficult to make explicit or to represent

in a textual form because it is acquired informally through participation in social activities. Relating this assumption to the study at the target school it premised that the tutors' daily interactions at HCCOE offer learning opportunities for them and enhance their prior knowledge as well as their knowledge in the teaching profession.

In similar manner, Zeidler (2002) argued that within Science education reform, three basic criteria have been teachers' the subject matter knowledge, pedagogical knowledge and pedagogical content knowledge. Evidence based research asserts that, quality teaching and teacher development is anchored to PD programmes that deal with teacher learning, teacher knowledge and pedagogy (Bertram, 2011; Boitshwarelo, 2009). These they contend provide teachers with skills for probing the intellectual capabilities of students in eliciting from them that curiosity and interest in learning through praxis.

Conceptions are "more general mental structures, encompassing beliefs, meanings, concepts, propositions, rules, mental images, preferences and the like" (Brown, 2004, p. 303). They represent different categories of ideas that teachers hold behind descriptions of how they experience educational phenomena and provide frameworks for understanding, interpreting, and interacting with the teaching/learning environment. Hence, conceptions of teaching/learning and curricula influence classroom practices and student learning outcomes (Calderhead, 1996). In addition, changes in teachers' understandings of teaching/learning and curricula precede changes in their practice (Brown, 2004). Hence, teachers' conceptions can be seen as one of the determining factors in teacher knowledge for effective learning in Mathematics and building teacher knowledge in other subjects.

However, Vinner (2002) argued that teachers may form in their classes a sequence of definitions, theorems and proofs as a skeleton for their course, but following these sequences may be pedagogically wrong in knowledge acquisition. Therefore, the teacher should take into account the common psychological processes of concept acquisition and logical reasoning.

General pedagogical knowledge (GPK)

The first domain in teacher knowledge is General Pedagogical knowledge. Grossman (1990) asserts that, general pedagogical knowledge has been the focus of most research teaching. It includes a body of general knowledge, beliefs and skills related to teaching, knowledge and beliefs concerning learning and learners, as well as knowledge of the general principles of instruction. Shulman (1987) propounded that general pedagogical knowledge is the broad principles and strategies of classroom management and organisation that appear to transcend subject matter. Shulman referred GPK as common knowledge of academic principles of learning and teaching, and this type of knowledge deals with generic skills that educators are expected to obtain to help them to deal with the general demands of the classroom.

Hartley and Whitehead (2006) contended that if a teacher has to 'know the territory' of teaching, then it is the landscape of such materials, institutions, organisations, and mechanisms with which he or she must be familiar. These comprise both the tools of the trade and the contextual conditions that will either facilitate or inhibit the teaching and learning efforts. Thus, a knowledge of the GPK is pertinent in any SPBD which seeks to

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advance teachers' learning and student learning outcomes, a feature which is very pertinent in this study.

Research has shown that most schools and even teachers on their own seek avenues of engaging in various professional learning through professional development programmes to improve their GPK and effectiveness in the classroom (Guskey, 1999; Rebore, 2007). Thus, Momanyi (2012) corroborated that "teaching is a dynamic profession; where new knowledge and learning do emerge that require new types of expertise among educators" (p. 206).

In South Africa, Mukeredzi (2014) studied how and what student teachers in Foundation Phase, Intermediate/Senior Phase and Foundation Elementary Teachers learn during teaching practice. These pre-service teachers learnt and developed a range of general pedagogical knowledge (GPK) skills and pedagogical content knowledge (PCK) from collaborating with subject peers, individual reflection as well as engagement in classroom practice, and preparation of various teaching materials. However, these student-teachers were on teaching practice, while this study explored what and how tutors at HCCOE, learned through SBPD programmes. Data, showed both studies to be similar in enhancing the GPK and PCK of teachers through collaborative and reflective strategies.

In a related study in China, which explored teachers' choice of teaching materials when it comes to English teaching and learning resources, data collected from a total of 24 EFL teachers from different universities across China who participated in focus group interviews, showed that teachers' beliefs regarding language teaching, their perceptions of the contents

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and general pedagogy of Australian-based digital English learning resources, as well as materials selection were challenged due to the application of current technologies in the language education (Yuan, Shen, & Ewing, 2017). However, through the interactive process of the study, participating teachers learned to appreciate Australian-based digital English resources, particularly the Australian culture, language and pedagogy embedded. A reflective process was also triggered in which the Chinese EFL teachers showed willingness to re-examine their instructional practices and utilise the digital resources by adopting a more learner-centred pedagogy for optimal learning outcomes. The use of online digital resources in advancing teacher knowledge and professional development is an imperative that cannot be compromised in contemporary world of 21st century education (Tondeur et al. 2012).

A study in Ghana, through the T-TEL programme showed that all the 38 Colleges of Education hold SBPD sessions every week. The study revealed that 79 PDCs are capable of confidently conducting PD sessions, while tutors are more reflective on their practice and are capable of using strategies learnt at PD sessions. The study concludes that 68% of tutors observed used at least one strategy from the T-TEL programme in teaching (Addae-Boahene, Awuku, Akummey, Alimo, & Anamuah-Mensah, 2016). The study is related to the study at HCCOE, however it is focused on what and how the tutors learn through SBPD programmes, and how they change their practice.

Kelly (2006) contended that the general pedagogical knowledge of teachers which enhances good teacher qualities can thrive only in a positive and supportive school environment. These qualities cannot be practiced most effectively by individual teachers rather through a community of practice

functioning as a social network, within the school community. Data from this case study at Holy Child College of Education, revealed collaborative endeavours among the tutors and the management, which is maintained through a supportive school environment, in changing the practice of the college tutors through the SBPD programmes (See page 101).

Content knowledge (CK)

Shulman (1987, p. 7) stated that, "Content knowledge or Subject matter knowledge refers to the amount and organisation of knowledge per se in the mind of the teacher." On the other hand, Grossman (1990) asserted that knowledge of content refers to knowledge of the major facts and concepts within the field. Subject matter knowledge therefore is made up of the teacher's knowledge of and about, the content that she or he will teach.

According to Ball (2016, p. 3) Content Knowledge for Teaching (CKT) includes:

1. Knowing the content that the students are supposed to learn

2. Knowing ways to unpack, represent, and make that content learnable

3. Knowing how students think about the specific content

4. Knowing ways to teach the specific content (p.9).

However, Bertram (2011) contends that what is really important for teachers who engage in professional learning activities with regards to Subject matter/ Content knowledge is the understanding of fundamental concepts in their subject areas, and not just having a huge collection of only the facts about each subject. It is this understanding of the basic concepts, their relationships and organisation that helps the teachers to use their subject matter knowledge effectively in teaching and learning.

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In the same vein, Kennedy (1991) asserted that having a major in your subject area does not necessarily mean one has the disciplinary knowledge, as indicated in a study carried out in the US, which showed that teachers who had a major in their subject were often no more able than other teachers to explain basic concepts in their discipline. Thus, a deep comprehension of the fundamental or key concepts embedded in the subject areas is essential in any meaningful professional learning of teachers.

A study conducted in Brazil investigated how four prospective teachers interpret and use text books while learning to teach mathematics during their university coursework and practicum teaching in the university. Results indicated that prospective teachers had varied approaches to using text books ranging from adherence, elaboration, and creation (Nicol & Crespo, 2006). Factors influencing how the teachers engaged with texts include their practicum classroom setting, access to resources, and their understanding of mathematics. Findings indicate that the practicum can, however, challenge preservice teachers to be creative and flexible users of curriculum materials and develop their CK as well. This study is related to the case study in HCCOE, where the engagement of the college tutors in producing their Teaching Learning Materials in the TESSA and especially SABRE school-based workshops played significant roles in enhancing the tutors' Content Knowledge and trainees' learning outcomes.

In a research study in Ghana Polytechnics which explored the impact of collaborative curriculum design on teacher professional development and curriculum practices, the study revealed that collective vision, reflection, shared understanding of advancing students' learning, teamwork promote

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creativity in the Content Knowledge of teachers (Bakah, 2011). However, this study is at Holy Child college of Education, Ghana, but shares the same understanding with the study at the Polytechnics. Hence, data from this study showed that group work, peer review of lesson notes, collegial learning and reflective strategies through the SBPD promote the learning of content knowledge by the tutors in their various course areas (See 101).

Pedagogical content knowledge (PCK)

Shulman (1987, p.127) described pedagogical content knowledge as the "blending of content and pedagogy 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." This significantly shows how the teacher re-contextualises his/her content for proper understanding by the learners. Some researchers view PCK as a collection of teacher pedagogical constructions (Ball, 2016; Hashweh, 2005). PCK is a contested term, as there is no clarity of what meanings to pin on it (Bertram, 2011). However, there is general agreement that teachers need more than just a deep knowledge of their discipline in teaching and learning (Adler, Slonimsky, & Reed, 2002). They argued that teachers' broad knowledge and deep knowledge is necessary but not sufficient, because this knowledge needs to be changed into "sequenced, graded, and developed into tasks for learners, learning and assessment" (p. 139).

The lack of impact of many professional learning activities is attributed to the fact that they are not anchored on the understanding of the processes of teacher learning and teacher knowledge (Bertram 2011; Morrow, 2007). Bertram suggests that organisers of CPD pay attention to what knowledge

teachers learn, the ways/styles through which they learn, and significantly, how such knowledge benefit the teachers and consequently the learning outcomes of their students. This she further stressed is what can change teachers' practice.

Contributing to the debates, Ball (2016) suggests a knowledge of the Curriculum, which gives the content/subject matter knowledge the pedagogy for instruction. This study will add that, a sound knowledge of the curriculum is imperative, but the 'how' to unpack the 'thinking' through the different topics meaningfully to create understanding for learners is even more pertinent in enhancing the PCK of the teacher and achieving the desired learning outcomes.

The notion of pedagogical reasoning places emphasis on the intellectual basis for teaching performance rather than behaviour alone (Shulman, 1987). Shulman argues that if this conception is taken seriously, both the organisation and content of teacher education programmes and the definition of the scholarly foundations of education will require a revision. An emphasis on pedagogical content knowledge (PCK) would then mean the teachers being part of the preparation of the curriculum. Shulman further opined that the focus would be on the teacher's ability to reason about teaching and to teach specific topics, and the basis of his/her actions premised on the scrutiny of the professional community. Needed change cannot occur without risks. On this premise, the data from the study at HCCOE showed that teachers had no role in the planning of T-TEL, SABRE and TESSA SBPD programmes, which constitute a major part of their professional learning and teaching practices at the SBPD programmes. But they do have representatives

in SABRE and TESSA at the national levels (See page 102). More so, the Council of the Colleges of Education do not plan these professional development workshops, rather accredited institutions such as GES, NTC, NAB, DFID and other educational bodies do the planning of these programmes (GOG, 2012).

Knowledge of context

Grossman (1990, p. 90) defined knowledge of context as: "Understanding of particular context in which teachers teach, thus having knowledge of districts in which teachers work, including the opportunities, expectations and constraints posed by the districts; knowledge of school setting, including the school culture, departmental guidelines, and other contextual factors at the school level that affect instruction and knowledge of specific students and communities, and the students' background families, particular strengths and weaknesses." This is related to the study at HCCOE, which elucidated what and how the tutors at the college learnt in the SBPD programmes.

Ball, Hill, and Bass (2005) posited that classroom problems such as mathematical problems connote context. While it seemed obvious that teachers had to know the topics and procedures they teach; factoring, primes, and so on, it is suggested that teachers have additional knowledge as to what works beyond the classroom for students to be successful in mathematics. Ball, Hill and Bass suggest that context involves the interactive work of teaching lessons in classrooms and all the tasks that arise in the course of that, which includes explanation, listening, examining students' work, knowing about the students beyond the classroom, and meeting with their parents. Thus,

in teaching mathematics there is more to knowing the subject than meets the eye. The study is related to the case study at HCCOE as it explores tutors' knowledge.

A knowledge of the different contexts in every teacher education programme is paramount, for the sake of quality and relevance to the teaching and learning processes. Transformative approaches in CPD reject top-down practices imported from the centres of power, and places premium on relevance to local content, which includes the knowledge of the whole school community and beyond (UNESCO, 2004). Knowledge of Context goes beyond knowledge of classroom but the community and its environs for enhancing teachers' knowledge of content, pedagogy, and reduces individual teacher's anxiety in classroom/ topic management (Ranjbar & Narafshan, 2016). This case study explored what and how tutors in HCCOE learnt through SBPD, and how they change their practice. Therefore, the knowledge of the college context is very key in understanding the role it plays in the learning outcomes of the tutors in the SBPD at HCCOE.

Reflecting critically on current pedagogical practices in Ghana in relation to inclusive education using a critical post-colonial discursive framework, Agbenyega and Deku (2011) argued that the existing pedagogical practices in the Ghanaian educational system, are intensely oppressive. The study examined the impact of colonial and cultural practices (beliefs, values, norms) on teaching and learning outcomes of students, using data obtained from three focus groups with 21 student teachers, a total of 42 hours of non-participant observation of their classroom teaching and existing research commentaries. The data revealed that current pedagogical practices are

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prescriptive, mechanistic, and do not value student diversity and different learning styles. The study concludes with new directions for teacher education programmes in Ghana that value and celebrate diversity, and differences in learners. However, this study is on what tutors learn through SBPD at HCCOE.

Therefore, in this era of educational reform in the COEs in Ghana, progressive gains through SBPD initiatives, will depend on teachers' individual and collective capacity to link with schoolwide capacity for promoting teachers' and most importantly students' learning in diverse ways. Building capacity through knowledge of their context is therefore critical. Capacity for the tutors in HCCOE will entail a complex blend of motivation, skills, active learning, collaboration, and infrastructural support systems. Put together, it will give the college community and systems the power to get involved in, and sustain tutors' and students' learning over time. Thus, at the end of it all, the transformative change in teachers' practices will be attained, but most significantly improved student learning outcomes might be achieved through the SBPD programmes.

Teacher Learning in School-Based Programmes

Teacher learning is seen as a process by which novice-teachers move towards expertise (Evans, 2002). Teacher learning is contended to be at the core of CPD activities aimed at improving teacher development (Bertram, 2011).

However, Kelly (2006) posited that teacher learning is the process by which teachers move towards expertise. This is based on the argument that the entire process of teacher development is a continuous and lifelong process

(CPD) and not limited to pre-service (novice) teachers alone. This assertion resonates with some scholars in teacher development studies (Dolan, 2012; Garet et al., 2001; Leu & Price-Rom, 2006) who opine that the entire process of teacher learning is lifelong and not a one day snapshot. Thus, any school-based PD programme that features this continuity and coherency is in line with teacher learning activities as it is in the SBPD at HCCOE.

According to Kelly (2006) the professional is one who is "… competent and develops excellence through measurable, pre-defined standard" (p.506). Professional skills such as values, attitudes, knowledge and understanding can be described readily, defined meaningfully and delivered through interactions and simple transfers. In this study data revealed that the tutors developed professionally through active learning, collaborative discussions, teamwork and coaching in advancing their teacher learning through the SBPD at HCCOE which subsequently leads to change in their practice (See page 114).

Interestingly, growing towards teacher expertise or professionalism is premised on the notion that professionalism is not resided entirely in an individuals' mind but it is a learning process which considers knowledge-in-practice or tacit knowledge for knowing what is distributed across people and settings (Borko, 2004; Kelly, 2006). This is the idea in professional learning communities situated in a school context, as seen in the study at HCCOE.

Hoban (2002) attested that, there are increasing range of literature focusing on particular aspects of CPD, be they school-based or off-site, but there is a paucity of literature addressing the various models of learning in like manner. Kennedy (2005) agreed with Hoban, but posited that the main crux

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is to find models of teacher professional learning that adopt and explore the circumstances and forms of knowledge that can be developed through particular models that are related to the teachers' classroom practice. The questions as to how teachers learn in many forms of CPD suggest approaches to learning that integrate the individual teacher into the collective efforts of other teachers as learners in their practice (Wallace & Loughran, 2012). Therefore, Teacher Learning (TL) focuses on research with and by teachers, and on building teachers' knowledge about the teaching practice, and recognises the inextricable connection between teachers' learning and students' learning.

Studies on teacher learning show that such learning takes place in multiple learning contexts, combining in-school and out-of-school activities, theory and practice-based learning experiences, with ongoing support for teachers to learn from their peers/mentors and to integrate these ideas into their classroom practices (Lieberman & Mace, 2008; Loughran, Berry, & Mulhall, 2006). Thus, teacher learning activities may run in different contexts in a school/ cluster of schools, but is consistent in encouraging continuous support, collaborative learning and praxis which relates to the teachers' classroom practices. This is related to the current study at HCCOE, where tutors' collaborative learning enhanced their change in practice.

In a study of Irish teachers' curriculum development, which is related to Bakah's (2011) findings in a study in Ghana, Avalos' (1998) findings revealed that the development of experiential learning at the early stages of teachers' professional development was initiated through SBPD. Avalos contended that, SBPD allowed teachers to go through student learning

outcomes, experience new pedagogical approaches as learners themselves, and adapt such approaches to their practice, before implementing them in their own classrooms. Avalos, further proffered that experiential learning by teachers through SBPD, helped teachers in Irish second level schools to make significant pedagogic changes to a major curriculum reform. This study is related to the study at HCCOE, where the tutors' self-reflections, collegiality and teamwork demonstrate how the SBPD activities influenced their teacher/professional learning experiences, resulting in meaningful changes to their practice and improved the student teachers' learning outcomes.

On a similar note, Knowles, Holton, Elwood and Swanson (2014) suggested some principles of adult learning that are related to teacher learning experiences as posited by Kolb, 1984, which are pertinent to this study. These include:

1. Adults (teachers) need to be involved in the planning and evaluation of their instruction.

2. Experiences (including mistakes) provide the basis for the learning activities.

3. Adult learners are most interested in learning subjects that have immediate relevance on their job or personal life.

4. Adults' needs, aspirations and assumptions are to be respected in their learning activities.

5. Adult learning is more practical/task-oriented than theory-oriented.

These adult learning principles were pertinent in understanding the tutors' professional learning experiences, and elucidated professional learning models that contributed to the tutors' change in practice through the SBPD.

Professional learning models in SBPD

Teacher professional learning models are used in teacher learning initiatives to develop the pedagogical and content knowledge of pre-service as well as in-service teachers' competencies aimed at enhancing classroom practice (Kennedy, 2005). Fullan (1993) postulated that any teacher professional learning model, adopted by organisers of SBPD programmes, must be carefully and strategically designed and implemented to provide continuity between what teachers learn, and what goes on in their classrooms. Fullan, further contended that such CPDs should be constructivist in approach to influence institutions, produce long-lasting effects on teachers' competencies and enhance students' learning outcomes.

Studies on CPDs for teachers, showed that the difficulties experienced in the implementation of constructivist ideas and active-learning approaches in CPD through PLCs, are challenging but worthwhile (Kennedy, 2005; Timperley & Alton-Lee, 2008). The adoption of a constructivist approach to SBPD, is challenging as evidenced at HCCOE, where the mandatory T-TEL initiative seems to have adopted a constructivist-based approach, but is compromised by government reform agenda (T-TEL, 2017a). Also, the mode of delivery do not give the tutors full autonomy in planning/organising the SBPD to meet their professional needs. One thing that is imperative to note is that with the desire for quality teacher education and reform taking place at the same time in the COEs in Ghana, a huge burden falls on the tutors and their PDCs to adopt teacher learning models which are experiential and constructivist in nature to address their professional knowledge and improve their practice.

Consequently, most developing countries in Africa prefer the traditional transmission models that cover many teachers in a single shot, a situation alluded to lack of resources to fund such SBPD (Alexander 2000; UNESCO, 2004). However, key issues to consider in organising constructivist teacher learning models include; adequate teacher preparation to understand strategies appropriate for active learning; and appropriateness of these strategies to a particular context, collegial implementation and various forms of follow up in the programmes (Alexander, 2000; Davis, 2003). Active learning has been understood to be best implemented within a system (school), where group work is the norm (Borko, 2004). Schools and classrooms provide opportunities for inquiry, experimentation, reflection, and dialogue. They are powerful contexts where teacher and student learning activities are experienced and experimented.

The Constructivist approach to teacher learning and active learning models demands consistency in learning activities, reflection, collaboration and continuous feedback (Kennedy, 2005). The following are some teacher learning models of SBPD:

The training model (TM)

The training model is the traditional and universally practised model. The model supports a skill-based, technocratic view of teaching whereby providers of the CPD provide teachers with opportunity to upgrade their skills in order to be competent in the classroom (Kennedy, 2005). It is generally transmitted by an expert with the agenda determined by the deliverer, while the teachers play no role in their learning but are passive recipients of knowledge (Kennedy, 2005). This model depicts the top-down practices of

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professional learning programmes, and has been argued against as not quite connected with the basic purposes that are at the core of teachers' 'professionalism' (Day, 1999, p.49). This model is in line with the top-down approach of the T-TEL workshops at the HCCOE, where constructivist approach to SBPD is desired by the tutors. However, the T-TEL programme is a government of Ghana reform agenda to train the tutors in the COEs to meet with the status of a tertiary institution (T-TEL, 2017a).

Similarly, in some African countries, the training model has been found to be compatible with, but not related to standards-based view of teacher development initiatives where teachers struggle to meet with the national demands by policy makers (Luneta, 2012). This is in line with the mandatory T-TEL programme at HCCOE, where the attention is not on individual teacher professional development needs and skills, rather the T-TEL places premium on what the teacher education policy stipulates for all teachers across board, with STEM as the core mandate (Fletcher & Shepherd, 2016b). The Science, Technology, Engineering, Mathematics (STEM) subjects are aimed at training a particular section of tutors. However, this model has proved to be a powerful tool in maintaining standards in teacher education, but lacking in meeting teachers' developmental needs, which is often the case in most developing countries where wide coverage rather than depth is the focus (UNESCO, 2004).

The award-bearing model

This model places emphasis on the completion of award-bearing programmes that are exclusively validated by universities and other control bodies (Kennedy, 2005). The external validation is seen as a measure of

quality assurance. It is also criticised as a means of power- control on teachers. Critics are also of the opinion that this model emphasizes more on the award-bearing courses than on teachers' classroom practice, values and aspirations which are central in their professional learning (Shulman & Shulman, 2004).

The current situation where most in-service teacher education programmes in the COEs in Ghana are tied to award-bearing courses in the curriculum of accrediting universities, is seen as having little or no impact on the tutors' practices (Mikulska, 2017). The focus and impact of such PDs is lost on the tutors who see it as avenues of getting certified rather than, enhancing their classroom practice. Kennedy (2005) opined that most of these award-bearing courses are often one-shot examination course and top-down in content as they do not address specific teacher education issues.

The deficit model

This a model which is specifically designed to address the perceived deficit in teacher performance (Rhodes & Beneicke, 2003). While this model uses CPD to remedy perceived weaknesses in individual teachers, Rhodes and Beneicke argued that the root cause of poor teacher performance are not only related to individual teachers' incompetence, but also to organisational and management practices. Thus, collective responsibility should be considered in using this model to address teacher learning experiences in any SBPD programme as well as institutional challenges. However, data from this study at HCCOE, showed that there is management support and collaborate effectively with the tutors in the SBPD, but are constrained by ICT facilities.

Boreham (2004) suggests that in addressing the issue of individual and collective competence learning of teachers, the school context and most

especially the type of leadership in the school play major roles in promoting learning based on the following conditions:

1. making collective sense of events in the institution

2. developing and using a collective knowledge base

3. developing a sense of interdependency (p.9).

Professional learning communities (PLCs) model

A professional learning community can refer to the whole school or the classroom or even at the level of a specific subject department, creating networks within their community of practice (Timperley & Alton-Lee, 2008). These sub communities can also be organised along departments, grade levels, pedagogical styles, students and subject levels (DuFour, 2004; Grodsky & Gamoran, 2003). This is in line with the departmental workshops at HCCOE.

Two critical elements that are highlighted in a school that is a PLC includes; the school must nurture a collective focus on student learning and the promotion of a collaborative environment where teachers are encouraged to work together to share understandings of students, curriculum and instructional policy. Secondly, the school must provide resources such as materials, buildings, books, computers and human resources in the form of teachers' ability to instruct (Alton-Lee, 2005; Avalos, 2011).

A powerful form of teacher learning can come from belonging to these kinds of PLCs by legitimizing dialogue and supporting risk-taking, a necessary part of any process of significant change (Clarke & Hollingsworth, 2002). The reported impact of PLC on knowledge and practice together as a mediating variable is very significant in any teacher learning and development, where change in teachers' classroom practice is the agenda

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(Garet et al., 2001; Herrington, Herrington, Hoban, & Reid, 2009). The teacher is always functioning as part of a social network, either with his or her students or within the school community. A strong school community and strong school leadership are of overriding importance in bringing teachers together as a community of learning (Graham, 2007; Lieberman & Miller, 2008). This is related to the study at HCCOE, where there is community of practice through the SBPD (See 111).

According to Dolan (2012) collaborative examination of students' work are part of any effective professional learning community, as it leads teachers to examine their students' work in relation to external reference points or standards. Wong and Luft (2015) are of the view that teachers gain a great deal of valuable learning from opportunities to examine students' work in collaboration with colleagues based on standards on what students should know and be able to do. Collaborative analyses of students' work opens up many avenues for teachers to de-privatise their practice and learn from each other. It also leads to deeper understanding of student learning outcomes and greater discrimination about what counts in meeting those objectives in the classroom.

Little (2002) found that the norms of collegiality and experimentation in US schools were most responsible for the development of teacher leaders and for fostering teacher professionalism. Little's findings revealed that when teachers and principals observed each other in classrooms, had time to talk about their practice, find solutions for commonly defined problems, the lives of the teachers in the schools are transformed to one of shared ownership of issues, a willingness to consider alternatives to challenges, and a desire for

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more collegiality and interest in work. This is related to the PLC practised through the departmental workshops organised by the tutors, HODs and the management of the HCCOE, in meeting the professional learning of the tutors and addressing any challenges in student learning outcomes (See page 115).

Similarly, in a study carried out in UK which contributed to the ideas about what teachers learn from both teacher education and workplace literature, Wilson and Demetrious (2007) explored what and how ten newly qualified secondary school teachers learn in the early years of their career. Wilson and Demetrious discovered that teachers mainly learn through reacting to day to day classroom issues and informal dialogue with colleagues. The study, highlighted the importance of teachers as learners and collegiality in a PLC. This assertion is supported by Johnson (2009) who highlighted the importance of dialogic mediation and collaboration as an imperative in teachers' learning:

> "Teaching as dialogic mediation involves contributions and discoveries by learners, as well as the assistance of an 'expert' collaborator, or teacher. Instruction in such a collaborative activity is contingent on teachers' and learners' activities and related to what they are trying to do" (p. 63).

A study on recruitment, retention, and retraining of secondary school teachers in Sub-Saharan Africa demonstrated that strategies to improve the conditions for teachers that resulted in a more motivated teacher corps, included creating learning communities among teachers to discuss teaching and learning issues; having experienced teachers mentor newer teachers; and

improving the classroom environment by providing adequate curriculum, books, and instructional materials (Mulkeen, Chapman, & DeJaeghere, 2005).

Morrow (2007, p. 107) posited that one key purpose of PD is to develop teachers' competence and to organise "systematic learning" which entails practice that "centres around the design of learning programmes that foster the gradual development of competences that cannot be learned in an instant." Morrow contended that PLC must focus on what and how teachers learn, which is informed by research on teacher knowledge and teacher learning.

Garet et al. (2001) conducted a quantitative study on the evaluation of the Eisenhower PD programme directed specifically at mathematics and science teachers. The study drew on a national probability sample of school districts who had received Eisenhower funds. Their survey was based on a nationally representative sample of about 1500 teachers who had attended these activities in various schools. The findings from the study showed that content focus and active learning have a significant impact on knowledge in professional learning communities. The study though quantitative is related to study at HCCOE. However, it is a qualitative study which explored the professional learning of teachers through SBPD programmes.

The coaching/mentoring model

Mentoring as a popular strategy for teacher professional development gained attention for the first time in the 1980's for assisting novice or student teachers (Wang & Ha, 2009). The coaching or mentoring model covers a variety of CPD practices that are based on a range of philosophical premises.

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However, the defining characteristic is provision of support between two teachers in a one-to-one relationship (Kennedy, 2005).

According to Ingersoll (2012) mentoring provides most beginning and pre-service teachers the opportunity of learning from and guided by an expert/experienced teacher. Thus, the active learning enshrined in mentoring model in teacher learning programme has to do with a professional teacher guiding a novice teacher to develop and own his or her own learning in the teaching practice.

Specifically, the learning in this approach is based on Vygotsky's concept of proximal development that claims to help children perform tasks normally beyond their ability with the aid of an adult (Berk & Winsler, 1995). The experienced teacher becomes facilitator with Vygotsky's stress on experiential learning. The mentor must design the interplay of cognitive, emotional and external interactions to benefit the mentee. However, it is important that individual learners create their own understandings based on their experience and the interactions of what they know and believe, while the mentor's role would be to facilitate mentee's discovery of principles by him/herself (Richardson, 2003). These assertions elucidate the study at HCCOE, where the tutors are trained through the SBPD to mentor newly qualified tutors who join the PLC in the college. These mentees are mentored by persons they referred to as their "Critical Friends", who observe them during their teaching and afterwards gives them feedback (See page 115).

Mentoring as a teacher learning model include the following characteristics:

1. It is a powerful device that may help teachers develop new insights into their profession. This is true whether we are talking about experienced or new teachers;

2. It helps move the novice teacher from a level of mere survival to initial success when used with beginning teachers. When applied to experienced teachers, mentoring can be a way for professionals to develop a sense of renewed enthusiasm for their jobs and enhance commitment for the profession;

3. Mentoring may reduce isolation and can build a collegial network among teachers (Daresh, 2003, p. 7).

Mentoring and school context

Understanding the context in which the mentee teacher is working is vital to the success of the mentoring relationship. Research studies on SBPD indicate that sustained and active learning interventions can change teacher attitudes, beliefs, and instructional practices (Darling-Hammond, 2008; Guskey, 2003; Garet, et al., 2001; Lieberman & Miller, 2008). To this extent, mentoring provides on-site continuous support for teachers as a result of collaborative peer relationships. This is particularly evidenced in one-to-one relationships, between two teachers working together, reflecting on current teaching practices with the purpose to improve their skills through transformative learning as is the case study of the SBPD at HCCOE.

Robinson (2001) conducted a critical review on teacher development in South African schools. The study was on a mentoring programme, which focused on school infrastructure and teacher support, over a period of three years. The mentoring programme aimed to develop in-service teachers as

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mentors for student teachers during a teaching practice module at their schools. Findings revealed that the school based mentoring was a potentially powerful strategy for teacher development. However, factors such as the school culture and school policies on mentoring (i.e. the institutional conditions at the schools) in fact constrained, rather than enhanced the mentoring programme. As a result, the Robinson contended that if "professional development initiatives do not have the infrastructure to 'work', mentoring will become an obligation and a burden, rather than a learning experience" (p.113).

According to Kennedy (2005) activities that support the development of the mentees as they interact with the guided support of a mentor teacher, is premium in understanding how mentees make sense of their experiences in their mentoring relationship, this will help to build trust and open-mindedness in advancing their learning. Such activities may include lesson-planning, classroom observations and reflection meetings and the PLC support, which are all embedded in the school. The study at HCCOE revealed that mentoring as a component of the SBPD included aspects where experienced tutors help their mentees in setting up classrooms, planning lessons and choosing TLMs with them for classroom instructions (See page 115).

Ingersoll (2012) conducted a study on the effects of induction programmes on teacher attrition. The survey examined the effects of many induction activities including mentoring, group activities, reduced workloads, and provision of extra resources on teaching. The findings from the study indicated that mentoring in education, particularly when the mentor had a background in education, benefited novice teachers immensely, specifically in

the area of retention of teachers in the teaching profession. This is related to the present study at HCCOE.

In Ghana presently, the policy framework of the T-TEL has stipulated a better practice in the COEs as majority of trainee teachers, tutors and mentors see the new and innovative teaching, learning and assessment strategies which are not linked to the existing curriculum as a burden (T-TEL, 2017a). Thus, Fletcher and Shepherd (2016a) suggested that T-TEL (PD) activities that do not directly support the COEs DBE curriculum can be distracting especially if they are not relevant for both mentors and mentees. This argument is related to the views of some tutors in the SBPD at HCCOE. Some tutors see the innovative strategies in the T-TEL as a theoretical, not practicable and not related to their classroom practices (See pages 111 and 112). More so, due to time constraints to cover what is in the DBE curriculum, the mentoring and other learning strategies in the SBPD are seen as distractions and time wasting event by some of the tutors.

The action research model

Action research is synonymous to teacher empowerment and has become an important component of what is considered good teacher development (Hopkins, 2002). Sometimes referred to as participatory research where teachers as individuals or in groups analyse information in order to solve a problem at the school level. In addition to mobilizing teachers to study and reflect on their practice, action research advances the professionalization of teachers by helping them develop and validate their knowledge (Hopkins, 2002; Kemmis, 1994). Action research often begins, in a teacher's practice, as school-based studies that are part of a preservice teacher education program

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and continue as part of school-based teacher professional development programmes. Thus, the 'reflective practitioner' is conceptually and operationally related to 'action research' (Hiebert, Gallimore, & Stigler, 2002). The idea of reflective practitioner assumes that teachers are professionals capable of reflecting on the school and classroom situation and, thus, capable of making a large number of instructional and classroom management decisions. Even in circumstances where the level of teacher preparation is low, this perspective rejects the notion that teachers must work according to rigid prescriptions, incapable of independent decision making (Glickman, Gordon, & Ross-Gordon, 2001).

Significantly, adequate time and resources are needed for action research programmes in which staff members have a say in the content of activities and in which new skills can be reflected, learned, practiced, and improved over time. An iterative teacher learning process of this kind involving all teachers takes place most effectively at the school level (SBPD), or in clusters of nearby schools working together, or sometimes in some more centralized settings as long as strong follow-up and continuing support is available at the school (USAID, 2004).

Teacher empowerment through action research include the use of technology as a main characteristic of continuing in supporting inquiry-based learning for solving problems in CPD initiatives (Voogt et al., 2009). In an era of so much to learn, the incorporation of technology in SBPD is seen as an added advantage that will facilitate teacher professionalism and student achievements. The use of technology as a powerful tool that supports inquiry-based learning which is constructivist in nature is pertinent (Desimone et al.,

2002). Findings from their study showed that there is need to train teachers in project-based learning, which is supported by technology to create inquisitive learning and expand the understanding of learner-centred approaches in the classroom. The SBPD activities at HCCOE, involves action research, however, the use of ICT is very limited as shown from the findings in the study (See pages, 109, 112 and 114).

Weiner's (2002) study in Sweden revealed that action research required democratic approach where every individual is a partner to the common goal irrespective of other agenda. Weiner acknowledged there could be other agenda, but suggested that attention be given to 'greater participation and democracy' (p. 3). Furthermore, the study showed that action research can enhance teacher professional development and transformative learning, and serve as a tool for decentralisation in the education system where top-down policies and control bodies take charge of tutors' PD as is the case of HCCOE in the SBPD.

The transformative model

The key characteristics of the transformative model is its effective integration of the various models described above, together with an awareness of issues of power relations which address whose agendas are the focus in the CPD (Kennedy, 2005). The explicit awareness of issues of power connotes the idea that the transformative model is not without tensions, which can emerge from conflicting agendas and philosophies of teachers, stakeholders of education and school management. The engagement in these debates might however lead to a transformation in the teachers' practice.

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Villegas-Reimers and Reimers (2000) argued that the question as to what fundamental purpose of CPD is for every teacher professional development, either for transmission or to facilitate transformative practice is very pertinent in choosing the models for teacher learning. They opined that the transformative model can serve a dual purpose in equipping teachers with the requisite knowledge and skills to implement reforms as decided by the government, or to inform, to contribute and critique the reforms themselves. This is related to the study at HCCOE where the SBPD is geared towards helping the tutors to be upgraded, have requisite knowledge for teaching in their new status as COE tutors, as well as promote the transformational agenda of the government. Similarly, Kennedy (2005) added that one test of teachers' CPD is "its capacity to equip teachers individually and collectively to act as shapers, promoters, and well-informed critics of reforms" (p. 248). This notion is what brings about transformative learning and change. Thus, the transformative learning model is a change-oriented model of teacher learning.

The strategies inherent in these models outlined above, emphasize building teachers' capacity to decide independently and collectively, how to apply instructional strategies to targeted subject/course areas, content, and students' learning outcomes. These elements are central to the teaching/learning activities in any institution and teacher professional empowerment as is the case of the tutors at HCCOE through the SBPD programmes.

Teachers' Change in Practice

Change in teachers' practice is essential in teachers' professional development which gives opportunities for improvement and more innovative

teaching/learning practices (Timperley, 2008). Teachers' change in practice results from a systematic integration of teacher knowledge and teacher learning that leads to positive and improved student learning outcomes (Fraser et al., 2007). Thus, teachers' change in practice benefits not only the teachers but most importantly the learners.

The nature of change in practice in teacher professional development is complex and multifaceted, it includes, knowledge, beliefs, attitudes, understanding, self-awareness and teaching practices (Bailey, 1992). Bailey proffered some assumptions about the nature of teacher change:

1. Teachers' beliefs influence their professional development.

2. Changes in teachers' practices are the results of changes in teachers' beliefs.

3. The teacher change is multidimensional and is triggered by both personal factors as well as by the professional contexts in which teachers work.

Richardson and Placier (2001) posited that teacher change comes from learning, development, socialisation, growth, improvement, implementation of something new or different, cognitive and affective self-study or reflection. This assertion is supported by Jackson (1992) who opined that teacher development is synonymous to change in their practice. Richard and Placier further argued that for change to manifest in teachers' practice, conventional knowledge transfer should be more naturalistic and integrated into authentic, ongoing PD activities that enable teachers to exercise more autonomy in cultivating their professional growth. Therefore, the SBPD strategies and the

different professional learning models and approaches were channels for teacher change (See page 111).

According to Clarke and Hollingsworth (2002) the concept of growth designated in professional learning as a key change process can only happen through "enactment" and "reflection" (p. 95). The term enactment in this situation lends voice to the translation of the teachers' knowledge or beliefs into concrete action in their classroom practices. Arguably therefore, it could be said that teacher change is best understood as emanating from a process of learning that is an association between teachers' knowledge, experiences and beliefs on one hand, and their professional actions on the other hand.

Golombek (1998) opined that constructivist theories of teacher development see the construction of teachers' personal theories of teaching as a central to teachers' practice. Golombek further pointed out that such theories can be resistant to change, and can also serve as reservoir for teachers as they process new information and make changes in their practice. Thus, a constructivist approach to SBPD, is more likely to bring about change in teachers' practice as adult learners such as the tutors at HCCOE.

Consequently, Clarke and Hollingsworth (2002) proposed that:

1. The most resilient teacher beliefs are formed on the basis of teachers' own schooling as young students while observing their teachers.

2. Teacher professional models that actually prove to be helpful and successful in achieving the objectives in any learning outcome, are learned through 'accommodation learning' (Illeris, 2009) and leads to change in teachers' practice.

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3. The day to day interactions of teachers with students and colleagues are avenues of influence on teachers' principles and practices. Over time these practices are consolidated and transformative through adaptability. However, the more experience a teacher has the more reliant he/she is on personal principles than on innovative practices. The study at HCCOE contradicts Clarke and Hollingsworth's assumption in this regard. The tutors proffered that they changed their practice through their exposure to group study, reflection, teamwork and adaptation to the innovative strategies in the SBPD.

4. CPDs that engage teachers in exploration of their beliefs and practices provide opportunities for greater self-awareness through reflection and critical questioning of their practice lead to change.

5. Teachers' understanding of language, teaching, learning, culture, society, and human relations are situated in their belief systems and can change their practices. Thus, an enabling school environment enhances teachers' change in practice.

Desimone et al. (2002), posited that teacher change is synonymous with high quality PD which possess certain characteristics which include; "A focus on content and how students learn content; in-depth, active learning opportunities; links to high standards, opportunities for teachers to engage in leadership roles; extended duration; and the collective participation of groups of teachers from the same school, grade, or department" (p.82). Similarly some studies conducted over the past decades agree to this assertion (Garet et al., 2001; Shields, Marsh, & Adelman, 1998). These studies also suggest that

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the intensity and duration of CPDs is synonymous to the degree of teachers' change in practice.

Luft (2010) explored how an inquiry-based demonstration classroom in-service programme impacted the beliefs and practices of 14 secondary science teachers. Both structured and semi-structured interviews captured in-service programme participants' beliefs, while in-class observations of participants documented their instructional practices. An analysis of the data revealed that the in-service programme had an impact on the participants. The 6 beginning teachers changed their beliefs more than their practices while the 8 experienced science teachers demonstrated more change in their practices than in their beliefs. The change was alluded to the use of student-centred practices in the SBPD activity and high student achievement in the classroom. This is related to the study at HCCOE (See pages 118 and 119).

A study carried out in China in related SBPD initiatives through a survey across the country, of 2,052 agricultural sciences teachers employed at 135 primary and secondary schools showed that 43.1% of teachers held university degrees and 33.3% held college diplomas. 78.4% of the teachers were under 50 years of age. Findings revealed that the training sessions provided by the county training school were far from satisfactory because more than half of the teachers (54.5%) surveyed considered the content of training as obsolete, which paid little attention to new educational pedagogies and new methods in teaching. About 70% of participants complained that the training did not relate to their classroom practices. 52.1% of teachers claimed that too much emphasis was laid on courses in professional integrity and abstract theories. About 65% of the teachers demanded for courses in

educational technology (McQuaide, 2011). The study though related to the present study was carried out in secondary schools, however, this study is at the HCCOE, which explored the professional learning of the tutors, and ways in which they changed their practice through the SBPD workshops.

Research has shown that there is tension between philosophy of teaching underpinned by the teacher's values, beliefs, behaviours which influences what is taught, also government policy on education, the curriculum, and the structural of school can constrain teacher change in practice (Hardman, Abd-Kadir, & Smith, 2008). This assertion corroborated Day and Sachs (2005) and Kennedy (2005) who contended that teacher development and teacher change is shaped by the interrelationship between personal experience, and professional knowledge which are linked to the teaching environment, students, curriculum and the entire school culture.

In the same vein Fullan (1993) argued that, "the way that teachers are trained, the way that schools are organized, the way that the educational hierarchy operates, and the way that education is treated by political decision makers results in a system that is more likely to retain the status quo than change it" (p. 3). Thus, these assertions have implications for the SBPD organisers and PDCs at HCCOE, to continuously bring in all these components into the SBPD, in order to promote changes in teachers' practice and improve performance of the trainees in the college.

In a related study of school-based professional development, strong support, collegial learning, and day to day teacher learning experiences have been shown to be avenues of unlearning and re-learning in teacher' experiences and changes in their practice (Jeanpierre, Oberhauser, & Freeman,

2005; Johnson, 2006). Adding to this view, is the fact that personal development, as part of professional development, is most often attended to and demonstrated through reflective activities in SBPD with change reforms as its agenda (Avalos, 1998). The study at HCCOE is in line with these studies where collegiality, and reflection strategies aided the tutors to change their practice.

Thus, innovative and transformative change which promotes student learning outcomes can be achieved through CPD which are anchored to improve teacher knowledge and practices (Guskey & Sparks, 2002). Clearly, if professional development does not alter teachers' professional knowledge or their classroom practices, little improvement in student learning can be expected.

Related study on school-based teacher development focused attention on how limited adult English language instructors engage in classroom practices that focus on sexual identities (Rhodes & Coda, 2017). The study examined how adult educators in English language classrooms feel regarding the inclusion of Lesbian, Gay, Bisexual, Queer (LGBQ) topics and materials into their curriculum and instruction. Through a web-based survey, teachers described their beliefs, practices, and challenges in creating lessons and responding to student questions in ways that broke down heteronormativity in the adult English language classroom. Findings add to the limited knowledge of how teachers in post-secondary, English language classrooms create and support a culturally responsive learning environment regarding sexual identities.

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Reflection is key in experiential learning, and a common feature in many current continuous professional development activities, where emphasis on change in teachers' practice is an imperative (Kolb, 1984; Davis, 2003). Reflection helps teachers in formal testing, comprehension, evaluation and feedbacks (Shulman, 1987; Minott, 2010). In the present study that explored the professional learning of tutors at HCCOE, the tutors' daily experiences and reflections on their professional learning enhanced their change in practice and improved the student-teachers learning outcomes (See page 110).

Teachers' experiential learning has been found to enhance change in teacher's practice, since it is focused on the experiences of teachers developing their practice whilst in the classroom and in their daily professional challenges (Minott, 2010). Reflection can be used as a tool for self-direction, shared experiences, collegial and innovative practices. Thus, experiential learning in any professional learning, is a gateway to change in teachers' practice (Darling-Hammond & McLaughlin, 2011). For each learner, it is unique as they draw upon their past experiences as a foundation to engage with the new experience/knowledge. In teacher professional learning activities, findings revealed that this approach can motivate teachers to try new practices and make desired changes to the curriculum a practical reality (Bakah, 2011).

Fullan's (2001) seminal work on change as a process rather than an event or an end product compliments experiential learning as a continuous process. Fullan opined the need for long-term engagement through ongoing CPD in order to sustain progress, through challenges, feedback and follow ups. In addition, McLaughlin and Talbert (2006) argued that government

policy on education of teachers, stress from workload and unconducive school environment can make teachers less willing to engage in discussions about their professional learning with colleagues. Furthermore, being bombarded by too many paperwork and change strategies makes it even harder for some teachers to maintain energy, enthusiasm and satisfaction in the workplace which invariably constrain their change in practice (Little, 2002). According to Guskey (1999) the barriers in SBPD programmes that hinder teachers' professional learning and change in practice call for a rethink of what motivates educators and teachers to engage in any form of CPD.

Guskey (2002) proposed a model of teacher change which affirmed that change is a slow and gradual process, no matter how hard teachers and organisers of staff development programmes try, there should be adequate time for change in teacher practice to happen. However, Guskey (2002) concluded that "the most significant changes in teachers' attitudes and beliefs comes after they begin using a new practice successfully and seeing changes in students' learning" (p. 57). Guskey (2002) further presented three principles to consider when planning/organising any CPD programmes such as the one contextualised in schools with change in teachers' practice as an agenda:

1. Change is a slow, difficult and gradual process for teachers (resulting from alteration of instructional procedures and the like).

2. Teachers need constant feedbacks from students' learning outcomes, this will act as a motivating factor and an opportunity for reflection on practice.

3. Continuing support and follow-up are very necessary after initial training. Not every teacher is capable of bringing innovations from CPD immediately into the classroom for experimentation (p. 59).

CONCEPTUAL FRAMEWORK

Miles and Huberman (1994, p. 18), defined a conceptual framework as a visual or written product that "explains, either graphically or in narrative form, the main things to be studied; the key factors, concepts, or variables and the presumed relationships among them." Based on this definition, the study is set on a Constructivist paradigm, which gave an insight and understanding to the professional learning experiences of the tutors from their own perspectives and lived experiences.
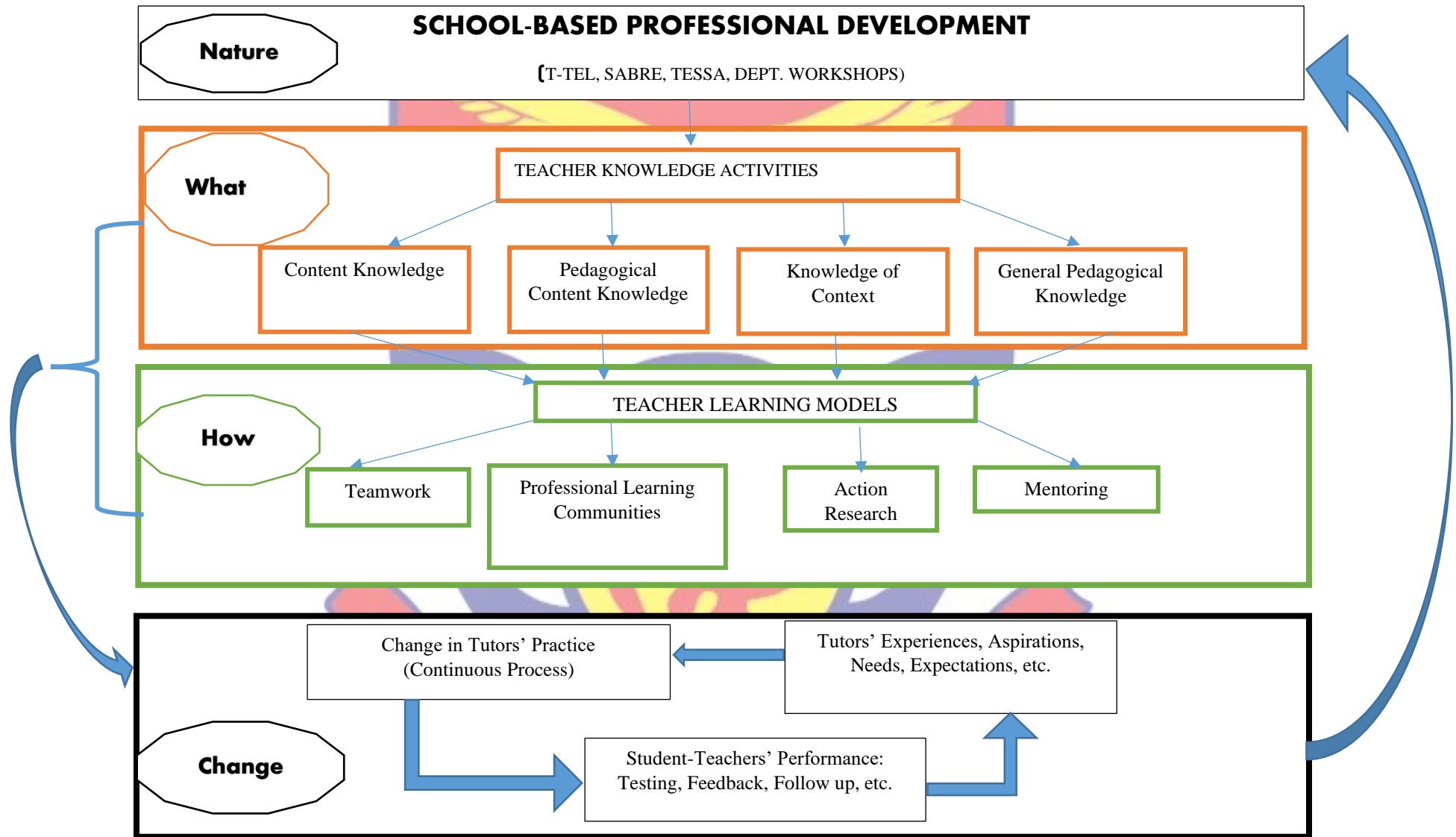
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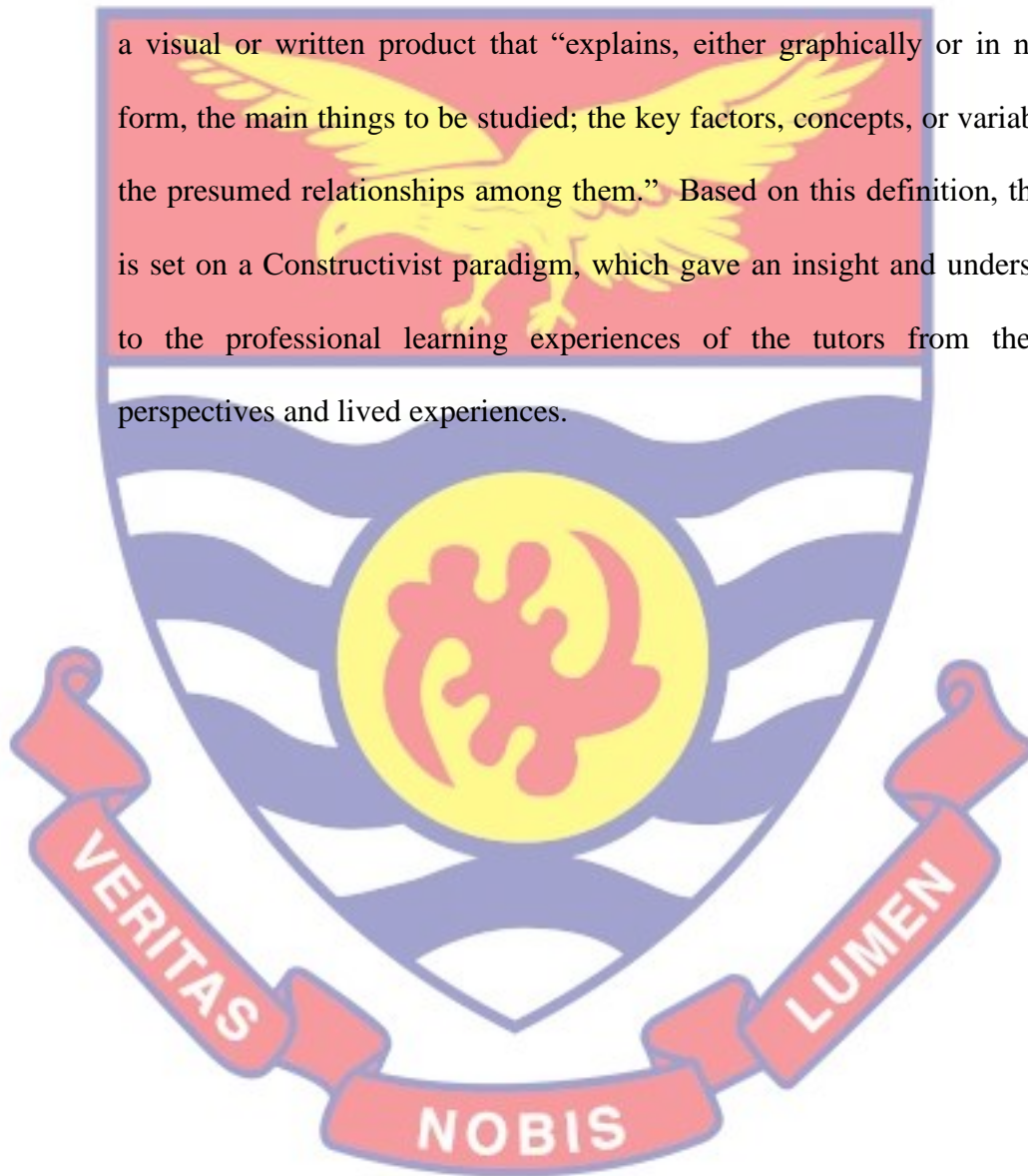
Figure 1: School-Based Professional Development Model.
Adapted from Illeris (2009), Kolb (1984) and Shulman (1987).

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The study is situated within the broad field of school-based teacher professional development and was informed by concepts of teacher knowledge activities, teacher learning models that lead to change in teachers' practice through SBPD programmes contextualised in HCCOE. Grossman (1990) drew on Shulman's (1987) categories of teacher knowledge and argued for the four domains of teacher knowledge; Content Knowledge (CK), Pedagogical Content Knowledge (PCK), Knowledge of Context (KC), and General Pedagogical Knowledge (GPK), as the cornerstones of teacher professional knowledge. This is in line with Kolb (1984, p. 41) who stated that "Knowledge results from the combination of grasping and transforming experiences". The assumption here is that tutors at HCCOE combined their knowledge of practice (teacher knowledge) and knowledge-in-practice (teacher learning experiences) in the SBPD workshops in developing in their professional learning.

Kolb (1984) contended that learning is a process, through which knowledge is formed via a transformative experience; conceptualization, reflection, testing and active experimentation. Thus, through this stand point, data elicited how the tutors at the HCCOE understood their professional learning experiences which influenced their practice through the SBPD activities. Interestingly, Kolb's assumptions agrees with Illeris (2009) who posited that human learning is a process that builds on stages to become a transformative experience, which results in a change in the individual learner.

Therefore, the tutors' previous learning experiences was the foundation for their knowledge and professional learning in the SBPD programmes. It is from this understanding that any change in the tutors' practice emerged, either

as an accommodative or transformative learning experience. Three key variables were addressed in the conceptual framework:

The first variable is the tutors' orientation within the school context. Teachers' past experiences, needs, aspirations, expectations and beliefs about knowledge and learning impact on their learning (Kolb, 1984; Shulman, 1987). The tutors' orientations in the professional learning activities in general, can also be influenced by how meaningful the new knowledge is to their current orientation. The professional needs and relevance of the new content and creative approaches embedded in the various SBPD workshops are premised to change the tutors' practices through accommodation and transformative learning (Illeris, 2009).

The second variable is seeing the school context (HCCOE) as an open system unique to a specific context, and also generalizable across contexts because of external interactions (Opfer & Pedder, 2011). Schools vary in terms of structures, resources, organisational culture, collective capacity and collective beliefs about learning. Context characteristics in this study also refers to the availability of physical and psychological resources in the SBPD, the characteristics of the tutors involved in the SBPD activities, and the general school culture. Thus, the college environment, facilities, culture and leadership practices can enable or constrain the tutors' professional learning in the SBPD. Thus, as a PLC collective beliefs about learning are also very important. Therefore, in this study, the professional learning of the tutors can be enhanced or constrained by the contextual factors at HCCOE.

The third variable is the SBPD programme, which is the pivot on which the tutors' professional learning activities rest at the HCCOE. The

teacher knowledge activities which are premised on the four categories of Shulman (1987) informed the knowledge base for the tutors' professional learning in the SBPD. The models of teacher learning approaches was informed by Illeris' (2009) and Kolb's (1984) learning theories. Both are premised on a constructivist and experiential learning models based on reflection, active learning, teamwork, coaching and collaborative learning experiences. The tutors' reflection and conceptualization offered opportunities to try out new and innovative approaches that culminated in their learning and change in their practice. Significantly, just like every experiential and adult learning initiative, the improved students' learning outcomes, solutions to problems, practicality and relevance of the SBPD programmes, are more likely to change the tutors' practice, and also act as feedbacks and pointers to the tutors' areas of needs for future SBPD programmes at HCCOE. Thus, change in the tutors' practice is a continuous process throughout their career as teachers.

Chapter Summary

Reviewing related literature elucidated the experts in the field of school-based professional development, and how other researchers have engaged with the research methodologies related to this study. The broad context of what has been studied, and the current state of research on teacher professional learning through SBPD, revealed that for teachers to professionally develop and experience a transformational change in practice, a constructivist approach is a panacea in their professional learning. Collegiality, teamwork, experiential, inquiry-based and active learning supported by technology as important strategies that can be used to enhance any school-based professional development and change in teachers' practice.

CHAPTER THREE
RESEARCH METHODS

This chapter outlines how the study was designed and carried out, and the techniques that were employed in collecting data. There is a description of the research design, population, sample and sampling technique, instrumentation used, pilot-testing, administration of instrument, data collection procedure, data analysis, trustworthiness and ethical issues in the study.

Research Design

The research design is a case study because it is a specific instance that is designed to illustrate a more general principle (Cohen et al., 2007). The study is contextualised specifically at Holy Child College of Education, Takoradi, and elucidated the professional learning activities in the SBPD programmes. This design was appropriate for the kind of exploratory study which sought to understand what and how tutors at HCCOE learn, and any possible change in their practice through SBPD programmes. Thus, the design provided rich data, in-depth and thorough analysis of the phenomenon/event at HCCOE. The weaknesses associated with this kind of design include researcher bias and subjectivity of the results (Creswell, 2010). Thus, the results cannot be generalised on a wider population apart from the scope of study.

The study is a qualitative study set in a constructivist paradigm. According to Schwandt (2001) a constructivist paradigm provides a deep insight into the complex world of lived experiences from the point of view of those who lived it. Therefore, it is appropriate for this study as it explored

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what tutors at HCCOE learn, how they learn, and any possible change in the tutors' practice through SBPD workshops.

A qualitative research usually involves small numbers which are good for in-depth study analysis which gives coherency and meanings to rich data (Creswell, 2005). Based on this assumptions, the small sample size of 20 participants assisted in gathering in-depth information from the perspectives of the participants as they reflected on their practice and shared their experiences.

However, the participants' self-report data cannot be generalised (Neuman, 2007; Padgett, 2008). Despite these limitations, the adherence to rigour of qualitative studies used, and the purpose of the study helped to draw pertinent and meaningful conclusions to the study.

Study Area

Holy Child College of Education is a teacher education college. The college is located at Adiembra Fijai Sekondi-Takoradi Metro District, WS124 in the Central/Western Region of Ghana. It was established in Cape Coast in 1946, and later relocated to Takoradi due to inadequate space for expansion. It presently one of the 40 public colleges of education in Ghana. However, it is owned by the Catholic Mission, but a government-assisted institution.

Population

The population for the study was made up of the entire faculty who participate in the School-Based PD programmes at Holy Child College of Education, Takoradi. The total population for the study is 34, made up of 30 tutors, two Professional Development Coordinators (PDCs) who are also tutors, and two management members (Principal and Vice Principal).

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Sampling Procedure

According to Creswell (2010) sampling decisions are made for the purpose of understanding the population from which it is drawn, and to obtain the richest possible source of information pertinent to the study. In this study the purposive sampling technique was used in selecting the participants (Dawson, 2002). From the total population of 34, 16 tutors were purposively sampled from the school's teaching staff record. This number was primarily selected based on the tutors who have actually participated consistently in the SBPD for three years and above, and as such have in-depth knowledge relevant to purpose of the study. In addition, two PDCs of the SBPD programmes who are also tutors, the Principal and the Vice Principal were selected as respondents since they also have in-depth knowledge of the SBPD which was relevant to the study. Thus, the total sample was made up of 20 participants. The distribution of the population and sample can be found on Table 1. The sampling technique adopted in this study is prone to some biases which may include; insufficient scope in sampling, participants' distortions and concealments in responding to the interview guide.

Table 1- *Distribution of Population and Sample*

Participants	Population	Sample
Tutors	30	16
Coordinators	2	2
Principal	1	1
Vice Principal	1	1
Total	34	20

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Data Collection Instrument

In this study, data was collected using semi-structured interview guide. The interview was in the form of face-to-face meeting. Semi-structured interview was used for data collection because it suited the nature of the qualitative research which sought to understand the professional learning of the tutors at Holy Child College of Education from their own perspectives (Gwimbi & Dirwai, 2003). The interview guide was structured to elicit from the tutors, the Coordinators, Principal and the Vice Principal what kinds of SBPD programmes are mounted for the tutors, what and how tutors learnt and what the tutors benefitted from the SBPD programmes.

Four different interview guides were developed for collection of data from the tutors, Coordinators, Principal and the Vice Principal respectively. Each of the protocols consisted of two sections. The first section was based on obtaining information on the characteristics of the participants. The Second section focused on the nature of the SBPD programmes at HCCOE. The third section solicited information on the school-based professional learning activities at HCCOE. The fourth generated data on the professional learning models of the SBPD programmes, while the last section collected data on the perceived changes in the tutors' practice through the SBPD at HCCOE. The semi-structured interview guides consisted of 14 open-ended set of questions for the tutors, 10 open-ended questions each for the Principal, Vice Principal, and the two Coordinators of the SBPD programmes respectively. These questions were underpinned by the research questions and purpose of the study.

Pilot testing

A pilot test was conducted using the semi-structured interview guides at Our Lady of Apostle College of Education, Cape Coast. To ensure reliability and trustworthiness of the data collecting instrument, the interview guides were scrutinized by the Principal and Co-supervisors to ensure that the research instrument is devoid of grammatical errors and ambiguities that could impair the findings of the study. The pilot test of the interview guides at Our lady of Apostles College of Education commenced with 20 participants, this was to ensure that the pilot test was not truncated, due to inaccessibility. The purposive sampling technique was used to select the participants through the teaching staff record book. Subsequently, as the period for pilot test progressed, only 8 tutors, 1 Professional Development Coordinator (PDC) and the Principal of the college were accessible. Thus the participants were reduced to 10 by the end of the pilot testing. The results of the pilot test ensured the face value and content quality of the interview guides in eliciting pertinent information from the participants at HCCOE. Both colleges share similar characteristics in mounting intensive SBPD for their tutors.

Data Collection Procedures

An introductory letter was collected from the Director of the Institute for Educational Planning and Administration (IEPA), which formally introduced the researcher to the participants at the HCCOE. Through the Principal and Vice Principal the teaching staff record was made available for purposive selection of tutors who have participated consistently in the SBPD at HCCOE from three years and above as participants in the study since they have in-depth knowledge of the purpose of the study. The consent of the

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participants were obtained through a Consent Form which they filled voluntarily (McMillan & Schumacher, 2010). The dates, time, and places for the interviews were also arranged. The participants were assured of confidentiality and anonymity throughout the study. They granted permission before the recording of the interviews. The face-to-face oral interview for each participant lasted about 35 minutes on different days, times, dates and places. The interview sessions were flexible and informal. The period of the data collection from the 16 Tutors, two Coordinators, Principal and Vice Principal lasted three weeks. The digital audio-recorder, diary, and copious notes were used in taking down participants' voices. Each day after leaving the research site, the interview notes were typed, and the audios uploaded to the researcher's personal laptop with a password.

Data Processing and Analysis

The data collected were transcribed verbatim (Hornby, 2010). The themes that emerged were related to the research questions and the purpose of the study (Braum & Clark, 2006). The data was categorised into four major themes namely:

1. Nature of school-based professional development programmes at Holy Child College of Education.

2. School-based teacher knowledge activities at HCCOE.

3. School-based professional learning models at HCCOE.

4. Changes in the tutors' practice through the school-based professional development.

Thematic analysis was carried out in segmenting the data into parts and reassembling the parts into coherent whole (Boeije, 2010; Miles, Huberman,

& Saldaña, 2014). The thematic analysis of the data helped in identifying commonalities, differences, and reporting the patterns within data generated from the study at HCCOE.

Chapter Summary

The research study explored what tutors at the Holy Child College of Education, Takoradi, Ghana, learn and how they professionally develop through school-based professional development (SBPD). The research design is a case study, which employed a qualitative approach in data collection, through semi-structured interviews. The sample involved 20 participants; 16 tutors, the Principal of the College, the Vice Principal and two Coordinators of the SBPD, using a purposive sampling technique. The study was based primarily on participants' self-report data. Thus, the limitations of this study are essentially those that are inherent in any qualitative inquiry. Qualitative data is subjective to a degree.

However, there was strict adherence to rigour in the transcription of the data to ensure that interpretations were authentic and accurate without bias (Lietz & Zayas, 2010). Transcriptions were also taken back to the participants for member checking (Creswell, 2010). This was done through face to face contact, WhatsApp text messages, emails and phone calls. Approval was sought from participants to use their direct personal quotes in written or verbal reports of the study. A written account of the research processes that included reporting of what occurred throughout the research study was consistently presented to both the principal and co-supervisors at different stages of the study and the feedback, enhanced the research study, generated new ideas and identified inherent biases. Other cohort members contributed through peer

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debriefing, while thick description of the context and events in the SBPD workshops at the HCCOE helped to confirm that the findings adequately and accurately represent the perceptions of the tutors at HCCOE.

CHAPTER FOUR

RESULTS AND DISCUSSION

This chapter presents the analysis of the data gathered from the participants. The study explored the professional learning of the tutors at Holy Child College of Education, Takoradi, through School-based professional development. The analysis focused on thematic areas that highlighted the similarities, differences and direct quotations from the interviews of the participants which are guided by the research questions for the study. Pseudonyms were used to ensure anonymity of the participants as names used in the biographical data cannot be traced to any of the 20 participants. The chapter has been divided into two: Background characteristics of participants and discussion of the main results.

The study was guided by the following research questions:

1. What School-based professional development programmes are mounted for tutors at Holy Child College of Education?

2. What do tutors at Holy Child College of Education learn through School-based professional development programmes?

3. How do tutors at Holy Child College of Education learn through School-based PD programmes?

4. In what ways do tutors at Holy Child College of Education change their practice through school-based PD programmes?

Background Information of the Participants

Data was collected from the participants on their background in the following areas: gender, age, number of years in Holy Child College of Education, qualification, course area, and working experience. These were

given freely by the 20 participants. This information was pertinent as they influenced the purpose of the study.
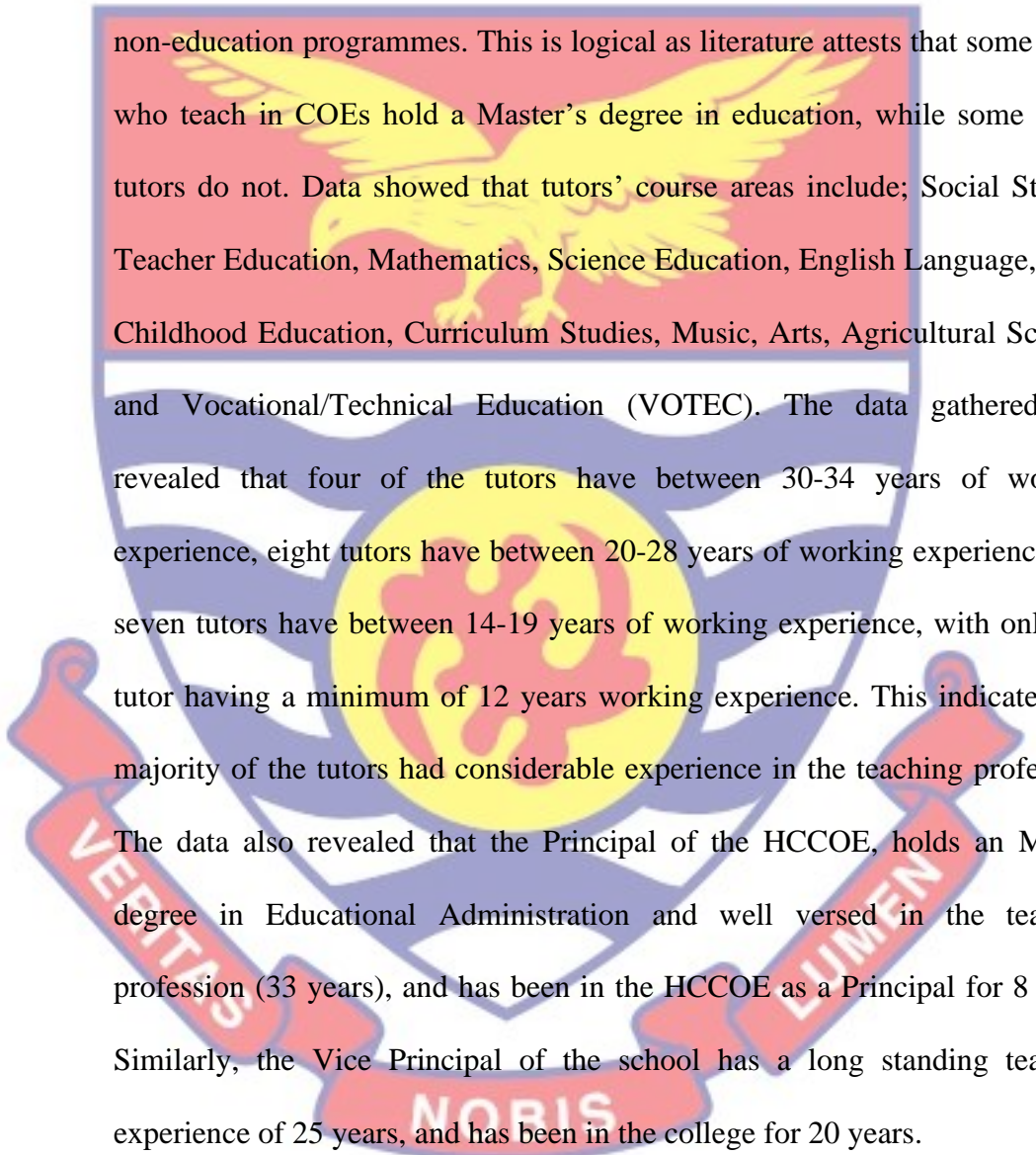
Table 2- *Biographical Data of Participants*

Pseudo-nyms	Sex	Age	Years in HCCOE	Qualifi-cation	Course Area	Work Exp.	Position
Fred	M	44	11	MA	Social Std.	14	Tutor
Jonny	M	50	19	MEd	Teacher Ed.	19	Tutor
Amah	M	45	14	MPhil	Mathematics	28	Tutor
Akos	F	42	14	MPhil	Social Science	26	Tutor
Winie	F	52	15	MEd	Curriculum Studies	21	Tutor
Laura	F	39	12	MEd	English	21	Tutor
Ham	M	51	17	MA	Music	31	Tutor
Paula	F	36	5	MPhil	Early Child Ed	14	Tutor
Betty	F	48	19	MEd	Social Std.	22	Tutor
Hanna	F	35	6	MPhil	Science Ed.	14	Tutor
Lois	F	40	10	MEd	VOTEC	15	Tutor
Woy	M	51	17	MPhil	Teacher Ed.	25	Tutor
Delphi	F	51	12	MPhil	Early Child Ed	23	Tutor
Patra	F	53	10	MEd	VOTEC	18	Tutor
Ekua	F	46	8	MEd	Mathematics	14	Tutor
Kojo	M	39	3	MEd	Curriculum Studies	12	Tutor
Kofi	M	58	10	MPhil	Agric. Science	33	Coordinator & Tutor
Lovet	F	53	4	MA	English	34	Coordinator & Tutor
P	F	56	8	MPhil	Ed. Admin	33	Principal
VP	M	48	20	MPhil	Science Ed.	25	Vice Principal

From Table 2, results showed that eight of the participants were males and the remaining twelve females. Their age distributions showed nine tutors are in their 50s, seven of the tutors are in their 40s, while only four of the tutors are in their 30s. This implies that majority of the tutors are above 30 years. Results reveal that fourteen tutors have spent between 10-20 years in HCCOE, while six tutors have spent less than 10 years in the college. This

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information was very useful in generating detailed and rich data on the professional learning experiences of the tutors through SBPD at HCCOE.

In terms of the qualification of the tutors, data showed that all the 20 participants hold a Master's degree. Ten tutors hold M.Phil. degrees, seven of the tutors hold M.Ed. degrees, while three of the tutors hold MA degrees in non-education programmes. This is logical as literature attests that some tutors who teach in COEs hold a Master's degree in education, while some of the tutors do not. Data showed that tutors' course areas include; Social Studies, Teacher Education, Mathematics, Science Education, English Language, Early Childhood Education, Curriculum Studies, Music, Arts, Agricultural Science, and Vocational/Technical Education (VOTEC). The data gathered also revealed that four of the tutors have between 30-34 years of working experience, eight tutors have between 20-28 years of working experience, and seven tutors have between 14-19 years of working experience, with only one tutor having a minimum of 12 years working experience. This indicated that majority of the tutors had considerable experience in the teaching profession. The data also revealed that the Principal of the HCCOE, holds an M.Phil. degree in Educational Administration and well versed in the teaching profession (33 years), and has been in the HCCOE as a Principal for 8 years. Similarly, the Vice Principal of the school has a long standing teaching experience of 25 years, and has been in the college for 20 years.

This study solicited responses from tutors, SBPD Coordinators, Principal and the Vice Principal on the professional learning of tutors at Holy Child College of Education through SBPD, with particular focus on the nature of school-based professional development mounted at HCCOE, teacher

knowledge activities, teacher professional learning models, and ways tutors benefit through the SBPD.

Research Question one: What school-based professional development programmes are mounted for tutors in Holy Child College of Education?

This research question sought to find out from the participants the nature of school-based professional development programmes at HCCOE in the following areas; what programmes have been mounted since the past three years, how consistent the programmes have been, and what roles tutors play in planning and implementation of the programmes. Thus, there were three thematic areas:

The Nature of SBPD Programmes at HCCOE

Based on the interviews, the 16 tutors, 2 Coordinators, and Principal and Vice Principal, gave a unifying opinion indicating that, over the past three years, they have had school-based professional development programmes in the following areas: Change Management, Assessment, Research/Publication, Information and Computer Technology (ICT), Procurement training, Leadership training, Transforming Teacher Education and Learning (T-TEL), Teacher Education for Sub-Saharan Africa (TESSA), Saving Africa By Rural Endeavours (SABRE), and other Departmental workshops on areas of tutors' need. The departmental, leadership and procurement workshops are mounted by HCCOE, and sometimes by UCC. The Vice Principal shared that:

> *The Act of Parliament of the Ghana government was*
> *passed in 2012 for us to move from training colleges to*
> *COEs so we have been engaging in Change Management*
> *Workshops in the college to help in our upgrading. I have*

been a teacher of Science since 25 years in this school,

though the VP, I still teach every second semester, and

also participate in these workshops. So we all engage

especially in T-TEL which is mandatory for all of us, and

other school-based workshops to keep updating ourselves

(Interviewed on December 14, 2017).

The participants also shared that TESSA is organised by UNESCO, and it aims at providing quality assurance for teacher development at the local levels in the Ghana educational system. SABRE is mounted by SABRE Trust in partnership with UKAID and the government of Ghana, it aims at improving the future of the Ghanaian child through investment in the area of Early Childhood Education. The T-TEL programme is an initiative of the Department For International Development (DFID), which is a UK Agency for International Development and the Government of Ghana to help upgrade the tutors to teach effectively in the elevated COEs as tertiary institutions. Akos revealed that:

The TESSA, SABRE and T-TEL are mounted by external

bodies, we don't have control of these workshops even

though they are mounted in the College, but since they

say it is for our professional development we participate

in them. They are Government's initiative with UKAID or

USAID, UNESCO, some NGOs, NAB and UCC for us, so

we don't need to travel out of the school to attend

workshops here and there. But the departmental

workshops are organised by the College. They also help

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us to adopt new innovations and approaches to teaching

(Interviewed on December 14, 2017).

The Government of Ghana is interested in making sure that teachers in the COEs acquire the necessary skills to help them in their new status as tertiary institutions (GOG, 2012; ESPR, 2016; T-TEL, 2017). Thus, it is little wonder then that the SBPD in these areas, such as T-TEL is mandatory in driving the reform agenda of the Ghana government. More so, the SBPD at HCCOE, is a requirement by the National Accreditation Board (NAB) for accrediting HCCOE as a tertiary institution apart from development of the tutors' profession. The SBPD organised by the HCCOE is used to also keep teachers abreast in their professional development.

How often the SBPD programmes are mounted

All the participants were unanimous in their affirmation that the school-based PDs organised by T-TEL, TESSA and SABRE in Holy Child College of Education are very consistent and on-going, but some other workshops in the school are not regular.

According to Fred:

T-TEL is mounted every Wednesday of the week, so it is routine and mandatory. TESSA and SABRE are also mounted consistently for all the tutors but not weekly like T-TEL. TESSA and SABRE are held twice in a month and are on-going, so over 20 workshops have been mounted so far. As for the Departmental Workshops, they are held as the need arises. But the other workshops in Research/ ICT, are very important too but they are mounted once in

a year or at most twice in a year, because of cost and other things involved. They are irregular, yet we need ICT skills to help us in our work (Interviewed on December 13, 2017).

The tutors corroborated by saying most of the SBPD workshops organised by external bodies such as the NCTE and other NGOs are consistent. Winie contended that:

...the T-TEL, TESSA and SABRE is not organised by the college per se. These workshops cost money and other resources, we are told, and the college is unable to run its own programmes regularly like the way they run SABRE or T-TEL because it is ran by the government and other NGOs, so money is involved... We're constrained by time, exams, supervision, UCC and other external examiners coming, and loaded periods... but, we want more activities in the ICT and Research /Publication workshops, and a reduction in the number of the T-TEL workshops... (Interviewed on December 12, 2017).

All the interviewees alluded to the fact that the T-TEL programme which form a major part of the SBPD at HCCOE, does not involve ICT sessions, this is a contradiction to the core elements of the programme on paper in the policy briefs, which stipulates emphasis on the use of technology in the pedagogy of teachers in the programme (T-TEL, 2017a). Also, studies have shown that the continuity and consistency of SBPD programmes depend on certain conditions which include financial support, flexible time table,

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reduced interference of teachers' routine work to the minimum, and interdependency in the learning communities (Boreham, 2004; McQuaide, 2011; Villegas-Reimers & Reimers, 2000). Thus data from this study, is in line with these studies, where financial challenges and inadequacy of other resources constrain the frequency of workshops organised by the Management of HCCOE, even though the tutors would want more of such workshops. Meanwhile, the government and NGOs resourced workshops ran regularly.

Tutors' Roles in SBPD at HCCOE

All the tutors proffered that they had no specific roles to play in the planning and organisation of the SBPD that are organised by T-TEL, TESSA or SABRE Trust at HCCOE. But they contribute their ideas during the workshops, and point out areas of shortfalls to the PDCs. However, with the SBPD workshops organised by HCCOE, tutors discover areas of needs and challenges, and in collaboration with Management and HODs organise workshops to address these needs and challenges. Patra stated that:

> *... Hmmmn, as for the T-TEL, when it's time, we all bring ourselves to the Resource Room. We are always given cardboard sheets to make our presentations by the facilitators from UCC. They bring the modules in the form of Themes, and we follow them as they are. In a term there can be 12 Themes, we are now in Theme 7. We are shared into groups according to our departments, and we do our presentations according to the themes. (Interviewed on December 12, 2017).*

But with the actual SBPD organised by the management of HCCOE, the tutors had some roles to play as Lois said;

We are given opportunity to capture the tutors' inputs or roles as the case may be, especially with workshops organised by departments and management. At the end of every year management organises self-assessment workshops for all tutors. This helps us to bring our challenges, needs and concerns in our teaching and course areas to be addressed. We brainstorm and find solutions to the problems, if it's beyond us then we seek help… For instance, last year we had a problem with Mathematics and English Language, so Management invited facilitators from UCC, in fact, the Chief Examiners in particular, and they came and ran workshops to address these problems… (Interviewed on December 20, 2017).

Similarly, Betty shared that;

With the SBPD organised by TESSA and SABRE Trust, the PDCs who are also tutors in this college represent the tutors' voice and take our concerns and challenges to the bigger forum like the external organisers at the end of the semester, and when they address these problems, they bring us feed backs. But with the Departmental workshops we have a say. Sometimes it used to address deficient areas. Sometimes too, you get departments that

are doing extremely well, through these workshops they

tell us how/ what is making them perform well, so they

share with us to benefit from them to enhance our

practice (Interviewed on December 13, 2017).

All the tutors indicated that the roles of tutors in organising the SBPD programmes is not specific. Though they have representatives who take their challenges and concerns in their professional learning in TESSA and SABRE workshops to the bigger forum for these to be addressed, this does not support findings of studies on SBPD through a constructivist and experiential learning (Bertram, 2011; Darling-Hammond & McLaughlin, 2011; Guskey, 2002; Hardman, et al., 2008). These studies proffered that teachers' daily experiences in teaching, challenges and interactions with colleagues are pointers to the organisation and implementation of any effective SBPD. Thus, this notion of the top-down approach to the professional learning of the tutors through the SBPD at the college with regards to the T-TEL programme is at variance with the advent of constructivist thinking, as a way of conceiving SPBD, which advocates that the tutors as learners should be at the hem of their own learning in addressing their professional challenges and enhancing their practice.

Furthermore, the T-TEL programme, which constitutes a major part of the professional learning of the tutors in the SBPD, make the tutors participants who only engage in activities as designed by the organisers of the programme. This allusion also contradicts the policy briefing of the programme (T-TEL, 2017a), which on paper stipulates that key stakeholders, especially the Councils of Colleges of Education, tutors, teachers, teaching

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unions and the Ministry of Education must all be involved in the curriculum writing through a consultative process. Thus, this study at the HCCOE corroborates Akyeampong et al. (2006) and Fareo (2013) who asserted that top-down approaches to CPD of teachers in Ghana and Africa respectively has inhibiting effects on teachers' professional development and has serious implications for all stakeholders in the education of teachers.

Conversely, this study contradicts Little's (2002) research findings which contended that one crucial characteristic of constructive and effective CPDs, is to equip teachers individually and collectively to act as shapers, promoters as well as informed critics of government educational reforms. This study therefore reveal that the workshops organised by T-TEL, TESSA and SABRE compromise constructivist ideology of school-based professional development.

However, all the tutors revealed that, the departmental workshops are experiential, and in tune with constructivist SBPD initiatives, where the tutors, HODs, and management plan, organise and engage in meetings and workshops to address their professional needs. This is in line with studies in SBPD and the findings of Borko (2004) and Richardson (2003) in the literature reviewed. The studies espoused contextualisation of PD programmes embedded in schools as providing immediate continuity in previewing and enhancing teachers' competence, knowledge and expectations.

Research Question Two: What do tutors at Holy Child College of Education learn through school-based professional development?

The research question solicited the tutors' opinions of what constitutes the tutors' professional learning in the SBPD at HCCOE. Three themes

emerged from this research question; teacher knowledge activities, the need for the SBPD and tutors' expectations from the SBPD. Thus, three thematic areas were addressed:

Teacher Knowledge Activities in the SBPD at HCCOE

Interview protocols of 16 tutors and 2 coordinators reveal methodologies that were steeped in teacher knowledge activities in the TESSA, SABRE and departmental workshops. However, T-TEL programme focused on three core subject areas (English, Mathematics, and Science), and related classroom practices and management. Lois said:

> The T-TEL, TESSA, SABRE and departmental workshops are loaded with subject or content knowledge, pedagogical knowledge, different methodologies in teaching, and other classroom management strategies. However, the approaches used in the T- TEL workshops involve Creative Approaches and strategies for teaching/learning especially in Science, Mathematics and English, to the apparent exclusion of other subjects…They say we should adapt them to other subject areas (Interviewed on December 13, 2017).

Another tutor affirmed that all the SBPD programmes; TESSA, SABRE, T-TEL and other departmental workshops are centred on their content knowledge and general pedagogy which enhance their teaching/learning activities, but T-TEL is mostly on the core subjects. Patra added:

> We have been introduced to different approaches of teaching in our various course areas through teamwork

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and collaborative studies, creative approaches in teaching children at kindergarten; how to write good lesson notes as a group which is reviewed by other colleagues; how to ask students questions to get the best answers, and create a lively classroom packed with student-centred activities…in T-TEL we don't have ICT training, they stress is on Science, Maths and English though it has been pointed out to the planners of the T-TEL, through the PDCs to include all subjects in the curriculum (Interviewed on December 15, 2017).

From the data generated, teacher knowledge activities through teamwork, and active learning is at the core of the SBPD activities in enhancing the tutors' professional learning in the departmental workshops, T-TEL, TESSA and SABRE. Teacher knowledge has been shown in the discussion in chapter two to be of great importance in forming the knowledge base for all effective and authentic SBPD activities (ATA, 2007; Bertram, 2011; Garet, et al., 2001; Shulman, 1987; Villegas-Reimers, 2003). Thus, the SBPD sessions provided the tutors with the knowledge that is needed to enhance their practice. This is key to any teacher development initiative in improving the overall quality of education. This study is in line with the aforementioned findings in attesting that teacher knowledge which includes both the Knowledge-in-practice, and the Knowledge-of-practice is at the core of the SBPD. The findings from this study are also in line with Bakah's (2011) findings, who opined that professional development of teachers which is centred on teamwork, knowledge of the curriculum, course areas, and

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pedagogy is imperative for enhancing teacher professional learning in the Polytechnics in Ghana.

However, with the T-TEL programme, all the tutors were of the view that most teacher-knowledge activities at the sessions are centred on Mathematics, English and Science courses specifically. This is a contradiction to research studies of collaborative learning by all teachers in any SBPD activity (ATA, 2007; USAID, 2004). These studies proffered that teachers' learning experiences as a learning community prevents the isolation of any individual teacher or groups of teachers, but promotes teamwork, cooperation and collegiality. Thus, every subject area and teacher in the learning community is important.

Similarly, one of the aims of the T-TEL programme, is to boost female students' participation in Science, Technology, Engineering and Mathematics (STEM-related) courses in the second cycle schools and higher levels of education in Ghana (T-TEL, 2017a). This, explains the T-TEL programme being centred on Science, Mathematics and English, in order to give sufficient attention to the development of teachers' knowledge and skills, and in literacy in these areas.

Ironically, data also revealed that vital skills which are pertinent to modern-day learning of school children, such as, the use of ICT is compromised and not adequate in the teacher knowledge activities in the SBPD workshops. This is similar to findings in related studies in Ghana and Nigeria, on teachers' professional learning programmes, reiterating the need for teacher training institutions to incorporate ICT skills to any effective CPD of teachers in order to advance teachers' knowledge, quality assurance and

curb apathy to the use of technology in teaching/learning activities (Agezo, 2010; Olakulehin, 2007). This study attests to this deficiency of adequate technological skills in the SBPD programmes at the HCCOE, to enhance the knowledge of the tutors.
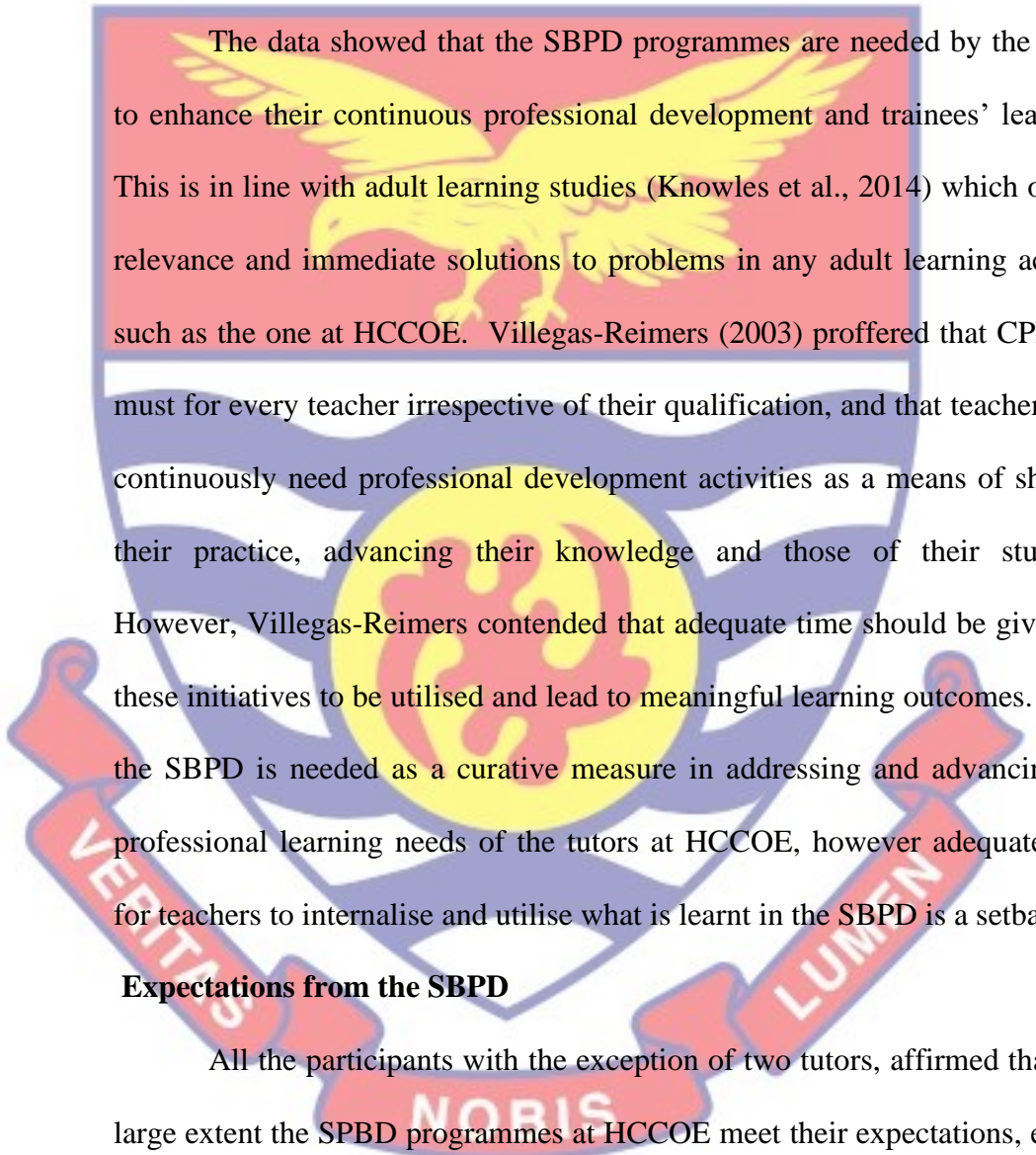
The Need for SBPD at HCCOE

The majority of the tutors expressed that despite their long experience in the teaching profession, they still needed the SBPD as a way of enhancing their practice. They described the T-TEL, TESSA, and SABRE as innovative and helpful in meeting their needs but complained of lack of time to make adequate use of the strategies because too many workload. However, the inadequacy of the ICT and Research was an issue. Woy indicated that:

> *We are still learning oo, even though we are adult and experienced teachers. Sometimes, we think we know everything, but when things come up, then we are like 'Eh!' New knowledge keeps coming, the world is changing, so we have to be in tune with the current things in teaching and learning especially in the ICT, where some of us are still lagging behind in using it for teaching… (Interviewed on December 13, 2017).*

This assertion was affirmed by Delphi:

> *We really need these programmes. I have acquired a lot of knowledge through this SBPD programmes. I am far better now than when I first came to Holy Child College. The T-TEL has taught me to manage my class. There is no dull moment in my class! SABRE has taught me how to teach kids better at the Kindergarten, there is no level*

that I can't teach now. We use 'Lotto Bingo for asking

students questions, 'The Reading Wall', the 'Story-

Telling Approach' for capturing the previous knowledge

of students, and Reducing Teacher Talk Time (RTTT)

strategies (Interviewed on December 14, 2017).

The data showed that the SBPD programmes are needed by the tutors to enhance their continuous professional development and trainees' learning. This is in line with adult learning studies (Knowles et al., 2014) which opt for relevance and immediate solutions to problems in any adult learning activity such as the one at HCCOE. Villegas-Reimers (2003) proffered that CPD is a must for every teacher irrespective of their qualification, and that teachers will continuously need professional development activities as a means of shaping their practice, advancing their knowledge and those of their students. However, Villegas-Reimers contended that adequate time should be given for these initiatives to be utilised and lead to meaningful learning outcomes. Thus, the SBPD is needed as a curative measure in addressing and advancing the professional learning needs of the tutors at HCCOE, however adequate time for teachers to internalise and utilise what is learnt in the SBPD is a setback.

Expectations from the SBPD

All the participants with the exception of two tutors, affirmed that to a large extent the SPBD programmes at HCCOE meet their expectations, except in the areas of ICT and Research, where more practical activities and consistency were still expected. Jonny complained that;

...T-TEL sessions is becoming too much a routine

exercise, let them find ways to capture our desires for

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> *more activities on ICT and Research Skills, since they say*
>
> *if you don't publish you perish (Interviewed on December*
>
> *18, 2017).*

This assertion was also affirmed by Ham, who indicated that:

> *These programmes especially the T-TEL is an old*
>
> *practice in a new jacket. It is the same old pedagogy in*
>
> *teaching that we already know, there is nothing new. My*
>
> *subject seem not to be relevant, but mind you, not all*
>
> *students will have interest to study Mathematics and*
>
> *Science. Some have interest in Arts and Music…*
>
> *However, TESSA and SABRE is doing a very good job*
>
> *with us. They have taught us how to do away with the*
>
> *cane when teaching children... This is in line with Holy*
>
> *Child Philosophy of Education which stipulates respect*
>
> *for all learners (Interviewed on December 18, 2017).*

From the opinions of the participants, the general expectations of the tutors of the SBPD can be said to have been met based on the opinions of the 18 participants. However, two of the participants raised serious concerns which literature in the chapter two of this study contend is key in any experiential learning of teachers and contributes to the professional knowledge of teachers (Dengerink, Lunenberg, & Kool, 2015. The need for ICT and research to enhance inquiry-based learning is compromised in this study. For any PLC to meet the learners' needs and expectations there should be a need assessment of the tutors, and parameters set out to meet almost all the professional needs of all the members of the learning community (Fullan,

1993; Kennedy, 2005; Morrow, 2007). The findings from the SBPD at the HCCOE, also revealed that the workshops did not fully meet the expectations of all tutors in the programme, because a few of the tutors' course areas were not captured in the SBPD sessions. Significantly, data showed that basic ICT skills that are expected to be relevant in enhancing their practices were not provided in the programme.

Research Question Three: How do tutors at Holy Child College of Education learn through School-based professional development?

To ascertain how the tutors learn through the SBPD, the tutors were asked: The Nature of Professional Learning Models in the SBPD. Two themes emerged that answer this key research question; Professional Learning Models used in the SBPD, and Experiential Learning in the SPBD

The Professional Learning Models used in the SBPD

Data from the interviews showed that there is group learning, discussions, and presentations at the various SBPD sessions at HCCOE. The data provided by the tutors showed how the tutors learn in the SBPD programme at HCCOE through various approaches. Kojo said:

We learn through group discussions, presentations, action research and coaching. There is no dull moment at the sessions, koraa… It is fun and an interesting way of learning! We learn how to do reflection on our teaching practice. Personally, I have gained a lot since I started teaching in Holy Child, we carry each other along as we learn together because there is strong collaboration among the tutors and Management. The only problem is

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with the ICT sessions because it is still the lecture method, there is no practice (Interviewed on December, 20, 2017).

The Principal of the HCCOE remarked that:

It is amazing how the tutors interact during the workshops as learners! They learn and take whatever they learn to their classrooms. We go round to monitor how they use these group and student-centred strategies to teach. So for me, I think the SBPD programmes are training the trainers to be effective not only as individuals but as a team (Interviewed on December 14, 2017).

Winie affirmed that:

We learn intensively at the SBPD workshops sometimes beyond two hours. We get opportunities to engage in teamwork, reflections, discussions related to our teaching/learning experiences, our students' work, brainstorming on challenging topics and issues related to our course areas, and finding solutions to the problems in the form of action research (Interviewed on December, 20, 2017).

Lovet, who is a Professional Development Coordinator in the SBPD programmes at HCCOE added:

The SDPD has provided continuous INSET for knowledge, and other competencies needed to transform

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us to effective teachers at Holy Child College of Education. During the sessions it is like a competition, every department would like to win! There is active learning and reflections in the strategies. We also ask questions and contribute to the PDCs' inputs during the sessions and plan lesson notes together. We engage in other Creative Approaches such as "Lotto Bingo", "Find who", Story-telling, RTTT, Carousel, Plan Do and Reflect (PDR), "The Reading Wall", Fast Tracking Teachers Training (FTTT) for Early Childhood Developers…(Interviewed on December, 21, 2017).

The tutors affirmed that the support from management, collaboration among faculty, and the conducive environment at the school has helped them to improve in their learning during the workshops and their teaching practices in general. However, two tutors interviewed still complained that how they learn through the various models presented at the school-based workshops has not changed from what they know previously. Ham said:

We have a supportive staff and management that help our learning…It is not today that we started story-telling, games, and other stuffs to recall the PK for our students. In Ghana we're good at copying the West but we copy wrongly. We need to use the technology and strategies that go with this kind of programmes...One-shot programme in ICT for a whole year is not realistic! How can the Organisers or NGOs give one tablet to a whole
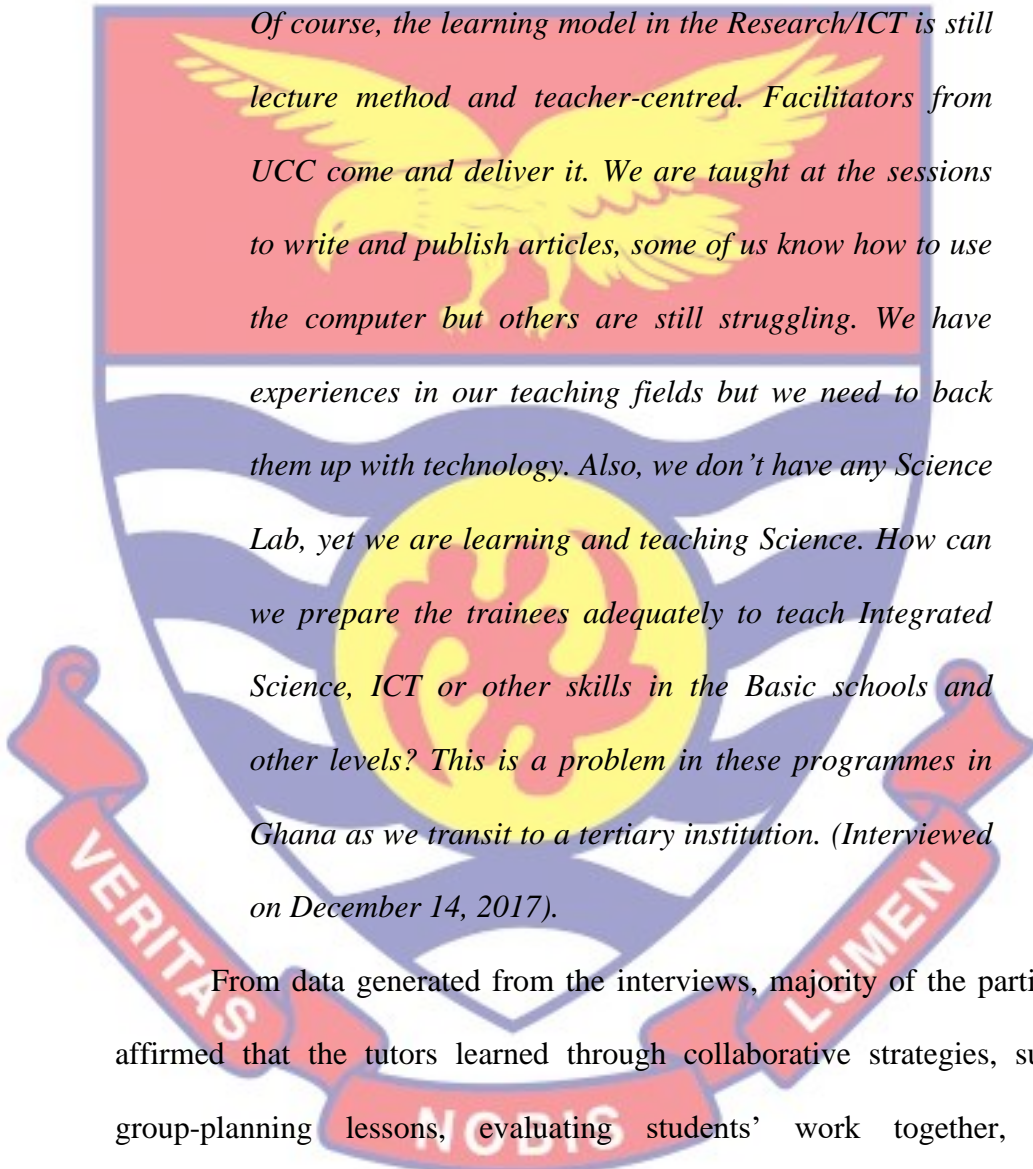
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department and expect every tutor to use it to learn? They want us to do power point in our lessons but we use cardboard papers during the SBPD Sessions… (Interviewed on December 15, 2017).

Jonny also revealed:

Of course, the learning model in the Research/ICT is still lecture method and teacher-centred. Facilitators from UCC come and deliver it. We are taught at the sessions to write and publish articles, some of us know how to use the computer but others are still struggling. We have experiences in our teaching fields but we need to back them up with technology. Also, we don't have any Science Lab, yet we are learning and teaching Science. How can we prepare the trainees adequately to teach Integrated Science, ICT or other skills in the Basic schools and other levels? This is a problem in these programmes in Ghana as we transit to a tertiary institution. (Interviewed on December 14, 2017).

From data generated from the interviews, majority of the participants affirmed that the tutors learned through collaborative strategies, such as; group-planning lessons, evaluating students' work together, having discussions, engaging in action research, and departmental coaching which included mentoring of new teachers. This is in line with studies by ATA (2007), Borko (2004) and Kennedy (2005) that attested that professional learning models that lead to effective teacher professional development are found in collaborative, active learning, mentoring, teamwork and collegial

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discussions embedded in a supportive school environment such as the SBPD at HCCOE. The data revealed these attributes in the study as the core of the SBPD, albeit technological challenges in the workshops and time constraints on the part of the tutors. Thus, the conceptual framework developed in chapter two for authentic school-based professional development includes an adherence to the theories that inform effective experiential learning (Illeris, 2009; Kolb, 1984). Both Illeris and Kolb suggest learning models or styles which are compatible with constructivist and adult learning as exhibited in the SBPD models used at the HCCOE.
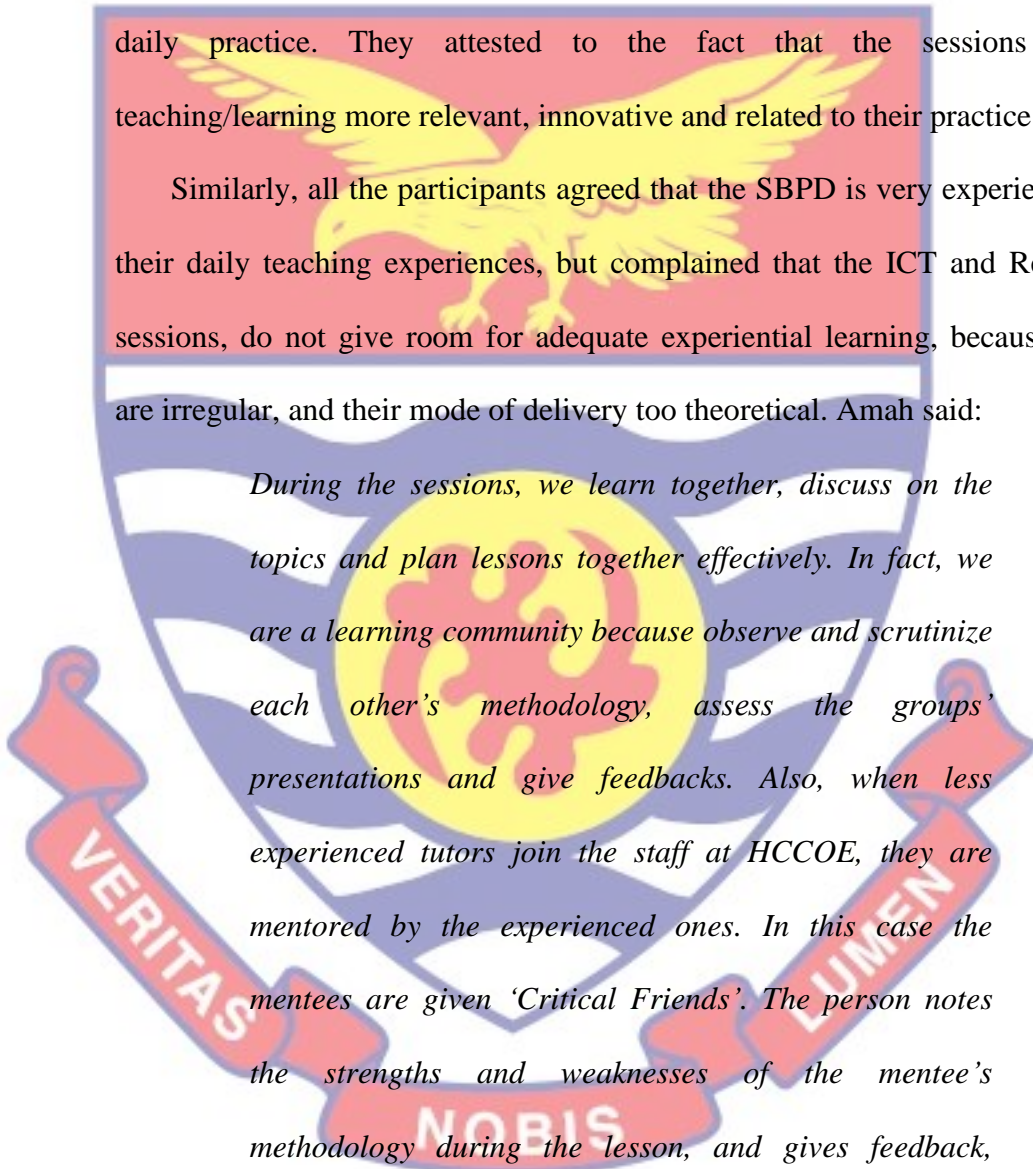
Similarly, the data from the SBPD at HCCOE is in line with studies in school-based professional learning models, where findings showed that group participation, interactive learning, and reflection triggered off willingness of teachers to re-examine their instructional practices in the use of digital resources to enhance research, discovery, and sustain learners' interest (Tondeur et al., 2012; Yuan et al., 2017). This study did not incorporate adequate technological skills in the professional learning models to address the practical realities and difficulties of the tutors in enhancing the tutors' practice.

However, in the research findings of Desimone et al. (2002) and Voogt et al. (2009) showed that incorporating technology in any CPD programme is a powerful tool that supports inquiry-based learning and action research, making teacher learning constructive, innovative and more meaningful. This study at HCCOE, revealed inadequate use of technology in driving the professional learning of the tutors in the SBPD programmes.

Experiential Learning in the SPBD

The tutors were asked how experiential the SBPD has been. To this, they attested that the professional learning models used in the programmes served to enhance their daily experiences about teaching, because it enabled them to observe, reflect and use whatever new knowledge they gained in their daily practice. They attested to the fact that the sessions make teaching/learning more relevant, innovative and related to their practice.

Similarly, all the participants agreed that the SBPD is very experiential to their daily teaching experiences, but complained that the ICT and Research sessions, do not give room for adequate experiential learning, because, they are irregular, and their mode of delivery too theoretical. Amah said:

> During the sessions, we learn together, discuss on the topics and plan lessons together effectively. In fact, we are a learning community because observe and scrutinize each other's methodology, assess the groups' presentations and give feedbacks. Also, when less experienced tutors join the staff at HCCOE, they are mentored by the experienced ones. In this case the mentees are given 'Critical Friends'. The person notes the strengths and weaknesses of the mentee's methodology during the lesson, and gives feedback, which helps to improve the tutors' strategies and pedagogical knowledge… (Interviewed on December 14, 2017).

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Woy corroborated this assertion:

> *We contribute to our individual and group learning in the programmes. I have even published one article with some of my colleagues on something on Early Childhood Education, but this time around I want to learn how to publish alone. We help new tutors to become fully grounded through mentoring especially in lesson planning and others, except that we want to see more skills in ICT, and how to do research in future sessions, because it is very important in our technological world of today (Interviewed on December 14, 2017).*

From the interview discussions, it was clear that there was active learning, observation, collaboration and reflection on the tutors' learning experiences through the SBPD. Also data revealed team work, some sort of mentoring, sharing of ideas and a professional learning community (PLC) through the various departments and the entire teaching staff. This is similar to Borko's (2004) and Kelly's (2006) findings. These studies revealed that teamwork, collaboration and active learning are models that are the panacea in most school-based professional development as the pivot for experiential learning of teachers in a supportive school context.

This study is also in line with Graham (2007) and Lieberman and Miller (2008) who posited that experiential learning and teacher qualities thrive only in a positive and supportive school environment, and that, learning is not practised most effectively as an individual activity, because the teacher functions as part of a social network either with his/her students or within the

school community, where strong school leadership is of overriding importance in bringing teachers together. The unanimous opinions from the data in this study at HCCOE reveal similar scenario, and thus the tutors attested to collaborative support from management and their colleagues in their professional learning during the SBPD programmes.
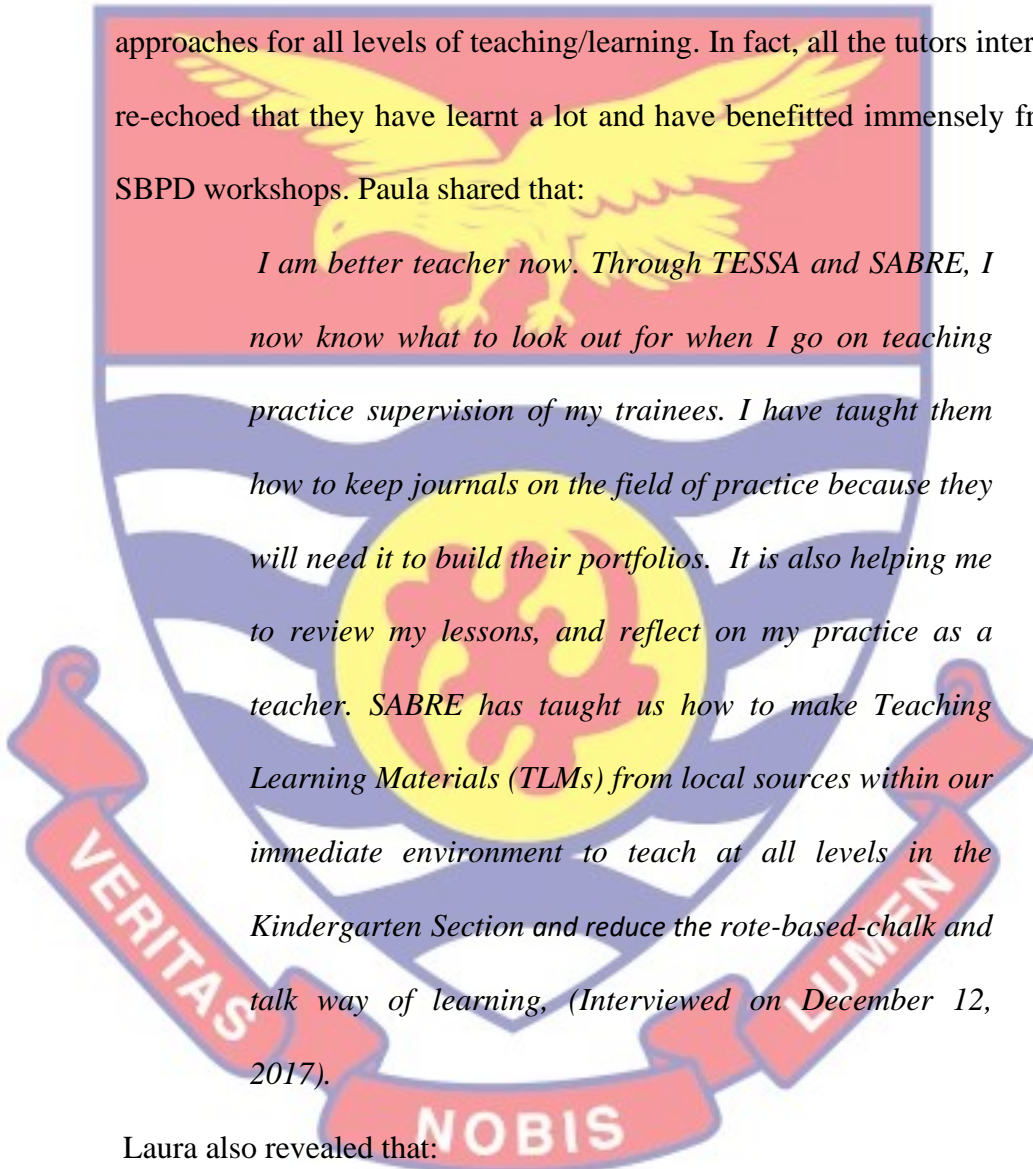
This study also revealed that new tutors are mentored by experienced tutors to enable them adapt to their new environment (HCCOE) and enhance their practice. This is in line with the research findings by Akyeampong and Stephens (2002). The findings showed that teacher education systems in Ghana need models of mentoring, as a tool to help sieve out what teachers bring with them when coming into the teaching field as beginning teachers, and later, to advance their practice. The SBPD also offered continuing learning experiences for the tutors despite their relatively long working experience at HCCOE.

Research Question Four: In what ways do tutors at Holy Child College of Education change their practice through School-based professional development?

The aim of this research question was to ascertain how the tutors benefitted from the SBPD and how it changed their practice and improved students' learning outcomes at HCCOE. Four thematic areas emerged; The Benefits of the SBPD to the tutors; Changes in tutors' practice, Benefits of the SBPD to trainees' learning outcomes; and Areas of improvement in the SBPD at HCCOE.

The Benefits of the SBPD to the Tutors

All the participants affirmed that the tutors have benefitted immensely from the SBPD workshops at HCCOE. The TESSA and SABRE programmes concentrated on the techniques for teaching in the Early Childhood stage. The T-TEL have taught the tutors innovative and student-centred learning approaches for all levels of teaching/learning. In fact, all the tutors interviewed re-echoed that they have learnt a lot and have benefitted immensely from the SBPD workshops. Paula shared that:

I am better teacher now. Through TESSA and SABRE, I now know what to look out for when I go on teaching practice supervision of my trainees. I have taught them how to keep journals on the field of practice because they will need it to build their portfolios. It is also helping me to review my lessons, and reflect on my practice as a teacher. SABRE has taught us how to make Teaching Learning Materials (TLMs) from local sources within our immediate environment to teach at all levels in the Kindergarten Section and reduce the rote-based-chalk and talk way of learning, (Interviewed on December 12, 2017).

Laura also revealed that:

I have learnt not to throw away any old stuff or thing in my household, my spoilt blenders, empty cans of milk, tomatoes, beverages, old cartons of sugar or biscuits, etc.… all very useful for teaching the children how to

pronounce words, and makes good sentences in English and count in Numeracy. I can confidently say apart from teaching in this college, I can teach even at the KG level, set up their classrooms and engage the kids in active learning by themselves; all thanks to the SBPD programmes, especially SABRE Trust. I have also learnt some ICT skills to use the OERs by practising on my own, but majority of us are still struggling… (Interviewed on December 12, 2017).

This assertions were corroborated by the Principal and Vice Principal of the college. The Principal reiterated that since the rolling out of the SBPD programmes at HCCOE, the tutors have shown better mastery in their pedagogy, there is improved student/tutor relationship, and more commitment in their general conduct in the college. The Vice Principal said:

I have taught for many years in Holy Child College of Education, but with the advent of these SBPD, I have noticed a tremendous improvement in the teachers' methods of teaching, from a teacher-centred approaches of teaching to student-centred approaches. These programmes have empowered both the tutors and the trainees to be more innovative in the classroom. For instance I am a Science teacher, if I am teaching Ecology, with ICT, I can get videos from the net that can make the students understand my lesson far better… (Interviewed on December 14, 2017).

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The Coordinators also attested to the benefits of the SBPD workshops in general whether especially with the departmental workshops, TESSA, SABRE, or T-TEL. Lovet indicated that:

Indeed, we have all benefited in various ways from these SBPD in the school. Personally, as a PDC and as a tutor I have benefitted both ways. I have been enriched so much in knowing more innovative ways that I can use to make my class livelier, and at the same time complete whatever I need to teach in ample time. For example the RTTT, is allowing the students to do their learning, while we facilitate, this way we are moving away from the old practice (Interviewed on December 14, 2017).

To this end the Principal of the College also added:

…Hmmmnn my sister, my teachers have benefitted a lot! You see these through the innovative approaches used by the teachers through T-TEL and the other programmes. The classrooms are now livelier. More student-centred learning, and the talking time of teachers are now reduced because they have been taught to facilitate learning and not talk, talk and talk…So we are all benefiting (Interviewed on December 14, 2017).

The results showed that despite the tutors' high levels of qualification, the tutors and subsequently their trainees have benefitted immensely from the SBPD. This data is similar to findings in related studies in Nigeria and United States respectively where teachers confirmed that their instructional tasks are

made easier through CPD irrespective of their levels of qualification, and act as added opportunities for their continuing professional development (Ayeni, 2011; Villegas-Reimers & Reimers, 2000). The data affirmed that the SBPD programmes offered the tutors opportunities to improve on their competencies, classroom practices, and most importantly contributed to their student learning outcomes. However, the notion that some tutors are still struggling especially in the use of technology for teaching, presented by the data is in line with the findings of Petrie and McGee (2012) that highlighted the difficulty in accommodating the teacher in a SBPD programme as a learner within the one-size fits all approach. The study argued that providers of such programmes should understand the unique complex web of cognition, context and other factors that impact upon each teacher, thus making their learning needs and learning ability unique in the SBPD initiatives.

Change in Tutors' Practice Through School-Based PD

On this score, the entire tutors interviewed revealed that their beliefs and practices about the teaching profession have changed to a great extent. Ham said that:

> *We now see ourselves as learners, because we learn everyday even as we teach, so to keep practising, we need to keep learning and updating ourselves. I also see myself now, as being entrusted with the lives of many of my students who look up to me not only as a teacher but as a mentor, The way I relate with them, talk to them, and attend to them in class or even after class hours matters a lot. The cane is longer seen as a medium of correction…So, apart from the programmes changing*

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our academic practices, it has helped us to have a better understanding of our profession as teachers… The trainees learn from us and also pass it on (Interviewed on December 14, 2017).

Ekua supported this assertion and said:

The SBPD has changed my perceptions of what supervision of teaching practice should be. As change-agents, we're changing every day. Before, when we go on teaching practice supervision, we go on a 'fault-finding mission', but now we have been trained to see ourselves as reflective practitioners or observers as well as facilitators who are there to give guidance and help the trainees to do better, so that the kids at school will also learn (Interviewed on December 18, 2017).

The Principal indicated that:

The teachers have really improved through the SBPD programmes. The evaluation reports show tremendous improvement in all aspects of their practices. We also go round during classes to monitor their teaching and we are happy with what we are seeing. Even in the use of ICT which seem to pose a challenge, some have been seen using it. And now, we have instituted an award for the best teacher who will be seen using ICT in his/her lessons often… So, students are watching, if they see you not using it, you hear 'This teacher you are always using

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your book, can't you use power point like others?'... So,

the teachers are being challenged to change from their

old practises (Interviewed on December 14, 2017).

Data indicated that the tutors see their practices as changed and still changing through engaging in the SBPD. The SBPD offered opportunities for reflective observation, collegial learning and experiential learning, which are enhanced by supportive school environment and leadership.

It is shown from the data that majority of the tutors at the college are experienced teachers, who draw from their experiences to learn in the SBPD. These experiences are not static, but continuously changing. Thus, the change in the tutors' practice is seen as a gradual and on-going process. This change in their beliefs and practices through the school-based PD programmes could have taken place through accommodation and transformation learning in the programmes (Illeris, 2009; Kolb, 1984). Thus, this finding affirms the findings of Illeris, Kolb who propounded that changes in the practice of learners occur through their daily experiences, and real world complexities, these consist of; presentation of a concrete experience, reflective observation, conceptualisation, experimentation or testing.

This study is also in line with findings by Villegas-Reimers (2003) who argued that teachers are conceived as a reflective practitioners who enter the profession with some knowledge, and build upon that knowledge through daily interactions with colleagues, students, parents and others in the PLC. Thus, through these interactions the teachers acquire or improve their theoretical and teaching strategies, trying them out and evaluating them with critical reflection, and through receipt of support and feedback.

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Therefore, the premise of this study is that the SBPD engaged the tutors in direct exploration of their teaching experiences, conceptions, prior knowledge and practices, that triggered their self-awareness through reflection, which in turn altered their earlier conceptions, practices, and created openness to new learning, leading to a change in the teachers' practice. This change or altering in practice however, is attributed to the accommodative learning and transformative processes experienced by the tutors in the SBPD at HCCOE.

The Benefits of the SBPD to trainees' learning outcomes

Data generated from all the 20 participants showed that the SBPD has impacted enormously on the trainees' learning outcomes. They attested that the students' performance has improved greatly because whatever the tutors learnt in the SBPD, they took back to their classrooms to teach the trainees. The tutors affirmed that students' learning outcomes and their ability to show mastery and competence in their various course areas, especially when they go on teaching practice is as a result of what they have learnt from the tutors, and the tutors through the SBPD. Betty contended that:

It is a joy to see your student excelling and practising what she has learnt from you!…When, I go on supervision and I see the way our trainees set up the KG classes, engage the children in group work, discussions, and active learning. I feel so proud to be a teacher! Some of our graduates from this HCCOE have impacted so much on most Basic schools in the country as District

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PDCs who coach other teachers especially in Early

Childhood (Interviewed on December 18, 2017).

The Principal of the college affirmed that:

Through these PDs which we have been mounting in the

school, the students' performances have improved over

the years. Previously, we use to have one or two

graduating students getting a First Class, but recently,

the number of First Class has risen to six and even eight.

Students are more eager to learn than before because the

class is active and interesting... (Interviewed on
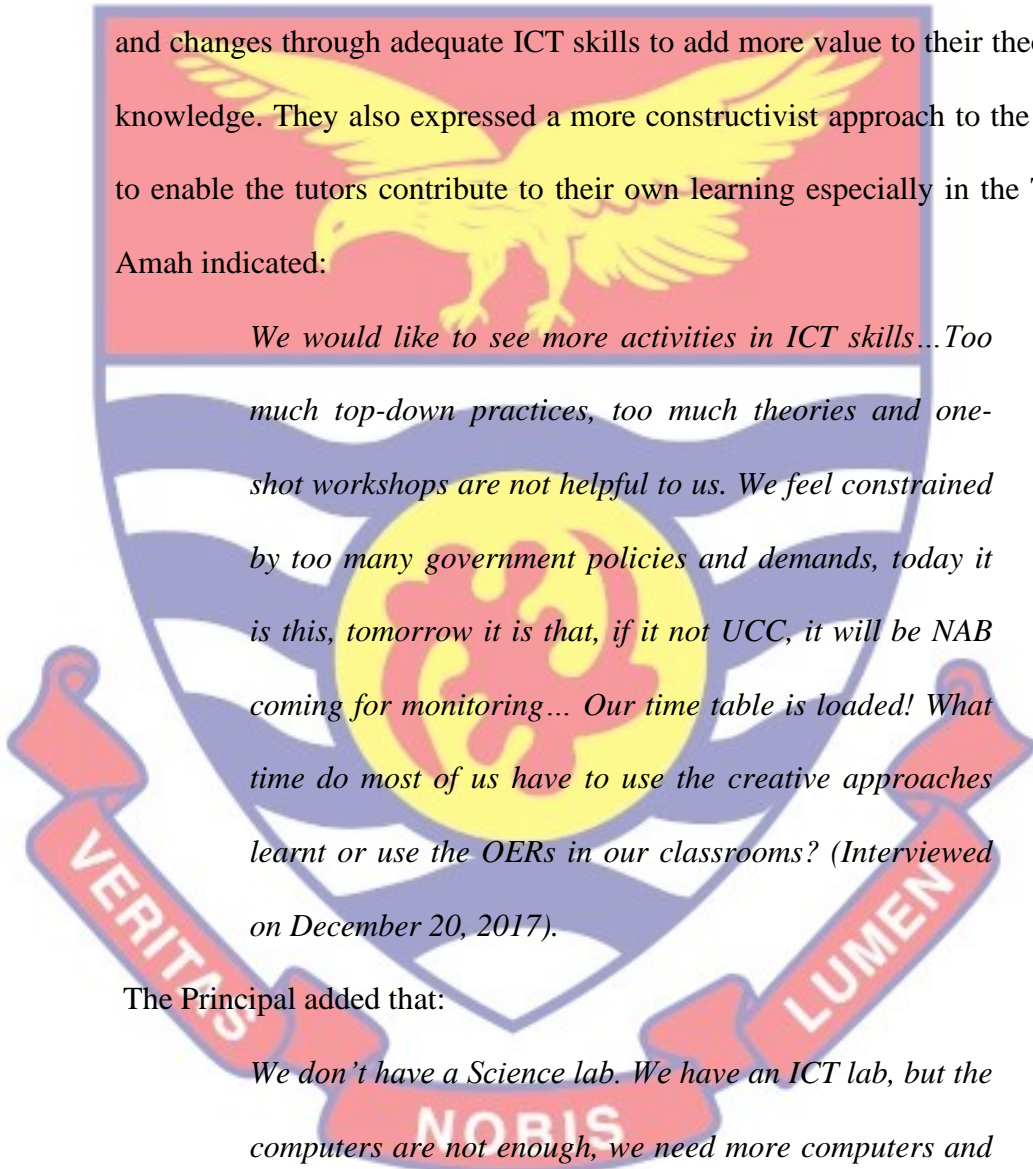
December 14, 2017).

Related literature cited in the Chapter two of this study show that improved students' learning outcomes is linked to effective school-based professional learning models and change in teachers' practice (Alberta Teachers Association, 2007; Desimone, et al., 2002; Guskey, 2002). Findings from these studies suggest that any SBPD initiative that lead to the improvement in students' learning outcomes can motivate teachers, to try out new practices and make the desired changes in their practice. These studies are similar to the SBPD at HCCOE, where data revealed that both tutors and students have benefitted through the programmes mounted in the college over the past years. The tutors were unanimous in affirming that their improved practice has also rubbed off on their students' performance in the college.

Thus, from the opinions gathered from the study tutors found the SBPD beneficial to them and their students. The willingness and desire to learn could stem from the fact that as adult learners who want relevance and

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solutions to problems in any learning initiative, the improved learning outcomes of their students serve as an intrinsic motivation for more learning and improvement in their teaching practice.

Areas of improvement in the SBPD

All the participants in this study expressed a desire for improvement and changes through adequate ICT skills to add more value to their theoretical knowledge. They also expressed a more constructivist approach to the SBPD, to enable the tutors contribute to their own learning especially in the T-TEL. Amah indicated:

> *We would like to see more activities in ICT skills…Too much top-down practices, too much theories and one-shot workshops are not helpful to us. We feel constrained by too many government policies and demands, today it is this, tomorrow it is that, if it not UCC, it will be NAB coming for monitoring… Our time table is loaded! What time do most of us have to use the creative approaches learnt or use the OERs in our classrooms? (Interviewed on December 20, 2017).*

The Principal added that:

> *We don't have a Science lab. We have an ICT lab, but the computers are not enough, we need more computers and projectors. I have put one projector at the Assembly Hall, and some in major classrooms for now. This is very important to facilitate the school-based workshops and*

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the general teaching/learning activities in the school

(Interviewed on December 14, 2017).

Studies have shown that teachers' professional learning can be inhibited by top-down policies and multiplicity of institutions that implement such PDs as is the case of many PDs in Ghana and most African countries respectively (Asare, et al., 2012; Fareo, 2013). The findings of these studies proffered that teachers are capable of gaining insight, ideas and engage in a more sophisticated CPD programmes for themselves and improve the learning outcomes their learners if given opportunities to be creative and innovative. The data from this study also reveal this top-down approach to the T-TEL programme which constitutes a major chunk of the SBPD initiatives at the college. This T-TEL programme serves as a reform for upgrading the teachers to their tertiary status. However, the tutors expressed that future SBPD programmes should take a more constructivist approach to their professional learning.

Similarly, Little (2002) contended that government policy and reform agenda, stress from workload, can make teachers less willing to engage in discussions about their professional learning with colleagues. The study revealed that being bombarded by too many change strategies and paperwork makes it even hard for some teachers to maintain energy, enthusiasm and satisfaction in the workplace. The findings from the SBPD at HCCOE indicate a similar fact which invariably is inhibiting the use of some of the innovative strategies from being used by some tutors in the classrooms because they feel constrained by time, external monitoring and workload to really engage students in these student-centred learning approaches. These constraints can

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hinder the aims and objectives of the SBPD programmes from coming to limelight. The need for incorporating more ICT into the SBPD is strongly opined by all the participants in this study. This is very pertinent in helping the tutors navigate through their professional learning more meaningfully in order to meet the demands of their new status as tutors in a tertiary institution.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary of the Study

The focus of the study was to explore the professional learning of the tutors at Holy Child College of Education, Takoradi, Western Region-Ghana, through school-based professional development. Specifically, the study sought to examine what SBPD programmes are mounted for the tutors at Holy Child College of Education, what the tutors learn, how they learn, and any possible change in their practice through the SBPD. Subsequently, recommendations are made to the management of HCCOE and other Stakeholders for improving the SBPD programmes for future school-based teacher development programmes. The following research questions guided the study:

1. What School-based professional development programmes are mounted for tutors at Holy Child College of Education?

2. What do tutors at Holy Child College of Education learn through School-based professional development programmes?

3. How do tutors at Holy Child College of Education learn through School-based PD programmes?

4. In what ways do tutors at Holy Child College of Education change their practice through school-based PD programmes?

Review of related literature was carried out under four broad areas, the nature of school-based professional development, teacher knowledge activities, teacher learning in SBPD, and teachers' change in practice through SBPD activities. The research design was a case study, as it explored the single case at Holy Child College of Education using a qualitative method.

The qualitative study made use of semi-structured interviews in the collection of data on the background characteristics of the participants, the nature of the SBPD programmes that are mounted, what the tutors learn, how they learn, and possible changes in their practice through the SBPD at HCCOE.

The population for the study was the entire teaching staff who participated in the SBPD at HCCOE. The total population was 34, made up of 30 tutors, two coordinators, and two administrative staff (Principal and Vice Principal). The study employed a purposive sampling technique in identifying the 20 participants for the study. This technique was useful because it identified the participants who have in-depth knowledge of the purpose of the study. Four separate semi-structured interview guides were used in the data collection, which allowed participants to express their views and thus, allowed in-depth study of the phenomena. The review of related literature helped in conceptualising the study and designing the interview guides.

The conceptual framework crafted in chapter two took into consideration three main variables as having significant influence over the professional learning of the tutors: the orientation of the tutors, the school context (world of work), and the SBPD workshops mounted. These discussions identified the need for the SBPD, conditions that support the tutors' professional learning and the different approaches and models used in the SBPD at HCCOE. Thus, the framework and the research questions served as heuristic guide during the data collection and provided guidance for the thematic analysis of the data. The conclusions drawn answered the four key research questions.

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Key Findings

1. The background characteristics of the participants showed that there were more females than males in the SBPD at HCCOE. The ages of the tutors ranges between 35-58 years. All the participants hold a Master's degree in their various course areas. The Principal of the college holds a Master's degree in Educational Administration. Out of the 20 participants 14 of them have been in HCCOE for a period between10-20 years and have participated in the SBPD, while 6 tutors have been in HCCOE between 3-8 years. Majority of the tutors are well experienced and are still motivated to learn especially in ICT.

2. The first research question inquired as to what SBPD programmes are mounted for tutors at Holy Child College of Education.

   The entire participants elucidated an opinion of the nature of the School-based professional development programmes mounted in HCCOE in the following areas: Research/Publication, ICT, Transforming Teacher Education and Learning (T-TEL), Teacher Education for Sub-Saharan Africa (TESSA), Saving Africa By Rural Endeavour (SABRE), and other Departmental workshops. Additionally, the workshops on T-TEL, TESSA and SABRE are mounted consistently, and are organised by the NGOs such as UKAID in conjunction with National Teachers Council (NTC). The workshops on ICT and Research are held once or twice in a year. The departmental workshops are organised by Heads of Departments in collaboration with Management and the tutors in HCCOE. They are consistent and address the professional development needs of the

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tutors, who plan and implement these workshops with management of the college. However, lack of adequate time to use the creative approaches learnt from the workshops in the classrooms, posed a challenge to the tutors.

3. The second research question solicited for what teacher knowledge activities are embedded in the SBPD at HCCOE. The participants indicated that pedagogical teacher knowledge activities are the focus of T-TEL, TESSA, SABRE and departmental workshops. Which comprised of creative and innovative approaches to teaching and learning. However, through this research question the ineptitude of the content and delivery of the ICT and Research workshops was unravelled as being grossly inadequate.

4. The third question asked how the tutors learn through the SBPD at HCCOE. It was through this research question that the issues of the organisational culture of the college and the corresponding departments showed through; collaborative learning, mentorship, team spirit, group work, active learning, collegiality, administrative support and conducive environment for learning. However, the tutors expressed the desire for adequate and practical approaches to the use of ICT which was compromised in the SBPD programmes.

5. The final key research question looked at the School-based professional development programme's impact on the tutors' practice and on the trainees' learning outcomes. The data revealed immense benefits by the tutors from the SBPD in enhancing the tutors' practice, changing their beliefs about the use of the cane as a medium of

correction, adopting student-centred learning approaches to teaching, and improving collegiality. This has led to improved learning outcomes of trainees, through increase in the number of First Class students, excellent performance on teaching practice and building up trainees' portfolios.

The study also revealed that there is need for improvement in the facilities at HCCOE that affect the SBPD, these included increasing the number of tablets, computers and projectors in the departments. The lack of Science Laboratory was a challenge to the professional learning of the tutors as well as trainees.

Conclusions

Based on the findings the tutors at Holy Child College are qualified, experienced and mature. Yet, they are still motivated to learn through the SBPD programmes to address their professional needs and aspirations. The Principal of the college is also well versed and experienced as can be deduced from the data.

School-based workshops at Departmental levels, T-TEL, TESSA and SABRE are mounted consistently, while workshops on ICT and Research/Publication are not consistent. The one-shot workshop in a whole school year and lecture-method approach to ICT and Research workshops do not favour active and continuing professional development of the tutors at HCCOE. However, the tutors are at the hem of planning/implementing departmental workshops.

Though implementers (NCTE, T-TEL, TESSA, SABRE) are committed to the SBPD programme, the one-size fits all and top-down

approaches used in the SBPD at Holy Child College do not really meet the needs and aspirations of tutors especially in (ICT). This situation makes the tutors constrained.

How tutors learn (i.e. Collaborative learning/Teamwork, PLCs, Mentoring, Group Discussions, Active Learning), through the SBPD at HCCOE is consistent with best practices in literature, albeit technologically driven programmes. However, tutors and subsequently the trainees did benefit from the SBPD, though the need for adequate time and ICT driven programmes in the SBPD was an imperative.

Recommendations

Based on the findings and conclusions drawn from the study, the following recommendations are made for possible implementation by Management and Stakeholders in making future school-based professional development more effective and experiential for teachers.

1. The management of Holy Child College of Education should continue to encourage tutors in upgrading/improving their qualifications especially in the use of ICT, as this would better improve their professional development and skills.

2. The management of Holy Child College of Education should continue to engage the tutors in departmental SBPD activities with ICT. The NCTE and UKAID, should continue to mount consistently SBPD workshops on ICT and Research during the T-TEL, TESSA and SABRE programmes to augment the theoretical knowledge needed by the tutors to engage in experiential and inquiry-based learning.

3. Management of HCCOE and T-TEL professional development coordinators should sustain the student-centred and collaborative models of learning through the SBPD programmes. In addition, they should encourage the bottom-up approach in the school-based workshops, and make the college an online-resourced learning community, this will improve the tutors' and student-teachers' learning outcomes.

4. The Principal and other administrative staff of HCCOE may have to take a look again at the scheduling and time allocation in the school's timetable to create more workable schedules to encourage the tutors to use adequately the creative approaches they learn in the SBPD workshops, in order to sustain their change in practice through the SBPD. Management and tutors should seize every opportunity to develop and advance their own professional learning by actively engaging in the Online Educational Resources (OERs) provided in the SBPD template.

5. The Management of HCCOE, UKAID, SABRE Trust and NCTE should work together to provide adequate computers, projectors, and structures (Science Laboratory), for the tutors to make practical what they learn in the SBPD at HCCOE.

Suggestions for Further Research

This study employed a qualitative method involving 20 participants from Holy Child College of Education, Takoradi. Therefore, it is suggested that similar studies involving more participants could be replicated in other Colleges of Education across the country through a quantitative survey. This

will help promote the professional learning of tutors through the School-based professional development and elucidate the reform agenda of the COEs by the Ministry of Education in Ghana.

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APPENDIX A

INTERVIEW GUIDE FOR TUTORS

This study is aimed at exploring the professional learning of the tutors in Holy Child College of Education through School-based professional development, to understand what programmes are mounted for the teachers, what they learn, how they learn, and in what ways they benefit from the programmes. I assure you that your responses will be treated confidentially and with utmost anonymity, and further state that information you provide are solely for academic purposes. Please kindly give your candid opinions about the issues being addressed. Thank you.

SECTION A: BACKGROUND INFORMATION OF PARTICIPANTS

1. Gender of participants.

2. Age of participants.

3. Number of years in Holy Child College of Education.

4. Qualification of participants.

5. Course Area.

6. Working Experience.

7. Position held in Holy Child College of Education.

SECTION B: NATURE OF SCHOOL-BASED PROFESSIONAL DEVELOPMENT

1. How many School-based professional development workshops have you had in the past three years at Holy Child College of Education?

2. What school-based professional development activities have you engaged in at Holy Child College of Education in the two past years?

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3. How often do you receive these SBPD through the academic year in the College?

4. In what ways do you contribute to the planning and organisation of the SBPD activities in the College? Please give details.

SECTION C: SCHOOL-BASED PROFESSIONAL LEARNING ACTIVITIES IN THE COLLEGE.

1. What activities have you engaged with in the past years which demonstrate teacher knowledge activities of the SBPD? Why do you classify them as such?

2. What did you learn in the SBPD activities that you would say is focused on enhancing your professional learning and teaching practice?

3. In what ways would you say you really needed this SBPD?

4. How would you describe the professional learning activities? Do they meet your expectations in your professional development?

SECTION D: PROFESSIONAL LEARNING MODELS OF THE SBPD IN THE COLLEGE

1. What is the nature of the school-based professional learning at HCCOE?

2. What are the various professional learning models used in the SBPD programmes?

3. How experiential are these professional learning models used in the SBPD to your professional practice?

SECTION E: CHANGES IN TUTORS' PRACTICE THROUGH THE SCHOOL-BASED PROFESSIONAL DEVELOPMENT

1. Based on your teaching experiences in what you have benefitted from the SBPD in HCCOE?

2. To what extent has your beliefs and practices in the teaching profession changed as a result of the SBPD?

3. How has your professional learning from SBPD affected the students' learning outcomes?

   Thank you for your time!

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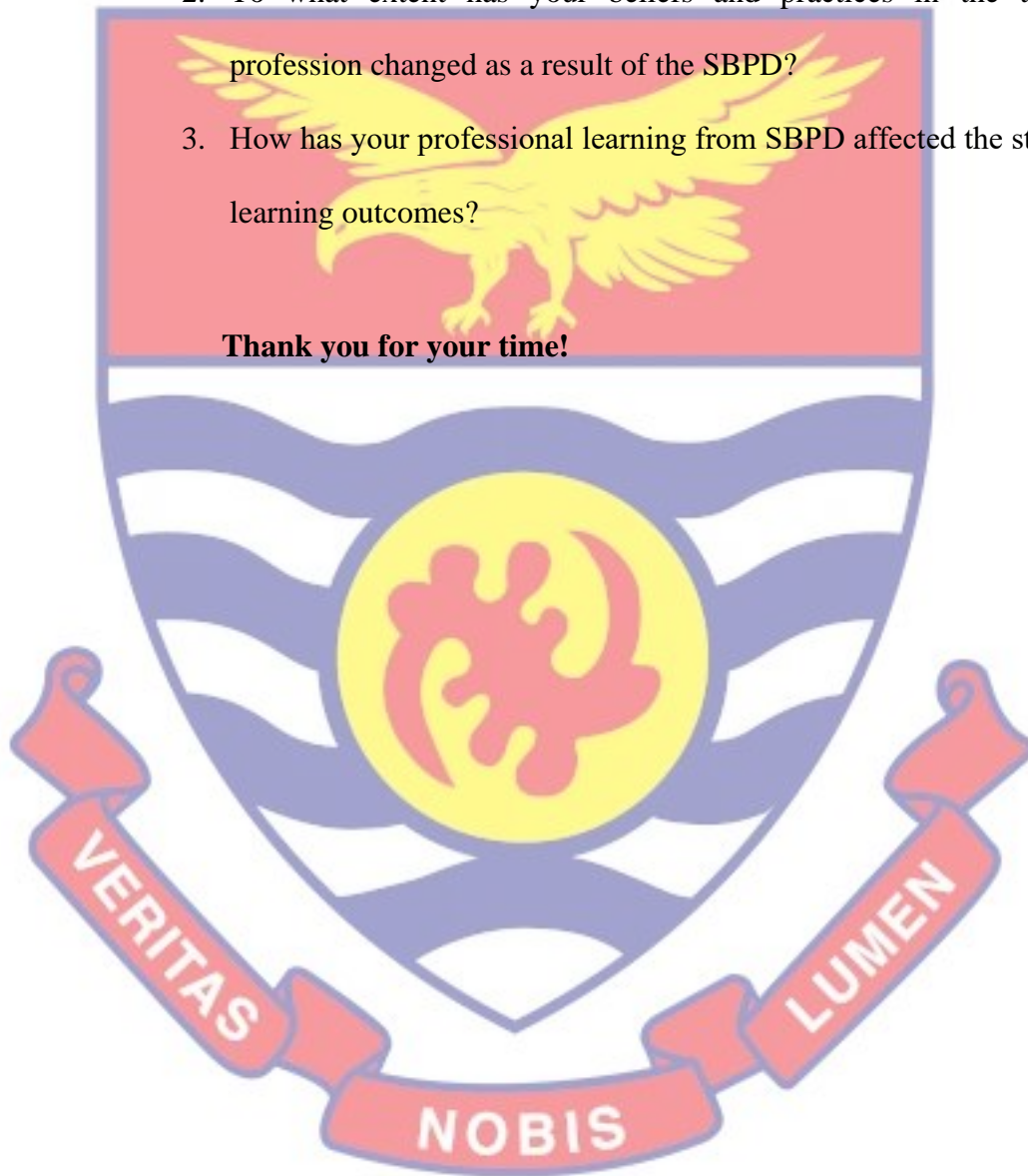
APPENDIX B

INTERVIEW GUIDE FOR COORDINATORS

This study is aimed at exploring the professional learning of the tutors at Holy Child College of Education through School-based professional development, to understand, what they learn, how they learn, and in what ways they benefit from the SBPD programmes. I assure you that your responses will be treated with utmost confidentially and anonymity, Please kindly give your candid opinions about the issue being addressed. Thank you.

A. **BIOGRAPHICAL DATA OF PARTICIPANTS**

1. Gender of participants.

2. Age of participants.

3. Number of years in Holy Child College of Education.

4. Qualification of participants.

5. Course Area.

6. Working Experience.

7. Position held in Holy Child College of Education.

B. **NATURE OF SCHOOL-BASED PROFESSIONAL DEVELOPMENT**

1. What school-based professional development activities have you engaged in at Holy Child College of Education in the past three years?

2. How many School-based professional development workshops have you had in the past two years at Holy Child College of Education? How often do you have them?

3. What roles do tutors play in the planning and organisation of the SBPD activities in the College? Please give details.

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C. **SCHOOL-BASED PROFESSIONAL LEARNING ACTIVITIES IN THE COLLEGE.**

    1. What did you learn in the SBPD that demonstrate teacher knowledge activities that you would say is focused on enhancing your professional learning and practice?

    2. How would you describe the professional learning activities?

D. **PROFESSIONAL LEARNING MODELS OF THE SBPD AT THE HOLY CHILD COLLEGE OF EDUCATION**

    1. What is the nature of the school-based professional learning approaches at HCCOE?

    2. How do you learn at the SBPD sessions at Holy Child College of Education?

E. **CHANGES IN TUTORS' PRACTICE THROUGH THE SCHOOL-BASED PROFESSIONAL DEVELOPMENT**

    1. In your opinion as a Coordinator and a tutor in what ways would you say you have benefitted from the SBPD in HCCOE?

    2. To what extent have your beliefs and practices in your teaching practice changed as a result of participating in SBPD?

    3. How has your professional learning from SBPD benefitted your students' learning outcomes? Give details please.

Thank you for your time!

APPENDIX C

INTERVIEW GUIDE FOR PRINCIPAL

This study is aimed at exploring the professional learning of the tutors in Holy Child College of Education through School-based professional development, to understand what programmes are mounted for the teachers, what they learn, how they learn, and in what ways they benefit from the programmes. I assure you that your responses will be treated with utmost confidentially and anonymity. Please kindly give your candid opinions about the issue being addressed. Thank you.

SECTION   A: BIO DATA OF PARTICIPANTS

SECTION   B: NATURE   OF   SCHOOL-BASED   PROFESSIONAL DEVELOPMENT

1. What school-based professional development programmes have been mounted for your tutors at Holy Child College of Education in the past three years?

2. How often do your tutors receive SBPD programmes through the academic year in the College?

3. What roles do they play in the planning and organisation of the SBPD programmes?

SECTION   C: SCHOOL-BASED   PROFESSIONAL   LEARNING ACTIVITIES AT HCCOE.

1. How would you describe the professional learning activities of the SBPD at HCCOE? Please give details.

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2. In what ways would you say your tutors really needed this school-based professional development?

SECTION D: PROFESSIONAL LEARNING MODELS OF THE SBPD IN THE COLLEGE

1. What are the various professional learning models used in the SBPD?

2. How effective are they in meeting the tutors' PD?

SECTION E: CHANGES IN TUTORS' PRACTICE THROUGH THE SCHOOL-BASED PROFESSIONAL DEVELOPMENT

1. In your opinion as the Principal of Holy Child College of Education, in what ways would you say your tutors have benefitted from the SBPD?

2. How has your tutors' professional learning from SBPD affected the students' learning outcomes? Please give details.

3. In what ways have you as a Principal enhanced your tutors' professional development and learning experiences in the SBPD?

Thank you for your time!

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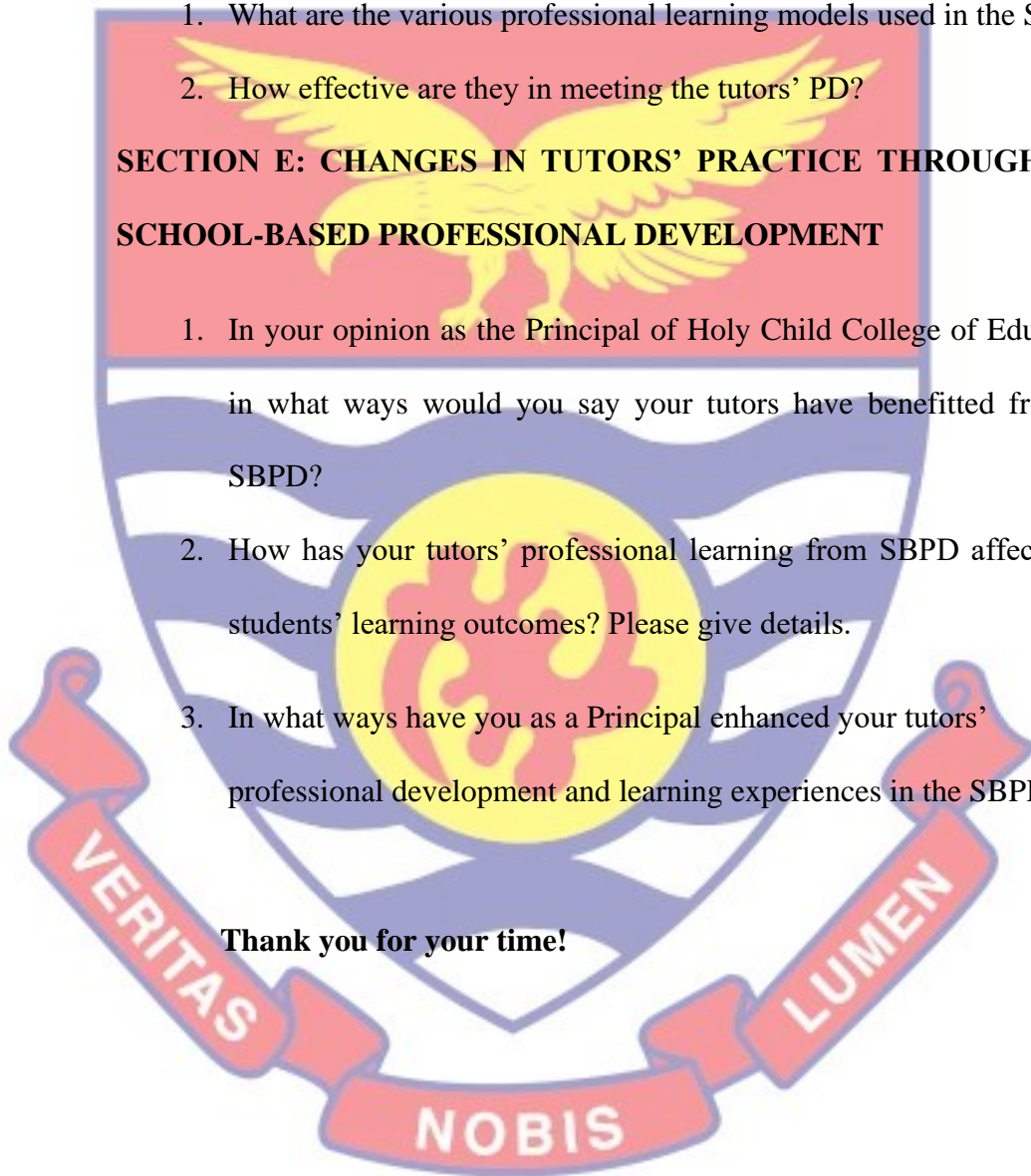
APPENDIX D

INTERVIEW GUIDE FOR VICE PRINCIPAL

This study is aimed at exploring the professional learning of the tutors in Holy Child College of Education through School-based professional development, to understand what programmes are mounted for the teachers, what they learn, how they learn, and in what ways they benefit from the programmes. I assure you that your responses will be treated with utmost confidentially and anonymity. Please kindly give your candid opinions about the issue being addressed. Thank you.

SECTION   A: BIO DATA OF PARTICIPANTS

SECTION   B: NATURE   OF   SCHOOL-BASED   PROFESSIONAL DEVELOPMENT

1. What school-based professional development programmes have been mounted for your tutors at Holy Child College of Education in the past three years?
2. How often do your tutors receive SBPD programmes through the academic year in the College?
3. What roles do they play in the planning and organisation of the SBPD programmes?

SECTION   C: SCHOOL-BASED   PROFESSIONAL   LEARNING ACTIVITIES AT HCCOE.

1. How would you describe the professional learning activities of the SBPD at HCCOE? Please give details.

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2. In what ways would you say your tutors really needed this school-based professional development?

SECTION D: PROFESSIONAL LEARNING MODELS OF THE SBPD IN THE COLLEGE

1. What are the various professional learning models used in the SBPD?

2. How effective are they in meeting the tutors' PD?

SECTION E: CHANGES IN TUTORS' PRACTICE THROUGH THE SCHOOL-BASED PROFESSIONAL DEVELOPMENT

1. In your opinion as the Vice Principal of Holy Child College of Education, in what ways have tutors benefitted from the SBPD?

2. How has the tutors' practice changed through the SBPD programmes?

3. In what ways have the tutors' professional learning from SBPD affected the students' learning outcomes? Please give details.

Thank you for your time!

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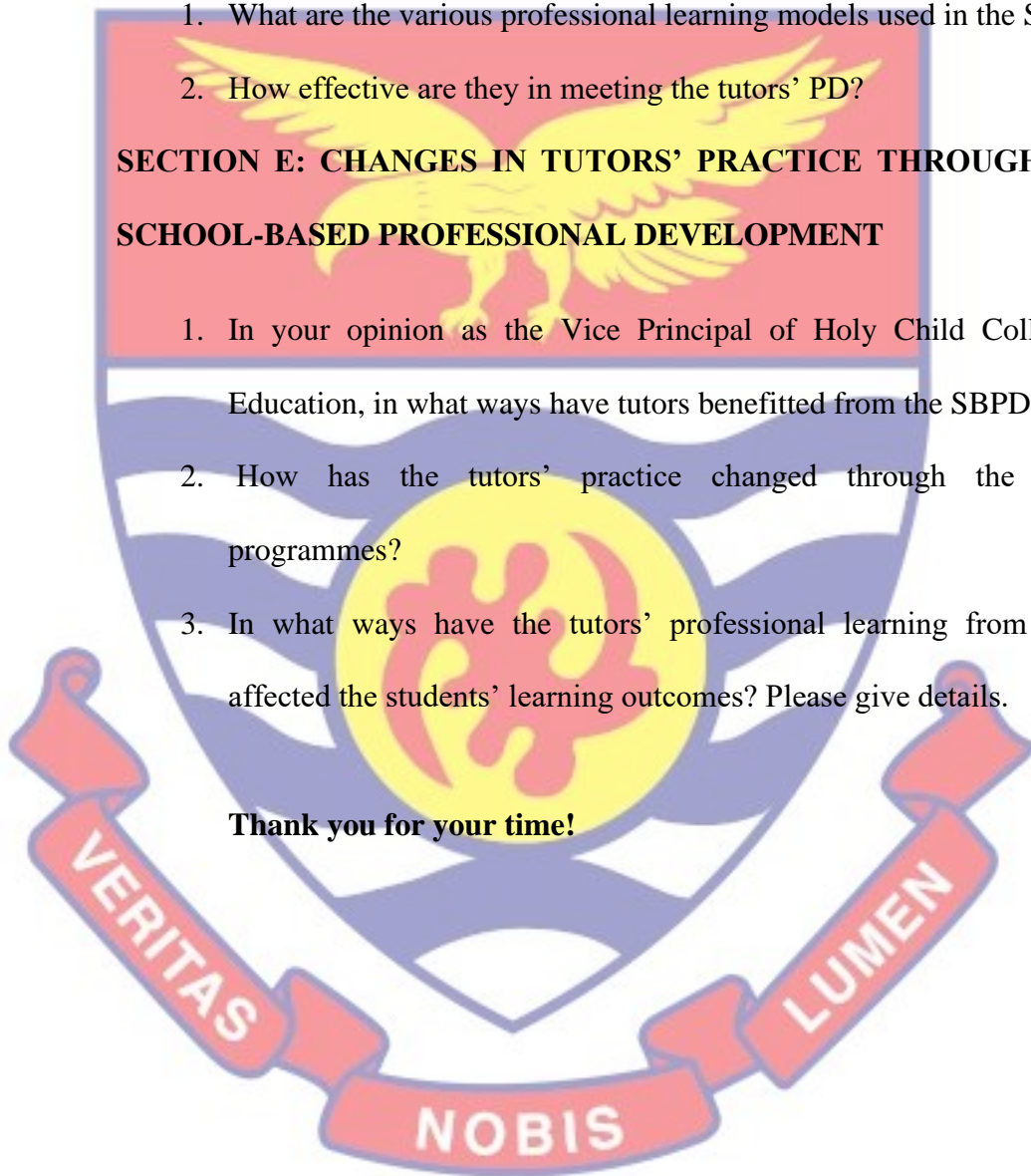
APPENDIX E

CONCERN FORM

INSTITUTE FOR EDUCATIONAL PLANNING AND ADMINISTRATION

UNIVERSITY OF CAPE COAST

Consent to Participate in School-based Professional Development Study

Introduction

This is an MPhil Thesis research study by Rev. Sr. Clarence Uzogara from the Institute for Educational Planning and Administration (IEPA) in the University of Cape Coast. The goal of the study is to explore how the tutors of Holy Child College of Education have benefitted from School-based Professional Development programmes in enhancing their student teacher learning outcomes.

Purpose of Study

- The purpose of the study is to explore the professional learning of tutors at Holy Child College of Education, Sekondi-Takoradi through School-based PD Programmes.
- The study aims to gain an understanding of what the tutors learn and how they learn through SBPD programmes; and any possible change their practice.
- Hopefully, information from the study might help to identify gaps in the professional development of the tutors in the College, which will provide Management and Stakeholders feedbacks on SBPD models for future professional learning, teacher development practices and improved student learning outcomes.

Confidentiality

- In this study, the issues of confidentiality will be maintained throughout the study and the anonymity of participants assured while collecting, recording and transcribing data.
- The records shall be kept strictly confidential and locked away safely and protected with password.
- The audio records and written information/data are purely for the purpose of this study and will not be used in any form against the participants.

Right to Refuse or Withdraw from the Study

- Participants have the choice of participating in the study and free to decline.
- At any point in time participants feel like discontinuing from the study, they are free to do so without any reservation.
- Participants have the right to request that information provided by them are not used in the study.

Right to Ask Questions, Seek clarifications, and Report other Concerns

- Throughout the study and even after the research you have the right to ask question(s), or report concerns that you may have, and they will be answered/addressed by the researcher.

Please feel free to contact the Researcher if you have any question(s) via this phone number **0553867721 or email:** clareuzo@yahoo.com

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Consent

Your consent to participate in this study is sought through your signature on the space provided,

and that you have read and fully understand the above information provided by the researcher.

Participant's Name:………………………………………………Date:…………………

Participant's Signature: …………………………………………..

Researcher's Name:………………………………………………Date:…………………

Researcher's Signature: …………………………………………

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APPENDIX F

INTRODUCTORY LETTER

UNIVERSITY OF CAPE COAST
COLLEGE OF EDUCATION STUDIES
SCHOOL OF EDUCATIONAL DEVELOPMENT & OUTREACH
INSTITUTE FOR EDUCATIONAL PLANNING AND ADMINISTRATION

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University Post Office
Cape Coast
Ghana

Our Ref.: EP/90.3/Vol.2

5th December, 2017

The Principal
Holy Child College of Education
Sekondi-Takoradi

Dear Madam,

LETTER OF INTRODUCTION

The bearer of this letter **Rev. Sister Clarence Uzogara** is an M.Phil student of the Institute for Educational Planning and Administration (IEPA) of the University of Cape Coast. She requires some data/information from you/your outfit for the purpose of writing her thesis titled, **"Exploration of the Professional Learning of the Teachers at Holy Child College of Education, Sekondi-Takoradi, Through School-based Professional Development"** as a requirement for M.Phil Degree Programme.

Kindly give the necessary assistance that **Rev. Sister Uzogara** requires to enable her gather the information she needs.

While anticipating your co-operation, we thank you for any help that you may be able to give her.

Thank you.

Yours faithfully,

Alberta A.K. Owusu (Mrs.)
ASSISTANT REGISTRAR
For: **DIRECTOR**

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