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**PEDAGOGIC RENEWAL AND THE DEVELOPMENT OF TEACHERS IN  
SUB-SAHARAN AFRICA: THE CASE OF GHANA**

**BY**

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DOCTOR OF PHILOSOPHY**

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### **Declaration**

I hereby declare that this thesis has not been submitted, either in the same or different form to this or any other University for a degree.

Signature: .....

## **Abstract**

This study examined the pedagogic practices of primary teachers in Ghana. The major goal was to identify innovative pedagogic practices, as well as to understand why the transmission practices continue to prevail in a majority of Ghanaian primary classrooms. Using a qualitative approach, the study tried to probe deeply into how and why teachers in Ghana engage with their practices, at the same time, how and where teachers manage to better support their learners in the face of their contextual difficulties.

The theoretical framework for this study was based on Schulman's theory on teacher knowledge. Schulman proposed that, for teachers to be able to support their learners, they must be able to combine content knowledge, curricular knowledge and pedagogical content knowledge (PCK): of the three he argued that it was PCK that teachers needed most in order to make sense of teaching. Thus this study has examined what constitutes teacher knowledge in Ghana and found that, primary teachers add on the traditional and cultural knowledge systems to teaching and learning processes in Ghana.

The major instruments used for the study were observations and interviews. The study employed two stages of observations; the first stage of unstructured lesson observations of 40 teachers revealed pedagogic variations (supportive and unsupportive) in Ghanaian classrooms. The second stage of structured lesson observations enabled categorizations of the pedagogic practices. Follow-up interviews unearthed teachers' views and understanding of their practices.

The analysis of the study revealed two categories of primary teachers in Ghana; the traditional and innovative. All teachers in the study relied on the traditional and cultural knowledge systems; but whilst a majority (36 out of 40) validated their transmission rote practices from the culture, there were a few (6 out of 40) who had deeply reflected on the positive aspects of the culture making learning more flexible and supportive for their children.

The study concludes that teachers in Ghana would experience more successes in their classrooms when they begin to embrace fully the positive aspects of the cultural knowledge. They will also begin to find alternative strategies to address the contextual challenges they often encounter in their classrooms. Therefore the learner's cultural

background ought to be promoted and embedded in the teaching as it stands as an all-inclusive and empowering agenda for the teaching practice. Teachers and learners alike have common goals and ideas that bond them so their familiarity with the indigenous culture would yield very much desired positive learning outcomes in the learners.

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### **Dedication**

To my beloved husband, Reverend John Olu Fagbemi, and my dear children: Prince William Ade Olu, Princess Barbara Olu, Loretta Olu Fagbemi, Edwina Nana Yaa Olu Fagbemi, Pearl Louise Olu, and Jason Amo Olu, whose constant inspiration and endless support have made this work a reality.

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### **List of Acronyms**

|               |  |
|---------------|--|
| <b>ADEA</b>   | Association for the Development of Education in Africa       |
| <b>ASSIA</b>  | Applied Social Sciences Index and Abstracts                  |
| <b>BECE</b>   | Basic Education Certificate Examination                      |
| <b>CAS</b>    | Critical Analytical Study                                    |
| <b>CoE</b>    | College of Education   |
| <b>CPD</b>    | Continuing Professional Development                          |
| <b>DBE</b>    | Diploma in Basic Education                                   |
| <b>EFA</b>    | Education for All  |
| <b>ERIC</b>   | Educational Resource Information Center                      |
| <b>ERNESA</b> | Educational Research Network for Eastern and Southern Africa |
| <b>GES</b>    | Ghana Education Service                                      |
| <b>GER</b>    | Gross Enrollment Ratio                                       |
| <b>IK</b>     | Indigenous Knowledge   |
| <b>INSET</b>  | IN-Service Training  |
| <b>IJED</b>   | International Journal of Educational Development             |
| <b>ITE</b>    | Initial Teacher Education                                    |
| <b>JHS</b>    | Junior High School   |
| <b>KC</b>     | Knowledge of Content   |
| <b>KCS</b>    | Knowledge of Content and Student                             |
| <b>KCT</b>    | Knowledge of Content and Teaching                            |
| <b>LCE</b>    | Learner Centered Education                                   |
| <b>MDG</b>    | Millennium Development Goals                                 |
| <b>MOE</b>    | Ministry of Education  |
| <b>MOESS</b>  | Ministry of Education Science and Sports                     |
| <b>MUSTER</b> | Multi-Site Teacher Education Research Project                |
| <b>NALAP</b>  | National Literacy Acceleration Program                       |

|               |   |
|---------------|---|
| <b>NER</b>    | Net Enrollment Ratio  |
| <b>PCK</b>    | Pedagogical Content Knowledge                                   |
| <b>SHS</b>    | Senior High School  |
| <b>SSA</b>    | Sub-Saharan Africa  |
| <b>TLM</b>    | Teaching Learning Materials                                     |
| <b>TLR</b>    | Teacher Learner Resources                                       |
| <b>TPA</b>    | Teacher Preparation in Africa                                   |
| <b>UNESCO</b> | United Nations Educational Scientific and Cultural Organization |
| <b>UPE</b>    | Universal Primary Education                                     |

## **CHAPTER ONE**

### **GENERAL INTRODUCTION**

#### **1.1: Introduction**

This study is situated in the Ghanaian context. In this chapter, I examine the patterns of Ghana's efforts to address her educational goals at the basic school level. Although Ghana is a major recipient of international support for educational progress, there are indications that the country continues to experience low outcomes of basic education whilst the achievement of educational quality remains a challenge. I therefore examine the contextual challenges in delivering quality education and further explore the Ghanaian teacher's role in the process of achieving educational quality.

Ghana as a developing country is one of the highest recipients of education aid in the SSA region (World Bank, 2004). With the introduction of poverty alleviation interventions such as the capitation grant, school feeding programme, exercise books and school uniforms, enrolment increased at all levels of education. For instance enrolments at the basic school level rose from 70.9% in 1999 to 85.2% in 2000 and between the years 2012-2014 the number had raised to 106.85 % (UNECSO, 2014). Whilst the increase in enrolment helped the country to move towards the achievement of the Education For All EFA (2006) and Millennium Development Goals MDG (2014) goals, the challenges of providing enough teachers and the needed facilities indicated a remarked decline in Ghana's educational quality (Anamuah-Mensah, 2006).

Available data and the trend of MDG 2 in the achievement of the Universal Primary Education (UPE) has indicated that Ghana is near to achieving both the gross and net enrolment targets by 2015 (UNDP 2014). However, the report asserts that the country has a lot of work to increase Gross Enrolment Ratio (GER) and Net Enrolment Ratio (NER) by 5.1 and 11.5 per cent respectively to reach the target. Critically, about one-fifth of eligible primary school children do not enter school whilst over two fifths exist in the Northern, Upper East and Upper West regions (Imoro, 2009). At the primary school level the dropout rate stands at 20% for boys and 30% for girls. This means that the challenge of finding out how to deal with those school age children not attending school, and those dropping out of schools will have to be addressed. Having children out of school implies that some children are still not learning and hence Ghana's

achievement of the educational quality at the basic level is still far from reality. Implicitly even the few who remain in the classrooms may experience some frustrations as the reports have indicated issues of feeding and Teaching Learning Materials (TLMs) which are critical to child learning. All these issues have contributed to the difficulty of addressing the quality issues at the basic school level.

One major challenge in addressing the quality issues in Ghana has been to examine the extent to which the primary curriculum meets the needs of young learners. Alexander (2009) remarked that the primary curriculum is a “truer measure of national intentions and priorities than the goals themselves” (Alexander, 2009 p.156). The primary curriculum is intended to decode the desired national goals in the young learner. Therefore, contents of the primary curriculum are the embodiment of national priorities and values. In Ghana, the primary curriculum seeks to imbibe in the young learner the core values and norms of the nation. The Ghana Education Strategic Plan aimed at making the primary curriculum ‘more relevant in practical aspects such as life skills, physical education and vocational skills’ (MoE, GES Strategic Plan 2003-2015, P. 15). For instance, the primary mathematics curriculum (P 1-6) emphasizes mathematical knowledge and skills that should help the young learner develop basic numeracy competence to enable him/her to function in society. It has a main objective to help young learners to be able to use numbers competently, read and interpret numeral data, reason logically, solve problems involving calculations and mathematical reasoning as well as communicate effectively with other people using accurate mathematical data and interpretations (MOESS 2007, p.2). Again the English curriculum (P4-6) recognizes the English Language as the official language of government and the medium of instruction from Primary 4 in the school system, with local language from P1- P3 (See below). The implication is that success in education at all levels depends, to a very large extent, on the individual’s proficiency in the English language. Thus focus is placed mainly on the development of basic skills of listening, speaking, reading and writing English. Further to attain high English proficiency implies the need to help a learner in the study of other subjects as well as cultivate the habit and interest in reading and also communicate effectively in English (MOESS 2007, p. 2). What is worrying is that the Recent Performance Monitoring and Criterion Reference tests have confirmed that relatively few students acquire the necessary knowledge and skills as identified in the curriculum. In 2012 the Basic Certificate Examination (BECE) scores showed that in

Mathematics, English and Science performance rates above average were 24.4%, 23.5% and 22.3% respectively whilst the performance rates in the same subjects below average were 17.0%, 18.1% and 16.7% respectively (Ghana Basic Report 2012-2013). This poor basic school performance has an upward effect creating weak performance at higher school levels. The causes of poor achievement have been identified as; poor learning environment, overcrowded classrooms in urban areas; the great majority of schools lack the necessary teaching facilities to assist the teaching of even the most basic subjects (MoE, Strategic Plan, 2003-2015). Thus the report declares that for any lasting effect on student learning, any improvement in the learning milieu will have to be harmonized by a strengthening of the teaching force. It further states that teachers require ‘targeted pedagogical training’ (MoE, Strategic Plan, 2003-2015). Meanwhile it is still unclear what form the targeted pedagogical training has taken. This raises the need for further investigations into teacher pedagogic performance and development in Ghana. In the next section I provide an account of teacher preparation in Ghana.

#### Teacher Preparation in Ghana

In Ghana, initial teacher education preparation (Diploma in Basic Education [DBE]) is offered in 38 public and 3 private colleges of education (CoE), (Institute of Education, 2013). Although the colleges run the DBE program, examinations are conducted by the University of Cape Coast’s Institute of Education. Apart from the CoE, the University of Cape Coast, also offers bachelor’s degree programs to teachers to teach at both basic schools (Grades K-9) and high schools (Grades 10-12). In addition, the University of Education, Winneba, trains teachers for pre-tertiary school (Grade K-12) (Anamuah-Mensah & Benneh, n.d). According to Anamuah-Mensah & Benneh, (n.d) although colleges are located in all regions of Ghana the teacher training in Ghana takes on a uniform approach with a national focus of utilizing the generalist and specialist training approaches. Meaning that some teachers are trained to teach general subjects whilst others are trained to teach special area subjects. Adu-Yeboah’s (2011) study of trainee teachers in Ghana (as part of the Teacher Preparation in Africa [TPA] study) found that they were exposed to three main teaching materials: teachers’ handbook, pupils’ textbooks and the teaching syllabus. Additionally, the generalist teachers are trained for Kindergarten level (KG) and Primary 1-6; the specialist teachers are also trained for Junior High Schools (JHS) and Senior High Schools (SHS); other training modes are the distance learning/sandwich and traditional residential training in the CoE; as well as



school attachment program or internship. The school internship programme is organised by the Universities of Education and the CoEs. Trainee teachers at the end of the final year of training are posted to basic schools in Ghana as practising teachers or interns. They work under the supervision of a trained mentor, who is often located within or near the school of the intern. Tutors from the respective colleges also go on regular supervision to assess the interns on the extent to which they practice the knowledge acquired from the training. The internship period covers a period of four months, which is equivalent to one term on the basic school academic calendar. Student trainees at the end of the internship period return to their respective campuses to complete college training. They are assessed through educational seminars where they share their experiences and reflections on their challenges and successes in the real life classrooms. They also present teaching portfolios to their assessors showing the physical evidence of their classroom activities. This may imply that trainees may have developed practical teaching skills that could be supportive for their learners. However, studies on teaching approaches interns used to teach content of various subjects showed that they employed the ‘transmission of knowledge which were similar to the lecture method their tutors had used in teaching them (Akyeampong, 2003, p.51). Newly qualified teachers seem to focus a lot more on applying prescriptive methods than on innovation that adapted these methods to ensure that learning was happening from the point of view of the learners. In other studies on trainee performance on internship, they were largely regarded as ‘empty vessels’ with little or no knowledge or experience of teaching’ (Lewin & Stuart, 2003, p. 171). This further implied that trainee teachers had to be guided by their tutors about how to teach whether or not the approach could fit their own learning contexts. Similarly, there seem to be no attempt to encourage reflexive practice which would have allowed trainees to draw on their experiences (Akyeampong, 2004)

Asare & Nit’s (2014) study on teacher training in Ghana, restated the lack of change in how teacher education was promoting more effective practices. In their review of teacher training in Ghana they concluded that, ‘we have not come across any literature that suggests that what Lewin & Stuart (2003) pointed out earlier on trainee teachers has changed. Consequently, the current training systems in Ghana are unable to guide trainees to make connections of the teaching practices to the real life and challenging conditions and situations that they often find in their practice. It raises the question where change will come from as it seems teacher training at the college level seems

incapable of developing teachers who are capable of innovations that make the outcome of teaching and learning more productive for the learner. However, it may be that a search for solutions lies, not in the college context, but in finding teachers who have managed to create more successful instructional practices, and to understand what this essentially looks like, and the lessons for improving teacher education in Ghana.

Other explorations on teacher training in SSA for instance the Association for the Development of Education in Africa (ADEA)'s earlier findings on developing nations added that although the curriculum appears well structured it also appears to be fraught with some weaknesses in its implementation and often teachers are unable to communicate effectively in the language of instruction to teach the young learners (ADEA, 2008). Furthermore, the multilingual and multicultural nature of the Ghanaian society has led the nation to 'be grappling with which language to use as the medium of instruction' at the lower primary level (Owu-Ewie, 2006, p.76). In 2002 the policy on the language of instruction was that English should be used as the medium of instruction from primary one, with a Ghanaian language studied as a compulsory subject to the Senior High School (Ameyaw-Akumfi, 2002). However, since its introduction the continuing debates have led to immense challenges in its implementation. Some of the reasons identified have been 'a lack of materials in the Ghanaian languages to be used in teaching' (The Statesman, 2002, ADEA, 2008). Also there was a lack of Ghanaian language teachers specifically trained to teach content subjects in Ghanaian language. Furthermore, the minister of Education pointed out that English is the lingua franca of the state and that all effort must be put in to ensure that children acquire the right level of competence in both the spoken and written forms of the language (Owu-Ewie, 2006, p. 78). The continual changes in language policy coupled with the inability of teachers to teach effectively in the local languages have compounded the communication problem in the classroom. Thus all these challenges have impacted greatly on the language of instruction and the teaching learning situation in Ghana. Teachers are often confused resulting in the continual low performance of children. This becomes an important issue for enquiry in the Ghanaian context.

In Ghana teaching and learning often follow the directions of the teaching curriculum usually spelt out in textbooks and teacher guides. Opoku-Amankwah (2009) confirmed that teaching in Ghana is characterized by a strong reliance on the textbook and that lessons are largely dependent on approved textbooks. In most cases the order of events

in the lesson delivery are those recommended by the teachers' guide, which are also reproduced in the teachers' lesson plan. The usual practice in the lower primary classrooms is that during the teaching of a subject like English Language, the teacher usually reads the text to the children and then selects a few words to be used for spelling drill. Owen et al. (2005) reported that very few children in Ghana are able to read with understanding at the end of year six. The authors observed that the strategy of teaching comprehension did not include strategies such as prediction, inference or visualization, but tested only comprehension assuming that children will learn on their own. In effect the primary teachers' pedagogic strategies were not supporting their learners.

Explorations on teacher quality confirm that poor quality of students' learning associates strongly with poor quality of teachers' teaching. Effective student learning and achievement is hindered by limitations in teachers' pedagogical content knowledge (PCK) and classroom practice (Pontefract & Hardman 2005; Moon et al. 2005; Byamugisha & Senabulya, 2005; Akyeampong, Pryor & Ampiah 2006; SAQMEC country reports). Efforts to improve the teaching and learning situation in Ghana (for instance, the national school improvement programmes) have been put in place to provide more interactive modes of instruction and learner centred dialogues into Ghanaian classrooms. However, these have hardly impacted on teachers' pedagogical practices in Ghanaian classrooms. Akyeampong laments that:

In spite of the yearly efforts of government to expend resources on school improvement so as to make African classroom more interactive, and democratic, the initial instructional approaches which are embraced by the teachers eventually disappear with time and are replaced by the traditional prescriptive behaviour (Akyeampong, 2006, p.156).

The 'traditional' prescriptive behaviour continues to dominate teacher practices in Ghanaian primary classrooms and this persistent pattern is what the study seeks to understand and as well seek out some further pedagogic variations. Teachers in the region have remained with some traditional classroom practices, which may or may not be helping their learners, yet little seems to be known as to why they continue to use such practices.

Similar pedagogic practices may be found in other places in the SSA region, like Botswana, Kenya, Uganda, where such attempts to shift to some form of child-centeredness have been made with limited success. In Botswana, Tabulawa (1997;

2003) provides a compelling explanation of why it is proving difficult to implement educational reforms. In his view, the inconclusive results have often been rationalized in simplistic, “technicist” terms such as lack of resources and/or poorly trained teachers, whereas the real explanatory factors have to do with teachers’ assumptions about the nature of knowledge and how it ought to be transmitted, their perceptions of learners, and what they consider to be the goal of schooling. Students’ epistemological assumptions, as well as social factors such as authoritarianism inherent in Tswana society, must also be factored in. These assumptions (teachers’ and students’), Tabulawa argued, are incongruent with the basic tenets of child-centred pedagogy; taking them for granted when trying to introduce change in classroom practices can lead to disappointing results.

Therefore, this study specifically focuses on Ghanaian primary school teachers’ thinking in terms of what more successful and less successful teachers do, and how they explain their actions, how they transform knowledge into forms that help children learn, and the role that traditional knowledge and values play. For instance, the study seeks to understand how these teachers use positive aspects of Ghanaian cultural values to transform their teaching: how they teach in ways that respect and honour children’s own views and background knowledge and experiences, and furthermore, how they affirm children’s knowledge systems and at the same time uphold the cultural expectations of behaviour between child and adult in Ghanaian culture. Findings from this study may help to understand what learner-centred education means in the Ghanaian context in a way that makes it possible to achieve pedagogical renewal.

## **1.2: Research Questions**

In developing the research questions for this study, the underlying goal has been to examine how Ghanaian primary teachers work towards improving their teaching through processes that help them to achieve pedagogic renewal of their practice. In this context, pedagogic renewal as used in this thesis is not merely shifting from a specific pedagogy but refers to planned qualitative change towards a desirable teaching practice that promotes better learning opportunities for their students (see, Dembele & Lefoka, 2007). Essentially, pedagogic renewal is achieved when Primary School teachers are able to plan and introduce innovative teaching approaches that foster better learning opportunities directly connected to the learning needs of learners. Such teachers focus

much understanding on the effect of their teaching practices on their learners and work out improved ways to make their learning more effective. These are teachers willing to ‘think and practice’ outside the traditional pedagogical practice box that they may have acquired through their training.

Thus in view of the above theme, the research is guided by the principal research question:

- What pedagogical strategies are promoting positive learning experiences in Ghanaian classrooms?

The principal question was broken down into these specific questions:

1. What are the prevailing pedagogic practices of Ghanaian teachers in the lower primary classrooms?
2. What are the major issues and concepts that underpin their pedagogic practices?
3. What are the experiences of teachers who are innovative in their practice?

Answers to the first research question were achieved by observing broadly some pedagogic practices that existed in the Ghanaian primary classrooms. The second research question sought to examine the thinking that informed Ghanaian teachers the third research question finally examined the innovative pedagogic practices. Specifically who those innovative teachers were and what it was about them that made them do things differently.

### **1.3: Organization of the Thesis**

As has been discussed above, this chapter is an overview of the whole study; the main purpose has been to review background to the problem of the study. The chapter provides the rationale for the study where the general issue to be investigated is introduced as well as the aims and objectives. Chapter 2 provides available literature on the discourses of teacher practices and the knowledge systems that underpin the practice within the SSA context and Ghana in particular. This chapter ends with the theoretical framework that served as the major lens through which the study explored Ghanaian teachers’ innovative classroom practices.

Chapter 3 presents the methodological perspectives employed in this study leading to the research design. It is followed up with the main research methods used in the study.

The researcher position in the study is presented, and the ethical considerations for the study are discussed.

Chapters 4 and 5 present the major findings from the study and an analysis of the varied pedagogic practices of primary teachers in Ghana. These chapters are structured to adequately answer the key research questions. The chapters also provide detailed analysis of the pedagogic practices and the meaning that teachers provided for their observed actions.

Chapter 6 provides the major conclusions, recommendations and contributions this study has made to the body of knowledge on teacher pedagogic practices in Ghana and the SSA context.

#### **1.4: Definition of terms**

For purpose of this study the following terms have been defined;

Innovative pedagogic practices are alternative practices that teachers introduce to their classroom to generate powerful learning opportunities that motivate their learners to become more active learners.

Innovative teachers in particular, will be seen as teachers who see the value of drawing on their learners' background to plan appropriate instructional strategies that uses this background to actively engage them in learning. Such teachers are basically problem solvers – who see teaching as finding instructional strategies that create better opportunities for the learner to progress in their learning (Tabulawa 2003; O'Sullivan 2004; Pontefract & Hardman 2005).

Their practices described as 'innovative', and which makes them 'innovative teachers' are basically pedagogical responses that take into account knowledge of the learner's background, the classroom conditions under which they learn, to maximise opportunities for active engagement in learning by the learners. These are teachers who are mindful of what 'works' from their experience of trying out different approaches to teaching, noting what achieves better learning opportunities, and building on the success to consolidate their innovative practice.

Teacher beliefs: these are the conceptions and understanding teachers hold about teaching and learning. Teachers have acquired certain beliefs about their own practices and this is demonstrated through their practice.

Teacher knowledge: Through training and experience teachers have acquired a set of knowledge systems which are often passed on to their learners. This knowledge is usually in the domain of the teacher and passed on to learners as and when teacher deems necessary.

Teacher thinking: Teachers think and reason about their work in ways which make them unique in their practice. They hold certain understandings about their learners and as well they devise their own ways of making learning occur.

Traditional knowledge systems: The Ghanaian traditional knowledge refers to the knowledge that emanates from the culture. It is packed with beliefs and values that are exhibited through language, songs, proverbs, stories and all forms of social activities. It also spells out forms of behaviour pattern that exist between adult and child and other groups of Ghanaians. Ghanaian traditional knowledge systems are also passed on through the transmission of activities such as modelling of practices, listening to stories, singing and dancing

### **1.5: Summary**

This chapter gives an overview of the rationale and relevance for the study. As discussed earlier, pedagogic practices in Ghana are predominantly traditional yielding unfruitful learning outcomes, but this study proposes that some teachers can and do innovate teaching drawing on culturally relevant representations of knowledge and how it is best acquired to provide opportunities for meaningful learning. Using a social constructive framework to examine the innovative practices of some teachers, lessons could be learnt on how to enhance teachers' instructional practices to improve learning for Ghanaian children.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1: Introduction

This chapter critically examines the current literature on the pedagogic practices of primary teachers in the Sub-Saharan Africa (SSA) region, specifically Ghana. I initially conducted a Critical Analytical Study (CAS) on classroom practices of primary teachers in the SSA region as part of my requirements for this doctorate degree (Fagbemi 2010). Findings from the CAS revealed that primary teachers employed diverse pedagogic practices with some yielding positive outcomes whilst others did not. This led the current study to examine the existing pedagogic practices that could be effective in bringing about meaningful learning in specific contexts in SSA.

I begin by examining the major theories on teacher knowledge and how they inform teacher practices. I also explore African knowledge systems and values, looking for connections with teacher knowledge in SSA. The impact of early schooling and training on the pedagogic practice of SSA teachers is also reviewed. I identify and examine pedagogic challenges teachers might encounter in their classrooms and present the available literature on pedagogic practices that have worked for some teachers in the SSA region. Finally, I discuss the implications of this review showing the need to identify pedagogic practices that could hold as promising for primary teachers in Ghana. In this review have I conducted a systematic search of relevant information from books, academic journals, government documents, reports of international organizations, as well as grey literature. My main focus was on SSA but I considered experiences from other contexts. I made use of the following sources: Google scholar, Scopus, ERIC, ASSIA, World Bank, UNESCO, and ADEA. Most of my key words were learning, classroom practices, classroom interactions, pedagogy, culture, teacher practice, teacher knowledge, teacher thinking, learner/teacher-centred approach, SSA countries reflective practice and teacher training. I identified about 100 items, but discarded 10 of them dwelling on the 90 which would make useful contributions to the search. My major journals for this review were Compare, Education, Elementary School Journal, International Journal for Educational Development (IJED), Indigenous Knowledge, Pedagogy, Review of Education, School Science and Mathematics, Harvard Educational Review, European Journal of Teacher Education and Cambridge Journal of



Education. Studies from these journals were based on a three-decade period (1983-2013) as it provided a broad scope for the current study.

Therefore the major issues to be discussed will be under the following headings:

- teacher knowledge
- traditional knowledge systems in SSA
- early schooling and teacher training in SSA
- pedagogic challenges and innovations of SSA teachers

## **2.2: Teacher Knowledge**

### **2.2.1: Historical development of teacher knowledge**

Teachers' professional knowledge has been an issue of concern on several educational platforms over the years (OECD, 2005, UNESCO, 2008; 2010; GMR, 2014). Major concerns around teacher practice have centred on what constitutes teachers' knowledge and how it is obtained. Shulman's (1986) exploration of teacher knowledge within the context of the United States of America, found that teacher knowledge was associated with how much teachers could demonstrate knowledge of subject matter (Shulman, 1986; 1987). Teacher training focused on teacher knowledge of the subject matter, thus teachers entering the profession were accepted even if they had little or no knowledge of teaching practice. Additionally, discourses on teacher classroom practices paid little attention to the subject being taught and even the role the subject played in teacher thinking. A major concern for Shulman and his colleagues was on how a college student with expert knowledge in a particular subject was able to represent it in ways that school children could understand. Their assumption was that representation of content knowledge is a special kind of technical knowledge needed for teaching. In their study they assessed the knowledge of pre-service teachers by exploring their understanding, conceptions and orientations that formed the source of their knowledge of the subjects they teach.

Shulman explored the domains and categories of content knowledge in the minds of teachers and proposed three major categories of teacher knowledge:

- content knowledge;
- curricular knowledge;
- pedagogical content knowledge.

Accordingly, content knowledge represents knowledge of the subject and its organization in the mind of the teacher. It requires going beyond the knowledge of facts or concepts of a domain. These representations are similar to those of Bloom's (1956) cognitive taxonomy and Schwab's (1964) distinction between substantive and syntactic structures of knowledge. The syntax of a discipline is the variety of ways in which truth or falsehood, validity or invalidity is established. Shulman argues that teachers must not only be capable of defining the accepted truths in a domain for students, they must also be able to explain why a particular proposition is considered to be practical and meaningful, why it is worth knowing, and how it relates to other propositions, both in theory and in practice. He states "moreover we expect the teacher to understand why a particular topic is particularly central to a discipline whereas another may be somewhat peripheral" (Shulman, 1986, p.9). In this way the teacher understands the syntax of the subject to be taught and, when issues arise in the course of the teaching, s/he is able to make clear judgements and decisions about what holds true for particular situations. Thus during teaching, teacher knowledge of subject matter can be established through explanations, metaphors and images that will expose central and peripheral issues for learners to understand.

Curricular knowledge refers to knowledge presented in the curriculum. The curriculum is represented by the full range of programmes designed for teaching of particular subjects and topics at a given level, the variety of instructional materials available in relation to those programmes, and the set of characteristics that serve as both the indications and contradictions for the use of particular curriculum or programme materials in particular circumstances. This implies that teachers will not only know alternative curriculum materials for a given subject, but will also relate the content of a given lesson or topic being discussed simultaneously in other classes (Shulman, 1986, p.9). Here the range of programmes is more or less determined by a government or ruling body such that policy intentions and goals are articulated through the curriculum.

Apple (1995) affirmed that the curriculum has some basic elements which include:

The day to day interactions and regularities of the hidden curriculum that tacitly communicate the important norms and values; then the formal representation of school knowledge that is the overt curriculum itself which is planned and found in the various materials and texts and filtered through teachers and finally, the fundamental perspectives that educators use to plan, organize and evaluate what happens in schools (Apple, 1995, p.18).

Hence the curriculum represents latent ideas, values, goals and intentions of leaders in society, and these are represented in the curriculum to be passed on to learners. Similarly, Alexander (2009) remarked that the primary curriculum is a “truer measure of national intentions and priorities than the goals themselves” (Alexander, 2009 p.156). Therefore contents of the primary curriculum are the embodiment of national priorities and values. This means that the national values and precepts which often spell out the codes of behaviour are found in the curriculum for teachers to pass on to learners.

Shulman further identifies two dimensions of curricular knowledge that are important for teaching, aspects he labelled lateral curriculum knowledge and vertical curriculum knowledge. Lateral knowledge underlies a teacher’s ability to relate the content of a given course or lesson to topics or issues simultaneously in other classes. Vertical knowledge includes “familiarity with the topics and issues that have been and will be taught in the same subject area during the preceding and later years in school, and the materials that embody them” (Shulman, 1986, p.10). Implied here is that during teaching, a teacher who is familiar with issues in a particular course will of necessity possess the ability to relate back to a topic that was taught previously even by a different teacher in earlier years. Building on this knowledge, Phelps and Schilling (2004) added that teachers need knowledge that “is usable in varied contexts, interactions and practices that define the work of teaching” (Phelps and Schilling, 2004, p.39). Consequently, knowledge of content and curriculum would also require knowledge of learner’s milieu; this led to the last form of teacher knowledge.

The last and most influential form of teacher knowledge is Pedagogical Content Knowledge (PCK). The PCK “distinguishes the understanding of the content specialist from that of the pedagogue” and Shulman endorses it as “that special amalgam of content and pedagogy “that is unique in the province of teachers; their own special form of professional understanding” (Shulman, 1987, p.8). The teacher can possess the skills and abilities that will demonstrate various ways of representing and formulating the subject such that it can become meaningful to learners. Hence, PCK unpacks the teacher’s ability to understand and conceptualize the different backgrounds and ages that students bring with them into the classroom. Consequently, the teacher’s PCK enables him/her to strategically reorganize the understanding of learners so as to achieve a greater degree of success in the teaching learning process. Niess (2005) also expressed

PCK as intersections of content knowledge with knowledge of teaching and learning, whilst Lowery (2002) defined PCK as “that domain of teachers’ knowledge that combines subject matter knowledge and knowledge of pedagogy” (Lowery, 2002, p.69).

Phelps and Schilling (2004) further propose three categories of knowledge teachers need to be able to make sense of teaching: knowledge of content (KC), knowledge of students and content (KCS), and knowledge of content and teaching (KTC). This means that for a specific subject to be taught (e.g. mathematics), a teacher must of necessity have knowledge of the content (KC) and in addition have a clear image of the learners (KCS) who have been entrusted to him or her. Thirdly, a teacher will have to know the ways in which the content and teaching practice itself will intersect with teacher knowledge meaningfully for their learners. These categories then provide teachers with an understanding of how content knowledge is related to the work of teaching (Phelps and Schilling, 2004; Phelps, 2009).

Thus teachers’ manner of representing and formulating subject content so that it becomes meaningful would require a clear understanding of learners’ background. Learners’ background is often immersed in his/her cultural milieu so where the teacher acknowledges that background, she/he connects with images and values familiar to learners, leading to success in the teaching learning process. It was therefore useful for me to enquire into the cultural values and knowledge systems so as to identify connections these might have with teacher knowledge in SSA. The next section examines culture, beliefs and knowledge systems within Ghana.

### **2.2.1.1 Traditional and Cultural Knowledge Systems in SSA**

In traditional African life a person depends on others just as much as others depend on him or her (Omolewa, 2007). Cultural ways of living are communicated and learned in the oral tradition through modelling the practices of others, listening to stories, singing songs, reciting prayers, dancing at celebrations, and participating in spiritual ceremonies; all of which are passed on from generation to generation. For the African, traditional knowledge preserves the past; it has continuing procedures that guarantee a supportable future (Omolewa, 2007). It is eventually assimilated within the social, cultural, political, occupational, artistic, religious and recreational life of the people and ‘it is also stored in people’s memories and activities, and is expressed in stories, songs,

folklore, proverbs, dances, myths, cultural values, beliefs and rituals' (Grenier, 1998, p.2). Furthermore, traditional African culture is used as an information base for the community that facilitates communication and decision-making generated within the community (Omolewa, 2007). Thus it is based on practical common sense, on teachings, and experience. It is holistic and essentially a way of life. What this means is that members develop their sets of understanding through practical common sense, they also learn from what their leaders teach them and through the experiences they gain from their interactions within the community. A major goal of culture is to produce a complete individual, a lifelong learner who is cultured, respectful, integrated, and responsive to the needs of the family and neighbours (Omolewa, 2007; Nikiema, 2009). Through its systems of close observation and coaching, it offers self-improvement and wisdom. A key feature of traditional knowledge is the fact that it remains an integral part of the culture and is kept in various forms and transmitted through various modes. Such modes include language, music, dance, oral tradition, proverbs, myths, stories, culture and religion (Omolewa, 2007, p.5). This mode of education is often used as a way of acquiring lifelong learning. They are given to learners to enjoy, thereby providing them with a way to relax. Learners often anticipate the music and dance sessions with excitement because creativity and choice are usually encouraged and nurtured. For Ghanaians traditional knowledge systems are also passed on through the transmission of activities such as modelling of practices, listening to stories, singing and dancing. Learning of the culture is therefore socially constructed and essentially connected to everyday life (Omolewa, 2007, p.596). Furthermore cultural activities such as dance, songs and participation in ceremonies, serve as useful indigenous resources for teaching and learning in Ghanaian society. The traditions offer assorted connections to Ghanaians and often direct their way of life in society (Hagan et al., 2005). It often functions as a lens of perception, influencing the way Ghanaians see themselves. By spelling out codes of behaviour for members of Ghanaian society, a child is expected to see the elderly as a leader and sometimes a parent and controller of knowledge and wisdom; hence the child is seen as respectful when she remains silent, passive and obedient to the teacher (Akyeampong, Pryor & Fobih, 2009). In a sense the traditional knowledge system communicates common sense knowledge as well as offers experiences and interactions that might influence teacher and learners' understanding of teaching and learning.

Therefore, traditional knowledge systems come with additional forms of knowing and understanding that are unique to Ghanaians. This cultural and traditional knowledge is important for understanding how teachers and learners interact. Teachers could rely on their own knowledge systems acquired through the Initial Teacher Education (ITE) and the Continuing Professional Development (CPD) that may influence how they behave in the classroom, yet the traditional systems may have the potential to unlock or provide some positive experiences and opportunities that move beyond teacher knowledge leading to useful for learning experiences. What this might mean is that teachers could adopt some socio-cultural experiences into their classroom interactions and such experiences could be useful and effective in supporting their learners. However, in the African (Ghanaian) context, what has received little attention is how adult and child acquire formal classroom knowledge that is culturally rooted. Understanding this knowledge is central to appreciating how some teachers are able to offer successful learning experiences in their classrooms. For this study my additional goal was to explore the initial sources of teacher knowledge about teaching and learning in SSA and how these might be influencing pedagogic practices.

### **2.3: Sources of Teacher Knowledge in SSA**

Two major sources of teacher knowledge which ultimately influence teacher practice are teachers' own early schooling and teacher training (Lefoka et al., 2000; Sebatane and Lefoka, 2001; Feiman-Nemser, 2001; Korthagen et al., 2001; Hardman et al., 2008; Adu-Yeboah, 2011; Akyeampong et al., 2013). These sources produce teacher belief systems and values that are evidenced in their pedagogic practices. Stuart et al. (2009) conclude that teachers' beliefs and conceptions about teaching start from their early schooling through to college training and these beliefs tend to influence their pedagogic practices. I begin the next section with teacher's early schooling experiences.

#### **2.3.1: Early schooling**

A teacher's early years of schooling before enrolling on the job tends to influence their pedagogic practices in later years (Hardman et al., 2008; Adu-Yeboah, 2011; Akyeampong et al., 2013). A study on six countries in SSA established that teacher "practices are based on their experiences as pupils in school and as trainees in college" (Akyeampong et al., 2013, p.10). Additionally it has been found that teachers bring memories of their early schooling into their training and so "develop their beliefs and

value systems well before they embrace teaching as a career” (Lortie, 1975; Lefoka et al., 2000; Sebatane and Lefoka, 2001, p.4; Stuart et al., 2009;). They even practice what they saw and often learnt through close and constant observation of their college tutors (Lortie, 1975). Such close observations are actually tied to the traditional and cultural knowledge systems (Omolewa, 2007) and thus underpin transmission practices in African teachers. Generally, as has been discussed in chapter one and will be discussed below in section 2.5, pedagogic practices in Ghana tend to be transmissive, teacher-centred, with learners more passive than active, and having few teaching and learning resources to read or experience within their classrooms. This has often resulted in unsuccessful learning outcomes in the young learners.

Some authors argue that most teacher preparation and teacher professional development programmes are unable to challenge these beliefs successfully; or even do not attempt to in part because many teacher educators or staff developers themselves generally hold the same unchallenged beliefs and images of how teaching and should occur (Arthur, 1998; Feiman Neizer, 2001; Stuart et al., 2009, Asare and Nti, 2014). The results of such beliefs are that teachers often view teaching as reproductions of content knowledge given to them through training. Hardman et al. (2008) added that “teachers’ perceptions of their role are based on their own experiences of how they were taught and trained in school and college and on the cultural relationship between adult and child” (Hardman et al., 2008, p.67).

Major conclusions from some authors (Alexander 2008; Stuart, Akyeampong, and Croft 2009; Mulkeen 2010) are that teacher education programmes in SSA could allow college tutors and teacher trainees to reflect on the images and beliefs about teaching and learning and then challenge them in the face of the realities of their practice (Lefoka et al., 2000; Sebatane and Lefoka, 2001; Dembele and Mario II, 2003). This type of reflection at this point may concur with Mezirow’s (1991) idea of critical reflection. He asserted that reflection for teachers would demand more than simply thinking about experiences, so that critical reflection would involve a critique on the assumptions on which teacher beliefs and values have developed. That is, the teacher could engage in critical reflection when he/she understands and challenges the validity of his/her own assumptions. This would mean extra effort on the part of teachers to reflect deeply on their experiences in the social context, and then find ways of using this understanding to

develop their practice in future. Therefore critical reflection provides the opportunity to integrate and make sense of one's assumptions, expectations and perceptions. One way forward therefore might be to adopt Mezirow's (1991) proposal for transformative education. He proposes that teacher educators and their trainees could engage in transformative learning, which would involve learning through forms of social interactions and dialogue. It may also mean that teachers are "given the opportunity to reflect on the taken-for-granted assumptions involving perceptual and conceptual filters in their practice" (Mezirow, 1991, p.160). Thus the current study further engaged with how college training in SSA might be influencing current pedagogic practices.

### **2.3.2: Teacher training**

Teacher training can play a critical part in shaping how teachers think about what good or effective teaching means, or may do little to change how teachers practice teaching later in their classrooms (Westbrook et al., 2013). Research indicates that SSA teachers' current practices seem to replicate the way in which they were taught during college training (Lefoka, Dembele 2003; Dembele & Lefoka, 2007). The curriculum and the pedagogy of teacher education in SSA remain inappropriate and still have some inherent weaknesses which do not enable the trained teacher to innovate practices that may work. Findings from Akyeampong (2003); Lewin & Stuart, (2003) and Asare & Nti (2014) show that "the structure of teacher training programs in SSA is focused primarily on content knowledge ... and not practice" (TPA, 2011, p.3), meaning that trainee teachers usually miss out the specific skills needed to teach the subject.

This finding has earlier on been confirmed by the MUSTER project. For example the study identifies that minimum examination pass for the Institute of Education is a cut-off score of 35%, yet the majority (84%) of beginning trainees who have weak grades (classified as D,E, 5, 6) fail the specially designed mathematics achievement pre-test. Only 2% of those with stronger grades (classified as A, B, 1, 2, 3) passed and 34% achieved a test score above 60%. In the same study, a post-test score analysis showed that about 58% of weak graders failed the test and only 4% achieved scores above 60%. The lessons one can draw from this report is that there is the need to raise academic entry requirements to be able to improve upon the quality of the teaching force (MUSTER, 2003). The next section examines teacher knowledge from training in Ghanaian context.



### Teacher Training as a source of teacher knowledge in Ghana

Teacher knowledge in Ghana often comes from knowledge of content in textbooks and the teacher's guide. This knowledge often comes as a result of the emphasis of training on the subject content knowledge (see Adu-Yeboah 2011).

Writing in the context of learning to teach reading, Adu-Yeboah (2011), found that: "Ghanaian teacher trainees were exposed to three main teaching materials: teachers' handbook, pupils' textbooks and the teaching syllabus. However, in terms of knowledge of the use of these materials, teachers only had superficial knowledge of the teachers' handbook and the pupils' textbook; they could not explain in detail the structure and content of these materials, or specific ideas about the reading they promoted. Teachers lacked the understanding of connections between different approaches to reading, and how to interpret and translate the different ideas/examples/suggestions in the teachers' and primary textbooks into structures for learning to read" (Adu-Yeboah, 2011, p.33).

This finding also indicates that trainee teachers lacked knowledge of both the lateral and vertical curriculum (Shulman, 1987). She goes on to conclude that, this situation arose because Ghanaian "trainees had been exposed to more subject content, less practical activities and critical engagement with the school reading; their vision of a reading lesson is fairly simple and mechanistic... in effect training did not seem to tackle the complex nature of the Ghanaian multilingual classrooms" (Adu-Yeboah, 2011, p.35).

When this happens, it is likely that teachers will be more prone to reproducing teaching the way they saw and experienced it during their early schooling and college training years. The effect is that these teachers are unlikely to confront and find appropriate responses to practices which may be responsible for much of the unproductive learning that learners experience in real classrooms. The implication here would be that Ghanaian teachers may not be making clear connections between content, curricular and PCK, their learners and context, hence not providing opportunities for achieving success in their learners.

Thus having examined the sources of teacher knowledge, early images and values on pedagogic practices, the next step in this review was for me to explore existing pedagogic practices identified in SSA classrooms.

#### **2.4: Pedagogic Practices in SSA**

A major concern of this study has been to explore and also to understand why the transmission modes of teaching continue to dominate in a majority of the SSA primary classrooms. Seeing that learners may not be necessarily supported, the study sought to understand what and why the transmission models have remained with teachers in the region. Research as far back as 1989 showed that, “most teachers in SSA are not able to practice the theoretically preferred techniques which include activity methods, individual attention ... because of the difficult conditions (ill resourced classrooms, limited numbers of tables and chairs, overcrowded classrooms, little or no teaching learning resources) under which they operate” (Chabane et al., 1989, pp.166-167). Interestingly with respect to teacher practices, very little seems to have changed since 1989. Another study conducted on new teachers on the job found that the large classes that newly qualified teachers had to cope with left them with little choice but to resort to transmission methods; these methods enabled them to address all students at once, thus paying little attention to individual students’ needs (Sebatane and Lefoka, 2001). Furthermore investigations on the teaching of Sesotho, English and Mathematics in Lesotho primary schools also indicated that pedagogy is still teacher-dominated. What is interesting in these findings is that difficult working conditions alone do not account for the established lack of change in primary school teaching but are significant to the challenges in supporting learners during teaching.

In Botswana, Arthur (1998) observed ‘teacher-dominated’ classroom procedures in some primary classrooms, in which the pattern was in the form of lengthy recitations of question (by the teacher) and answer (by individual pupils or the whole class). In this context, the routinized pattern did not make room for meaningful learning. Tabulawa (2003) questions the linguistic and cognitive demands of the Learner Centred Education’s LCE theory of learning and what it might impose on SSA teachers and their pupils in the face of their traditional teaching practices. In his view, then, LCE may impose hegemonic ideologies of Western theories and not provide a problem solving agenda to the SSA region. What might be the issue here is that teachers and children may have similar experiences from the traditional practices which may be linked to the forms of classroom interactions that they encounter. As Arthur (2005) and Hardman et, al (2008), pointed out that SSA teachers and children often bring the social order of

cultural activities into their classrooms. Hence another reinforcement of the transmission approaches to teaching.

In Kenya, Pontefract and Hardman (2005) found a similar whole class, teacher-led pattern of classroom interaction. The teacher overtly gives instructions followed by children who responded passively in a chorus to the teacher without having the opportunity to make meaning out of the process. This practice, whereby children are not allowed to explore their own ideas or engage in their own level of reasoning, often leads to low learning outcomes of the students (Sikoyo, 2011; Bernstein, 2000). This is because learners are not given the opportunity to make meaning out the teaching process as the teacher perceives such practices as the right way to learn.

In Ghana, Akyeampong et al. (2006) also concluded that teachers usually engage in a monologue explaining factual information from the prescribed textbook, and tested students to ensure they could recall information. In effect teachers exhibited a lack of concern on why the teaching approach was not supportive and what alternatives would provide a solution to their current pedagogic practices. The study by Adu-Yeboah (2011) on trainee teachers in Ghana found that some teachers employed varied approaches in the teaching of English. One group (majority) used the ‘look-and-say’ method; another group (only one) employed the phonic method which employs the careful pronunciations of words for learners, and the others combined the two methods (Adu-Yeboah, 2011, p.38). According to the author, trainees explained the ‘look-and-say’ method generally in terms of the use of pictures as Teacher Learner Resources (TLMs) to help children identify or predict the meaning of words or a passage. This implies that the teacher “trains the pupil to look at the graphic representation (form) of print and then say the word” (GES, 2004, p.193) without breaking it into smaller chunks. On the other hand those who did not use pictures taught meanings using simple explanation, mostly in the local language. A few others used demonstration and word association such as synonyms and antonyms. Meanwhile the GES (2004) textbook on Methods of Teaching English for the UTDBE programme suggests that pupils should be first introduced to formal reading through ‘the Look-and-Say Method’ (GES, 2004, p.203). In addition, the book acknowledges that the look-and-say method cannot support learners to become independent readers and so recommends the need for the

phonic method to be used to compliment and overcome the shortcomings of the look-and-say method. However, the author laments:

Nevertheless, NQTs stuck to look-and-say, even when their pupils could not recognize words and read after a number of repeated drills (Adu-Yeboah, 2011, p.38).

Therefore teachers showed a lack of deep reflection on why the approach does not work and what alternatives would provide a solution to the current practices. This may be because the trainees continue to hold onto their own unchallenged beliefs and values about teaching and learning which do not yield fruitful learning experiences. However, one interesting finding from Adu-Yeboah was that trainees in her study expressed confidence in their ability to teach reading in lower primary due to the fact that they had learnt that from college. Another form of confidence showed up when trainees were able to teach using the 'look-and-say' method compared to the phonic. This was an interesting issue for this study since the kind of confidence found here was not based on learners' outcomes but rather on the teacher's own personal gain. In a sense it was the learners' 'reproduction of concepts' from their training as well as their personal convictions as models of 'good teachers' which sealed their confidence. Similarly, Onderi and Croll (2009), p. 97, also found that some teachers' confidence was based on their belief that they were competent classroom performers and educational professionals rather than having a strong desire to improve upon their learners' outcomes.

It becomes apparent that teachers' current practices have some key connections with the traditional knowledge systems. The traditional knowledge systems have filtered into teachers' understanding of classroom practices leading them to adopt transmissive forms of behaviour between adult and child. Clearly they have perceptions of the classrooms as a socio-cultural milieu and also their classroom interactions tend to follow the traditional transmission patterns. Reinforced by these perceptions yet since they remain unchallenged in their training teachers have assumed that transmission teaching is truly viable for them. This situation has led to some teaching learning gaps which do not enable teachers to meet the dilemmas in their classroom and so often children /learners get frustrated and do not show interest or eventually dropout from school. However as Omolewa (2009) summarized, the flexibility of traditional indigenous knowledge systems could make teachers adopt some social interactions into

their classrooms which might lead to useful learning experiences. For example where the teacher has the difficulty of explaining concepts to learners she could make use of song and or dance to demonstrate such concepts. The point here might be that both teachers and children might be familiar with the song or dance so that making connections from such activities with the content might lead to some success in the teaching learning process.

Research suggests that managing the quality of classroom interaction will play a central role in improving the quality of teaching and learning, particularly in contexts where learning resources and teacher training are limited (Hardman et al., 2008; UNESCO, 2010; F Hardman et al., 2011). Westbrook et al., (2013) showed clearly that some teacher classroom practices have a great potential in promoting successful learning experiences. Drawing on the literature it has become clear to me that specific aspects of classroom life particularly, questioning, talk and feedback styles of teachers have the potential to illuminate the ways teachers use their spaces to interact with learners during teaching and learning. In this study I have focused on these three aspects to critically examine how SSA teachers vary their pedagogic strategies to bring out innovations in their classrooms. This is because how teachers use questions in their teaching, respond to students responses provides an understanding of the teachers' own pedagogical reasoning approaches, and helps to unlock and understand the nature of any innovative pedagogical thinking and practices that might be taking place. I continue the next section with teacher questioning

***Questioning*** is one of the key elements to guide and assess student learning and, drawing on Bloom's taxonomy of cognitive learning, teachers' questions in class take the form of either low-level or high-level questions. The lower-level questions tend to focus on facts and do not test student understanding or problem-solving skills. They usually take the form of what, when, where, when or who. The student is expected to recall or merely memorize facts that the teacher might have transmitted or passed to them in class. This leads to lower cognitive processes that ultimately limit the child's ability and opportunity to probe into any areas that might be of interest to them. High-level questions begin with how or why and go beyond memory and factual information, delving into more complex and abstract thinking. They also seek to explore the student's ability to deal with high or thought provoking questions that might involve

analysis, synthesis, and problem-solving. In practice a teacher would ask higher-level questions only when teacher knowledge is able to probe situations (Arthur, 2005; Opoku Amankwah, 2009; Pontefract and Hardman, 2005; Hardman et al., 2011; Westbrook et al., 2013). Available discourses on classroom questions styles in SSA show that most teacher questions are of the lower order expecting simple, short and closed answers (Hardman et al.2008; Arthur, 2005; Pontefract and Hardman 2005). This creates a situation whereby learners may become ‘mechanistic’ simply reproducing teacher’s instructions. In a sense teacher posing higher order questions may then be possible only when her knowledge enables her to draw on learners’ background and consequently reorganise and adapt the content to make clear links with the teaching curriculum. In this way learner will be able to experience issues and topics which are central rather peripheral to the subject being taught (Shulman 1986, p.9).

Other studies in Ghana (Owen et al. 2005) during teaching observe that teachers failed to use questioning strategies pupils could use in constructing meaning from written passages. The children did little thinking; they just located the answers in the textbook and copied them into exercise books. This approach does not help the children become independent readers and writers. The available literature shows most African teachers ask more of the lower-order questions, however during interviews the teachers have claimed their deep desire to support student learning, (Akyeampong et al., 2006). If these teachers have an understanding and willingness to support their learners (Pollard, 2002) then the form of questions could be ones that connect to the learners’ understanding and background. In this way children will be able to listen attentively, sometimes contribute as well participate in assigned tasks.

Alexander (2009) recognized marked differences in the classroom *talk*, which reflected a critical difference in underlying values: ‘on one hand the importance of the group, on the other individual freedom and self-fulfilment’ (p.428). He makes the case that, depending on the situation in the classroom, teachers may engage in dialogue with their learners and in this form of dialogic teaching and learning “understanding is fostered through discussions and collaboration” (Alexander, 2004, p.23). Therefore classroom interactions are usually shaped by the way the teacher organizes his/her class and likewise, as Mercer (2008) stated, talk in learning is not one-way linear

‘communication’. I continue the discussions on classroom interactions with the feedback styles.

**Feedback** moves of teachers and their decision to repeat or reinforce actions have been studied (Guskey, 2010). This model is based on teachers’ personal learning experience, such as those practices that are useful for teachers are those that teachers find useful in helping students attain desired learning outcomes (Hattie, 2013). So that those that yield tangible evidence of success and are retained and repeated. Evident results in terms of student learning outcomes are the key to the endurance of any change in instructional practice (Guskey, 2010, p.384).

Alexander’s findings in Indian classrooms saw how Indian teachers’ feedback style was being used to support children (Alexander, 2009). His study showed that Indian teachers in similar primary classrooms depended on ritualized feedback patterns of instruction and routines of repeated songs and action words to support their learners (Alexander, 2009). Some studies in Africa (Craft, 1994, Alexander, 2002; Tabulawa, 2003; Arthur, 2005; Pontefract and Hardman, 2005; Opoku Amankwah, 2009) have shown that the discourse styles of teachers tend to have some similarities within them, particularly, with regards to teacher questioning and feedback. In effect, these variations have their relative impact on learners meaning that the teachers exhibited their questioning strategies in ways that made learners move beyond the traditional questioning styles. In another study, teachers worked within rote learning but they were found to interact with their learners and often tried to check to see if they understood the lesson (Westbrook et al., 2013, p.31). This was also a form of positive feedback. In sum SSA teachers’ questioning, talk and feedback moves have remained because they often consider them as traditionally acceptable practices found within their society. Teachers have perceived their classrooms as social domains where codified practices occur. Therefore, traditional values and conceptions of teaching and learning lead them to exhibit the transmission modes of teaching. However, as Ogawa (2007) suggested traditional knowledge also makes room for exploration and flexibility then teachers could begin to reflect on their knowledge systems and thereby engage in learning experiences that are socially constructed. This means that teachers, if they are able to do this, may draw a lot more on various aspects of their learners’ socio-cultural activities, such as songs and dance in more affectionate and affable ways which creates greater cognitive engagement

resulting in better opportunities to learn. It is also about validating this source of knowledge as part of teaching knowledge – in effect, traditional knowledge although has often been constructed in deficit terms because of how they promote transmission modes of teaching, can be drawn upon to create learning experiences that are more socially constructed. It is the ability to do this which lies at the heart of this study’s search for innovative teachers who see teaching not as applying prescriptive methods, but look for socially constructed opportunities outside the context of formal teacher training to create more dynamism in their teaching. The next section explores some examples of practices that may be described as successful experiences from the perspective of SSA teachers. For this review these pedagogic practices are described as innovations.

### **2.5: Innovative Pedagogic Practices in SSA**

Pedagogy concerns not only the curriculum but how teachers and learners actually interact in the classroom. Alexander believes that the power of pedagogy “resides in what happens between teachers and pupils” (Alexander, 2009). What happens between teachers and learners often occurs in their classrooms and by unpacking these interactions within SSA classrooms, it will be possible to find some pedagogic variations that may be occurring but have not been fully identified.

Following up with contentions on teacher transmission modes of teaching in SSA, O’Sullivan (2006) investigated the teaching in primary schools in Uganda, and identified some good teacher practices such as group work, team teaching, attracting learners’ attention, school based staff development, which tended to work in difficult developing contexts where large classes are the norm. Nakabugo (n.d.) tried to identify issues within the literature that dealt with practical teaching ideas and examples of good practice. She analyzed the strategies that teachers in Uganda had developed to teach their large classes. Some of these practices were flexible group work, peer support and using local resources to support teaching. Ultimately her findings illuminated those classroom practices that have the potential to promote learning for dissemination to a wider context.

Teachers in Adu-Yeboah (2011)’s study used some positive strategies such as songs, imaginative explanations and demonstrations to teach the content. Also her study



identified one teacher who demonstrated good practice. The teacher taught “matching word-cards with words on a sentence card” to 22 Primary I pupils. Her objective was that pupils would be able to read sentences aloud and match words on flash cards with words on sentence cards. After taking them through a picture description, she used the look and say method to teach vocabulary. Then she used them in sentences on the board and on sentence cards, which she read for the pupils to repeat aloud individually. At the end of the reading the teacher stuck the sentence cards on the board and asked the pupils to pick word cards to match them to words in the sentence, and a greater majority of the children were able to read to a good standard. Such practices do not follow the traditional rote approaches but demonstrates some shifts in teacher’s perceptions about the teaching learning process. Hence it comes out here that some few teachers have reflected deeply and positively on their culturally rooted practices to produce some successful learning experiences.

The recent review of pedagogies (Westbrook et al., 2013) in developing countries discussed earlier identified six practices and three strategies that could contribute positively towards enhancing student learning. These were “the use of group and pair work, use of a variety of teaching and learning materials, posing questions to students, demonstrations and explanation drawing on PCK, using local language which students were familiar and planning lessons with a clear structure”; with three overarching strategies being ‘feedback, individual attention and inclusion, creating a safe environment in which students are supported in their learning and drawing on students’ background and experiences’ (Westbrook et al., 2013 p.28). An important finding was that the identified practices became effective in the hands of teachers who focused on the student’s needs, and perceived teaching as a shared activity between teacher and learners, (Westbrook et al., 2013 p.28). Korthagen (2010) proposed that such innovations in teacher practice could occur when teachers’ gestalt develops into a conscious cognitive schema level (Korthagen, 2010, p.412), meaning that teachers are able to develop themselves professionally as they make efforts to situate learning in their respective contexts.

Therefore, some SSA teachers are able to reflect on their circumstances and, irrespective of the difficulties they may be encountering, use their PCK to connect the learning needs and understanding of the children. It goes without saying that these

useful findings provide further implications for teacher professional development. This is also similar to Stuart et al. (2009) who believe teachers should be given the chance to choose good teaching methods that fit their difficult circumstances. Therefore it can be argued here that there is the need to find out what practice really works in primary classrooms in other contexts. Hence in my research work I seek to engage critically with a careful mix of the research tools employed by these authors to be able to search for innovative teacher practices.

## **2.6: Theoretical Framework**

Finding answers to the calls for quality in education in SSA has been the major goal of this study (Vespoor, 2005). I have focused critically on teachers whom I believe have the greatest influence on learning outcomes in a developing context like Ghana (Akyeampong, et al., 2006). A major theory that has influenced my work is that of Shulman (1986: 1987). Shulman's theory of teacher knowledge enabled deeper insights into the forms of knowledge that inform teacher practices: content knowledge (CK), curriculum knowledge (CRK), and pedagogic content knowledge (PCK). Shulman believes these three forms of knowledge will be useful for a teacher to successfully transform the knowledge of the subject to the learner. However, he argues that it is the PCK that is key since it is the 'amalgam' of all three categories of knowledge (Shulman, 1987, p.8).

In trying to extend this theory, I have come to realize that, for the desired quality to be achieved within the SSA region, there are other contextual and situational factors that influence teachers' pedagogic practice to make meaningful learning occur in primary classrooms. As Omolewa (2007) presents the elements of the traditional knowledge systems he offers some promising learning experiences for Ghanaians and promotes possible alternative pedagogic practices for Ghanaian teachers.

In the Ghanaian social context the traditional and cultural knowledge systems and resources are often used as a way of acquiring lifelong learning alongside formal classroom learning. The ultimate objective is to produce a person guided by wisdom and confident irrespective of circumstances that emerge. This personal confidence attained is to serve as a buffer against all challenges in future life (Omolewa, 2007). Hence traditional knowledge systems are also focused on the attainment of quality life.

Teaching and learning in Ghana is fraught with contextual challenges making it rational for teachers to continue to rely on their own knowledge systems during teaching. Consequently Ghanaian teachers could begin to reflect on their goals of teaching and learning and thereby find ways of giving place to traditional knowledge and cultural systems as a potential reinforcement for their current pedagogic practices.

Thus in addition to Shulman's proposed categories of knowledge base for teachers, I hold the view that teachers' ability to draw also on the cultural knowledge could help and provide support for the young learners. Drawing on the culture Ghanaian teachers may then find ways of opening up more connections from the content and socio cultural milieu to meet the diversified background needs of young learners. Hence teacher's diversified practices will provide and encourage some more of self realization in the learners. Teachers in Ghana may therefore begin to reflect on the positive aspects of their knowledge systems and then come out with alternative classroom practices. This will result in a shift from transmission practices to some meaningful practices which would ultimately provide answers to the quality education puzzle in Ghanaian education. This study therefore seeks to identify how some successful teachers manage to promote better understanding and rich learning experiences as well as demonstrate that what they do relies on elements of traditional culture that distinguishes them from less successful teachers. I set up this framework as a tentative explanation of how more successful teachers working in large classroom contexts achieve improved learning.

## **2.7: Conclusion**

The deliberations on teaching and learning in SSA so far confirm that teachers have remained with transmission modes of teaching principally due to their understanding of teaching and how their own traditional knowledge connects with content knowledge. Teachers often demonstrate culturally rooted pedagogic practices leading to unproductive learning outcomes. However a few studies have identified some teachers who have considered the positive aspects of the traditional knowledge and so achieved some successful learning experiences in their classrooms. This was very promising for this study.

Therefore in African classrooms, the teacher would need to find ways of varying the teaching pedagogy so that it supports learners, and this is where the decision to create successful learning experiences come up in the classroom practice of the teacher. It

becomes interesting to find creative and innovative teachers under such difficult circumstances. It is agreed that there is a need to find out what really works in primary classrooms in other contexts. Hence in my research work I seek to critically engage with a careful mix of the research tools employed by these authors to be able to search for innovative teachers in my context.

## **CHAPTER THREE**

### **METHODOLOGY AND METHODS**

#### **3.1: Introduction**

This study searched for pedagogic practices that differ from the traditional Ghanaian pedagogic practices. An additional goal was to carefully examine the thinking processes, understanding, beliefs and knowledge systems that Ghanaian primary teachers consider as useful and worthwhile in their practice that is those learning experiences they have found as successful in their classrooms.

#### **3.2: Research Design**

An interpretative approach

Concepts of social reality are founded on two different ways of interpreting it such as objectivism and subjectivism. First from an ontological perspective, within objectivism, social reality is external and independent of individuals, whereas within subjectivism, the world exists but different people construe it in distinct ways (Cohen et al 2007, p.7). In terms of epistemological perspectives, whilst positivism forms part of the objectivist stance, interpretivism forms part of subjectivism. The positivism claims are largely scientific assuming that human behaviour can be explained through measurable terms rather than inner experience. The interpretivist paradigm is however characterised by a concern for the individual in a bid to understand the subjective world. Thus my approach for this study was interpretive that focused on actions of individuals (Cohen et al 2007, p.7) specifically teachers. Actions are meaningful only when they are able to ascertain the intentions of the actors to share their experience (Glasser and Strauss, 1967). In this study I worked directly with Ghanaian teachers seeking to understand their interpretation of their world, in the process theory emerged.

The current study adopted the case study design. Stake (1995) describes a case study as follows;

A case could either be a child, a classroom of children or a particular mobilization of professionals to study a childhood condition. In any given study concentration is on one. The time we spend concentrating on the one may be a day or a year, but while we so concentrate we are engaged in case study (Stake, 1995, p.2).

Thus doing a case study may require concentration on issues and situations of groups or individuals. This study seeks to explore and examine the specific characteristics peculiar to the case of Ghanaian teacher pedagogic practices. Specifically case studies of some specific innovative teacher practices have been used instrumentally to illuminate those practices. Ragin and Becker (2000) discusses the issue of what a case is, when conducting case study research. He points out that social scientist's answer the question of what a case is differently, but all agree that 'cases may be multiple in a given piece of research' (p 8). In answering what my case study is a case of, I draw on Ragin's notion of the case as located somewhere between 'finding a case' (i.e. pedagogical renewal) and as a theoretical construct (pedagogical practice) – which is a case of 'pedagogical practice in teaching'. By researching teachers' who are innovative, in terms of their practice, I was seeking to provide an example of a case of 'innovative pedagogical practice' that shows itself in a different way in the hands of creative and innovative teachers', leading to what I have called in this thesis, 'pedagogical renewal. So in simple terms, my case is a 'case of pedagogical practice' which is itself problematized in the context of teaching in a resource-constrained large class sized African classroom.

This approach required an inquiry of a few cases which would serve as instrumental cases that would facilitate a clearer understanding of the situation under study (Stake, 1995, p. 3). Therefore a multiple cases study was adopted as each case of teacher's pedagogic practice was helpful to the inquiry about pedagogic practices Ghana.

Additionally, 'balance and variety were important but the opportunity to learn (Stake, 1995, p. 6) from the Ghanaian primary teachers was of primary importance'. Thus a narrative approach was adopted to understand how the primary teachers think about their work and then link this to what they do in their practice. Teachers are unique in their own ways thus enquiring into their pedagogic practices required listening to how they make meaning of their own world Creswell (2009, p.13). Anderson (2004) found that, firstly, teachers use narratives to share their knowledge with other teachers, that is, they tell stories to one another. Secondly, narratives are concrete and pertain to a particular situation, specific group of students, or a certain problem. Thirdly, narratives equip the reader to begin to understand the relationship between teachers' intended actions and the implemented actions that take place in the classroom, as well as the reasons for any discrepancies. Thus this narrative strategy has revealed how some

Ghanaian teachers rely on more culturally rooted knowledge systems to enact their pedagogic practices.

Furthermore, by observing some Ghanaian teachers and exploring their thinking I have had the opportunity to unearth some cultural or indigenous knowledge systems which play a major role in teaching and learning but remain outside the traditional notions of teacher knowledge in Ghana. Additionally, I have also explored wider dimensions of Ghanaian teachers' knowledge base; what they believe about the relationship between adult and child, their own cultural values and conflicts with their practice and how all of these account for innovative practices. Thus the primary teachers have unravelled 'new insights' in teacher practice and thinking. After exploring their journey with them, their narratives have provided me with a 'theory of practice' that had worked for them within their own circumstances.

In the SSA region, particularly in Ghana, studies have depended on teacher perceptions and views through the use of questionnaires and surveys, yielding general information on teacher pedagogic practices as transmissive practice (Owen et al., 2005; Opoku Amankwah, 2009) Empirical data has remained limited on 'how' the teachers actually renew their pedagogy in the bid to make learners benefit from their practice. I have therefore searched for some successful learning experiences as well as connect these with teacher thinking. I made use of unstructured lesson observations and probing interviews guided by the following research questions to obtain the required data.

The research questions which guided this study were;

1. What are the prevailing pedagogic practices of Ghanaian teachers in the lower primary classrooms?
2. What are the major issues and concepts that underpin their pedagogic practices?
3. What are the experiences of teachers who are innovative in their practice?

### **3.3: Selection of Cases**

The selection process and creation of the cases of teacher pedagogic practices was carried out through a convenient sampling technique based on proximity and ease of access to the teachers. The selection was carried out primarily in three stages.

For stage 1 I engaged with schools that the Ghana Education Service has categorized as high and low performing at the Basic School Certificate Examinations (BECE). That is those schools whose students score high grades enabling them gain admission to the first class Senior High School (SHS) category in Ghana and vice versa. From these categories, I undertook a short listing of the schools in Kumasi in the Ashanti Region of Ghana, where I have lived and worked as a teacher educator for twenty-five years. For the purposes of convenience I selected two schools each from the high and low performing groups respectively and finally selected four primary schools.

In Stage 2, I selected ten teachers from each of the four short listed schools, making forty lower primary school teachers in Kumasi, Ghana. The criteria for selecting the forty teachers were based on willingness and voluntary participation. In Ghana all lower primary school teachers teach all the three compulsory subjects (English, Mathematics and Science). At this initial stage of the study my focus was to understand how all the selected teachers exhibited their pedagogic practices. At this stage I conducted unstructured lesson observations on the forty (40) primary teachers which provided a broad spectrum of the varied teachers' pedagogic practices in their classrooms. This allowed me to draw out two major categories traditional (A) and innovative (B) from the pedagogic practices for the next stage of the study. Those for category A, were the traditional teachers, being those primary teachers who have remained with the prescribed textbook and teaching syllabus and who also strictly follow the teachers' guide, and who therefore as such, they did not make any alterations in their classroom practice. Category B I recognized innovative teachers, being those teachers who drew on their professional knowledge to make small extra and creative alterations in their practice. They were those who made efforts to go beyond the teaching syllabus and textbooks to employ their own judgement, as well draw on the culturally rooted knowledge systems to support their learners. Having obtained the two categories of teachers, a new interesting category (C) of teachers emerged who made more adaptations to the traditional practice in order to support their learners. These I categorised as more innovative teachers. Therefore I arrived at three categories of teachers for the next stage of the study. Having in mind the need to identify and understand the experiences of innovative teachers, I focused on exemplary teachers in category B and C to illuminate the experiences of the innovative teachers.



In Stage 3 I considered the importance of focussing deeply on teacher micro practices that exhibited shifts from the transmissions practices and moved on progressively to select three teachers each from category B and C, making six case studies of more innovative primary teachers for the study. Yin (2009) believes that the ability to “conduct six to ten (6-10) case studies in aggregate provide more compelling support for the initial set of propositions” (Yin, 2009, p.54). Thus each case provided me with the opportunity to learn about the variations (Stake, 1995, p. 6) that existed in the pedagogic practices of teachers who achieved more innovations and successful learning experiences in their classrooms. Shulman (1987) asserted that teachers who achieve their instructional goals intelligently adapt their subject knowledge “to the variations, ability and background presented by their learners” (Shulman, 1987, p.15). An understanding of the thinking that informs the strategies these teachers adopt therefore required researching their pedagogical reasoning. The six selected innovative teachers were therefore carefully observed again (in a focused manner) in their lesson presentations and later followed up with individual interviews. Alexander asserts that:

“if the act of teaching is the *sin qua nom* of pedagogy, then a reasonably coherent account of teaching must be at the heart of any pedagogic model”  
(Alexander, 2009, p.556)

Therefore, I purposely entered into critical dialogues with each of the six teachers about their beliefs on teaching, and so they provided narratives of how their own teaching had changed slightly or entirely over time from the traditional practices, and how they had managed this change. The next section provides details of the phases in the field work.

### **3.4: Phases in the fieldwork**

The field work was conducted in four phases: 1) rapport building, 2) unstructured lesson observations, 3) focused lesson observations 4) interviews.

I first visited the four shortlisted schools (as explained earlier) and met the head teachers as well as the teachers. The purpose of the visit was to hold an informal interaction with the head teacher of each school. After discussing the intentions and methods of the research, I asked for the head’s views on forms of pedagogical practices that were exhibited by teachers in that school. Then I asked for a formal introduction to all the teachers in the school. At this point I asked for ten volunteers from each school to

participate in the study, and, on a group basis explained my intentions and applied ethical procedures with the teachers who were going to be observed. Although I did not ask questions directly related to the research, my flexible approach led the teachers to bring out interesting data. Thus, I took along my journal to record any such data.

After the first visit, the unstructured lesson observations were conducted on each teacher's lesson delivery on an agreed date. As there were ten teachers in each school selected for the study, and each lesson covered 30-45 minutes, I observed four teachers in a day. This meant that I spent a maximum of three days in each school (bearing in mind the overlaps of the time plans, and the flexibility of timetables). Hence, the unstructured lesson observations took a maximum of three weeks (four observations in one school day, then 20 observations in five school days, making 40 observations in 10 school days).

In the next phase I conducted focused lesson observations with the six teachers in the schools. The observed lesson of each teacher was used for interrogations and discussions throughout the interview so as to enable the teacher to reflect on his/her thinking during the teaching process.

In the final phase I went back to the teachers to clarify issues and engage in a detailed interview with each of the six teachers. Then I made a last to share the findings with the innovative teacher participants, as I was certain that the findings of the research would be of great benefit to them. The four phases are illustrated in the table below:

**Table 3.1: Phases in the field work**

|         |   |
|---------|---|
| Phase 1 | Rapport building with Heads of Primary schools and teachers; selection of forty (40) teachers; unstructured lesson observations of teacher pedagogic practices. |
| Phase 2 | Categories of pedagogic practices; traditional practices (A) and innovative practices (B) and (C).  |
| Phase 3 | Focused lesson observations of six (6) teachers groups (B) and (C).   |
| Phase 4 | Follow up Interviews with six (6) teachers  |

*Source: Authors construct, 2015*

### **3.5: Methods**

#### **3.5.1: Observations (a)**

In conducting the initial unstructured lesson observations my target was to search for all the pedagogic practices. The observation of actual pedagogic practices was essential for understanding the primary teachers and also to collect first-hand information about how they do their work in their own context (Silverman, 2006). I decided to conduct observations within an unstructured mode in order to see broadly how all the teachers exhibited their practices. During the unstructured lesson observations I kept a good record of classroom events to provide relatively incontestable and thick descriptions for further analysis of pedagogic practices (Stake, 1995, p.62; Cohen et, al., 2009). This observation process required a continuous collection of data to indicate all frequencies thus enabling me to find the most to the least common pedagogic practice (Cohen et, al., 2009, p. 408). Furthermore I was mindful of the non-routine teacher practices that could offer more direction for uniqueness and innovations (Cohen et, al., 2009; Alexander 2009). I observed the Ghanaian teachers' ways of questioning, providing explanation of concepts to young children all of which indicated their traditional knowledge systems of how children ought to behave towards adults in class. Being driven by the micro teacher practices, I further observed teaching learning materials (TLMs) present in the classrooms and how these were used by both teachers and children. Having a fore knowledge about the ill resourced primary classrooms I tried to look closely and monitor how teachers made use of TLMs during lesson delivery. Here the dynamics of classroom interactions revealed Ghanaian teacher pedagogic strategies in the use of TLMs. The teachers' epistemology found here was complex but revealing; for the majority of teachers learning required replications of behaviour (following the transmission modes); whilst for a few teachers learning took the form of sharing and working together. The observed events and classroom interactions continued to open more discrete teacher behaviour in terms of their feedback mechanisms. Teachers' feedback mechanisms were again connected to diverse cultural values which served a communicating role for learners. It also became evident although teachers' feedback mechanisms followed the 'routine pattern' of claps they were packed with silent messages which indicated teachers' satisfaction or displeasure to the learners. These feedback mechanisms underscored teacher and learners' assumption of power relations in the classrooms which also linked to the traditional knowledge systems.

Therefore I acknowledged that most of the pedagogic practices were not entirely different from the traditional pedagogic practices, but I found some of the individual teachers demonstrate shifts in their talk and questioning styles that suggested the potential of facilitating some interesting classroom experiences. The next stage of lesson observations was conducted in a more focused manner to elicit teacher thinking and reasoning about their initially observed practices.

### **3.5.2: Observations (b)**

The second set of focused lesson observations were conducted on the six selected teachers and used purposively for a detailed and critical study. During this stage written notes were made on some specific pedagogic practices which had the potential for further probing (Cohen et, al., 2009; Creswell, 2009). I made careful and critical observations of each teacher's lesson plans, lesson delivery, primary curriculum, classroom interactions whilst I made links to their observed practices. Additionally I observed each separate pedagogic practice together with the time and way it occurred. However, being mindful that small units of data posed the 'risk of falling out of context' (Wilkinson, 2000). I tried to ensure that the observed data was comprehensive enough to enable further analysis. Thus I obtained detailed descriptions of what and how teaching actually occurred in the Ghanaian context. The second set of lesson observations were followed by detailed interviews with each of the six participating teachers.

### **3.5.3: Interviews**

The interview approach adopted for this study took the form of knowledge construction through conversation and dialogues. In Kvale's view 'the process of knowing through conversation is inter subjective and social, involving interviewer and interviewee as co-constructors of knowledge' (Kvale, 2009, p. 19). Thus this process was journeyed through reflections that led me to new ways of understanding and uncovering previously 'take-for – granted values and customs' (Kvale, 2009, p. 49) of teacher practices. The teachers in the study therefore produced some narratives of their own pedagogic experiences (Kvale, 2009).

The interviews sought to elicit teacher's perceptions and understanding about their observed practice and the ways by which they explained their own actions. The purpose

was to move from the doxa to the episteme (Kvale, 2009), where teacher's beliefs and conceptions about children learning would be produced. Thus questions for the interviews were simple, open ended and conversational, with probes such as 'why did you start your lesson the way you did? how can you determine that the children have understood your lesson?; why did you pause at that point? This also made me focus on some significant incidents that had occurred in their classrooms and used them as the basis for discussions with them. This approach allowed the teachers to freely express themselves about their pedagogic variations in the classroom. The biographical sketches and context of the schools within which these teachers worked were obtained through observations and interviews.

Research in Ghana has proved that teachers are able to explain their actions better when given the opportunity to reflect on them (Akyeampong, 2006). This meant some more negotiations with both heads and teachers on an ongoing basis. Thus, these teachers were allowed to express themselves on their "ways of representing the subject matter that make it comprehensible to learners" (Shulman, 1986, p.15).

I engaged flexibly with the six selected teachers in a selected place of convenience after each observed lesson, ensuring their willingness to share their rich experiences with me. They willingly allowed me into their world of practice unfolding how they celebrate their success and how they had managed to overcome frustrations in their practice. I registered and interpreted the meanings of what they said to me. I was "observant of and also tried to interpret the vocalizations, facial expressions, and other body gestures" (Silverman, 2006; Kvale, 2009, p.29). Active listening was an important part of this study. The interview was supported by an audio tape recorder. The purpose was to use this gadget as a support to my inadequacies in listening to the teachers' voice intonations. Therefore I critically looked and listened, but the tape recorder concentrated on the listening. I proceeded onto analysing the data.

#### **3.5.4: Data analysis**

The data analysis was achieved through thematic analysis discussed in Bryman (2008) which follows an inductive logic of procedure. Classroom observation data obtained from the forty initial observations in Stage 1 were broadly divided according to the categories of traditional, innovative and partially innovative pedagogic practices. The

transcripts of the observations were read and re-read and subject to analysis by identifying the categories of pedagogic practices as they emerged. I sought to find the teachers' approach in the use of the primary curriculum, their ways of speaking and learner responses in class, their feedback mechanisms, classroom organization and interactions. This analysis provided insights and understanding that enabled me to identify and draw categories of supportive and less supportive pedagogic practices in the lower primary classrooms in Ghana. In analyzing teachers' methods of lesson delivery, I searched for the extent of use of the teachers' guide, how lesson plans were presented, and the choice teachers made in the selection of a text. Again I recorded each teacher's choice of specific words for spelling, comprehension and composition, and the intersection of teacher knowledge and belief systems in the teaching process. Here the teachers' tactics of digression from the teachers' guide and primary curriculum was very interesting to me. The point of digression actually revealed the extent to which they drew on their cultural knowledge to bring in images and metaphors that connected to their learners' world view. Then I also looked at the role the teacher assumed in class and what was expected of learners in that particular class. Hence I was able to make judgments on some specific pedagogic practices that were supportive for learning.

The second observation data from the six different lessons were also transcribed in the order of one per teacher in a detailed manner. The transcripts of lessons were analyzed in conjunction with the lesson plans prepared by each teacher as well as the scheme of work. I matched patterns of similarity in terms of teacher and learner roles in class, as well as matching differences in teachers' pedagogical variations in the classroom (Yin, 2009, p.158). I also analyzed the forms of local language sometimes used by the teachers and pupils. What I was keenly concerned with in this observation was the monitoring of the teaching process. Alexander (2009) described this as monitoring the invisible teaching method which has:

Four dimensions purpose, focus, location and pattern. The continuum of monitoring purposes then we observed and recorded ranged from mere supervision (in India) through active instruction, to assessment and (in Michigan) record keeping ... Finally monitoring could be random or systematic ... It is therefore a teaching method that has considerable potential to advance pupil's learning (Alexander, 2009, pp.409-410).

I agree with Alexander here that the teacher's method carries the potential to make learning occur in the classroom. So the way a teacher adapts subject knowledge to the variations, background and abilities presented by learners is of great interest to me.

The six interviews were recorded and transcribed. The interviews were "coded by attaching one or more key words to a text segment in order to permit later identification of a statement, opening it for further ideas" (Kvale, 2009, p.202). I put a code to indicate teacher questioning style then another code to indicate teacher explanation of text and further code for teacher feedback styles. I then drew out the meanings of each teacher thinking from the interview and coded their explanations of their choice of activity which they had found useful in their practice, for instance why a teacher had used a local Twi song to demonstrate the meaning of verbs was explained and coded. The findings were put down in a sequential order for each set of recorded interviews. The transcribed data was processed into narratives to make the identification of data by the common themes such as questioning styles and feedback moves. I searched for teachers' assumptions of knowledge and their understanding of concepts such as curriculum, teaching and learning, communication and interactions in class and instructional approaches. I probed deeply into how each individual teacher lived through his/her classroom experiences. The experiences they shared revealed their pedagogic reasoning and judgements successful learning experiences in their context.

Also the data obtained led to more insights on how teachers took some time off to reflect on their classroom practices and consequently alter their practices to make learning occur. I recognized the complexity of the teachers' situation for them to explain all of their thinking and actions. Therefore, I sought to pay particular attention to the expressions and ways in which these teachers made clear their own reasons for using the specific strategies during teaching. Sometimes it is a routine, an action or even a speech. The data was interpreted by a cross-checking of the teacher interviews with their actual lesson observed during teaching. That enabled me to develop better and coherent narratives and each teacher's observed practice was put together with her voice and explanations of practice, to show why they did what they were found doing in class. Having come to this stage I joined each of the six pairings of data (observation and interviews) and made some combinations of the emerging themes across the six teachers in category A. I further triangulated the data through the evidence of lesson

plans primary curriculum teacher notes and available textbooks to ‘corroborate’ the data obtained from the study (Yin, 2009, p.103). I further checked for connections of how lesson plan links to the themes that emerged from the study. This process led to more focusing that allowed “thick descriptions” (Geertz; 1975; Miles and Huberman, 1994, p.54) to emerge until I gradually arrived at a ‘saturation’ point (Kvale, 2009, p.202) when no new insights and interpretations emerged from further coding. Finally, I drew out the conclusions that came out of the study. I finally present a table that summarizes and matches different data sources and research questions.

**Table 3.2: Data Sources and Research Questions**

| Research Questions   | Data Sources  |
|--|---|
| 1. What are the prevailing pedagogic practices of Ghanaian teachers in the lower primary classrooms? | Unstructured lesson observations  |
| 2. What are the major issues and concepts that underpin their pedagogic practices?                   | Unstructured lesson observations, lesson transcripts and Documents<br><br>(lesson notes, teacher’s guide, primary curriculum) |
| 3. What are the experiences of teachers who are innovative in their practice?                        | Structured lesson observations, probing interviews and documents (lesson notes, teacher’s guide, primary curriculum)          |

*Source: Authors construct, 2015*

### **3.6: Researcher’s Role**

My role in this study has been that of an insider because I share similar cultural values and beliefs with my participants (Dunne, Pryor and Yates, 2009). Within a social constructivist view of learning, I assumed the role of co-constructing knowledge with my participants. First of all I am a Ghanaian woman living in Ghana, so I have a lot of insights into the cultural implications of a majority of teacher-learner interactions that



ensue within the socio-cultural milieu of Ghanaian primary schools. Also being an outsider a lecturer of teachers in particular, I looked for different pedagogic practices that demonstrated shifts from the transmission patterns.

I adopted an empathetic and flexible attitude because often teachers teaching younger children assume a compassionate and flexible attitude (Akyeampong and Pryor, 2006). Additionally, the soft language and flexible strategy I adopted implied the importance of caring and creating a playful environment for young learners. The iterative nature of this study also made room for deep reflections on what Ghanaian teachers do, as well as how they do it, to make sense of learning. The key issues have been how these insights impact on my practice within a university community where the power relations between teacher and learner are almost stratified, not giving any space for any form of a pedagogic renewal. I however allowed and encouraged a form of cordial, reversible and flexible power relations to exist between my participants and myself, this did not interfere with the entire research process. The majority of teachers (participants) who were women flexibly identified themselves with me since they recognized me as having similar professional traits such as patience, supportive and appreciative of learners' background; therefore they freely opened up their thoughts and intents to me, enabling me to arrive at rich and united narratives about their practice. As I engaged with the teachers I tried to avoid the use of typical terminologies such as 'child/teacher-centred learning'. This strategy enabled me to avoid teachers' talk about some of the contextual problems like lack of resources, more INSET, incentives and others. I therefore proceed to explain how I selected my participants for this study.

### **3.7: Ethical issues**

The ethical concerns were dealt with in an explicit manner. I initially obtained ethical consent from the University of Sussex as I made sure that I understood the importance of ethical issues involved in the research, and the non-disclosure of confidential issues also constituted a part of the contract.

I started the fieldwork only after receiving the permission from the people to whom I spoke. Initial contacts and consent were sought through the head of the school. Access to classrooms was obtained through written letters to head teachers and, more importantly, the teachers were told about the purpose of the study. The head teachers

were encouraged to inform the parents on a blanket basis that school activities to be observed would be used for research purposes. In addition to the general information from the head teachers, all teachers were given sufficient information about the study to make informed decisions about their participation or non-participation. I used the information sheet for this briefing, but I also asked them to sign a consent form. At the same time, I told them that this research was not for the regular supervision, but for an educational research purpose. At all times, I emphasized that the participants had been selected because they could be of help to the study.

Additionally, I also gave prior information to the teachers regarding the actual day that they may be observed and interviewed. They were also given the right to withdraw when they wished to do so. Again, although I made the selection alone I informed the head of the school of the choices I had made. Their reward was the opportunity to reflect on how they managed to connect to the learning needs of their pupils. I also discussed with them the importance of the research I was doing and how the findings and recommendations would be useful for future policy on improving teacher education in Ghana, and that by participating, they would be making a valuable contribution to this effort. I approached my research subjects with a lot of sensitivity because of the 'power gap' that exists between teachers and students, and the fact that they were likely to see me in the same light because of my status as a university lecturer. I addressed this by focusing initially on understanding their concerns about the teaching profession, by placing them in the dialogue as people who had a lot to offer me the researcher because of their years of experience in the teaching profession. This helped to shift the power balance a lot more in their direction where they saw me as 'the learner' seeking to 'learn' from them.

My questions were simple probes that allowed the teachers to freely express their views on the issues under discussion.

For the purpose of confidentiality, the names of teachers, schools, and villages that appeared in the thesis were anonymized. Individual interviews were recorded where the participants gave their permission. The last aspect of ethical concern is that of information sharing.

## CHAPTER FOUR

### PEDAGOGIC PRACTICES IN GHANAIAN PRIMARY CLASSROOMS

#### 4.1: Introduction

This chapter presents findings on the prevailing pedagogic practices in Ghanaian primary classrooms. Unstructured observations were conducted on 40 lessons in four primary schools in Ghana. The forty teachers in this study served as an ‘exploratory’ group enabling me to focus on the more innovative teachers. Although I collected data from these teachers, my aim was to use insights from these teachers to gain a better understanding of the innovative practices of what I considered as more successful teachers. I found teachers exhibited three distinct categories of practice: group A, the majority (34), practiced traditional transmission and rote patterns of teaching; group B, a minority (3), made some slight adaptations to traditional practices in order to support their learners; and group C, also a minority (3), made committed efforts to introduce innovation into their practice in order to facilitate learning. The first Table 4.1 below, shows the different lesson observed across the subjects teachers were found teaching.

Lessons observed and subjects taught

**Table 4.1: Lessons observed and subjects taught**

| Subject          | Number of lessons observed |
|------------------|----------------------------|
| English Language | 17                         |
| Mathematics      | 15                         |
| General Science  | 5                          |
| Music            | 2                          |
| Social studies   | 1                          |
| Total            | 40                         |

*Source: Authors construct, 2015*

Table 4.1 below gives a summary of the various pedagogic practices exhibited by each group, presented here so that the following discussion of the prevailing practices is understood within the larger context of what more innovative teachers can do.

## 4.2: Description of Teachers

The table below presents the descriptions of the Ghanaian teachers. The teaching and learning strategy employed by each category of teacher has been provided. The assumptions that underpinned each category of practices are also presented. Further, the specific pedagogy and power relations that were observed in the Ghanaian classrooms are also presented in the table below.

**Table 4.1: Teacher pedagogic practices**

| Group | Strategy   | Assumption  | Pedagogy   | Power relation   |
|-------|--|---|--|--|
| A     | Teacher attempts to cover all items on the curriculum for each lesson. Teacher relies solely on the teacher's guide.   | Teacher assumes that pupils will learn through rote recitation of texts.  | Teacher is in control of the learning process, while learners listen quietly and respond accordingly. Teacher decides what must be learned and has no supplementary content to support learners.   | A rigid teacher-pupil relationship. Pupils have little or no agency in the learning process. They only obey instructions from the teacher, who is regarded as the knowledgeable guide.   |
| B     | Teachers attempt to follow the curriculum. Teacher primarily uses the teacher's guide, but sometimes also draws on pupils' experiences to enhance explanations.  | Teacher assumes that the children can learn when lessons are related to their own experiences.                          | Teacher sometimes makes use of supplementary content to support learners.  | Teacher-pupil relationship often unstable, swinging between relaxation and rigidity. Teacher occasionally allows pupils to express their own understanding of concepts. Teacher supports strategies prompt some excitement in learners, stimulating them to work in class. |
| C     | Teacher seldom refers to the teacher's guide, having other books and resources to draw upon. Teacher conducts several activities that lead pupils to make meaning out of concepts presented in the lesson. | Teacher assumes that children enjoy play, so engages them in various indigenous activities such as dancing and singing. | Teacher makes use of various support strategies such as use of child's own peers by inviting pupils to come to the front of the classroom to demonstrate what they have seen during the lesson. Other pupils watch and decide how well their peers can perform a given task. Teacher seeks to organize the ideas and understanding of pupils | Equal and flexible teacher-pupil relationship. Teacher and pupils work out meanings of concepts together. Pupils confident, excited, and able to do the work.  |

*Source: Authors construct, 2015*

In summary, Group A (34 teachers) presented a direct verbal reproduction of the teacher's guide, and hardly attempted to make alterations in methods of discussion and discovery. Pupils almost invariably simply recited information without any opportunity to make meaning out of what they were saying (Sikoyo, 2010). Group B teachers allowed pupils to draw on their own experiences at certain points during the lesson to make direct connections to the concepts being taught. These teachers believed that, depending on the topic, children should to some extent be helped during the lesson. Group C teachers attempted to organize pupils' ideas during the lesson (Shulman, 1987) and perceived children to be part of the learning process, so they allowed them to be an integral part of it (O'Sullivan, 2006). Pupils in their classes (Group C) were excited and relaxed.

In this chapter I present the analysis of pedagogic practices of the majority of teachers observed paying attention to the knowledge, orientations and understanding that underpinned their practices. In doing so I examined observed classroom interactions that showed how teachers continued to adhere to rote transmission patterns as I focussed on teacher speech and questioning style, feedback moves and use of textbooks.

#### **4.3: Description of Traditional Teachers**

The majority of teachers who fell into the category C were all trained teachers with some holding a Bachelor of Education whilst others held a Diploma in Education. They fell within the ages of 25 to 58 years with teaching experience between five and twenty years. They all worked in different communities (public and private school communities) and their schools were high or low performing according to the GES categorization of student outcomes. I proceed with the lessons they were found to be teaching.

#### **4.4: Lesson Structure**

Findings revealed that the majority of teachers in the study were found to stand or sit in front of the class for most of the lesson delivery period. The Ghanaian classroom culture showed that pupils understood teacher's sitting and standing position in class as culturally defined, expecting obedience and respect from children (Ogawa, 2007; Omolewa, 2009). In most lessons the teacher presented a direct verbal demonstration/reproduction of content knowledge and asked all pupils to repeat after

him/her. Children watched the teacher quietly, and immediately tried to repeat or recite teacher's words. Interestingly, this reciprocal practice seemed to assure teachers that learning took place simultaneously in the minds of all learners. Such tacit and dual patterns of interaction were observed to be common practice in all lessons observed. The following discussion on teacher speech reveals the ways they engaged their learners during the lesson. It must be noted here that although the language of instruction expects teaching to be conducted in the local Ghanaian languages from P 1 to P 3, the observations showed variations and teachers often code switched as they found it necessary to do so.

In all the majority of classes observed for Group A, I found a uniform and clear teaching pattern (Darling-Hammond, 2005), showing a set of teacher-led moves (Arthur, 2005; Hardman et al., 2008; followed by reciprocal learner responses and as similarly described by others (Tabulawa, 1997, 2003; Dembele and Mario II, 2003, 2005; Kraft, 2005; Akyeampong et al., 2006; Hardman, et al., 2008; Sikoyo, 2010).

Before beginning, the teacher held up a textbook and sometimes shouted to signal the start of a lesson. During the observation most of the teacher's pattern of lesson presentation consisted of reading a text aloud, giving explanations, and asking pupils direct and simple questions from the textbook and the teachers' guide. For example, during lessons in mathematics teachers presented formulae and then demonstrated examples of solved problems for pupils to follow. English comprehension lessons often started by selecting words from the English textbook to be written on the blackboard. The teacher then read them all aloud two or three times before asking the class to repeat them as prescribed in the syllabus. This process continued for about ten minutes, after which explanations of some of the words on the blackboard followed. The teacher's method of clarification was to spell out the word and sometimes translate it into a local language (e.g. Twi). In explaining the colour green to pupils in Primary 1 the teacher pointed outside the classroom to the green leaves of a plant; while in an another classroom, the teacher used the children's green school uniform to indicate the colour. Usually, after such an explanation, the teacher's questions that followed were intended to check comprehension, the exchange proceeding along the lines of:

Teacher: Do you all understand? [Or] are you with me?  
 Class: Yes, madam.

Study analysis reveals that the majority of teachers associated pupils' understanding of concepts with such "yes, madam" responses (an indication of the safe talk found in other contexts), and, interestingly, most teachers (34 teachers) then proceeded to the next part of the lesson. It clearly emerged that the majority of teachers had little or no intention of further probing learners' understanding of concepts, and it was rare to see anyone provide an opportunity for questions from pupils (Sikoyo, 2010; Harman et al., 2008; Adu-Yeboah, 2011).

The following extract shows how teachers interacted with their learners, in some cases asking questions, while in others, simply talking. Although some teachers' questions indicated an extension of the environment, my observations revealed to me that they did not probe or make any connections to illustrations or images familiar to the pupils.

**Extract 1 (Nyamesem School, Kofi Owusu, October 2012)**

This school is privately owned by Catholics and has very clean surroundings. Classrooms were fully resourced and children in this classroom are 40 in number.

The next extract presents a lesson by one traditional teacher who appeared to be confident in teaching his lesson.

Lesson: reading a passage

Teacher has written new words on the board: the teacher asks pupils to pronounce them. He takes the words one by one and tries to determine what they know about them. For example, 'mountain': the teacher asks the pupils to look at pictures, and they all try to say what they see. One child is not able to complete a sentence. Reading begins. The teacher reads a passage about a tortoise climbing a mountain and he uses its movements on the mountain as part of his illustration – all pupils should look at their books and listen. As he reads, he draws their attention to the rain this morning [this seems to help them imagine a drought]. One child reads after him. A pupil reads with the teacher explaining the story in between.

## Primary 2 (Class size 40)

- T: Who has seen a mountain before?
- Abena: When my mother and I were going to Khwawu [a small town in Ghana].
- T: Very good. [This continues with the other words. Pupils are then asked to form sentences with the words.]
- T: Hello.
- All: Hi.
- T: Have you seen a tortoise before?
- T: Open your books. What do you see in picture A? Yes, Joy?
- Joy: I can see a mountain. [They all try to say what they see, and the teacher responds to the children's answers with comments like "This is my best friend" to signify that children are giving the right answers.]
- T: What is the tortoise doing? Is he dancing azonto [a type of youthful dance introduced by a Ghanaian football player]? Yes, James?
- James: I see the tortoise climbing.

During this lesson the teacher quickly engaged learners in the early stages of the introduction by using a question and answer style, as and when the children gave direct answers to his questions, he assumed that they were following his plan. Additionally, he expected them to understand all the words he had written on the board. For this teacher, if one pupil was able to say that she had seen a mountain before, it meant that all learners had an idea of a mountain. Meanwhile the GES (2007) teacher's guide on methods of Teaching English suggests that teachers should select relevant materials that will help improve pupils' understanding and use of English at all levels of primary (GES, 2007, p. xx). Obviously this teacher's effort to check these learners' understanding of the words on the board was missing. At this point this teacher just proceeded with his lesson at a fast pace. Thus, the teacher continued in the same way with all the other words on the board. Interestingly, during the observation, the teacher appeared to be confident that learning was taking place, going on to ask the children to form sentences with the words which only a few were able to do.

The next stage of the lesson was the reading of a passage. The teacher read the passage, then the children looked at their books, and finally one child read the passage aloud. Here again, the teacher used one child's reading skill to gauge that of the whole class. After this process, the teacher asked the children to do a class exercise (answering questions on the passage); the class then ended.

The study found that, as Ghanaian culture demands, pupils in most classes were quietly seated during lesson delivery (Pryor and Akwesi, 1998; Fobih et al., 1999; Akyeampong et al., 2006; Opoku-Amankwah, 2010). This teacher's method of teaching resonate the



simple look-and-say method of teaching English found amongst trainee teachers in Ghana (Adu-Yeboah, 2011). In her study trainees preferred to use the simple look-and-say method because they assumed it helped pupils to predict meanings of words.

Although the observation showed that this teacher tried to make use of children's socio-cultural experiences and previous knowledge, such as asking some children to bring in their ideas on a mountain, what happened here was more a form of reproduction of the teacher's ideas that endorsed the traditional rote pattern of teaching. Consequently my observation showed that the majority of the children could not make meaning out of the words on the blackboard but ostensibly shouted out 'yes sir'. For example:

Teacher: any questions, do you all understand?

All: yes Sir.

This teacher has exhibited some knowledge of the content (KC) but could not give any clear representations or illustrations of the content in ways that learners could understand: therefore his PCK is limited (Shulman, 1987; Phelps and Schilling, 2004). He just stopped at a point assuming they were all learning. Thus as Adu-Yeboah concluded, this teacher seems to lack a deep reflection of why his approach does not work and what alternatives would help him find solutions to his current practice.

The majority of teachers were confident in themselves that pupils' responses were true reflections of their understanding. In Adu-Yeboah (2011)'s study on Ghanaian teachers, they were confident because they were able to teach in ways they had been taught in college. Other studies (Sebatane and Lefoka, 2001; Stuart et al., 2009) have also found this form of confidence among teachers in SSA. Stuart et al. (2009) report teachers' pedagogic practices often "derive from teachers' own personal experiences of schooling" (p.11) and more so is the culture which endorses such authoritative practices. In Lesotho, the study on teacher practices made two assertions on what led to teachers' confidence; firstly, they had been able to transfer some positive images and ideas of training into their current practices. Secondly, they could model themselves as good teachers "according to their definition" (Sebatane and Lefoka, 2001, p.4). Additionally teachers exhibited confidence in their practice once they were able to use the simple methods of look-and-say to teach, even when children did not make any progress out of the approach. In all these cases the teacher's confidence was not related to children learning but rather to their own understanding learning. Thus, these teachers'

epistemology of knowledge as a behavioural one was evidenced through the ways they encouraged pupils to repeat all the information imparted to them. What was evident in these primary teachers was their positivist orientation of knowledge recognizing their learners as external to the teaching learning process (Cohen and Manion, 2009, p.7). Consequently, teaching by rote and transmission was understood as a suitable methodology.

In the next extract, another teacher in group A is attempting to teach the concept of single-digit numbers to children in Primary 3.

**Extract 2 (Primary 3, Class size 40)**

- Teacher: We are going to add four-digit numbers; all of you pay attention. Now, everybody say one digit. (Teacher is speaking English, and sometime switches to Twi but I'm not sure all children here have understood the language).
- All: One digit.
- Teacher: Example, 1, 2, 3, 4, 5, 6, 7, 8, 9 are all one-digit numbers.  
[Pupils watch her; she calls one child to the board to write a digit.]
- Teacher: Prince, come and write a one-digit number on the board.
- Prince: [Writes the figure 'zero'.]
- Teacher: Okay, hmmm, Yaw, you too come and write a one-digit number.
- Yaw: [Writes the figure 'two'.]
- Teacher: Okay, who else?

During this lesson, the teacher wrote all the single-digit figures on the blackboard and then asked the class to repeat the names of the figures after her. Next, she asked one pupil to write an example of a single-digit number on the board. However, as the child did not perform the task correctly – she wrote the figure 12 – the teacher ignored this effort and proceeded to call on another pupil. Eventually, she called on two more learners, and because they wrote the correct numbers on the board, the teacher appeared to be satisfied that the rest of the class were able to follow. Here this teacher's style was merely to see if a few could perform the task on the board and not to help those who could not do the task.

The behaviourist epistemology of this teacher once again reveals that she had clearly overlooked the learning needs of some pupils, focusing on how well the two pupils could reproduce her examples, and demonstrating that the majority of teachers seem to have assumed that learning occurred in their pupils irrespective of some children's visible misunderstanding. This teacher's observed practice confirms the Ghanaian

teachers' professional culture of appreciating such simplistic approaches to teaching, so it is likely here that pupils' failure to grasp concepts will ultimately be blamed on them (i.e., the learners) as this was the case in the Adu-Yeboah (2011) study. Hence teachers' mental index of how learning occurs indeed leads to the prevalence of the traditional pedagogic practice found in the majority of primary classrooms.

The next extract also concerns a formula-driven lesson, which is an exercise that reveals the mind-set of the teacher while teaching. The teacher's pedagogic strategy shows that she perceived learning to occur when pupils were able to use a given formula to reach the expected answer. Here, the teacher rushed through an explanation and did not wait for any questions from the class, or even check the ways in which pupils tried to assimilate the formula in their own way; rather, she moved on from her explanation to ask them to use the example to do a class exercise.

**Extract 3 (Primary 5, Class size 45)**

The teacher is teaching the concept of finding the area of a triangle to class 5 pupils.

- Teacher: All of you, we are going to find the area of a triangle.  
[All children are watching the teacher.]
- Teacher: So, the formula for finding the area of a triangle is  $A = h \times b/2$   
[She reads the formula she has written on the board. She goes over the formula again.]
- Teacher: Do you all understand? Any questions?
- All: Yes, madam.

This teacher was observed using her teachers' guide to ask her pupils to work out the same example first using her instructions. She used the formula  $A = h \times b/2$  to calculate the area of a triangle, but she did not pause at each step of the process to break down the concept of the formula well enough for the children to understand. She had a diagram of a triangle on the blackboard, so she merely mentioned the significance of the letters b, h, and A, expecting the pupils to be able to do the calculation. By mere repetition of the figures on the board she assumed that her learners could follow and understand how to use the formula for a triangle. At some point, she asked the class if they had all understood the formula, and as they responded 'yes' in a chorus, she assumed that it was clear to everyone.

The point here is that this exposed a mind-set that adhered to the notion that teaching was all about learning a formula, and when you get it right, learning has occurred (Pryor

et al., 2009). As Phelps (2009) pointed out earlier, teachers need special knowledge to teach mathematical concepts, as well as needing to know ways in which they can break down concepts of mathematical domains to children. Clearly, this teacher fundamentally revealed an inability or unwillingness to ensure that all her pupils could comprehend the formula: she only tried to ensure that her pupils could use the formula to work out the example problems she set and assumed the collective ‘yes’ meant all could use the formula. The students were external to the learning process.

#### **4.5: Teacher Speech and Questioning Styles**

The extract from the teacher in Primary 5, Class size 45, from group A revealed that this teacher’s questions were direct, appearing to check for understanding. Hardman et al. (2008) assert that such questions are of a lower order and do not seek to extend the child’s understanding of concepts, going on to argue that the Sub-Saharan African (SSA) teacher’s question tags are merely a ‘pseudo-check’ of pupils’ understanding. The interesting point here is that the schools in the present study had class sizes of about 40 to 60 pupils of various ages and different abilities, yet most of their teachers assumed that pupils would all learn simultaneously and indicated that they had done so by simply answering “yes, madam” to any question.

What seemed evident in this study was that it appeared that the teacher’s knowledge of the subject matter and teaching curriculum lacked the basic critical skills that could make some realistic connections to meet the different backgrounds and ages of their learners (Shulman, 1987). Indeed, children come into the classroom with these varied abilities for a teacher to provide some support for them, in their various experiences to make meaning out of the texts and concepts teacher may present to them. Under such circumstances, Shulman contends that “when teacher knowledge and understanding of subject matter are poorly represented, they tend to lose their detail and hence are not de-contextualized, so it becomes a real challenge for the teacher to ensure some form of meaningful learning in the classroom” (Shulman, 1987, p.10). Nevertheless, the primary teachers in this study were confident in their assumptions because they depended on their own previous learning experiences and were optimistic about pupil learning outcomes. The next section examines teachers’ feedback strategies.

#### **4.6: Feedback Strategies**

The majority of teachers were found to employ gestures, facial expressions, comments, claps, and silence as means of praising pupils' responses, or indeed ignoring them. Teachers also made use of one or two local languages to comment negatively or positively. On the whole, moving from school to school, observations showed that feedback mechanisms varied from teacher to teacher. Furthermore, the majority of teachers sometimes indicated their perception of learners' rate of progress through their (teachers') observed physical reactions and feedback modes. Opoku-Amankwah (2009) also found that the pupils in the primary classrooms were able to interpret and read meanings into the teacher's facial expressions, voice pitch, and body posture.

During one lesson observation (of group A teachers), the teacher walked to a pupil's (Elizabeth) desk and helped the child find the answer to a question. The teacher smiled as Elizabeth gave the correct answer and clapped as a form of feedback to show the rest of the class that she appreciated Elizabeth's effort. Clearly, such feedback encouraged pupils and gave them some assurance that they had 'got it right for the teacher'. The study found that little comments and remarks such as, 'Clap for senior [the child a girl] ... Let her say it louder... Now, for the boys, we clap and say chief in Yoruba language; and for the girls, we say queen'. Such comments from a teacher were very important signals to the class. A teacher's facial expressions served as clues for young children in particular to the extent to which they were providing the right answers. Conversely, if a remark or gesture was negative, pupils knew they had not said or done the right thing. The teacher in this case smiled when she asked the children to clap for Eric. This was a mutually reassuring gesture for both learners and teacher that indicated learning had taken place.

It however also possible that, if this teacher had extended her smiles and used it more often children could have been more relaxed and made more meaningful connections to the concepts of single digit. This would have made way for Hopkins (2002) quest for some promising features in this traditional pedagogy.

In the following extract, the teacher demonstrates that her sole concern is for the 'right' answer, claps only at the end of the lesson, and relies on the teachers' guide alone as a resource, making her different from the innovative teachers. Her pupils were observed to be scared and bored.

**Extract 4 (Primary 5, Class size 35)**

- Teacher: Look at the first example, then look at the words given, and let's do the exercise in the book. Don't make noise; we have already been given the words, we are not going to use any words outside the book. [Children raise their hands.] OK, Kwesi, try.
- Kwesi: [He is able to attempt a sentence by picking 'oo' words from a box.]
- Teacher: Pronounce the words properly and audibly. [They continue with 'ea' words.]
- Teacher: Let's go to the last column. Is that all?
- All: Yes, madam.
- Teacher: Then clap for yourselves. [She allows another child to attempt the exercise, then asks the class to clap for the child.]
- Teacher: Hey, let's hurry up, we don't have time.

This teacher also used the same feedback style of clapping for their pupils (as found in the majority of classrooms) but differed in the way in she talked to her learners. During the observation, she wore a stern look and stood in front of the class shouting that everyone should clap for the child who had responded 'correctly'. In this case the purpose of the applause was to encourage learners, but the unfriendly way of huge frowns and high pitched voice intonations by which this teacher reacted carried different messages to her young learners. This feedback style made the learners scared.

The study thus found that such tacit feedback strategies served as important stimuli for young learners (Stuart et al., 2009). In addition, this is a teacher who appeared to have had at least 20 years of teaching experience but had remained with the "stereotyped and ritualized classroom practices" (Asare and Nti, 2014). In addition, the teacher in the above extract appeared to have a rigid mind-set of children learning, only asking one child at a time to attempt a given activity, and then jumping on to the next exercise. Hence the teacher's facial expressions and gestures communicated her understanding of knowledge as something firm that ought to be acquired with much seriousness.

The next extract reveals another feedback strategy employed by the group A teachers. The main feedback style here was a smile and a facial expression that pleased the learners. This teacher's teaching and learning epistemology was revealed by her focus on learners doing what was expected of them.

### Extract 5

Primary 1, class size: 40

Mathematics

The teacher sings a song with the pupils: ‘Kofi bra ye nni agro’ [ten little ducks went swimming one day]. Thus, the intersection of Twi and English is found here through code switching. Relevant previous knowledge (RPK) as stated in the teacher’s guide is what this teacher has dwelt on. Pupils recall what they did the day before. The teacher begins to smile cheerfully and count with the pupils from the tallest to the shortest girl. Some selected pupils are asked to hold up pencils of different sizes.

Teacher: Who is holding the biggest pencil? Jeffrey?

Jeffery: Ama Serwaa.

Teacher: [smiles] Clap for him.

[Another child shows a bigger pencil. Teacher smiles again and walks around full of grins showing the children how pleased she is. ]

Teacher goes back to yesterday’s lesson and returns to explain today’s again: arranging objects from biggest to smallest. After putting some examples on the board, the teacher goes over the exercise with the pupils as a form of reinforcement.

T: You are going to do the same thing in your books, then you colour. Listen, if I mix them up and ask you to arrange them, can you do it?

All: Yes.

Teacher: [Sings ... with one little finger dancing around.]

Her pronunciation in English is not clear enough but is very good in Twi. She gives out pencils and books. The children are moving around.

T: Please sit down and do your exercise. [She goes around checking what everyone is doing. Teacher is still smiling as she moves around from desk to desk]

The extract shows that, similar to other study participants, the usual false smiles to assure learners’ of teacher’s satisfaction with an answer was found here. Thus this teacher’s smiles and grin signified that she was pleased that they had got it right. After asking Jeffery to identify the biggest pencil, the teacher moved on to another child, asking them to show her the bigger pencil. Subsequently, the teacher informed the class that, “This is the way we will do it today”. The main feedback style here was a grin that was reassuring to the learners.

This teacher's behaviouristic and mechanistic epistemology demonstrates that she was oriented towards a specific behavioural pattern from her learners. Hence, her smile and facial expressions indicated her satisfaction with the apparent behaviour of her learners. After two examples of the right answer, she assumed that all the pupils were able to do the exercise. Notably, her feedback was embedded in a transmission practice that gave no room for questions, merely pouring information into learners and expecting them to follow (Craft, 1994; Tabulawa, 2003; Arthur, 2005; Pontefract and Hardman, 2005; Hardman et al., 2008; Opoku Amankwah, 2009).

An important finding here is the fact that feedback from this teacher seems to be more of a positive one. The teacher was concerned with only right answers but then her smiles made her learners feel relaxed. This was also interesting for this study because some form of opportunity could also have been provided and extended for learners if this teacher had realised the value and importance of her feedback strategy. Thus such feedback could have been supportive for learners and also promoted as useful practices in Ghanaian primary classrooms. This practice indeed endorses false-learning as teachers were drawing on it in a different way. Since traditional Indigenous Knowledge systems seem to validate rules on obedience and reproduction for adult and children (Omolewa, 2007), the study found here that children felt appreciated by their teacher. However, this was not learning but rather a form of safe learning that Chuck (2007) described. In fact teachers' smiles merely reproduced non-learning. This is because if teachers had provided the same smiles with a different mind-set, learners could have felt more appreciated so they could also experience some meaning out of the classroom processes (Stuart et al., 2009; Sikoyo, 2010;). The observed variations in feedback style revealed the group A teachers' epistemological stances. However, although they seemed to perceive learning as part of the classroom process, it was presented as a peripheral function and something to be discovered by the pupils themselves (Burrell and Morgan, 1979). Therefore, teachers did not perceive learners as part of the learning process but rather merely receivers of knowledge that they perceived as relevant to the teaching learning process (as precisely spelled out in the teachers' guide). Again they focused on how to get pupils to reproduce the correct answers. Thus learners were to discover how much they were appreciated by their teacher by looking at their facial expression and listening to their comments (Cohen and Manion, 2009). This study found the word reproduction as a key word for the traditional teachers. This connotes reproducing what



the teacher prescribes and is directly rooted in the indigenous knowledge systems where Omolewa (2009) states that learning is through transmission of ideas stored up in the memory of leaders. Thus, teachers had tacitly adapted these practices from the Ghanaian traditional indigenous knowledge systems and transferred them to their pedagogic practices.

#### **4.7: Use of Textbooks**

Additionally there was also the issue of ensuring full coverage of the curriculum, so teachers attached equally high importance to syllabus coverage. Such restrictions on teachers at some point impacted on their willingness to support learners, as was found in their use of curriculum materials. The majority of teachers under study were found to adhere closely to the textbook and teachers' guide that were prescribed by the Ghana Education Service (GES). Observations indicated that teachers invariably had the textbook and the teacher's guide open on their tables as they followed steps for the development of a lesson. As argued earlier, teachers act as guards and principal translators of the textbook, whereas learners are the receivers of new knowledge (Opoku-Amankwah, 2009; Adu-Yeboah, 2011; Akyeampong et al., 2013).

A major reason why Ghanaian teachers exhibit the particular style of lesson development is because the Ministry of Education (MoE) requires all teachers to plan their lessons according to the teachers' guide prepared by the curriculum division of the GES.

For instance in the Primary four English curriculum, in the teaching of grammar,

The general objectives: pupils will be able to

1. Use grammatical structures/forms correctly in speech and writing in English.

The structure of the English curriculum is presented in the table below.

**Table 4.2: Teaching Syllabus for English (Primary four)**

| Unit  | Specific objectives   | Content  | Teaching and learning activities   | Evaluation   |
|---|---|--|--|--|
| Unit 1<br>Nouns- proper nouns<br>(special naming words) | The pupil will be able to:<br>Identify and use proper nouns appropriately in speech and writing | Proper nouns are special naming words for:<br><u>Names of people</u><br>Akosua, John, Ebo, Ali, Esther, etc<br><u>Names of Countries, Towns and Villages</u><br>Ghana, Cote d'Ivoire, Ukraine, Kumasi, Hohoe, Wa | Through discussions let pupils mention the names of people they know, names of countries, towns, villages and days, festivals and holidays.<br><br>Write all examples on chalkboard and guide pupils to re-organise the accordingly (refer to content) | Pupils find out and write the names of countries in West Africa and the capital of each one. |

*Source: MOESS: Teaching Syllabus Primary 4, 2012*

Moreover, the MoE sanctions trained supervisors and school heads to visit schools and make regular checks on teachers' strict adherence to the use of the teachers' guide. As a result, most the teachers are expected to prepare their lessons and teach according to the precepts of the syllabus. Another significant point is that the syllabus and the teachers' guide prescribe exercises that teachers can easily set for pupils (as seen above). Thus teachers' tried to make sure they follow the laid down plan so they could be regarded as good teachers. Therefore, they find it convenient to use the guide because it is assumed to be comprehensively prepared for teaching and learning (MoE, 2009; 2010).

The following extract reveals the way participants in the study engaged with the guide and how they translated its concepts to their pupils.

### **Extract 6**

Primary 1, class size: 40

Mathematics lesson (lesson in English language)

Teacher has a mathematics textbook open on his table that he makes frequent reference to: he pauses, looks into the textbook, and then continues with the next step.

Teacher: [Counts objects from 1 to 20 and then writes the numbers on the board].

A child goes to the front to count straws and then writes the number on the board. She counts well but does not initially write accurately. All the other pupils watch her and tell her to correct her writing. The next child is able to count and write accurately while the others watch. Whenever a child counts well, everyone claps.

Teacher: Put your pencils down, fold your arms, and let's count looking on the board.

[Teaching ends, teacher give instructions for exercise]

Teacher: OK, let's do the exercise on page 36 in your workbook. There will be a space in your textbooks, so put your answer there after counting.

Pupils continue with the exercise and the teacher marks. She goes to another desk and helps a pupil count and write. She tries to communicate in the child's mother tongue. She tries to mark in class in order to identify those who were able to do understand the

lesson. She explains corrections to one pupil who does not understand. She calls pupils by name for correction (dairy notes, October 2013).

In this class, the teacher had planned the lesson directly from the textbook and had no teachers' guide. This teacher's strategy was thus to reproduce the exact words of the textbook. More importantly, an analysis of the teacher's practice suggests that his pupils were disconnected from the basic elements of the counting exercise: they were only counting in order to get the right answers. Once again, such a dual pattern of teacher learner interaction was evidenced in most classrooms observed.

Yet, notably, the majority of teachers under study had little difficulty in teaching the subject because they had developed a repertoire of strategies for use with their own classes. This practice is what Alexander (2009) terms the generation of 'rituals' in everyday practice. Such an observation is also significant to the present study in that total dependence on the guide implies that these teachers scarcely made any effort to conduct further research on the teaching and learning processes that occurred in their own classrooms. Shulman (1987) remarks that it is only through extra effort to do research that teachers will be able to adapt or draw on their experience to transform their understanding of a text into instructions that will support learners.

The findings of the present study, therefore, confirm that Ghanaian teachers' heavy reliance on approved textbooks and teachers' guides is another reason why transmission and rote learning practices dominate the primary classroom (Opoku-Amankwah, 2009).

#### **4.8: Summary**

The findings of this study have provided some significant explanations for the prevailing prescriptive behaviour in the Ghanaian classroom. The study has illuminated the ways in which the majority of primary teachers exhibited the traditional rote methods of teaching. Having analysed their talk and feedback strategies, as well as their use of textbooks and guides, it was found that teachers exhibited three major epistemological positions about teaching and learning. They perceive knowledge as being in the form of tangible behaviour and measurable practice that they have received, so for them learning will occur when they give out the knowledge and their learners receive and reproduce it. Secondly, they perceive the whole class as one unit to be

treated as 'collective' in nature so that individual differences are overlooked. Thirdly, they are goal oriented, that is independent of any individual needs and weaknesses.

Additionally, teachers were very confident in their pedagogic practices because they carried authoritative images and symbols from their previous schooling and training. However it has also come out that teachers adhere closely to the transmission practices because its precepts are embedded in the IK systems, hence providing validation for their transmission practices in the classrooms.

However, although the prevailing pedagogic practice continued to be teacher-led, the study found a few teachers who took more time to extend pupils' understanding of concepts. Such teachers transpired to be distinctive, interesting individuals who conducted their teaching differently and varied their pedagogy from traditional practices. The observation of such innovative pedagogy revealed how proponents were able to achieve some positive outcomes in their pupils. Thus, these different practices lead to the next chapter, which seeks to shed light on the minority of teachers who employed more communicative methodology, analysed their pedagogic practices, and probed alternative views as to how teaching and learning might be conducted.

## **CHAPTER FIVE**

### **INNOVATIVE TEACHER PRACTICES**

#### **5.1: Introduction**

This chapter answers the research question that sought to identify and explain innovative teacher practices in Ghanaian primary classrooms. Six primary teachers' classroom practices differed from the prevailing traditional pedagogy as they augmented it with varied and adaptive strategies to achieve more success in their learners. Further analysis found two categories of teacher practices: three innovative and three partially innovative. Analysis of teacher practices revealed five major knowledge categories that influenced their practices: subject matter content knowledge, indigenous knowledge systems, teacher beliefs, curricular knowledge, and pedagogical content knowledge (PCK). Therefore, this chapter is organized into three sections: 1) brief descriptions of the six teachers, 2) a detailed analysis of innovative pedagogic and partially innovative practices, and 3) analysis of their sources of knowledge.

#### **5.2: Description of Innovative Teachers**

The study found six women who were innovative in their practices. Four of them had taught for at least twenty years, whilst the remaining two had been teaching for an average of about ten years. They all had an Initial Teacher Education (ITE) in Ghana but two of them had further upgraded themselves through CPD at the University of Cape-Coast Ghana, to obtain University Diploma Certificates in Education. These teachers were not, however, a part of the National Accelerated Literacy Program in Ghana, (NALAP) or other interventions for teacher professional development in Ghana. They all worked in different communities (public and private school communities) and their schools were high or low performing according to the GES categorization of student outcomes. The following section presents a detailed profile of each teacher. The table below presents a summary of the background characteristics of the innovative teachers.

**Table 5.1: Teacher Profiles**

| <b>Name</b> | <b>Age</b> | <b>Qualification</b>     | <b>Teaching experience</b> | <b>School<br/>High- (H)<br/>Low – (L)</b> |
|-------------|------------|--------------------------|----------------------------|---|
| Abena       | 53 years   | Certificate ‘A’          | 24 years                   | Wadoma Local Authority (L)                |
| Serwaa      | 45 years   | Certificate ‘A’          | 14 years                   | Nkunim Local Authority (L)                |
| Yaayaa      | 31 years   | Certificate ‘A’          | 8 years                    | Kudi Community School (L)                 |
| Ama         | 55 years   | Diploma in Education     | 33 years                   | Adom Primary School (H)                   |
| Akosua      | 58 years   | Certificate in Education | 33 years                   | Adom Primary School (H)                   |
| Afia        | 59 years   | Certificate in Education | 25 years                   | Oye Community School (L)                  |

*Source: Author’s construct, 2015*

As seen in table 5.1, Abena is a 53-year-old woman who has taught for 24 years and currently holds the rank of principal superintendent of education. She is the Primary 3 class teacher. Her classroom is in an old building with walls covered in cobwebs and black dust and a floor of cracked cement. Pupils sit in groups of four around each table. The next teacher, Serwaa is a 45-year-old married woman who has been teaching for 14 years, having previously taught in two other districts. She is the Primary 1 class teacher with 30 pupils in her class who are an average of nine years old. Similarly, Yaayaa is a 31-year-old married woman who holds a Diploma in Education. She is a Primary 2 teacher and has been teaching for eight years. Yaayaa’s school is similar to those of Abena and Serwaa, and the average age of her pupils is ten years. Additionally, Ama is a 55-year-old woman with a Diploma in Education. She is a Primary 1 teacher with 40 pupils of varied ages (8, 9 and 10 years) and abilities. Ama’s school was established by the Kwame Nkrumah University of Science and Technology (KNUST) rated as high performing. Parents are middle working class. Classrooms are well ventilated and arranged according to year group levels.

Akosua is also a 58-year-old married woman with four children who has been teaching for 33 years. She teaches Primary 1, a class of 30 pupils. Akosua’s school is located in a Muslim community; her classroom has virtually no teaching or learning materials suitable for young children. There is a residential area nearby and a lot of community activity goes on around the school premises. Pupils are unlikely to stay in class throughout school hours since they can easily be called home for one reason or another. Clearly, such conditions constitute a substantial challenge to a Primary 1 teacher to keep

her pupils motivated and in class. Afia is a 59-year-old woman who has been teaching at this school for 25 years. She is at the same school as Ama. She is a Primary 2 teacher of Mathematics. She was observed conducting an innovative practice in one of her math lessons in teaching fractions. Therefore these teachers are old and experienced women who have stayed in the teaching service, apart from Yaayaa who is 31 and has served for 8 years.

### **5.3: Innovative Pedagogic and Partially Innovative Practices**

The adaptive strategies of the two categories of teachers are presented in the table below. A careful observation of their practices gave indications of their pedagogic strategies whilst interviews and probes with them revealed their assumptions about teaching and learning. Additionally, during teaching the teacher's and their learners exhibited the power relations that existed between them. Table 5.2 below gives a summary of the innovative teacher practices. The teaching and learning strategy employed by each category of teacher has been provided. The assumptions that underpinned each category of practices are also presented. Further, the specific pedagogy and power relations that were observed in the Ghanaian classrooms are also presented.



**Table 5.2: Pedagogic Practices, Assumptions and Power Relations**

| <b>Group</b>                           | <b>Strategy</b>   | <b>Assumptions</b>   | <b>Pedagogy</b>   | <b>Power relations</b>   |
|--|---|--|---|--|
| <b>A</b><br>More innovative teachers   | Integrates child's world view in teaching<br>Coaching pupils, provide consistent pupil/peer support<br>Teacher is calm and patient during teaching.<br>Have a holistic nature teaching and learning | Positive assumptions about how children learn and reflects on personal experiences, critical classroom incidents, problem solving agenda | An amalgam of secure PCK, CK, Curriculum with traditional knowledge.<br>Have mutual forms of measuring pupils' understanding.<br>Teacher pays attention to whether or not children have understood the lesson | Takes total control of subject matter and does not ignore or learners during class activities,<br>Confident in practice<br>Redefine roles in class and society<br>Very patient with learner's difficulties |
| <b>B</b><br>Partially innovative women | Inconsistent patterns of idea generation for children and group work/ support   | Hold some basic beliefs about children, sometimes shares experiences   | Sometimes tries to extend learning to indigenous culture.   | Time bound, takes a lot of control over the class time ,   |

*Source: Author's construct, 2015*

Group A teachers gave greater access to their learners during lesson delivery time and offered varied opportunities for their learners. They also focused on the children in the teaching learning process through the way they adapted and varied the cultural activities during the learning process. They also had very positive assumptions about how children learn, reflected on their own experiences and classroom conditions, and so provided consistent support for their learners. Group B, also all women, provided some opportunities for their learners, but they had narrow assumptions and beliefs about children learning thereby they were often impatient during teaching providing limited support for their learners. In the section that follows I will begin by presenting the very innovative practices then will follow up with the partially innovative practices.

### **5.3.1: The more innovative practices**

The constructivist epistemology of the more innovative teachers (Ama, Akosua and Afia) was such that they considered the children as an important part in the teaching and learning process giving them a chance to release their own imaginations; they took a different view of learning from their less innovative peers and positively viewed it as a

shared activity between teacher and student. They reflected on classroom activity, seeing that it required both teachers and learners to be actively involved.

The socio-cultural activities they brought into the learning process empowered their learners to participate fully in the lessons so as to draw out deeper meanings that had vivid connections to their lessons. A key finding was that Ama and her colleagues remolded the traditional recitation and questioning styles of Ghanaian teachers. In their own ways they had reflected on the traditional IK system, which is imbued with varied speaking styles that release children's ideas, abilities and offers a more conscious participation for both teachers and children. As their pupils were already familiar with such activities they enjoyed them better, leading to active participation in those activities.

Alexander (2009) has said that the act of teaching is grounded in an analysis of teaching as it happens, rather than idealists believing it should happen (p.275). Thus in examining the pedagogic practices I present those micro classroom practices (thinking processes, understanding, beliefs and values, etc.) these teachers considered useful and worthwhile in their practice. I will proceed with the forms of classroom interactions that comprised of the teacher talking and questioning, feedback and use of textbooks.

#### **5.3.1.1 Classroom interactions**

- Teachers' way of speaking

In the case of these three teachers Ama and Akosua who taught in a University community school used English language as the medium of instruction, whilst Afia in the Muslim school used the local language Twi but switched at some points to the English language. Since the Language policy in Ghana keeps changing teachers often use the language they deem it fit.

The analysis of the study revealed that the three teachers employed discourse styles that included questioning, probing and dialogue. The mutual sense of belonging and the children's familiarity with the social activities revealed the strength of these teachers' speaking styles (Omolewa, 2009, p.597). The voice and language styles in songs served as a common front for all the learners giving them an equal chance to learn. Observations revealed that this strategy of the three innovative teachers yielded a lot of excitement and enthusiasm in all children in their three classes.

Ama's questioning strategy seemed to be in the form of teasing out or probing pupils' ideas and views on the topic (Hardman et al., 2008). Also Afia and Akosua used probing to make deeper extensions in the understanding of their learners. They had positive attitudes towards their learners and a clear conception of how a lesson could be introduced to children. Ama and her colleagues' pedagogic strategy of initially engaging pupils in a common indigenous activity was to attract them to the lesson, arouse their interest, and open up some connections in their minds (Hagan et al., 2005).

The following extract is from Ama's introduction to an English grammar lesson on verbs to Primary 1 and shows how Ama started her lesson using dance, songs and actions to allow the children to imagine what those activities and songs might lead them to. The children in her class joined in the social activities gladly throughout the lesson time.

- 9:05           Teacher:   Hello, hello, hello – close all your books and put them in your bags. All of you, stand up. [Begins to sing] Clap, clap, clap together; clap, clap again: clapping is an exercise. Clap, clap again. Dance, dance, dance together; dance, dance again: dancing is an exercise. Dance, dance again. Hop, hop, hop together; hop, hop again: hopping is an exercise. Hop, hop again. [Sings twice more, she demonstrates the words with actions.]
- 9.17           Pupils:     Heyyy!!! [They are all excited].
- 9.19           Teacher:   Everybody sing with me. Walk, walk, walk together; walk, walk again: walking is an exercise. Walk, walk again [She walks round the classroom again].
- 9.22           Teacher:   Now, who can tell what we are doing today? Afia?
- Afia:       We are doing verbs.
- 9.25           Teacher:   Who will tell me what is a verb?
- Pupils:     [Some raise their hands.]
- 9.28           Teacher:   Yees, Alexander?
- Alexander: A verb is a... [He is not able to answer. She allows others to try]
- Teacher:   [other children are trying to get the teacher's attention; some are able to make out the meaning of a verb.] If you know, don't make noise.
- 9.30           Teacher:   A verb is an action word or a doing word. Now, all the girls stand up and tell us.

Ama's schema of supporting her pupils is illuminating. Her major goal was to ensure that all her learners grasped the concepts of verbs and use action words to form

meaningful sentences in class. She used indigenous cultural tools like songs, dance, and everyday social activities such as sweeping to reinforce their understanding of verbs. In singing familiar songs, Ama would use actions and gestures to communicate the meaning of the verb to her learners. The learners listened and watched her actions, and then she paused and asked them to think quietly about the meanings of the words. Thus in their minds they tried to match the words with the actions to visualize the meaning of the verbs. Gradually the written words on the blackboard were no longer abstract to the children but they were able to recognize their respective meanings. What was significant was that although the teacher's guide suggests the use of songs, Ama patiently went through the actions and gestures allowing the children to form part of the process then paused to see how well each child got involved in the process. Obviously this was a time consuming activity yet she differed from her traditional counterparts as she saw this process as vital to her learners' understanding of the verbs.

Unlike her traditional counterparts who depended on the 'look-and-say' (described earlier) (children looking at words as teacher pronounces them and they recite them back to teacher) methods as confirmed by Adu-Yeboah (2011), Ama matched words on the board with songs, gestures and actions so the children then imagined the connections between them. Thus her strategy made an impact on the children's cognitive skills and so word meaning took precedence not just memorization of the word. She managed to extend her content knowledge of verbs to the children's own environment making it "visible to and learnable by her pupils" (Ball et al., 2008, p.400). More importantly she has developed a gestalt of the learners' 'here-and-now' within their classroom realities and, upon reflection on the schema, she has arrived at such a practice being confident that this is what works for her learners (Korthagen, 2010).

In Akosua's Primary 1 classroom, knowing that the Muslim parents of her learners hardly had any time to support their children, she patiently employed some indigenous tools (songs) during teaching. In engaging with the topic 'myself', learners were seen to be excited as they all sang and acted out a familiar local Twi song to describe the parts of the human body:

Shira wo ti shira wo nnae [bless your head and bless your feet].

For Akosua, her major learning tool was the children's body. In her initial demonstration she used the song to connect each word to her body parts. During the observation Akosua's way of singing gave children the opportunity to connect the song and her actions with the names of the body parts and finally to the words on the board. Gradually she allowed them to visualize the functions of the words on their own bodies. Akosua asked a child to describe her body parts by pointing to her body parts while singing a rhyme and then transfer the same words to the body parts on the diagram of the body parts on the blackboard. This practice enabled greater access and connections to the topic of study. Thus children became alert and she encouraged them all to do similar actions. From there she asked them to take the English textbooks (few were available) and share them in pairs amongst themselves. Thus she went through reading of the pictures of body parts with the children, allowed them to look and quietly think about the word connections. By the end of the lesson, over half the class were able to read the passage on the blackboard and in their textbooks. In addition, she went round the class ensuring all children could describe their body parts. This strategy was found to be all encompassing allowing all the children to participate in the lesson.

The observation showed that the great majority of pupils in her class were eager to communicate their thoughts to her and they were not scared to say what they felt about the topic. This was because it was obvious that they were happy and knew that since their teacher was playing with them, they could also share their playful ideas. In this way children were able to recognize the meaning as well as the connections of the words to their background. When Akosua was asked to explain her choice of strategy, she said:

What I do is to help them step-by-step to identify the parts of their own body, and then ask them to touch that part themselves and match it with its name. This process will continue gradually row by row ... some of them will come to the front and show the part with the name. From there, I will ask them to watch me as I demonstrate the way to describe myself. Gradually, they follow, and I again call the children group by group, then one by one, to [say] and do exactly what I did. (Akosua, October 2012)

Hence children from the poor and ill resourced community have the chance to observe and practice in situ, and have co-produced new knowledge through activity (Brown et al., 1989, p.34). This apprenticeship mode of learning yielded interesting and positive results in this study.

In Afia's class, she stuck a sheet of paper on the board, divided it into two halves, shaded the parts, and labeled them with the symbol  $\frac{1}{2}$ . She then carefully explained the meaning of the diagram and the function of the symbol that matched the parts, stopping to watch them and checking on their participation at some points. She went through the same procedure with other fractions, such as  $\frac{1}{3}$ ,  $\frac{2}{3}$ ,  $\frac{1}{4}$ ,  $\frac{2}{5}$  and  $\frac{1}{8}$ , and drew a representation of this on the board, where she again paused for them look carefully at her. In addition, she also used segmented oranges and broken sticks to reinforce the concept. She then continued by teaching them how these fractions could be made whole again, taking time to show them how the pieces could be put together. A key issue here is that although this approach appeared teacher centered, yet Afia's gestures, calmness, and patient teaching and level of cooperation with the learners redefined her classroom role making her learners central to the learning process rather than external to it, as her less successful peers did. From there, she asked two pupils to each take an orange segment and helped them put the pieces together. Finally, she asked pupils to come forward individually and in groups to show how they had understood the concept of fractions; those who did not get it right were corrected by the class. This study found Afia's PCK unfold in a form of patience and coming from the IK's style of scaffolding fragmentation and remaking which indeed provided some support to meet the children's learning problems. This was the problem solving agenda of the cultural systems! As mentioned earlier, Akosua's variations in the socio cultural activities through demonstrations with the local Twi song to make clear connections with the body parts made it possible to break down turn around and change strategies till her learners could make meaning out of the words of the body parts. This is what made these innovative teachers different from their traditional counterparts. From this interesting activity, I was able to observe the remarkable extent to which the whole class was able to follow the teacher as she went through the explanations. Also Afia's own approach, patience and strategic use of indigenous tools took the form of body language, eye contact and voice intonations was a inner skill which gave the children a lot of ease as well as brought them into the centre of the learning process to find such learning tools in their environment. Afia's reasoning was significant, she remarked that:

My aim is to alert the children and make them excited about the topic, so I try to think of something which will not make them bored. This is a math class, so I am careful.

The calmness and patience embedded in their approach is particularly noteworthy: the children were not scared of them because they knew their teacher would not become angry or shout if they went wrong in their various attempts to perform the activity. These teachers had overlooked their ill-resourced classrooms (some full of broken chairs and dirty floors) rendering merely a textbook and learners to work with, but then they reflected upon children's unsupportive backgrounds and devised strategies that worked for them. Thus they were able to achieve success in their learners because they saw teaching as interactive, and interacted individually with each child. They also engaged with the whole class as a unit, but then identified them as having different dispositions in terms of how she modeled the fractions from different angles, taking time to break the steps into smaller units for the children to understand and so dealt individually with each child. They perceived the class as different individuals who have been put there for a common goal; they thus connect with them from the perspective that each child has special needs and shared their own social activities and identities with the children (Ogawa, 2007, p.23). Hence teachers were able to achieve greater participation from their learners.

A further analysis of the study showed that such innovative practices challenge the perceptions in western literature that assume that current Ghanaian teachers' questioning styles are unproductive. The findings recall the whole-class teaching strategy in Asian contexts "where lessons are oriented towards problem solving rather than rote mastery of facts and procedures" (Stigler and Stevenson, 1993, p.383).

#### Use of textbooks

In Ghana, research indicates that teachers depend solely on the teachers' guide and the syllabus during teaching (Adu-Yeboah, 2011; Opoku Amankwah, 2009; Owen et al., 2005). However, the innovative teachers had developed a deeper understanding of the curriculum and made positive shifts away from the curriculum. The more innovative teachers had internalized the textbooks and also had a mental index of each topic in the textbook. They were found exhibiting a deeper conception of the textbook as they all conducted research to enrich their knowledge and understanding of the subjects, whilst the partially innovative ones acknowledged the limited information in the textbooks but hardly added further information to them. They made much intersection of teacher knowledge, culture and personal experiences with the teaching curriculum, which was

very significant for this study. Therefore these teachers no longer acted as custodians and principal interpreters, but rather as facilitators (Opoku-Amankwah, 2009). For example, Ama combined her previous knowledge with research and personal experiences so she had ‘added’ to the curriculum. Her thinking concerning the order of units in an English textbook demonstrated how much time she spent on research, and planning her lessons. She [Ama] explained that:

In the order of teaching units in the textbook, nouns had been placed earlier than verbs. As she prepared her lesson notes, she realized that practice would not be useful for her situation, so she noted it and changed it. The next day she came to school [and] reported to the block head who agreed with her suggestion (Researcher’s diary notes, October 2012).

Her continual reading of English grammar enabled her to identify what she saw as unhelpful for the teaching-learning process; therefore, she ‘deconstructed’ the information to facilitate better understanding for her pupils (Dunne et al., 2005, p.110). Therefore, whatever challenges and dilemmas came up in the classroom, she had developed her own way of resolving them.

This powerful intersection of teacher knowledge and personal experience was another important finding for this study. Akosua and Afia expressed their dissatisfaction with the contents of their teachers’ guide. Akosua was more concerned with the relevance of ideas and connections to the topic, and had spent much time examining and designing the most suitable strategy to make learning occur for the young ones. Therefore, she was not using a teachers’ guide. When I asked her where she had got her ideas from, her answer was: ‘this is wisdom from God’.

The interesting point here is that she seems to believe that she has her own wisdom of practice. As a further probe I asked her if she sometimes depended on the teachers’ guide for her lesson plan and development. To that question her answer was:

The teachers’ guide is someone’s mind so I don’t believe in it’ ... I think that if you care for the children, you will always have good intentions for them, so when you read a lot of books which are related to the topic, even other textbooks, you will combine with your experience and then get ideas on how to plan for the lesson. Also, as you plan, you will imagine how this strategy can help them understand the topic better than the other. (Akosua, October 2012)



Such comments and responses reveal these teachers' confidence in their own practices, which they believed have worked for them over the years. Teachers all demonstrated their efforts to research in other textbooks in a bid to increase their content knowledge of the subject matter, and support children to make clear judgments of what holds as valid and true in a situation (Shulman, 1986; Phelps and Schilling, 2004). This was an indication of how much they could twist and turn around the curriculum to meet their learners' needs in class.

Ama's lesson observation showed that her introduction was very straightforward and not based on the teachers' guide; consequently children in her class were not disorganized in any way. When she asked her learners what impression they had received from her introduction, a greater majority of the learners had their hands up, ready to tell the teacher. This interesting stage also made me ask her how she was certain this strategy would lead the children to the topic. Her answer was:

I have already taught verbs, they have learnt verbs and then during the verbs we did the actions. So now that we're going to learn 'look and say' - 'the verb to be'. Also we've already learnt nouns before the verbs they're supposed to identify which one is actually the verb. So the previous ones they did actions so once that now we're going to learn through the pictures and the demonstration, that is, the verbs to bring out the topic. (Ama)

Interestingly, this teacher had built in her practice enough confidence so that she was certain that her children would no doubt make clear distinctions between abstract topics like 'a verb' and 'a noun'. She therefore went through this introductory stage with several examples of actions such as dance, clap, and hop, which she allowed all the children to join in. Although there was a timetable period for the subject, I realized this did not affect her plan. She would ask one child to come forward and demonstrate what she had done, and then when the child went wrong she would ask her/him to wait for another to come and try until the previous child is able to do it as well.

The tolerance Ama exhibits here is what impressed me. Children were not scared of her for they knew she would not be angry when they went wrong in their various attempts. It was clear that these teachers refused to simply follow the pattern of teaching laid down for them by the curriculum or teachers' guide or timetable, but made choices and decisions that seemed to work for them (O'Sullivan, 2006). Such PCK was clearly informed by the IK since it unpacks so much flexibility and connections which create

space for both teacher and learner to make connections during the teaching learning process. This practice portrays a problem solving agenda.

- Feedback

The three innovative teachers under study all claimed their ability to interpret pupils' attitudes, behaviour and facial expressions, e.g. smiles, frowns, and signs of uneasiness, worried looks, and crying. Their ability to read their children moods and facial expression enhanced the sharing of the culture between the teacher and her learners. This was a distinct characteristic within the traditional knowledge systems that provides reassurance for both parties. The feedback from the children's gestures serves as a tangible source of reflection to validate her choice of different strategies; thus, they saw it as their role to probe any situation that indicated learners were struggling with comprehension (O'Sullivan, 2006; Akyeampong et al., 2006). Ama expressed her way of detecting children's ability to understand concepts during teaching;

It depends on their actions; when teaching, the ways they answer help you to know they have understood the lesson or not (Ama).

Again she remarked that:

In fact my life throughout my teaching career, I've been placed at the lower level, the nursery, Primary (P).1 and P.2, and for children, I've seen that they learn through play. So always after I give them an exercise, I assess and see the method that I used did not help them, so next time I will use another method, then I will see whether that one also helped them, so I will be changing and trying more methods. So whenever I'm teaching I will be mixing methods with those previous experiences, so that if this doesn't understand the other will. This enables easy understanding for all of the children.

Ama's critical point here was how she would assess and see from the children's reaction, based on that she makes changes until she is certain they understand. Ama's own conception of assessment was not only giving out exercises but also to reflect on her conscious and unconscious approaches, which may or may not have supported her learners. Again her notion of 'if this doesn't help them understand, this will' shows her 'inclusive agenda', which she has brought into her practice for all her learners (Florian and Black-Hawkins, 2010). The feedback therefore has developed from Ama's gestalt, leading to deeper reflections on the schema (Korthagen, 2010).

She patiently helps those who need assistance and encourages those who had already grasped the concepts. The feedback also endorsed her use of the problem solving agenda from the traditional systems (Ogawa, 2007). Similarly, Afia has also developed a repertoire of learning from her children, so the feedback she receives from the work given to them tells her how well they have understood the topic. Thus as I watched her, I realized she was referring to some earlier work (when she got to some of the children) and when I asked why she had done that she explained that:

The last time I treated this topic, when I gave them work, I realized through marking that most of them did not get it, so that's why today I am being so careful: I cannot move on to the next topic if they do not get this one....(Afia, October 2012)

Furthermore when a pupil's facial expression was cheerful, the teacher would be sure of the learner's understanding, whilst frowns, quietness, and signs of uneasiness caused them to pause and go over the lesson to ensure comprehension. This practice echoes the indigenous culture's silent mode of expressing one's inner feelings (Omolewa, 2009). Children, who cannot boldly react or express their worries, were identified by their teacher and received support as well. Interestingly, whilst the traditional teachers used their learners' quietness and passivenesses to co notate learning, these were able to judge that those silent children were having difficulty in understanding concepts. Thus the decision to proceed to the next stage of the lesson depended on an accurate reading of the pupils' reactions and not so much on the teaching timetable. Guskey (2000) affirms that significant change in teachers' attitude and belief occurs primarily after they gain evidence of improvement in student learning. Accordingly, pupils were found to be calmly seated and well composed since they knew that their teacher was ready to spend some time helping them. This study identified such feedback strategy as a kind of informal assessment of teacher and learner's practice, helping the teacher to determine how well a lesson was taught. It also highlights the way these teachers tried to organize learning around the varied abilities of their learners (Akyeampong et al., 2006; Westbrook et al., 2013). This practice was also remarkable because their traditional counterparts gave no opportunity to children to express how they felt about lessons, but rather they had to be silent and watchful in class.

During the lesson development, they were able to determine from pupils' responses and attitudes that they could do individual tasks. Ama, Akosua and Afia believed that their

pupils were ready to do individual work. Accordingly, they gave out the exercise books and assigned an exercise for checking and marking in class. They waited for about 15 minutes and then moved from desk to desk to check how well pupils had understood the lesson and were able to work on their own. The three teachers all confirmed their ability to gauge the attitude of pupils, who gave out signals indicating their state of mind such as excitement or confusion. Therefore, as they moved round, they were able to tell from a child's gestures what he or she had achieved in the learning process. As they came across those who were still in need of explanation, they paused and helped them.

Again, the teachers could use their eyes to monitor those who did or did not participate in the activity (Alexander, 2009, p.509; Westbrook et al., 2013). The kind of monitoring observed here was more complex than that found in the majority of traditional classrooms. Here Ama and her team used their eyes to wink at the children then paused to check who did not follow. They would then go to the child's desk and do the activity again with the child. It was after this stage that she would stand and watch all the rows of children do the activity; when she was satisfied she would then ask them all to clap.

### **5.3.2: The partially innovative pedagogic practices**

The pedagogic practices of the three (group B) teachers – Serwaa, Yaayaa and Abena (described earlier) – showed that, although they had individually constructed some strategies that worked in their specific contexts, they were inconsistent in their pedagogic reasoning.

#### **Classroom Interactions**

- Teacher speech and questioning

The epistemology of Abena and her colleagues is similar to her colleagues, as they perceived learning as a way by which children will have to 'join' without giving thought to the way of acquiring it. In different ways, these three teachers' talking styles took the form of monologues with a few dialogues, making their approaches inconsistent. The study found the partially innovative teachers using questions such as 'what and where' styles, which only elicited closed ended answers (Pontefract and Hardman, 2005).

Abena and her colleagues began their lesson with a recall of the previous lesson, which served as a reminder and a link to the present lesson's topic. In the case of Abena, she

then put pupils into groups of six and asked them to go outside to look for stones and bottle tops. This gave them the opportunity to move around. But the analysis of the study found that she actually posed no questions to the children but only asked them to write one and two digit numbers on the board.

Teacher: Prince, come and write a one digit number on the board.  
 Prince: [He writes zero – 0]  
 Teacher: Okay, eehmmm Yaw you too come and write one digit number.  
 Yaw: [He writes two – 2]  
 Teacher: Okay who else...?

Serwaa's questioning style was in the form of 'who has, and what is', eliciting short and closed ended answers. Thus, it was actually her extension of ideas of social images on friendship that opened up the opportunity for dialogues during the lesson. Serwaa's experience with children informed her that they were able to grasp ideas through the use of social images. Serwaa used the familiar social concept of friendship in the IK systems as a teaching learning resource to engage her pupils:

Teacher: Who has a friend?  
 All: Teacher, teacher, me!

During the interview she explained that friendship was a common social relationship amongst children; therefore, once they could identify their own friends, they would be able to share their experiences on what a friend did, thus enabling the teacher to probe the children's own ideas:

When I asked them, some of them were able to tell me they have friends. The topic was on friendship so if they have a lot of friends, then they know something about the topic. Then I know they can answer so I have achieved my aim (Serwaa).

Thus, although she had access to very few teaching-learning aids, she began her lesson by asking pupils to look at pictures of friends she had drawn on the blackboard. She believed they would be visually stimulated by these pictures and then be able to carefully describe what they saw in them. Thus by allowing her pupils to think through and create their own interpretations of the pictures, Serwaa helped them to engage in some form of dialogue leading to 'sense making' on their own (Alexander, 2001). Through the use of pictures of friends Serwaa, for example, helped her learners to engage in some form of dialogue, however, she did not take enough time to see if 'all' or the majority of pupils could share their ideas on the pictures. She demonstrated some

respect for her pupils by allowing them to share their ideas of the pictures of friends walking together, but the analysis of the study found Serwaa's pedagogic strategy could not be varied well enough to enable her learners make extensions out of the lesson. Again she did not have enough PCK to develop her learners' ideas but rather left them hanging not providing any alternative strategies to help those who had not understood the lesson. Thus the children could not remain in their world of excitement but, after a period, just remained passive.

However, what was missing here was that Serwaa only called on one child and did not take the time to see if all or the majority of pupils could express themselves just as well. The implication for this study is that the limited nature of Serwaa's strategy, although effective for learning, could not capture the whole class's understanding of the lesson (O'Sullivan, 2006; Hardman, 2008).

Yaayaa's pattern of introduction was rather different. She began by putting a picture of a triangle on the board and then attempted to explain the formula for calculating its area. Afterwards, she worked out an example by substituting the formula with figures. This was designed to help her pupils conceptualize the whole topic and get an idea of what they were going to do. Her experience with children informed her that making math abstract might not be a useful starting point; therefore, she got straight to the point with an example for them to follow. Yaayaa's 'straightforward approach' to teaching depicts a transmission teaching pattern that lacks a deeper understanding of the subject matter (Schweisfurth, 2011).

- Use of textbooks

Abena and Yaayaa expressed their dissatisfaction with the contents of their teachers' guide:

The teachers' guide is not enough (Abena)

One cannot be a slave to the teachers' guide (Afia)

So they, Abena, Serwaa and Yaayaa, also took the teachers' guide and added to it, as articulated by Serwaa:

Some topics in the guide are not enough.... You have to get a lot of things for the children to understand you better; so you have go out and look for some and add.

It was thus clear that these teachers refused to simply follow the pattern of teaching laid down for them by the curriculum or teachers' guide, but made choices and decisions that seemed to work for them (O'Sullivan, 2006). They also asserted that the curriculum and teachers' guide were insufficient to provide adequate support for their pupils given the complexities of the classroom reality.

- Feedback

The feedback styles of the partially innovative teachers were frowns and smiles. For instance, Abena's feedback style was straightforward; using smiles and gestures could not reinforce learners (Dembele and Mario-II, 2003; Arthur, 2005). Yaayaa exhibited a certain amount of concern for her learners, but became impatient when she found out that one of her learners was not being attentive in class. The study found her frowning at the learners when they could not give the right answers. She was also very quick to use the clap as a form of praise when her learners responded in the 'yes madam' chorus. It is agreed that Yaayaa's 'impatience' actually hindered the required flexibility that could occur in her classroom. Also her quick way of asking for applause was obviously superficial and children saw that she was only operating within the 'routines' of their classroom practices.

Observation revealed that Yaayaa's answers were also short, precise and unchallenging for the children for example 'o k let's go on'. Eventually all learners were often cast in a very passive mood, which sent messages of uneasiness in the young learners. Serwaa also employed a two dimensional focus for the class, and afterwards, she asked the class to give her a round of applause. However, Serwaa was rather calm and made some effort to smile at her learners to encourage them to work harder during her lesson time. The observation found Serwaa's learners were more relaxed. Therefore the feedback variations of these teachers confirmed their inconsistent strategies employed in their classrooms.

An important search for this study was also to discover some micro practices that were less successful in Ghanaian classrooms. Having come this far, the following seeks to add to the earlier descriptions of these findings in the study.

## **5.4: Discussions**

The analysis of the study has revealed the three very innovative teachers who were committed in their practices achieved more success in their learners. They had internalized the curriculum, making learning more of a process that grew out of the learning context. Being inconsistent, the partially innovative teachers sought to support their pupils but were not entirely successful. However, although the other three teachers were found to be inconsistent with their practices they were able to make some meaningful learning occur.

### **5.4.1: Sources of innovative teachers' knowledge**

Analysis of what it was that made these six teachers stand out from their peers is that these innovative teachers had added on the traditional and indigenous knowledge systems to the existing teacher knowledge making their teacher teaching differ from their peers. A summary of the knowledge system follows.

- subject content knowledge;
- teacher beliefs and curricular knowledge;
- pedagogical content knowledge (PCK)
- traditional and indigenous knowledge systems
- Subject content knowledge

Teachers in this study exhibited their understanding of the subject matter as they tried to make it “comprehensible to their learners” (Shulman, 1987, p.8). The findings revealed that the more innovative teachers exhibited content knowledge that went beyond knowledge of mere facts in the subject, a form of essential and fundamental knowledge. In their own ways they were able to make their learners understand and distinguish issues that were central from those that were peripheral in the topics being taught (Shulman, 1987). Children in their class made meanings and judgments about what holds true and valid for particular learning situations.

The partially innovative teachers also exhibited a lesser understanding of the content so made more distinctions of the peripherals and lesser expositions of the central ideas of topics they taught. Yet all six teachers at some point showed that they had overlooked their classroom realities and flexibly made use of socio cultural activities (Duguid, 2010) and resources like songs, actions and gestures to create alternative ‘contexts of



learning’ and to engage the whole class in active construction of meaning (Hopkins, 2002, p.35). Thus they helped their learners to understand the substantive and syntax of concepts through extensions to the learners’ environment.

- Traditional and Indigenous knowledge systems

The six teachers achieved positive outcomes as they drew on the traditional and indigenous knowledge systems in their classroom practices. They articulated their lessons in various ways through stories, songs, folklore, proverbs, dances, myths, cultural values, beliefs, rituals, community laws, and local language but more importantly, they drew on the positive aspects of the culture knowledge systems (Omolewa, 2007, p.593). Brown et al. (1989) propose that knowledge is a product of the activity and these activities were socially constructed through negotiations amongst members. The more innovative teachers seemed to bring alive the culture perceiving it as embodied in their practice. Through some deep reflections of their own professional identity they conceptualized themselves as useful leaders. Thus they transferred such positive insights to their learners, allowing them to view themselves also as potential achievers in their society. Thus the culture’s all-encompassing feel was experienced by the children throughout their lesson period.

Akosua patiently employed some indigenous activity during teaching the topic ‘myself’, and acted out a familiar local Twi song to describe the parts of the human body. The study found her intersections and the way she made connections of the subject matter with the cultural knowledge systems as very innovative. Furthermore, analysis of Ama and her colleagues’ understanding of content knowledge, revealed some positive indigenous perceptions about their learners which were that the learners were not only children of now but stood out as a future generation who would have to be supported to move on in society. These constructivist views generated some child agency and encouraged positive power relations in the classroom (Foucault, 1998).

Arthur (1998), Akyeampong et, al., (2006) and Opoku-Amankwah (2009) argue that the traditional perception of the child as a tabula rasa leads to a teaching style characterized by teacher monologues, transmission, and rote learning. Meanwhile the innovative teachers had reinterpreted such a code of behavior, and assumed a motherly and caring role, recognizing their learners as younger members of their own society who were

endowed with useful attributes that could be nurtured, so they approached them differently from the ways of traditional teachers. Serwaa explained that:

Children like play, activities, they want someone who likes them and understands them. At times I ask them a lot of questions and I get to know that they have a lot of problems. Some don't even eat when coming to school, when I do that you see that they are okay. You realize that in one way or the other you are helping them.

This statement not only showed Serwaa's concern but also that she knew what to do to make her learners feel wanted.

Likewise, Ama and her colleagues had experienced growth in their knowledge systems and more importantly found evidence of learning in the children they have taught before and hence developed their understanding and perceptions of their practice profession (Guskey, 2000). The six teachers used words, actions, gestures and playful activities to assure their pupils of the rewards of learning and encouraged them to work hard in order to become high achievers in future. Ama's pedagogical reasoning unpacked how she would always take time to listen to her pupils' problems, inviting their parents for further discussion as necessary. Similarly, Akosua expressed her deep concern, saying, "They are young, so you need to help so they can live better lives in future".

Thus teachers are aware of their learners' difficult conditions and so often use their own life stories to serve as positive images, which reassure their learners of future achievements. The next section discusses the personal experiences of the study participants.

The teachers emphasized that, in addition to influences from early schooling and ITE, they had substantial experience with children, ranging from child rearing in their own homes to the guidance of younger siblings at church or within the community (Maclure, 1997; Lefoka et al., 2000; Sebatane and Lefoka, 2001, p.4). However, the innovation here was that they personally advanced the positive aspects of these experiences making them have a better understanding of children. Such experience meant that they had come to understand children and, more importantly, knew how to support them.

Ama explained how many years in primary teaching enabled informed decisions about what constituted an effective lesson:

The old adage says experience is the best teacher – I have taught for so many years, so I always base on experience that I have taught previously and I have been adding a lot to it. Though the training college, they teach us how to teach but it's not deep, and it's not practical. But when you come out of training and come to the classroom, you begin to work. You will also be going for in-service training. Personally, I combine my training with in-service training with other books and then my own experience to plan my lesson.

Her personal experiences meant that she had developed a set of values and conditions for achieving success in her pupils. Her pedagogical reasoning showed that she acknowledged the importance of training but had reflected on the training as 'not deep' so had challenged it. She had moved beyond the weaknesses in the training and situated the teaching learning process in her current community. Clearly, transformations in Ama's experiences had created a schema of sense making in her practice (Korthagen, 2010). Significantly for this study, such a practice responds to Feiman Nemser's (2001) proposal for a pedagogic renewal in SSA: Ama has renewed her pedagogy making her successful in her practice.

The next section discusses the teacher's knowledge of the teaching curriculum and the beliefs they held about it.

- Curriculum knowledge and teacher beliefs

All six teachers under study exhibited a clear understanding of the scope and content of the curriculum of the three core primary subjects (English, Mathematics and Science). However, they had individual views on the weaknesses in both the curriculum and the teachers' guide. Tabulawa (1987) asserts that teachers make varied assumptions about the concepts of curriculum and teaching practices in different contexts. Kanu (2005) also maintains that culture influences both teachers' and learners' perception of the curriculum, communication patterns and instructional approach.

In Ghana, the curriculum spells out the patterns and conduct for teaching. The innovative teachers (Ama, Akosua and Afia) were found to add on to the guide and also rely on their own ideas, experiences and indigenous learning tools. They were easily able to change the order of units in the textbook. Her continual reading of English grammar enabled her to identify what she saw as unhelpful for the teaching-learning process; therefore, she 'deconstructed' the information to facilitate better understanding for her pupils (Dunne et al., 2005, p.110). This powerful intersection of teacher

knowledge and personal experience was another important finding for this study. Abena and Afia expressed their dissatisfaction with the contents of their teachers' guide.

- Pedagogical Content Knowledge

In their varied ways, all six teachers acknowledged the mixed abilities of their pupils and devised effective strategies to meet their needs. A major finding was that the six teachers' PCK was very complex in the ways of connecting to learners' needs and thinking, as the PCK was not structured according to the given curriculum but according to circumstantial settings. This was what distinguished their understanding (pedagogue) from that of the traditional teachers "content specialist" (Shulman, 1987, p.8). Their pedagogic reasoning demonstrated teaching that was not straightforward, but one that employed a deep understanding of subject knowledge applicable in diverse situations.

Furthermore, the PCK represents the skills and abilities in a teacher's possession that enable him/her to vary the subject matter in ways that are adaptable to the varied backgrounds of learners (Shulman, 1987). Hence there is ample opportunity for both teachers and learners within these classrooms to engage in critical and reflective thinking within classroom situations, and to arrive at practices that have actually worked in their own context. Where the focus was on learner ability, Ama for instance expressed that she employed peer support; she explained that:

During the lesson ... as I use the different methods, I will invite the children to come forward and act as teachers ... to do the actual things I do to enable the dull ones to learn from their peers. Sometimes, the teacher will teach but some may not understand. But when you invite their peers to come and demonstrate exactly what the teacher has done, it helps them to understand ... because they're always anxious to see what their peers can do. So, they learn from peers.

Where her focus was on age, Ama decided to act as a coach by allowing children to come forward and do what they see her do in class. Her explanation was:

The reason why I don't use one method is that the children are all individual ... some are smart, some are slow, and some are average. So by using different methods, everybody will be able to pick the process by which he or she will be able to understand the lesson.

Ama's idea of coaching suggests the potential for peer assistance in teaching and learning. It also represents Korthagen's (2010) apprenticeship model where the teacher's gestalt develops into conscious cognition (ibid, p.412). Such a pedagogic practice was not straightforward, but one that employed a deep understanding of subject knowledge to diverse situations.

Thus Ama's schema of learner support was another innovative practice for this study. The study found that learners felt secure and confident that there was someone of their own age who had a clearer understanding.

Additionally, Afia noted that:

The last time I treated fractions, when I asked them questions in class, I realized that most of them did not get it; so that's why today I am being so careful, I cannot move on to the next topic if they do not get this one.

Afia has recognized her learners' difficulties in the previous lesson on fractions, so decides to be 'so careful' but, more meaningfully, she 'cannot' move on to the next topic until she is certain they have understood the current one. This is another innovation, because irrespective of institutional expectations in Ghana, Afia has overlooked the timetable demands or the syllabus coverage, and used the same lesson time to support her learners. According to Akosua, the choice of activity or song was not fixed, but essentially depended on the topic to be taught. Therefore, she carefully 'reflected on' the classroom situations and all the strategies in her repertoire to ascertain which would best help her Muslim pupils to grasp the topic. Akosua's challenge was to engage the interest of young children from a poor Muslim community therefore, she told jokes that amused her pupils and made them eager to listen. Akosua's probes to make deeper extensions in the understanding of learners coupled with her own strategies, such as pointing to her body parts while singing a rhyme and turning her body around, informed all her pupils and stimulated them to do similar actions. Their PCK is complex in ways of connecting to learners' needs and thinking since it is not structured according to the 'given curriculum' but according to diverse influences. Hence there is ample opportunity for both teachers and learners within these classrooms to engage in "critical and reflective thinking" within the classroom situations, leading to positive changes in practices that have actually worked in their learners (Zechinner, 1990; Schon, 1990; Pollard, 1995).

Therefore, teachers have experienced growth in their practice since they have achieved positive shifts from the routine and unchallenging practices yielding success in the learners. A key finding here was that they stood out from the majority of teachers because of their own beliefs, connections and perceptions derived from the positive aspects of the culture. They had therefore made shifts from the traditional practices. This is a pedagogic renewal.

### **5.5: Conclusion**

The six innovative teachers' understandings, conceptions and orientations about teaching and learning intersected with their traditional knowledge systems in their classroom practice. Their PCK and patient strategies revealed how they differed from their peers in terms of their assumptions about the teaching-learning process and their strategies for managing it.

The analysis of the study has revealed the distinctive characteristics of six primary teachers who made extra efforts to change their pedagogy to bring about innovation in the classroom. The innovative teachers demonstrated how they had internalized the curriculum, making learning more of a process that grew out of the learning context. Thus, the three very innovative teachers who were committed in their practices achieved more success in their learners. Being inconsistent, the partially innovative teachers sought to support their pupils but were not entirely successful. However, although the other three were found to be inconsistent with their practices they were able to make some meaningful learning occur.

The next chapter outlines the study's original purpose and draws some conclusions based on the key differences found between the three categories of teacher – traditional, partially innovative, and innovative.

## CHAPTER SIX

### CONCLUSIONS AND POLICY IMPLICATIONS

#### **6.1: Introduction**

This chapter concludes this study by responding to the research aims and questions, and presents how the study makes significant empirical, theoretical and methodological contributions to the field. I also present the implications of the study at the contextual and policy level and suggest areas for future research.

#### **6.2: The Research Aims and Questions**

This study had a major goal to understand how and why Ghanaian teachers continue teaching in the transmission patterns of teaching despite international support, and to find out what works for meaningful learning in the Ghanaian context (Tabulawa, 2003; Schweisfurth, 2011). I used collective case study design to explore Ghanaian teachers' pedagogic strategies and variations that occur in primary classrooms. Locating myself within a social constructivist theoretical framework I examined primary teachers' experiences in Kumasi in the Ashanti region of Ghana on 'how' some of them are able to make learning occur within their circumstances.

The study was focused on the main research question:

- What pedagogical strategies are promoting positive learning experiences in Ghanaian classrooms?

The principal question was broken down into these specific questions:

1. What are the prevailing pedagogic practices of Ghanaian teachers in the lower primary classrooms?
2. What are the major issues and concepts that underpin their pedagogic practices?
3. What are the experiences of teachers who are innovative in their practice?

The main research methods employed in this study consisted of classroom lesson observations, documentary analysis of lesson plans followed by detailed interviews. The case studies from the lower primary teachers made it possible for me to draw out meanings from their pedagogical strategies and current experiences (Creswell, 2009) as

well as develop some understanding of teachers' view of themselves and their teaching (Saban, 2004).

### **Research Question 1**

- What are the prevailing pedagogic practices of Ghanaian teachers in the lower primary classrooms?

The study found a majority of the teachers practiced 'traditional' rote and transmission modes of teaching in lower primary classrooms. This confirms existing reports on teacher pedagogic practices in SSA (Akyeampong et al., 2006; Hardman et al., 2008; Opoku Amankwah, 2009). Furthermore the straight forward approaches and socio-cultural activities practices which trace back to teacher beliefs and training accounted for the traditional teachers' questioning and feedback styles. In all cases of teacher questioning, teachers depended on one or two children's positive response to questions as signals for the understanding of the whole class. Although some teachers' questions indicated an extension of the environment, they made no efforts or commitments to connect ideas to the pupils' context. Moreover, traditional teachers were very confident in their pedagogic practices owing to their reliance on the specified socio-cultural roles which influenced their teaching and learning interactions (Stuart et al., 2006; Akyeampong and Pryor, 2006; TPA, 2011; Lefoka and Sebatane, 2007;).

The socio-cultural practices and knowledge systems had also provided some shared micro classroom interaction patterns that were evidenced in their feedback modes. Their feedback strategies were found to be packed with tacit messages that were interpreted by the children during lesson time. During teaching, teachers' feedback was more of the 'pseudo checks' to which children responded quickly in a bid to please the teacher (Arthur, 2005 Pontefract and Hardman, 2005; Hardman et al., 2008). Additionally, children's feed back in the form of silence served as a clear indication for the traditional teachers that learning had occurred. The use of 'clapping' came out as the mutually accepted form of feedback from the teacher; they grinned, smiled and endorsed learners' progress or achievements with a clap from the whole class. Significantly, however, the traditional teachers' feedback styles did not yield visible success in their learners. This was another significant finding for this study since the teachers perceived that their passive children in their classrooms were truly learning.



Again another key characteristic of the traditional teachers was that they persistently stuck to the teaching curriculum and continued with the procedures laid down in the teaching guide. They again demonstrated their knowledge and understanding of values and norms as enshrined in the socio-cultural norms and practices, but did not make any significant connections of learner background with the teaching curriculum. Significantly they made exact representations of subject matter as presented in the teaching curriculum and teachers' guide. This they exhibited in their lesson plans and were confident they did good work as long as they accomplished all the steps outlined in it. A confirmation of this confidence was also found amongst Ghanaian NQTs (Adu-Yeboah, 2011).

### **Research Question 2**

- What are the major issues and concepts that underpin the pedagogic practices?

More traditional teachers exhibited their epistemological and ontological positions about teaching and learning in a more behaviouristic and mechanical manner. For them learning occurred when they gave out the knowledge and their learners received and reproduced it (Cohen and Manion, 2009). Significantly, traditional teachers' conceptualized knowledge as out there in the culture for their learners to receive from their leaders and teacher. Such a way of knowing also derived from the culture had been carried into their classrooms, allowing the transmission patterns to appear as appropriate for their learners. Secondly they used authoritarian approaches as specified in the adult learner roles and brought these into their teaching their pedagogy demonstrated their perception of the whole class as one unit and so they stood at the top and treated their learners as 'collective', giving instructions to them and also overlooking individual pupils with difficulties.

Another significant finding was that traditional teachers exhibited some forms of content and curricular knowledge but exhibited a weak pedagogical content knowledge (PCK) needed for the work of teaching (Schulman, 1987). They were more often concerned with giving shallow, peripheral, and straight forward information to their learners. In a sense they were preoccupied with just ensuring that they made representations of only whats and not the whys of issues in their lessons that only led learners to reproduce information - an indication that they themselves lacked in-depth

knowledge of the content related to the work of teaching (Phelps, 1989; Shulman, 1987).

### **Research Question 3**

- What are the experiences of teachers who are innovative in their practice?

The study analysis found that teachers' innovative practices were grounded in how they augmented the traditional practices with varied and adaptive strategies to achieve more success in their learners (Westbrook et al., 2013). Significantly the six teachers exhibited a well-developed and stronger PCK through the manner in which they intersected the positive aspects of socio-cultural norms and values with their questioning, feedback and the curriculum. The study identified three teachers as very innovative and three as partially innovative. The partially innovative teachers exhibited their understanding of the values and norms embedded in the traditional knowledge systems but their PCK during teaching were minimal and inconsistent. These teachers also indicated a mechanical epistemology similar to their traditional counterparts, but in their case they differed in terms of their reasoning about their learners. They sometimes perceived their learners as part of the teaching learning process. They demonstrated knowledge of content that was deeper than their traditional counterparts as they drew on their personal experiences and that of children to vary their pedagogy, but they often lacked the pedagogic skills that could make meanings for learners (Akyeampong et al., 2006; Adu-Yeboah, 2011; Westbrook et al., 2013).

Yaayaa's PCK and pedagogic reasoning provided her with some strategy of how to present the central issues of mathematics to her learners (Phelps and Schilling, 2004; Phelps, 2009). But it was specifically her impatience during learners' difficulty in the topic that resulted in the stiff and boring atmosphere noticeable in her lesson. In the case of Abena, although she made her learners gather stones in groups the children were not found studying in groups. Thus she actually based her teaching on what a few individuals could do, a practice that excludes the majority of pupils who may never be seen or heard in class (Harman et al., 2008). Thus these partially innovative teachers exhibited a lack of reflection of the implications of their own classroom practices on their learners. These teachers did not strictly adhere to the teaching curriculum but remained with some procedures in the teaching guide. Having recognized some weaknesses in the teachers' guide they saw the need to draw on some cultural

knowledge to support their learners at different times during the lesson delivery. Thus at some points they reinforced their PCK and content knowledge through research on other textbooks to get more ideas to teach and do better teaching. Their feedback strategies varied from their traditional counterparts such that through their experiences with children they could interpret children's moods during lesson delivery. However, the analysis of the study found marked inconsistencies. Abena used only smiles for correct answers and frowns for wrong answers and hardly probed any answers from individual learners. Serwaa acknowledged that children had 'individual differences during learning', but lacked the PCK ability to extend their ideas and support them all in the lesson. Thus the absence of an explicit follow-up response from Abena and her colleagues through probes and extensions demonstrated that they could not offer the pupils an opportunity to play an active part in the classroom discourse, hence pupils were often cast in a passive mood (Pontefract and Hardman, 2005; Sikoyo, 2011).

### **6.3: Distinguishing Features of the More Innovative Teachers**

The study analysis showed that the more innovative teachers exhibited pedagogies that did not match with the current/recent findings on 'chalk-talk' rote transmission patterns of teaching in SSA. The innovative teachers' practices had been developed in situ, and over time as they intersected some positive features of the IK socio-cultural practices with the teaching curriculum. They revealed a much stronger PCK and their pedagogical reasoning about learning was not limited to their 'classrooms' but one that permeated the larger Ghanaian society. That is, classroom contexts are surrounded by several socio-cultural learning milieus so they often extended their learners' mindset of the connections between each learning environment. More importantly it was how they lived out the IK for their learners to work beyond their ill-resourced classrooms that demonstrated their innovative strategies.

- They all employed coaching as a strategy to support their learners. The coaching strategy provided the potential for peer assistance in teaching and learning and a form of apprenticeship pattern to support the weaker ones during teaching (Korthagen, 2010, p.412). This revealed their understanding of how learning could be a shared activity in the classroom.

- Through their own life and teaching experiences, the more innovative teachers had become different types of veterans in dealing with the content so had clear conceptions of how learning could be achieved in their learners. This created a clear mental perception of how content knowledge could be carefully explained to their learners. The more innovative teachers were bold and confident, but, unlike their less successful peers, they did not depend on the teaching curriculum and teachers' guide. Unlike the traditional teachers, these innovative teachers made clear alterations to the teaching curriculum. They reflected on the dual contextual circumstances of their learners and themselves; in doing so, they were strong in demonstrating the central issues of the content to their learners in contrast to their traditional counterparts who were only mindful of passing on detailed information (Shulman, 1987). By so doing they faithfully carried some images and illustrations of the indigenous culture to make very significant connections with the teaching curriculum.

A major finding was that they exhibited a stronger PCK that distinguished them from the traditional teachers. They presented the subject matter in ways that were adapted to the varied cultural backgrounds of their learners (Shulman, 1987). Therefore, through critical reflection, these teachers used the classroom and learning opportunity to integrate positive aspects of the Ghanaian culture with what was to be learnt and make sense of the children's assumptions, expectations and perceptions on teaching and learning (Mezirow, 1990). They revealed a much stronger patience and their pedagogical reasoning about learning was not limited to their 'classrooms' but one that permeated the larger Ghanaian society. That is, considering their ill resourced classroom contexts, they often extended their learners' mindset onto the connections between their own culture and the classroom environment. Furthermore they did not leave any learner behind irrespective of their class size, but had alternative strategies to ensure a greater majority was part of the learning process. This was significant since the discourses on African classrooms continue to search for effective strategies to reduce large class sizes in a bid to address the educational quality issues.

Another significant finding was that their PCK revealed how they differed from their peers in terms of their assumptions about the teaching-learning process and their strategies for managing it. They looked beyond their classroom realities and flexibly

made use of indigenous tools (Brown et al., 2010) and resources, such as songs, actions and gestures, to create alternative ‘contexts of learning’ that involved the whole class (Hopkins, 2002, p.35). They confidently shifted from the use of prescribed teaching learning materials (TLMs) to the use of indigenous tools and resources like songs and games to facilitate learning as well as open up connections in their learners’ minds. This made the children alert and, unlike their traditional counterparts, their PCK was able to develop support patterns in the spur of the moment so that children could move along in the lesson without being left behind. This is a form of inclusive and problem solving agenda making that Schon described as reflection in action (Schon, 1990). Where the focus was on age range of the children, the strategy was an open approach and where the focus was on learner ability, they employed peer support.

Similarly, through reflection on a previous lesson they overlooked the time table demands and determined to support their learners. They essentially reflected deeply on their own and learners’ experiences in the community to find the best method to help pupils to grasp the topic (Pollard, 2002; Schon, 1990). This resonates with what O’Sullivan (2006a) and Alexander (2009) identified as innovative and effective classroom processes.

These teachers often considered their learners’ cultural and educational milieu and brought in other indigenous learning tools that differed significantly from the prescribed teaching learning resources (TLMs) in Ghanaian schools for effective teaching (Brown, Collins, and Duguid, 1989). The thoughtful and reflective choice of their learning tools was identified as a profound innovation for this study. Thus by using social activities and demonstrations in varied ways they were successful in enticing their learners into their teaching and learning process, hence achieving their own goals with children with whom they have been entrusted. Therefore they exhibited a prior understanding of their learners’ needs and used the filters or lenses of this prior understanding to connect and support them (Feiman-Nemser, 2001).

The three teachers perceived their learners as younger and intelligent members of their own society who were endowed with useful attributes that could be nurtured, so they lived it out and assumed a motherly and caring role as teachers. Their pedagogical reasoning also substantiated the fact that they had confidence in their pupils, believing that they were responsive members of society who could learn through activity. So

children in their classrooms actively looked, listened and acted differently from those in the majority of classrooms.

I viewed the Ghanaian teacher innovative practices against the background of the 40 others. I have also I worked within the Ghanaian cultural lenses and not within the western ideas and standards prescribed as good practices ideas on specified teaching/learning practices. Principally, these teachers have actually revisited and renewed the 'traditional' pedagogy; in terms of their ontological and epistemological perspectives, they have made use of dialogue, scaffolds, allowed learners to talk, listened to them, read their eyes, varied and repeated strategies to make learning occur in their classrooms, Thus this study highlights that in contexts where physical TLMs remain absent teachers have made use of both cognitive structures and socio-cultural tools that are equally user friendly and familiar to learners such as local indigenous songs and dance. They ignored time, added on to the curriculum,

Ama and her colleagues had experienced growth in their practice, developed some positive and attractive pedagogic skills, and hence developed their profession (Feiman-Nemser, 2001). They re-conceptualized their adult roles and social relationships with children as enshrined in the culture/indigenous knowledge systems and reflected on the positive aspects of the indigenous knowledge using them to support their learners. They articulated interpretations in line with the social constructionist's views of learning by continually co-constructing knowledge with their learners (Lincoln and Guba, 1985). They approached them patiently, not shouting at them, interacting differently from the ways of the traditional teachers. Thus the analysis of the study revealed that this different approach to learners released the active nature of their learners, whilst the traditional teachers' devotion to the codified behaviour patterns also released the passive and quiet nature of their children (Stuart and Lewin, 2003).

This study unearthed some significant micro classroom practices of the innovative teachers that made them different from their traditional counterparts. Significantly Ama and her team's style of speaking were dialogic and differed remarkably from their traditional colleagues (the typical monologist patterns reported of SSA classrooms, Akyeampong et al., 2006). Their talk was not 'one-way' linear communication' (Mercer, 2008) coming from teacher alone, but turned out to be in a form where "understanding was fostered through discussions and collaboration" (Alexander, 2006,

p.23). The shared sense of belonging through a common socio cultural activity in local songs and proverbs endorsed the collaboration, and revealed the strength of these teachers' pedagogic strategies (Omolewa, 2009, p.597).

Ama and her colleagues' pedagogic strategy of initially engaging pupils in a common indigenous activity attracted them to the lesson, aroused their interest, and opened up connections in their minds. This practice allowed their learners to engage in their own level of reasoning leading to continuous and positive results. This form of strategy became effective, which encouraged the young learners leading them to move on automatically with their teacher. Their questioning strategy was in the form of teasing out or probing pupils' ideas and views on the topic.

These teachers had reflected on their ill-resourced classrooms, coupled with children's unsupportive backgrounds. They therefore made use of questions that begin with 'how' and 'why' leading to thought provoking ideas that were creative and problem-solving (Ornstein and Lesley II, 2000, pp.179-181). The innovative teachers' voice pitch and language style that served as a common front to engulf all her learners was oriented towards problem solving (Omolewa, 2007; Ogawa, 2009). It was particularly how they opened their eyes, looked directly into their learners' eyes and at the same time pitched their voice to enquire from them how they could deduce the meaning of verbs from the songs and action words which created the connections and excitement in the children. The study analysis further found that the great majority of pupils in these classrooms were eager to communicate their thoughts to their teachers. They were not scared to say what they felt about the topic because it was obvious that they were happy and knew that, since their teacher was playing with them, they could also share their playful ideas. Such important findings demonstrate how some teacher questioning strategies within the same Ghanaian context could stand out as effective since it focused on the student's needs, allowing children to perceive teaching/learning as a shared activity between teacher and learners (Westbrook et al., 2013, p.28).

Significantly a key finding in this study was that Ama and her team had remoulded the traditional recitation and questioning styles of Ghanaian teachers so that it no longer sought for 'predictable correct answers' only (Arthur, 2005; Pontefract and Hardman, 2005; O'Sullivan, 2006a; Nakagubo, n.d.; Opoku-Amankwah, 2009). Therefore, their pedagogic strategy practice challenges the perceptions in Western literature that view

teacher practices as ‘unproductive practices’ of recitation and questioning in Ghanaian classrooms (Stuart and Lewin, 2002; Sikoyo, 2010).

I further challenged the deficit notion that says that children may not be learning in African classrooms. Their feedback styles served as tangible sources of reflection (Gusky, 2000). Pupils’ gestures were a kind of informal assessment informed by the culture; critically determining how well a lesson was going and gauging the attitude of pupils who gave out signals indicating their state of mind such as excitement or confusion. They saw it as their role to probe any situation that indicated learners were struggling with comprehension. Learners in these classrooms were always reassured and confident, knowing that teacher feedback was loaded with positive messages that stimulated them to work harder and not just to please the teacher. They were able to monitor those learners who did and did not participate in the activity (Alexander, 2009, p.509). The kind of monitoring observed here was more complex and hardly found in the traditional classrooms. The more innovative teachers used feedback styles such as eye contacts to check who did not follow the lesson even in large classes. An innovative practice which has hardly been identified in western literature as effective in managing large class sizes. Therefore, such innovative strategies challenge deficit views of the challenge of achieving quality education in African classrooms where large class sizes are the norm. Thus the teacher’s judgement of a learner’s understanding determined the progression to the next stage of lesson development. Hence, not only did they have the goal of helping pupils learn, but they were also able to attend to them separately based on what they had learned in class. This is an interesting and fundamental problem solving element embedded in the socio cultural practices systems (Omolewa, 2007; Ogawa, 2009). This indeed has further challenged the deficit notion that says that children may not be learning in African classrooms.

Another significant finding was that the innovative teachers were confident because they had experienced growth and transformations in their practice, so were able to determine their learners’ ability and achievements. Hence for them, their practices were not mere replications of the transmission and rote behavioral patterns and attitudes of their college tutors in the past, but a form of redefined and improved practices that they had discerned would work for their learners. Thus, contrary to their counterparts in the traditional group, they had negated the aspiration to reproduce images of the ‘good



teaching' they had seen during their early school years but rather developed more useful practices for their context.

#### **6.4: Empirical, Theoretical and Methodological Contributions to the Field**

This thesis has identified pedagogic practices in the Ghanaian primary classrooms that may be of great interest in broader terms to the SSA region. The findings highlight how a few teachers manage to support their learners in Ghana. More importantly at this point is how they have stood out successfully in the face of generally deficit notions about teacher quality within the SSA region as reflected in the literature.

#### **6.5: Contributions to Knowledge**

I have made some substantial, methodological, and theoretical contributions to knowledge.

Substantial contributions:

When it comes to the literature of pedagogical practices of African teachers, the predominant view is that they are often incapable of more creative and innovative practices because of either, deficits in their training, or their inability to be reflexive practitioners due to limiting factors, such as large classrooms and lack of instructional resources. As a result, many studies which reach such conclusions advocate for 'better' training practices, more resources and in-service training. Whilst all of these are necessary, what is often not given sufficient attention are incidences of teachers who are clearly developing practices that may be seen as 'unconventional' in terms of traditional practice, but are drawing on socially constructed practices to enhance the teaching and learning experience. This study, clearly shows that, within contexts that have often been described as difficult environments to find good practice, it is possible to locate teachers who are developing culturally sensitive and appropriate ways to create opportunities for learners to become more active in their learning. These teachers, as the study found, are much more likely to pay particular attention to the background features of their students and utilise this in (re)structuring their teaching approaches. For those teachers that this study found were innovative in their practice, it was evident that they adopted friendly, patient and created learning environments, quite significantly different from other less innovative teachers. In effect, they had come to realise that changing the learning environment so that it focused a lot more how the child was

understanding what the teacher did, and whether from their perspective it promoted better engagement and understanding of the lesson, was the driving force behind their renewed pedagogical practice. But crucially, it is the success they were achieving in their innovative practices seen through the lens of children's positive engagement in learning, that was helping them to evolve their unique form of pedagogical practice. That seemed to overcome the dominance of the transmission practices – which suggests that the more that this can be made a focus of learning to teach, the more likely that teachers may be willing to move out of the 'comfort zone' of transmission teaching to more innovative and dynamic teacher practices.

Methodological contributions: The constructivist approach drawing more on unstructured lesson observations to examine teacher pedagogic practices in Ghanaian context has revealed a variety of pedagogic practices within the Ghanaian primary classrooms being the traditional, more innovative and less innovative. The teachers who were more successful in their practices had perceived learning as a shared activity so they created spaces for greater interactions with their learners leading to more successful learning in their classrooms. Additionally my strategy of progressively focusing on the innovative teachers has offered detailed descriptions of their classroom experiences and how they have achieved success in their practices. What the research may not have fully addressed in the Ghanaian context is the fact that teachers are not simply mechanical in their pedagogic practices, but that given the space for variations, they could be creative in their practices. From my own position as a Ghanaian and teacher trainer for that matter, locating Ghanaian teachers in a dichotomy of practices as either 'transmissive' or 'non transmissive' restricts the possibility of creativity and innovative pedagogic practices. This study contributes to the fact that methodological approaches that would create spaces between the transmission and non transmission paradigms would release and unpack some rich and innovative pedagogic practices.

My third contribution to knowledge is that my understanding from theory has enabled me to recognize that what is 'innovative' is a factor of what is plausible within the classroom realities of a teacher. Also what is plausible is dependent on what is counted for as 'good' pedagogic practices within specific contexts. Teachers may be innovative and more dynamic when they are able to create practices that yield successful learning outcomes within their own context. I do not deny that transmissions practices occur in Ghanaian classrooms but this study argues that in the mist of these contextual issues

some few teachers have exhibited a lot of dynamism in their pedagogic practices. The innovative teachers were able to draw on the positive aspects of the culture and essentially intersect them with their knowledge, understanding and conceptions about teaching and learning in their context.

## **6.6: Policy Implications**

### **Training**

Teacher training in Ghana continues to underscore the technical aspects of pedagogic practices focusing on subject content knowledge, with well-structured lesson notes, strict adherence to teacher guides and the teaching curriculum. This form of training ostensibly strengthens teachers' technical skills but critically masks teachers' innate non-technical skills often embedded in the culture. Consequently, this study asserts that training has ignored and overlooked some of the creative and soft skills of teachers which could be unpacked to help overcome the quality education problems in Ghana. Therefore teacher education and training ought to revise teacher guides that highlight such soft skills in the teaching curriculum to enable teachers engage with them during teaching and learning in Ghanaian classrooms.

Additionally these innovative teachers had recognised the effect of their practice on their children and it was such evidence that reinforced their practices. Often training in Ghana does not seem to connect the teaching practice with the effect it could have on children/learners. Teachers who are innovative in their practices have come out with such connections. These teachers ought to be identified and set apart as mentors for internship training so they could mentor trainee teachers. Furthermore, training should provide models of such innovation and find ways of developing teacher standards that highlight creativity and innovations. Consequently a pedagogic renewal would be achieved in the Ghanaian context.

## **6.7: Conclusion and Recommendation**

This study concludes that within the Ghanaian primary classrooms, there are a few teachers who are supportive in their practices ensuring that their learners achieve some good success. Thus their unique strategies will have to be promoted in the teacher professional development policy and training discourses in SSA. Furthermore, such

detailed descriptions of teacher practices are long overdue in the SSA region, so a study of this kind could have been conducted in more than one region.

Therefore teacher pedagogic practices would have to be re examined focusing duly on innovations and less so on teacher guides. The situation whereby teacher guides often outline teacher practices in Ghanaian classrooms would then be revisited. Teachers would then become more reflective professionals who seek to find ways of supporting their learners.

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## Appendices

### APPENDIX A

#### OBSERVATION GUIDE

Ratings: from (1-5). 1, 2, 3, 4, 5; the mark 1 indicates a low output of the teacher.  
Descriptions are to be included.

Introduction of Lesson interesting /leading/linked to learner's own background?

.....

Mastery over subject matter: good/poor/not deep? .....

Use of Teaching Learning Resources: appropriate? .....

Lesson Plan links/connections to or away from the Curriculum? .....

Teacher talk: instructions, explanations? .....

How is classroom organized? Grouping? .....

Classroom environment/atmosphere appears relaxed/tensed? .....

How does lesson develop? Using the PCK? Other? .....

Various ways of using voice intonations, gestures .....

Forms of communication in classroom, code switching? .....

Feedback mechanisms: individual attention to pupils? .....

Types of distractive mechanisms .....

How are closure and lesson objectives achieved? .....

**APPENDIX B****INTERVIEW SCHEDULE REFLECTING RESEARCH QUESTIONS**

Prompts and probes reflecting Research Questions and possible answers

Can you describe your class?

- i. How do you begin your lessons?
- ii. How do you prepare your lesson plans and scheme of work?
- iii. How many age variations do you have in your class? In which ways do you try to help them to understand the concepts in their own way?
- iv. How do you determine a student has understood what you are teaching?
- v. Do you have any differences in the learners' responses to teachers' questions with respect to group or individual work?
- vi. When are your most successful moments in class?

## **INFORMATION SHEET (for participating teachers)**

### **Research Topic:**

Pedagogical Renewal and the Development of Teachers in Africa-Ghana

Researcher: Ellen Olu Fagbemi

Research Institution: University of Sussex, United Kingdom

Programme: International Professional Doctorate in Education (EdD)-Phase Three

Contact Information: University of Education Winneba, Ghana.

**Purpose of the Study:** the purpose of this study is to investigate the pedagogic practices of the primary school teachers in the Sub-Saharan region, precisely, Ghana. Particularly, I am interested in the pedagogic practices which could lead to innovations in the primary classrooms. During this study, I will be observing you carefully in class and also interview you afterwards to help me understand how you are able to assist the children learn meaningfully.

**Procedure to be followed:** you will be observed carefully as well as your learners in your classroom during a number of your lesson delivery sessions and afterwards a number of questions will be asked on how you go about classroom practices. The interview will be recorded on a tape and later transcribed. You should feel free to challenge the questions and to state your point of view over issues raised. If you would like to have a copy of the transcribed interview just contact me.

**Risk Factor:** There are no risks in participating in this research. However, as you are being interviewed, there will be some questions that might seem personal and so might cause psychological discomfort. This is not intended and the chances of this happening are very minimal. But note that you are free to decline answering questions you may feel uncomfortable.

**Benefit:** This study does not involve any material remuneration. However, in the course of the interactions you will certainly be brought to reflect on how you connect to the learning needs of your learners. This might help you organize yourself better as teacher and also help you find some more useful ways to support your learners. It might even help you improve upon your practice. Also the possible publication of the study might help policy planners organize teacher professional development and training policies better for the benefit of learners.

**Duration:** the observation will be done throughout a lesson period which takes 45-60 minutes. Staying throughout the full duration of the lesson will enable me capture the entire lesson development, variations of your classroom practices and the learners' participation. After the classroom observations, a 20 minute interview which will be recorded (and later transcribed) will be conducted with you.

**Voluntary Participation:** Your decision to be in this research is voluntary. You can withdraw from the study at any time. You do not have to answer any questions you do not want to answer. You can also request at any time for your participation to be removed, destroyed or deleted from all the files involving this research.

**Statement of Confidentiality:** Your participation in this research is strictly confidential. Personal information gathered will not be shared with a third party. Observations and recorded interviews will be coded immediately after this session and will be identifiable only through a unique identifier. Similarly, place, programs, and institutions that could lead to your identification will be removed or substituted by a unique identifier. In the event of presentation or publication of this research no personal data will be shared.

I am an independent researcher. What you say and or do will not influence your practice.

Thank you

.....

Ellen L. O. Fagbemi

## **INFORMED CONSENT Form (for participating teachers)**

Dear Madam/Sir,

I am conducting a research on the classroom practices of some teachers in your school. I would be very glad if you could join in. The study will be as follows:

You are going to be observed carefully as well as the learners in your classroom. I intend to do these observations during your lesson delivery sessions. And afterwards I would like to have a detailed interview with you during which you would be asked a number of questions on how you go about your classroom practices. During the interview I will record the proceedings on a tape and subsequently transcribe them. By signing and returning this form, I believe you would agree that you are consenting to being observed and interviewed.

Therefore kindly sign below upon agreeing to the statement below;

I understand that such information will be treated as strictly confidential and handled in accordance with the Data Protection Act 1989 (UK).

.....

Participant's Signature and date

.....

Researchers signature and  
date

DRAFT OF EMAIL SENT TO MR ASARE, HEADTEACHER of the KWAME NKRUMAH UNIVERSITY PRIMARY SCHOOL, (K.N.U.S.T.) – KUMASI.

The email followed an initial meeting with him on the possibilities of carrying out research amongst teachers in his school.

Dear Mr Asare,

I thank you for creating time on your tight schedule to meet with me on the question of my research into the pedagogic practices of primary school teachers.

I am grateful for all your advice, which I find valuable as I carry out my research on teacher classroom practices.

Thank you also for the advice about access to teachers of the KNUST Primary School. I look forward to meeting some of your teachers for a deeper understanding on the forms of "pedagogy that fits". I would also want you to inform parents (of your school) on a blanket basis that this visit is not going to be like the regular educational visit but this is going to be for an educational research purpose.

As promised, if in the course of my research there is any need to meet and address the teachers as a group, I will formally seek clearance from the headmasters' office.

Once again, I thank you for your support towards my studies.

Best regards,

.....

Ellen Louise Olu F

## INTERVIEW SCHEDULE REFLECTING RESEARCH QUESTIONS

Prompts and probes reflecting Research Questions and possible answers

Can you describe your class?

- i) How do you begin your lessons?
- ii) How do you prepare your lesson plans and scheme of work?
- iii) How many age variations do you have in your class? In which ways do you try to help them to understand the concepts in their own way?
- iv) How do you determine a student has understood what you are teaching?
- v) Do you have any differences in the learners' responses to teachers' questions with respect to group or individual work?
- vii) When are your most successful moments in class?

Specific Questions in line with research questions:

1. What particular teaching strategy do you often use in teaching your lessons? Why?
  - i) How would you describe its application in teaching a subject like mathematics?
  - ii) How do you decide on what task a student should perform during a lesson time?
  - iii) How do you interact with the children in your class during lesson delivery?
  - v) What happens during difficult times of children learning?
  - vi) What do you consider to be a fruitful or a successful lesson?
  - vii) How do you use the environment to connect learning and understanding of your learners?
  - x) Do you have the support from the school authority to introduce any new ideas into the classroom?
2. Subject matter knowledge
  - i) How did you master the subject you are teaching?
  - ii) As much as possible do you find it appropriate to follow the given syllabus and teacher's guide provided by the Ghana Education Service? Why, explain your answer.
  - iii) Do you find the information and explanations provided in the syllabus enough for the learners to understand the concepts?

### Pedagogical Content Knowledge

- i) In what ways do you connect the subject content with the teaching practice?
- ii) How and when do you perceive learning to occur amongst your learners?
- iii) How do you make time to support the slow/weak learners during your lesson delivery?
- iv) Do you always use prepared TLMs to assist the learners?
- v) Which situations lead you to make variations in the prescribed curriculum for teaching?
- vi) Which teaching strategy do you find helps the children to understand the concepts best? Do you use it often? Why?



DRAFT OF EMAIL SENT TO MRS. AZUMA, HEADTEACHER, AYEDUASE  
/KOTEI LOCAL AUTHORITY PRIMARY SCHOOL – KUMASI.

The email followed an initial meeting with her on the possibilities of carrying out research amongst teachers in her school.

Dear Mrs Azuma,

I thank you for creating time on your tight schedule to meet with me on the question of my research into the pedagogic practices of primary school teachers.

I am grateful for all your advice, which I find valuable as I carry out my research on teacher classroom practices.

Thank you also for the advice about access to teachers of the Ayeduasi/Kotei Primary School. I look forward to meeting some of your teachers for a deeper understanding on the forms of "pedagogy that fits". I would also want you to inform parents (of your school) on a blanket basis that this visit is not going to be like the regular educational visit but this is going to be for an educational research purpose.

As promised, if in the course of my research there is any need to meet and address the teachers as a group, I will formally seek clearance from the headmistresses' office.

Once again, I thank you for your support towards my studies.

Best regards,

.....

Ellen Louise Olu F

## Profile of teachers

## Case studies

**Group A (Different practices)****Teacher A 1****Observation**

Class 1 B (*children are seated in pairs there are 5 rows with 4 pairs in each row (there are overlaps in some rows).*)

No of pupils: 43      Average age: 6-7years      9.10 am (90minutes)

Topic: Verbs

9.10 Teacher has a number of words written on the marker board

Teacher: hello, hello, hello, close all your books and put them in your bags. All of you-stand up, teacher begins to sing...

*Clap, clap, clap together, clap, clap, again, clapping is an exercise, clap, clap, again.*

*Dance, dance, dance together dance, dance, again, dancing is an exercise, dance, dance again.*

*Hop, hop, hop together, hop, hop, again, hopping is an exercise, hop, hop again. She sings 2x as she demonstrates the words in action.*

9.13 Children: heyyy!!!... (all children are excited)

9.15 Teacher: everybody sing with me.....

*Walk, walk together, walk, walk again, walking is an exercise, walk, walk, again....she walks around in the class and children also walk around in the classroom.*

9.18 Teacher: now, who can tell, what we are doing today? Afia...

Afia: we are doing verbs.

9.20 Teacher: who will tell me what is a verb?

Children: some rise up their hands

9.23 Teacher: yeees Alexander

Alexander: a verb is a... (he is not able to answer...)

Teacher: (*other children who have an idea are trying to draw teacher's attention*) if you know don't make noise.

9.25Teacher: a verb is an action word, or a doing word. Now all the girls stand up and tell us. 9.32All Girls: they stand up and in a chorus *‘a verb is an action word or a doing word’*.

Teacher: all of you clap for them, they have done well, now all the boys stand up and say it

9.30All Boys: in a chorus *‘a verb is an action word or a doing word’*

Teacher: all of you clap for them. Now all of you say the definition of a verb in rows, starting from row one, and go on.

*All children in the different rows (1-5) do so accordingly. Teacher then calls some individuals to try and say out the definition of a verb.*

Teacher: Okay Kofi, Esi, and Mary, try

Kofi: he is able to define a verb

Esi: she also defines it

Mary: she tries with some difficulty but finally gets it.

Teacher: ok. Clap for all of them, they have done well

*(some children are playing)*

9.35Teacher: hey! I’ve told you when I’m teaching no playing. *(all children become alert)*.

Teacher: *(looking at the marker board)* who can say one verb on the board? Yaw

Yaw: walk

Teacher: good, can you spell it?

Yaw: looking on the marker board, spells ‘walk’ slowly

Teacher: okay Anna, say another verb

Anna: a box

All children: no

9.40Teacher: *(no comment on Anna’s answer)*, Osei, try.

Osei: run

Teacher: Okay run and let’ see

*Osei runs*

Teacher: ok good, who else, Owusu

Owusu: sweep

*Owusu takes a broom and sweeps*

Teacher: Mark dance

*Mark dances 'azonto' all children become excited*

9.42Teacher: good! Now, I will draw some actions on the board, and then I will put some words under each action, then you will match the verbs by putting a circle around the correct verb action.

Teacher: all of you read the instructions on the board. Read it in your head first.

All: they all read .....*but some are still trying to read*

Teacher: Mansa stand up and read the instructions

*Mansa is able to read*

9.45Teacher: the instructions say circle it so don't underline it.

Teacher: one person should come and circle the verb, John come and try....

*John is able to do the task*

9.47Teacher: good show let's give it to him!!!.... (*Meaning all children should clap for him, so they all clap. This seems to excite the children they become eager to try out for themselves*)

Teacher: another person ....*this continues with three more children who are also able to do it.*

9.50Teacher: Now, take out your English books, and open page 36.

*All children take out their books and open page 36*

Teacher reads the words to the children then asks all children to read too.

She asks the children to identify at the verbs in their books. She goes round to check and helps those who have difficulty.

Teacher: okay good,

She calls one child to point at the verbs on the board.

Blessing, come and point at the verb on the board.

Teacher: okay good,

*Teacher has made use of three dimensions in teaching... the sight (children see words written on the board, the children to see the activity for themselves), hearing (allowing the children to listen to the word pronunciation by the teacher) and use of manipulative skills, (teacher demonstrates the action physically*

*and gives children the opportunity to do the actions and also try circling of verbs on the board) this gives me an idea of scaffolding and building upon blocks, she is step by step breaking down the concepts as she moves on. This shows the strategy of deconstruction of text to learner. Children in this classroom are not merely learning by rote or even repeating answers provided by the teacher but are actually travelling (teacher is the driver and children travelers) through a journey of looking seeing, hearing and acting. As the driver moves on, the children gradually see for themselves where the journey will lead them to. The teacher in this context is in the process of 'creating contexts of learning which actually encourages the whole class to engage in the active construction of meaning' (Hopkins, 2002, p.35). Meaningful learning is very likely to take place here.*

Teacher: Eshun, you too come and point at a verb

*Eshun points at a word which is not a verb, the teacher had found him actually playing*

Teacher: Eshun stay there, you're not paying attention, George come.

*George also fails*

Teacher: stay there..... *(so she calls some more children and all those who do not get it right are made to stand in front of the marker board)*. Afterwards she calls another one child.

Teacher: Kofi come and circle the verb, he is able to do it

Teacher: good clap for him, now all of you in front, do it again then you can go and sit down.

So one by one they begin to circle the verbs.

Teacher: ah George well done!

*(teacher dance bumps with him, and for each child who gets it correct this time she would say give me five or uses a different play gesture with the child, this really excites all the children) .*

10.00 Break time (20mimutes)

Teacher: all of you go for break

*During break time teacher puts a class exercise on the board.*

*10.20 Children come back from break*

10.22 Teacher: take your exercise books and copy the work on the board.

*She explains the instructions on the board to the children.*

Teacher: now look on the board and listen; the exercise here is for class work, everybody 'class work'

All: class work

Teacher: so listen; you are going to draw and color the actions on the board in your class work books, and write the verbs under it. Take your books and do it **now!**

*Teacher calls on the cupboard boy and girl to come and take out the books to be shared out. Some books have been mixed up with other subjects so teacher herself searches for the misplaced books.*

*Children who have gotten their books start working whilst a few others are still searching for their books. One child is coming to teacher's table...*

Teacher: sit down and show me where you are

Child: I am coming to buy pencil

Teacher: so you don't have a pencil and you're sitting down all this while! She sells/gives the pencil to her and the child returns to her desk.

*Children are now working and teacher after 8 minutes goes round from desk to desk to check.*

*Teacher gives them some 20 minutes to work. She is still helping those who need help as she moves from desk to desk. Some children have finished and they come to show their work to her.*

Teacher: have you finished Afia? (*teacher takes a look*) okay go and put your book on my table and wait for me. Hey you George, let me see your work.....The drawing is beautiful but you didn't color it well, go and do it well. Now listen; it's almost time for the Twi teacher's lesson so hurry up and finish.

*15 minutes later*

Teacher: hands up those who have finished. She counts them (*three quarters of the class has finished*) then all those who haven't finished you can finish your work during the third break, I will be here to check for you.

(Note: teacher was not using the teacher's guide)

10.55: Lesson ends.

## Teacher A 1

### -Interview

After observing an 80minute (double period) lesson

Total time for interview: 43 minutes

**M:** Researcher (Interviewer); **T-** The teacher (Interviewee);

Some Codes: **I:** Indigenous Knowledge; **P.R:** Pedagogical Reasoning

**SC:** Source of Knowledge; **J:** Judgments; **C:** Confidence; **T O:** Teacher's Own Ideas

**ST:** Steps ; **V:** Variety; **F:** Flexibility; **W:** Wisdom of Practice

M: Good day again, Madame.

T: Good day.

M: as I went through your lesson plan I read your plan as 'start with actions', 'look and say' then in the teacher/learner activity I also read –revise previous lesson,;

-introduce pictures to children,

-talk about the pictures to the children

-write the verbs on the board

-give them exercises.

So I would like to know why you started the way you did by using actions

T: As I have said in the objectives we with relevant previous knowledge. The children are supposed to revise (lays emphasis here) what they have already learnt which will lead to the topic. T O

M: How do you know they have already learnt it?

T: I have already taught verbs, they have learnt verbs already and then during the verbs we did the actions. So now that we're going to learn 'look and say'- 'the verb to be'. Also we've already learnt nouns before the verbs they're supposed to identify which one is actually the verb. So the previous ones they did actions so once that now we're going to learn through the pictures and the demonstration, that is, the verbs to bring out the topic. T O/C

M: what approach did you use for the demonstration?

T: I used the play way method and demonstration by doing, by looking into their textbooks, the pictures that have been shown there are the verbs, after the demonstration of songs and dance and actions , we look at the pictures in their books and we read the

sentences, then before we then do some of the activities on the board and after reading through the activities, then we do exercises. PR

Me: earlier on you said you do not use one particular method in teaching. Why?

T: the reason why I don't use one method is that the children are all individual differences. Some are Smart, some are slow, and some are average. So by using different methods, everybody will be able to pick the process by which he/she will be able to understand the lesson.

M: So within the different methods, how do you go about them?

T: during the lesson, as I use the different methods. I will invite the children to come forward and act as teachers to do the actual things I do to enable the dull ones learn from their peers. Sometimes the teacher will teach but some may not understand but when you invite their peers to come and demonstrate exactly what the teacher has done, it helps them to understand. Because, they're always anxious to see what their peers can do. So they learn from their peers I

M: So where do some of your ideas and choices come from? Is it from training?

T: Hmm (grins to herself), the old adage says 'experience is the best teacher' - I have taught for so many years (about thirty years), so I always base on experience that I have taught previously and I have been adding a lot to it. Though the training College they teach us how to teach but it's not deep, and it's not practical. But when you come out of training and come to the classroom, you begin to work. You will also be going for in-service training. Personally I also do a lot of research – I've been reading other books and so I combine my training with In-service training with other books and then my own experience to plan my lesson. I V; W ;TO.

M: So what makes you confident that you're doing the right thing, in terms of your choice of teaching methods?

T: In fact my life throughout my teaching career, I've been placed at the lower level, the nursery, Primary (P).1 and P. 2, and for children, I've seen that they learn through play. So always after that I give them and exercise, I assess and see that method that I used did not help them, so next time I will use another method, then I will see whether that one also helped them, so I will be changing and trying more methods. So whenever I'm teaching I will be mixing methods with those previous experience so that if this doesn't understand the other will, this enables easy understanding for all of the children. J I

M: Decisions you make come from your own experience not from any book?

T: Yes from my own experience....

M: What if you realize that you find something in the textbook that is not helpful to the children?



T: for instance in one of the English textbooks the author had written nouns instead of verbs. So as I was studying to plan my lesson, I noted it down, and cancelled it in the textbook. I then came to school and drew the attention of the block head of class 1. She agreed with me and then confirmed the mistakes. So when I started teaching my lesson, I wrote the mistake on the board and wrote the correct one on the board too, then I asked the children to look carefully cancel the wrong one and write the correct one in their books. M: so how did the message get to all the other teachers in P 1?

T: that week another teacher approached me so I advised her to make the corrections.

M: O.K. Madame, what would you describe as a very successful way of introducing a lesson?

T: based on the particular lesson, but I'll still say they're children so they're still young so use play.

M: So any specific play?

T: based on the particular lesson, sometimes the topic demands rhymes, other times, it demands observation, meaning you go out there and observe. For instance, you are going to teach a reading passage on a market scene. You need to go to the school market and observe with the children what goes on there, then come back to the classroom and ask discuss on what goes on there, then from there you go on and introduce the lesson. This also helps.

M: O.K Madame, thank you very much I will come back later.

T: Bye .

## Teacher A 2- Observation

### Class 1 A

I have come to Class 1 in the Ayiga Primary School

The teacher supposed to be the head of the morning stream, expresses she has no idea of my coming to do observations. I try to explain and she wonders if this will not require any recommendations from the head since this has been the practice of the supervisors.

She accepts my request after sometime.

This teacher tries to mix the twi with the English language in the class communication

Children are writing in their exercise books, the subject is natural science. Some children are able to write well but others are not. Teacher goes round, she tells me about a child who has been brought from a private school but cannot write. She uses the local language There are some children of 7, 8 and 9 years.

Some of these being repeaters and transferred from some private school.ch

Children in this class are making a lot of effort to write/do their work.

One child is able to draw teacher's attention to a mistake on the board.

A skill of learning how to write your name.....

.....use of cards with child's name to be written out every day, On every exercise to be done until child is able to identify his/her name This usually takes three weeks ( according to the teacher). But for those who continue to have difficulty, she write Those names up on the blackboard for them to see daily. She pauses after a while and draws children attention to writing on the ruled lines in the exercise books. There is a special needs girl in this class- Ayisha

Ayisha

She comes in late, she roams about a lot. Teachers allows her to move about freely????????? She has her name written up on the board. She has no book to work in today,

T: where is your book?

Ayi. She points outside

T. Go for it.

She comes back with it...She doesn't finish her work

Teacher takes time to mark each child's work and then takes time to call the child and help her make corrections

NOTE teacher understands that when all read it serves as a form of motivation , and so those who cannot will do what others are doing.

Teaches the writing of alphabets on the line. Teacher makes use of images of what the culture sees as good- the nature of God is good The nature of the devil is bad Children are made to understand the dirty work takes you close to the devil and vice versa.

It's break time.....

Some children go out but teachers insists all should go out

It's break over

All come in

The next lesson is

English

She starts with a rhyme from the previous subject learned....."....Twinkle ,twinkle little stars

Checks on those are not taking part.

She shares books herself

Topic: matching letters

Teachers draws a table with six lines

She asks them to pronounce the letters , ask them to give or mention words with similar voice intonations.

Eg d for dog, a for AMA, e for elephant

NOTE she calls one child to come and identify letter a on the board

She calls. Ayesha to to this.... she asks one child to speak

to her in the frafra language

She is able to do this and all the children are very happy shouting

Feedback ..clap for. Serwaa

Some are not... Why does this pain you..in twi

T let's go to page 24

T reads the instructions in the text book

T don't talk to anybody

She writes on the board

She points to the word 'match'

T what letter is this

All M

T so Ma is.....

One girl.....match

T well done shake my hands....

T Mable you a lone

T some are not paying attention

She dances in-between

after reading all that is written on the board they go back to the book

T. Who can read the sentences?

They are able to identify the same words in the book.

Reading becomes easy here.

They understand the words like pictures, shapes.....

She again uses chn own uniform colours.

One child wears green and two others wear brown

to explain the word different.

## Teacher A 2

### Interview

After observing an 40minute lesson

Total time for interview: 30 minutes

**M:** Researcher (Interviewer); **T-** The teacher (Interviewee);

Some Codes: **I:** Indigenous Knowledge; **P.R:** Pedagogical Reasoning

**SC:** Source of Knowledge; **J:** Judgments; **C:** Confidence; **T O:** Teacher's Own Ideas

**ST:** Steps; **V:** Variety; **F:** Flexibility; **W:** Wisdom of Practice

M: Good day again, Madame.

T: Good day.

M: I saw you were going to teach the topic 'myself' but I heard you sing a song (in two local language- shira wo ti shira wo nae,.....). why?

T: I try to refer to their whole body in that song.

M: Why this song?

T; This song is very specific and leads to the topic- of myself.

M: what in your judgment is the best approach?

T: All depends on your selection and relevance of approach to the topic. Well other methods like rhymes could also lead to the topic, but the children should be able to see the link to the topic. I feel this is the most suitable. Because the children have easy access to examine their body whilst in class.

M: so please tell me how you developed this lesson on 'myself'

T: so what I do is to help them step by step to identify the names of the parts of their body and then ask them to touch that part themselves and give its name. This process will continue gradually row by row group by group and even some of the them will come to the front and show the part with the name. After a certain time, I will see that they have all got the names of the parts of the body. Then I will draw the body and its parts labelled and ask them to draw their own and label it. From there I will ask them to watch me as I demonstrate the way to describe myself. Gradually they follow and I again call the children group by group, then one by one to and do exactly what I did.

M: why do you make them come and do what you did?

T: when they come forward to do what I have done, their peers are able to watch carefully and check on their mistakes, so this helps them to learn too since they are themselves correcting their own mistakes.

M: so what would describe as a successful lesson?

T: for example, last I was teaching on the topic ‘animals and their sounds’, so I began by asking them to mention all the domestic animals they have seen in their homes and on the farm. Then I put the list of the animals on the board. Next I take an animal and ask them to tell the sound it makes, for example I said

‘ the pig on the farm says grrrrrrrooo.....’

‘the dog says woow, wooow,.....’

‘the goat on the farm says meeehhhh.....’

‘the cow on the farm says moooooohhh..’

This initially made them very excited, so after I went over again and I asked them to go over the sounds, in groups and individually. After this they started calling out that

-‘the crow says craaawww.....’

So when they go home they still have these ideas on their minds. Next I sketched the animals on the black board with their names and sounds written under them. So I asked them to draw the domestic animals in their books and put the sounds they make under each animal. Afterwards I took their books and assessed to see that they had all understood the lesson.

M: So how do you help the abnormal girl?

T: you know she sometimes comes to school very angry. So whatever work, I give the children, I have to do hers separately. You know I repeated her in P.1 and now she is older than the others in her class. So what I do is I begun by asking her to write on the floor and in the sand.. I would write the first alphabets of her name, on the floor, on the wall and up on the black board. She would write this out every morning when she comes to school.

M: Why do you write on the floor and in the sand?

T: Because if you give her an exercise book she will destroy it. By asking her to write in the sand she could play around it and gradually get the skill.as she gradually progressed, I also use signs and symbols to communicate with her, for example the

symbol 'C' means go whilst the symbol 'U' means go and buy 'banku' (a traditional food).

M: So how do you detect that some children are lost in class?

T: I can tell from their participation and excitement., so if you see that they are dull then you change your teaching style.

M: do you use the teacher's guide?

T: no, it's someone's mind in there, so you don't rely on it.

M: so how do you teach the maths lesson on counting?

T: sometimes children have been playing with some things at home, so you can ask them to mention some of these such as cups, milk tins, milo cans, pencils, etc., sometimes I will ask them what they do at home. So then I group them together as they bring such objects. The can all be counted even they themselves are countable! So I would ask them to use the objects they have or those who would not bring anything will use what I can supply as well. Then I group them into 4 or 5, some milo tins milk tins, pencils and they count them one by one. Also I would just pick 5 girls and 5 boys and ask them to count. Afterwards they will put two groups of 5 together and count them all. This helps them to understand and they are able to do it on their own.

M: how do they understand? T: You as a teacher must lead them by giving an example., so I will then draw 4 balls and four buckets on the black board and ask them to count for me.

M: So is this from any guide

T: no

M: how?

T: God's gift

M: how do you make decisions?

T: I will look at the ages and decide which methods will help them understand , then I will choose objects within their environment because we do not have any resources to use, so that each method will link the children's mind to the topic so they can enjoy the lesson.

M: O.K. thank you very much Madame, I will be back.

T: Bye.

### Teacher A 3

### Observations

Class 2 D

No of pupils: 44      Average age: 8-9 years      9.10 am (50minutes)

Topic: (Mathematics)-fractions

(children are seated in pairs there are 5 rows with 4 pairs in each row (there are overlaps in some rows).

Teacher: class stand

All: they stand

Teacher: look at me-

All: they follow the teacher's pattern

Teacher: sit down and close every book. Yesterday we talked about how to divide. We will revise and go on to today's lesson. So we have on the board. She writes the date and topic and some boxes

Teacher: what do I have (she has a piece of paper in her hands and tries to divide it into two parts.)

Some children watch the teacher and say the answer. she takes another object a stick and breaks it into three parts

Teacher: Yaw what did I do?

Waits for the child to answer but some others shout out the answer.

Teacher: today we are going to do fractions, everybody, fractions-small over big. Girls say 'small over big'.

Girls: 'small over big'.

Teacher: boys 'small over big'

Boys: 'small over big'

Teacher: you divide the whole into parts, we can also share parts.

Teacher draws a box, an orange and a pencil on the board. she shades all object into different portions.

Teacher: all of you look at the board. When we divide into two parts we have two halves. Look we write one over two like this- $\frac{1}{2}$ . She has put several examples on the board.



Teacher: okay watch me. What did I do?

She shades another object on the board and write half again. O k, so all of you did you see what I did?

T: say one fourth and write  $\frac{1}{4}$ . So Adom come write  $\frac{1}{4}$  on the board. Nhyira, come and do the first one –one over two.

They both come and Adom shades well but could write the one quarter well, so children are excited, and eager and want teacher to call them so they could also try out their hands.

T: will another person try?

All: yes

T: now look at the next one I am shading two out of three parts what do we call it? Two thirds-or  $\frac{2}{3}$ , so we are sharing three parts and one will get two the other will take 1.

All: Me, Me.....(trying to draw teacher's attention)

Teacher selects more children to come and try out shading and matching with the right fractions, and those who do not get it wait till they watch other come to do it correctly.

Teacher: Boafu come and draw a box, divide into four and shade two.

He comes to do it

Teacher: all of you, 'you see what happened'?

Teacher: now let's see what fraction do we have?

All: Me, Me...

T: we have what? Kwesi come and let's see, everybody watch. Kwesi comes to draw and writes  $\frac{1}{2}$ .

All: no.....(they all shout back, this makes him try to think further but he couldn't so teacher makes to wait at the front and call Serwaa) . Serwaa is able to write  $\frac{2}{4}$ .

T: all of you clap for Serwaa, but we write  $\frac{2}{4}$  this way- $\frac{1}{2}$ . Because it still in two parts can you see. Watch it well. When it is two spaces, we shade on to get two halves. So also ,when it is 4 spaces, and we shade two parts, we are getting two equal parts. So see the two on the board. They are both halves. Okay let's do more examples. I have put some more examples on the board try and writ it out in your jotters, I am coming round to see. Let us also cut this orange into four parts now four people come and share.

T: row 1 get ready I coming to see your work.

As she goes round all the 5 rows there are still a number who are struggling. She stops and helps all such people. Its break time and she remarks.

O, k try hard and do the examples before you go out for break . show me your work before you go out. The smarter ones finish early and the slower ones gradually finish.

If you don't finish, show mw where you are and you will come early from break and finish. There a about four children who have to go and come back. They all go out finally.

Its break over

T: now we will go over what we did and then do the exercises in your text books.

Children watch as teacher goes over the beginning stage and she then asks

T: ok, Derrick come and draw an orange, Kofi come and shade into our parts and Esi, come and shade  $\frac{1}{2}$ . All children watch their peers do these tasks.

T: O.K. well-done, now take your exercise books, and John and Yaw share your text books and all open to the page 35 on fractions and do exercise 6. Start work everybody do 1-5 and take 5-10 home for home work. Bring your work let me see when you finish.

So she ensures all have gotten the text books. She goes round and after 20 minutes she sits watching and waiting for some to come and show their work. Some go to her desk others put up htheir hands and she goes there to see the work. Teacher is happy and children are also happy.

8 minutes to the end of the lesson.

T: the science teacher is ready to come in so pack your books and take it home for home work I will check tomorrow.

Lesson ends

**Teacher B 1****Observation**

Class 2 E

No of pupils: 44      Average age: 8-9 years      9.10 am (50minutes)

Topic: (Mathematics)-Subtraction

(children are seated in pairs there are 5 rows with 4 pairs in each row (there are overlaps in some rows)).

Teacher: class stand

All: they stand

Teacher: hands up, look at me-open, close

All: they follow the teacher's pattern

Teacher: sit down and close every book. Yesterday we talked about which has more and which has less. We will revise and go on to today's lesson. So we have on the board. She writes the date and topic the two boxes

Teacher: so we have two boxes which has more A or B?

Some children watch the board and say the answer. she draws another set and calls one pupil to come and match.

Teacher: Yaw which group has many more, A or B?

Waits for the child to answer but some others shout out the answer.

Teacher: today we are going to do subtraction, everybody subtraction. Girls say 'take away'

Girls: take away

Teacher: boys 'take away'

Boys: take away

Teacher: you take small from big. Sometimes some will remain sometimes none.

Teacher puts a group of pencils in a box on the board.

Teacher: all of you count the pencils. How many pencils?

Teacher: okay watch me. What did I do?

She takes three pencils away and asks children to tell her what she did.

All: you took three pencils (in a chorus)

Teacher goes on, though some are not paying attention

Teacher: Brentwood come and count eight pencils on the table and take three from them.

He comes to do it

Teacher: all of you, 'you see what happened'?

Teacher: now put your counters (bottle tops) on your table and count 12 (twelve)

Some bring out their counters other do not. Teacher goes for some more counters and goes round to give to those who do not have, but not all are able to get some.

Teacher: count twelve...shhhhhhhhhhh keep quiet

Pupils are trying to do the counting; some are able to do this faster than others

One pupil: please Mrs. X mine is... she has none to use

Teacher: she shouts I told you to bring some from home.

More children come out, please I don't have

Teacher: then you have to work in twos

Teacher: Tamakloe count twelve

One child is crying, teacher ignores him.....

Teacher: Maame you have too much share with others

Teacher: okay have you all finished counting

Pupils: yes (not all pupils give this answer, some are still not settled )

Teacher: now take away 6 and keep the answer. Basua, go to the board and take 6 six from the box.

Basua goes to the board and is able to perform the task.

Teacher: good clap for him

All children clap for Basua

Teacher Adu come and write 12 and take 6 from it.

He has difficulty

Teacher: Ama, come and help him, Adu stay there don't go.

Teacher: Peprah come and stand here you're just disturbing us....

Meanwhile Ama is writing the correct work so teacher calls Adu's attention

Teacher: so Adu have you seen how to write it?

Teacher: all of you count 11 eleven and take seven from it. Don't shout the answer

Teacher: Ama show 11 on the board and take seven from it, go and don't give the answer.

Teacher: Colman show how to write the answer.

Colman writes the answer but has difficulty in showing how.. teacher comes to stand by her and helps her to do the circling.

Teacher: okay all of you count 15 fifteen, children are beginning to get the counting exercise. Teacher goes round to check.

Teacher: now take 8 from it.

She goes from desk to desk to check and helps those in difficulty

Teacher: Oduro go and show the 15 on the board

Oduro goes to board, squashes the 15 in a corner, but teacher asks him to spread them, he does it again

Teacher: okay look on the board, we are taking how many from it?- Stephen write 15.

He is able to write 15

Teacher: then write the take away sign

Stephen writes the addition sign

Teacher: all of you see what Stephen has done.....he is not here with us... we are not adding but subtracting. So do it again...

Teacher: Adutwumwaa come and do it

She comes but teacher has to assist her.

Teacher: all of you 'I am a little tea pot'

They all start to recite.... Teacher continues with other rhythms and all the children recite them. This practice seems to make them all alert.

Teacher: all of you tomorrow come with the counters coz some of you are still using the addition sign.

Lesson ends

## **Teacher B 2**

### **Observations**

Class P 1

Time: 40 minutes

Class size: 40

Average age: 6-9 years

Topic: Identification of Objects

Teacher takes a few objects- a broom, a duster, a napkin; she picks them one by one and asks the children to mention the name of the item. Not all children are paying attention.

Teacher: (takes a broom) what is this?

All: a broom

Teacher: (takes a duster) what is this?

All/some: a duster.

This is repeated for the last item; holds the duster high up and tries to explain its real state to the children

Teacher: holding the duster. We call this a rag; it is old and dirty.

Teacher takes a bowl and also asks the children to tell its name. She calls Simon.

Teacher: Simon, tell us the name of this.

Simon: blue plate

Teacher: what do we use plates for?

Some: we eat

Teacher okay

Teacher takes a mat

Teacher: what is this?

Some hands go up.

Teacher: yes Lorrentia.

Lorrentia : (speaks in Twi) a mat

Teacher: yes Bismarck.

Bismarck: couldn't answer in English.

Teacher: I want the English word. Patricia.

Patricia: mat

Teacher: yes. What do we use the mat for?

Some: we sleep on it

Teacher: good who will sleep on it?

One child comes to sleep on it. Children are enthused and they all clap for her and teacher remarks.

1:20 Activity 2

Teacher mentions the new word and all repeat (rote/routine); broom, rag, plate mat.

All: broom, rag, plate, mat.

1:30 Activity 3

Teacher sings to demonstrate how the activity sweeping can be learned. she starts to sing..

This is the way we sweep the floor, sweep the floor, we sweep the floor,

This the way we sweep the floor, early in the morning.

All children begin to sing whilst one girl comes out to take the broom from the teacher to sweep the floor. teacher then translates the words of the song into Twi for all to understand better.

Amoako (a boy) also comes to sweep the floor and all children continue to sing.

Teacher: good.

Dorothy and Wisdom also come to sweep and teacher praises them all for the effort made.

Teacher now draws the objects on the board. So in addition to the real objects present she has them on the board.

Having looked into the teacher's guide, I find the teacher's guide asking the teacher to talk about the action but instead of using only the picture to show how to sweep she actually demonstrates the activity. This could actually make learning occur

11:30 teacher goes round to explain words again.

Teacher uses the objects to form sentences.

Teacher: let's form short and small sentences; the broom is on the tabnle

Someone should form another sentence. Kingsley

Kingsley: the water is on the table

Teacher: well done, so now use 'under the table' say the rag is under the table'.  
Solomon, say it

Solomon: the rag is under the table

Reflections

As she goes beyond the guide is learning taking place here?

Activity 4

Line A group 1

Line B group 2

Line C group 3

Line D group 4

Teacher: group 1 and group 2 will sing the song 'this is the way we sweep...

Children at this point are still having difficulty singing the song. So she explains again and then asks them to go home and talk about it to their parents.

Lesson ends

Reflection

Teacher has tried to end the lesson by extending the learning to the home environment. Will this be feasible? Children have great difficulty in understanding the language in the classroom.

Reflections

Teacher tries to make use of songs and demonstrations to teach. Her startetegies. Seem fragmented. Though they could come together to make a whole. Children were quite excited in this class.

Lesson Ends.



### Teacher B 3

#### Observations

Class P 1

Time: 40 minutes

Class size: 40

Average age: 6-9 years

Topic: Language and Literacy: Friendship

Classrooms are similar, walls/decorations and learning materials are all dirty and even folding up.

11: 25 Cupboard boy shares textbooks

Teacher: (in twi) all of you open your textbooks to page 24. I've told you , you have now left K.G (Kindergarten) so each one should do private work. Sshh do not speak, take good care of your books.

Teacher: look on the board, can you describe what is happening in the pictures? Come and show it Dorothy.

Dorothy: two friends, one has fallen and the other is helping her.

Teacher: okay clap for her. Elizabeth you too come and try

Elizabeth: two friends sitting under a tree.

Teacher :clap for her.

Teacher: all friends are in pairs. Now who is your friend? Tell me Stella.

*This is a form of reflection for the children, teacher goes out of the textbook and allows the children to show who their own friends are.*

Stella: my friend is Elizabeth.

Teacher: Charles who is your friend?

Charles: my friend is Kofi.

Teacher: what do you do with him?

Charles; I go to play football with him at breaktime.

Teacher do you all have friends?

All; yes

Teacher: show me one by one. *(they do this individually).*

Teacher : look at the pictures on page 25, in pairs describe what you see to each other.

Children work in pairs. Teacher goes round to ensure they all do the task.

*Teacher moves from desk to desk and interrogates each pair of students about the pictures they are looking at in the textbook .she brings out another diagram to provide further explanation to the understanding of the pictures. (Some peer teaching here)*

11:40 teacher puts three words on the chalkboard.

11:42 she asks all children to pronounce and repeat after her. She takes each word and explains each with an example.

11:45 teacher: now let's read. *She shows the page.* I will read first; look closely at the book and I will ask questions before you also read. No playing when we're reading. Listen carefully.

*Teacher reads the first sentence in the passage and pauses. She asks children to explain some key words she points out to them.*

Teacher: what is the meaning of honey? What comes into your mind when you hear it?

There are gifts. How many?

Children: 2 gifts

Teacher: let me call first

All: honey- ewo

Teacher: Elizabeth have been playing. Tell us the other gift.

Teacher goes closer to her and Elizabeth answers softly.

Teacher: clap for senior (her), and let her say it louder. Now for the boys we clap and say chief in youruba language, and for the girls we say queen.

*Refelection*

*This insertion here makes the children excited. Children see some form of rewards from the teacher and are happy about it. Reading continues for about 20 minutes. Teacher continues to read and all repeat after her.*

Teacher : put your finger on the word "atta manntonnou" for me to see.

*She goes round to see this action. She assits those who have not found the words . checks on sitting posture.*

Teacher: you have done it. Dorothy why are you happy today? What did you eat today/

Dorothy: chips.

Children begin to fidgit in the classroom, teacher ignores this. *(is she being flexible here?)*

Teacher: I am reading the passage again.so which day were you born? Rhahab?

Rahab: Tuesday.

Teacher: all those born on Sunday lift up your hands. She repeats for all days of the week. Teacher goes round to check on all activities.

Teacher: Listen to me you are not to be canned so stop all the KG (kindergarten) activities

Children keep looking out of the window.

Teacher goes back to read the passage for the 3<sup>rd</sup> time.

She takes the teacher's guide and begins to take the steps outlined in it. I ask for a copy and she offers me one. There are nine steps in it. She begins with step 4. Step 8 will need alphabet cards but there are none available. Teacher writes the words as written in the guide, and uses this to teach the sounds suggested for the work.

12:15pm Activity

Teacher: draw your best friend into your books

All: heeey (very happy)

Teacher: all those without pencils and sharpeners come...

Observation

*Teacher sharpens pencils for children who need help. She puts the waste into her hanky for later disposal. Children are not using the drawing books. Teacher explains that they can still draw in them.*

12: Lesson ends.

## **Teacher C 1**

### **Observations**

Class 1 A

Topic : passage reading

Teacher puts a passage on the board :Mr Opoku's Car

T: everybody we are going to read

T: all of you pay attention. ( children are divided on paying attention some five boys are arranging brooms at the back of the class, some are absented minded, teacher expects them all to be reciting after her. They seemingly do so...

T: she reads lone by line and asks the children to read after her. They follow this procedure to the end of the passage. She underlines a few words and explains with twi, assuming everyone has understood.

T: AMA I know I'll get you.

She goes to one child and spans her with the cane.

T: manatu you're not reading....a

All of you read... Some cannot read. Hey are you reading from the board or you're reading off head...

All: mr Opoku....she..

T: it's not she who is that saying she...? If I hear you say she I'll punish you. Abena don't say she...

T:all of you read again

All: chn read with difficulty. Only a few are reading. Some are reading from memory, others are idle just watching or gazing at the board...teacher hardly takes note , she only listens to this who are reading

T: only a few of you read, clap for those who read, when I give it to you for home work .....you'll do it..... Open to pages 27-28, we will discuss before you take it home....

Teacher distributes homework books.

Warns one child that she has offered her teacher's copy so if she refuses to return it she'll ask her to buy a new one. Another child has the book in her bag and tells teacher she couldn't find it.

T: you'll write the answer into your English home work, now open the page. What does Mr. Opoku have ?

All: a car

T: don't answer car, say.. mr. Opoku has a car...

All: ,mr....

T: no. 2 what is the colour of the car?

All:.....

This continues for all questions. Teachers answers questions for children in class. ( for those who may not have help at home would do this now)

She goes through all the exercises....with pupils as a way of answering the homework questions

She reads instructions with children,

T: what is there

All: black..

T: good clap for yourselves..those who cannot follow are left behind.

Put your books in your bags.

Lesson ends.....

## Teacher C 2

### Observations

In the P. 3 classroom

Subject Mathematics (Addition)

no. of children 30

Teacher marks the register. She groups the children according to A, B, C,....

Teacher: Now you here you are group A, the next you are group B, and so on, Okay, all groups go out for your stones.

*(All Children run out of the classroom. They go for stones, others go for bottle tops. Each child comes back with twenty stones. The walls of this classroom are full of cobwebs and black dust. Very dusty drawings of actions explained in Twi and English are found here). Children have their stones and bottle tops on their desk; they are now settled ready to work.*

#### Stage 1

Teacher: We are going to add four digit numbers, all of you pay attention. Last time when I was not here the other P.3 teacher did four digit numbers with you, so today we will continue. *(This school has two streams so there are two teachers for each year group)*. Now everybody say one digit. (Teacher is speaking English, but I'm not sure all children here have understood the language).

All: one digit

Teacher: example, 1,2,3,4,5,6,7,8,9, are all one digit numbers.

*Children are watching her; she calls one child to come to board to write one digit on the board.*

Teacher: Prince, come and write one digit number on the board.

Prince: he writes zero-0

Teacher: okay, eehmmm Yaw you too come and write one digit number.

Yaw: he writes two- 2

Teacher: okay who else...?

*(She calls out two more children and they are all able to write the numbers on the board. This could be because they have an earlier lesson with the other P. 3 teacher. At this point all children are just watching teacher to be sure they are giving her the right answers. Teacher seems to be concerned with what is right. There is little opportunity for trial and error here). Teacher writes four single digits on the board.*

Teacher: All of you say single

All: single

*(A clear case of rote learning is being exhibited here)*

3  
4  
7  
+ 1

Teacher: Now we are going to add these single digit numbers.

*(She changes the language to Twi at this point. She explains why she wrote the figures in the straight line and shows where the answer should be written. She tell the children that the single digits are in the ones column and the answer will be in the tens column). She works another example and all children watch her. Children are seated in groups of 8 and 10. Teacher uses the local twi language to explain again.*

2  
3  
5  
+8

Teacher further explains that writing in a different way will be wrong. She pauses here for difficulties.

Teacher: any questions, do you all understand?

All: yes Madame.

*Not sure of the children's response but teacher moves on to stage 2.*

Stage 2

Teacher: one person from group A come, Mary come and use to the stones to add what is on the board.

6  
3  
5  
+4

Mary counts 6 stones then counts three stones and adds them. She stops.

Teacher: Mary have you finished?

Mary: yes.

*She doesn't look confident but insists she has finished. Mary remains in front of the black board. Teacher pauses and explains to the class that it is a four digit addition and not only two digits (not sure if this is really an explanation, maybe she is actually telling them). Then she calls Mary's attention and helps her to go over the task again. Mary tries to add all the four digits and she gets it done.*

Teacher: all of you clap for Mary

*They all clap for her. The children do not appear relaxed, they seem to be edgy, and they are very quiet. Some more children are looking for the right strategy for the teacher to praise them so they also attempt to do the same task. Boateng comes to the board and is successful. Teacher allows four children to come and quietly they are all able to get the work done. Teacher now takes the textbooks and asks the class prefect to come out share them.*

Individual work

Teacher: okay now, its nine o'clock, the work is for 30 minutes. I'll collect your books at 9.30.

*One cannot tell whether children have understood but teacher expects them to work more examples to show their understanding....Children are fidgeting, fighting, and making noise, whilst others have settled to start work. Teacher moves round the classroom to check those who do not have seats. She tries to ensure that each child has a pencil and a book to use. She goes back to her seat and waits for them to submit their books. She collects those who bring them and puts them down. Time is finally up.*

Teacher: okay time is up put all your books down and finish after break time.

Lesson ends



### Teacher C3

#### Observations

Class 6

Time: 80 minutes (double period)

Class size: 35

Average ages: 12-14 years

Topic: English Language 'Aspects of oral skills' - 'sounds'

9:30-9:35 Teacher writes the topic and draws a work sheet from the text book on the chalk board whilst the cupboard girl shares the textbooks. The work sheet makes use of two letter words which students are to use to form words. Textbooks are few and children have to share by three to one book.

9:35 teacher calls on one to read the first line as found /written in the text book.

She writes 'th' on the board and helps them to pronounce them. Children look into the book and try to form some of the words under teachers guide.

*Teacher reads the instructions in the book and informs the children (no explanations).*

9:40Teacher: look at the 1st example ... look into those words and give us the ones which fit the answer. If you make noise, I'll drive you out of the classroom... Now listen, *they've already given us the words we're 'not going to use any words outside the book!'. Children look scared and are quiet watching the teacher. One child puts up her hand and picks a word from the book. Others seem to be doing the same.*

9:45Teacher: pronounce the words, properly and audibly. Now let's go to the 'ea' column. Who will try, please speak out loud.

Student: clean

Teacher: Yees!

*Other students give some examples under the 'ea' column. Meanwhile some students are conversing, but teacher just ignores them and continues the class with those who will learn.*

Teacher: let's go to the last column. Someone should volunteer and give out the answers. One student gives out the answer, but seems to be different from others. At this point, teacher realizes some students are using different textbooks. She confirms with the students that the the old text book has 18 words and the new one has 25 words.

Teacher: now am using the new one.

#### Reflections

*I am really not sure of what this teacher is doing here, this is a class 5 classroom and half of the class are not part of the lesson, the remaining half are either scared of the teacher or do not understand the lesson or both. What is teacher knowledge here?*

Teacher: so is that all?

All: yes madame.

Teacher: then clap for yourselves. Let's go through yesterday's passage, where are the readers?

Reader 'A' starts to read, teacher interrupts her as she hears some noise.

Teacher: shouts out. Go away from the class, you know yourself, walk out ...go away from the class and allow me to do my work.

*The student walks out of the class before the teacher continues with the lesson. Fear is actually written all over the faces of these children. They are not relaxed at all, the lesson proceeds and reader continues. As she reads she has some difficulty in pronouncing some words but struggles with the words, teacher just waits for her and eventually she completes the sentence.*

Teacher: good clap for her

*Reader 'B' continues and teacher assist her to pronounce some words as she reads the line. This process continues for a while and three readers do similar reading with teacher asking the class to clap for them after each turn. Teacher now picks a word and asks all to pronounce after her.*

Teacher: all of you say 'awful'

All: 'awful'

Teacher: say 'dentist'

*She picks one child, Esi to pronounce the words but she is unable to do so. Teacher ignores her and calls on a better reader who reads very fluently.*

10:00 Reading ends.

Teacher: we don't have time let's hurry. She asks questions about the just ended passage. Teacher: Why did Hannah have no friends?

Ati: because her breath was bad.

Teacher: why did the Dentist call Hannah a disgrace?

*Students give mixed answers*

Teacher: let's concentrate on her teeth.

Jane: her teeth were green.

Teacher: so 'green' is pronounced like 'clean'. Can you see the girl with green uniform and green teeth? They all laugh for the first time.

Teacher: what must Hannah do so she is not a disgrace?

Helen: she should not clean her teeth.

Teacher: no...

Another student: she will try to clean her teeth.

10:07 Teacher: so do you think Hannah will clean her teeth every day?

A student: No, because she didn't like to clean it every day.

All: No...

Teacher: Yes that's her opinion. What's your opinion? There is no one answer so Hannah will do it?

Another student: Yes she didn't want to be disgraced.

Teacher: this is another opinion, so I'll take them both and write them on the board. Take the one you are comfortable with.

*This is a very deprived way of allowing children to do their own reasoning. Teacher is just weird...*

10:10 Teacher: *calls on the class cupboard monitors to give out the exercise books.* Give out the books and hurry up, we have only 20 minutes to go. I am giving you home work, tomorrow God willing, we will have our 1st class test.

Fidgeting has not ceased, so she shouts again

Teacher: hey, the 2nd person will go out soon. This is not a market place, so if you make noise you go out and allow those who want to learn to stay.

***A clear authoritarian and boring lesson***

Lesson ends

## **Teacher C 4**

### **Observations**

Recall is used to remind learners. Still in twi

Topic feeding in plants was covered last week..

Questions are asked on the past

T: what are some of the animals in your area?

P: dog, goat, cats, etc....

T all these fed on diff kinds of food so we have grouped the food into different categories.

Some eat fresh meat---Carnivores

T: mention those you know that eat only flesh

P: lion, crocodile

T: yes

P: snake

T go home and ask if snake eats flesh

T so tell the name for flesh eaters

All : Canivores

T some also feed on plants, raise up your hands then I'll call you.

T we have cow, goat, sheep,cow

Mannerism whilst serving the food then it's getting finished,whilst teacher is teaching, the period will be running out, so if you do 't pay attention, you'll be left behind.

Teacher explanations ends. Exercise books are shared.

T use your own mind to answer the questions on the board and we'll compare tomorrow

T when you get your books write the date and the topic.... This not h/ wk it's a class exercise.

One child is able to complain she doesn't understand. Teaher tries to help her but this is done briefly.

Pupils are obviously matured here so giving instrutions os not difficult

Teacher realises that about six children are absent with several reasons.

Some go for condemn business.. "....".....

The use of religious ideas as a form of discipline

as she goes round she finds the need to do further explanations, this time .she allows  
chn to put pictures on the children

Obsv.... Classroom arrangement in groups of 6