AN ANALYSIS OF THE IMPLEMENTATION OF REFLECTIVE TEACHING METHODS IN SELECTED PRIMARY SCHOOLS IN LIVINGSTONE DISTRICT OF ZAMBIA

BY

MARY SIFUNISO

UNIVERSITY OF ZAMBIA

2015

AN ANALYSIS OF THE IMPLEMENTATION OF REFLECTIVE TEACHING METHODS IN SELECTED PRIMARY SCHOOLS IN LIVINGSTONE DISTRICT OF ZAMBIA

BY

MARY SIFUNISO

A DISSERTATION SUBMITTED TO THE UNIVERSITY OF ZAMBIA IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE DEGREE OF MASTER OF EDUCATION IN ADULT EDUCATION.

DECLARATION

I Mary Sifuniso do solemnly declare that this dissertation titled: An Analysis of the Implementation of Reflective Teaching Methods in Selected Primary Schools in Livingstone District of Zambia is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references and that the project has not been accepted in any previous application for an academic award.

Signed …………………………….. Date…………………………………….

Supervisor's signature………………… Date…………………………………

COPYRIGHT

CERTIFICATE OF APPROVAL

This dissertation by Sifuniso Mary is approved as a partial fulfillment of the requirement for the award of the degree of Master of Education in Adult Education at the University of Zambia.

Examiners' Names and Signatures:

Name   Signature   Date

1…………………………….. ………………………….   …………………………

2…………………………….. ………………………….   …………………………

3…………………………….. ………………………….   …………………………

DEDICATION

To my family

This dissertation is dedicated to my family and children Jessy Mwiya and Mushiba Mwiya who made a positive contribution to my studies through their understanding, patience and encouragement.

ACKNOWLEDGEMENT

ABSTRACT

The purpose of this study was to investigate the implementation of reflective teaching methods in Livingstone district of Zambia. The objectives of the study were to identify the forms of reflective teaching methods used by teachers, determine the implementation of reflective teaching methods in Schools and to establish factors which influence the implementation of reflective teaching methods. Data were collected from a total of hundred (100) respondents comprising of six (6)head teachers, two (2)deputy head teachers, six (4) senior teachers, 42 teachers, 46 pupils.

Descriptive survey design was employed and data were collected using interviews, questionnaires, an observation checklist and document review. Stratified random sampling was used for the questionnaire respondents while purposive sampling was used to determine the teachers to be interviewed.

The first major finding was related to forms of reflective teaching used by teachers. The forms of reflective teaching methods used by teachers were role play, mentoring, diaries, peer observation, continuing professional development meetings, storytelling, mind mapping and action research. The second finding was on the issue of the implementation of reflective teaching. Though most respondents indicated that they used written outline as opposed to mental outlines in the implementation, the data collected using observation showed the opposite as many used mental outlines. The third finding was on factors influencing implementation of reflective teaching. Pupils' needs, administrative support, availability of space in the classroom, subject matter, and belief about teaching were the reasons teachers gave for implementing reflective teaching.

The study found out that some factors hindered the implementation of reflective teaching methods. These were time limitations, curriculum needs and class size. Although teachers were aware of the importance and relevance of reflective teaching, observations showed that they had difficulties to practice the same in their classes due to limited time, curriculum needs, and class size. Finally, the majority of students said that though their teachers exhibited some forms of reflective teaching, they would want them to change the way they taught and give them more time to participate during lessons.

Based on the findings, four major recommendations were made. First, this study established that teachers used only one quarter of the variety of forms that were available during the period of study. In order to establish whether or not teachers were conversant with the remaining forms, the study recommends a longitudinal study for more in-depth insight into reflection and its developmental process in further stages. Secondly, the study recommends that school administrators should find mechanisms of tracing reflectivity among teachers rather than just use teachers' lesson plans. Thirdly, teacher Educators to provide short courses on reflective teaching and finally action research to be in the curriculum in all teacher training colleges of Education in Zambia.

TABLE OF CONTENT

CHAPTER ONE: INTRODUCTION

LIST OF TABLES

LIST OF FIGURES

ACRONYMS

CPD   Continuing Professional Development

EFA   Education for all

ESL   English as a Second Language.

FDG   Focus Group Discussion

FNDP   Firth National Development plan

ISBN   International serial book number.

JICA   Japan international Cooperation agency

MOE   Ministry of Education.

QEP   Quality Education Project

RT   Reflective teaching

RTM   Reflective teaching Method

SACMEQ   Southern African Consortium for Measuring Education Quality.

SBCPD   School Based Continuing Professional Development

SCN   save the Children Norway.

SPRINT   School programme of in-in service for the term.

TESOL   Teaching English to Speakers of other Languages

UNESCO   United Nations

UNZA   University of Zambia

<center>**CHAPTER ONE**</center>

INTRODUCTION

1.1 Overview

In order to have a better comprehension of the dissertation, this chapter presents the background to the study that analyses the implementation of reflective teaching methods in selected primary schools, statement of the problem, purpose of the study, general objectives as well as the specific objectives. Thereafter the significance of the study shall be presented after which delimitation of the study and the limitations shall be generated. Ethical issues will also be highlighted.

1.2 Background of the study

Educators and scholars recognise the fact that there are many factors that contribute to low learner achievements. These include poor teaching methods, non availability and lack of use of teaching and learning materials, classroom interaction between teachers and pupils, lack of qualified teachers to mention but a few Mbozi, (2008).These factors have raised concern on quality education that should bring about learners that are functional to society's needs and aspirations. This has led to adoption of different teaching methods including the reflective teaching methods, adopted for implementation in some Zambian schools. As a method of teaching, reflective teaching was an inquiry approach that emphasis an ethic of care, a constructivist approach to teaching, and creative problem solving Henderson, (1992).

Teachers using a constructivist approach place emphasis on big concepts, student questions, active learning, and cooperative learning, and they interweave assessment with teaching. The implication of this is that schools ought to incorporate reflective thinking and teaching into a sequential curriculum pattern with initiatory, developmental, and culminating phases. It calls for the need to explore teaching, academic preparation, understanding learners, organising for teaching as well as schooling and cultural context Mbozi, (2008).

Engaging in reflective practice was seen to be one of the methods that could improve learner achievements. Therefore reflective practice is viewed by many as the hallmark of professional competence for teachers.Cole and Knowles, (2000) elucidate that reflective teaching is the

<center>1</center>

process of self evaluation and reviewing of what has been taught. There is learning in the process of teaching when the teacher engages in the research through interactions. The whole process is learner centred as the needs of the learner are considered.

Therefore this calls for practitioners to employ teaching strategies that are learner centred.It is against this background that the need to prepare professionals who will be reflective practitioners has gained wide acceptance and is increasingly being adopted as the standard to aspire for across numerous professions.

Pollard (2004) urges that while professional standards for teachers in many countries advocate teachers to be reflective practitioners, escalating pressure to be accountable for students reaching imposed standards of performance increases the likelihood of teachers using teaching strategies that prioritise efficiency and expediency, which may come at the expense of ongoing reflection on teaching practices. Such demands can leave teachers feeling powerless. However, the best antidote to take control of their teaching lives is for teachers to develop the habit of engaging in systematic reflection about their work.

Reflective teaching methods support the development and maintenance of professional expertise in teaching (Pollard, 2006). Reflective teaching is born out of reflective practice which involves an integrated way of thinking and acting. With regards to teaching, reflection involved recognition that teachers should be active in formulating the purposes and ends of their work or objectives, that they should examine their own values and assumptions and that they need to play leadership roles in the curriculum, development and school reforms.

1.3 Statement of the Problem
A number of studies have been conducted on educational methods, school effectiveness, and student achievements in Zambia. For instance the southern Africa Consortium for Measuring Education Quality (SACMEQ) report conducted in 2011 reviewed that there were low learner achievements due to many factors among them poor teaching methodologies. In view of the foregoing, a number of interventions by various stakeholders have been put in place to curb the low achievements of learners at all levels. In 2002 reflective teaching methods were introduced in some schools of Southern Province as part of quality education project by the save the children Norway. The project focused on training in service teachers and teacher

educators to become reflective of their own teaching and learning in the classroom. This was continuing professional development for teachers. This componet makes it an adult education programme as it targeted in-service teachers. The methods were believed to have a number of advantages like encouraging teachers to regularly evaluate their approaches to teaching and learning, become more aware of the importance of teacher-pupil interactions and use action research to enhance teaching and to maximise pupil's learning. The reflective teaching methods are aimed at increasing the quality of education provided to the pupils. A review of the implementation of an educational intervention is necessary to ensure that the benefits are maximised. In the case of reflective teaching there was no empirical evidence on the implementation of the teaching methods in the beneficiary schools at the time of the study and this necessitated the study.

1.4 Purpose of the Study

The purpose of the study was to analyse the implementation of reflective teaching methods in selected primary schools in Livingstone District.

1.5 Specific Objectives

The study's specific objectives are to:

(a) Identify the forms of reflection and reflective teaching methods used by teachers.
(b) Determine the implementation process of the reflective teaching methods in the schools.
c)   Establish factors which influence the implementation of the reflective teaching methods.

1.6 Research Questions

The research attempted to answer the following questions:

(a) What are the forms of reflection and reflective teaching methods used by teachers?

(b) How is the implementation of reflective teaching methods in selected primary schools?

(c) What factors influence the implementation of the reflective teaching methods?

1.7 Significance of the Study

It was envisaged that the results of the study would contribute to the learning of many professionals as well as enhancing the professional standards and competences of new and experienced teachers which in turn would improve the quality of teaching in schools.It was

hoped that by making the research report available to educators and policy-makers who are responsible for the proposed initial teacher education programme, it could act as a catalyst in ensuring that the whole programme supports the idea of reflective teaching. Alternatively, at the very least it could raise curiosity regarding reflective teaching.Awareness of factors influencing the implementation of reflective teaching methods would bring to the fore the importance of reflection in the daily lives of people. Therefore society in its entirety could benefit as their reflective practice would improve.

1.8 Delimitation of the Study

The study was confined to selected primary schools which were Linda East Primary, Linda west Primary, Livingstone primary school, High lands primary school, Maria Asumpter and Simoonga Primary school from Livingstone, in Southern Province.

1.9 Limitations of the Study

Borg and Gall (2003), postulate that limitations refer to factors which the researcher foresees as restrictions, problems and such elements which might affect the objectivity of the research findings.One limitation was the collection of data using retrospective reports. These retrospective reports were vulnerable to recall bias and the fact that in some cases the teachers were asked to report cases from previously taught lessons had an element of recall bias. In this study the danger of this bias was mitigated by the use of observation method which complimented the information collected from the reports. The other limitation had to do with reflective teaching. This method requires more time for the researched to demonstrate reflectivity and for the researcher to observe reflectivity hence a longitudinal study would have sufficed for observation of reflectivity.

1.10 Operational Definitions

The definition of the terms indicates how the researcher applied the terms in the study.

Reflective teaching: Looking at what one does in the classroom, thinking about why it is done, thinking about if it works and finding solutions.

Reflective practice: A questioning orientation towards one's actions

Pedagogical Reflective Practice: It is teaching practice in which the teacher undertakes deliberate and sustained reflection and action within a learning programme on the black board for the purpose of improvement. Pedagogical implies the reflection based on teaching and it also indicates that it takes place within a learning programme on the black board.

Reflective practitioners: Those who perpetually consider alternatives, taking action to continually improve practice throughout their professional career.

1.11 Theoretical Framework

Theoretical frameworks basically account for phenomenon and elucidate why things occur in a particular manner. Theories may be used to explain theoretical frameworks and in this study theories of learning were used to understand the theoretical framework.

1. 12.1 Theories of Learning

This study was guided by two theories of learning that justify reflective teaching methodologies and these are humanistic and social constructivist theories with the latter being the centre of the dissertation.

1.12.2 Humanistic theory*: Humanist theory posits that human nature is essentially good, that individual behaviour is autonomous, that everyone is unique, that all people are born equal and subsequent inequality is a product of circumstance and that reality for each person is defined by herself or himself, according to liberal humanist philosophers (EFA Report, 2005).According to the humanistic theory, learners are at the centre of `meaning making'. Education is strongly influenced by learners actions, is judged central to developing the potential of a child. Some scholars like Carl Rogers liken this theory to facilitative learning. The basic premise of this theory according to him is that learning will occur by the educator acting as a facilitator, that is by establishing an atmosphere in which learners feel comfortable to consider new ideas and are not threatened by external factors (Laird, 1985).Other characteristics of the humanistic theory include: a belief that human beings have a natural eagerness to learn and there is some resistance to, and unpleasant consequences of, giving up what is currently held to be true; and the most significant learning involves changing one's concept of oneself.

For the humanist facilitative teachers are less protective of their constructs and beliefs than other teachers. They are more able to listen to learners, especially to their feelings, inclined to pay as much attention to their relationship with learners as to the content of the course, fitting to accept feedback, both positive and negative and to use it as constructive insight into themselves and their behaviour. Learners: are encouraged to take responsibility for their own learning, provide much of the input for the learning which occurs through their insights and experiences, are also encouraged to consider that the most valuable evaluation is self-evaluation and that learning needs to focus on factors that contribute to solving significant problems or achieving significant results (Farrell, 2004).The theory therefore gives more freedom to teachers to be able to select the appropriate strategy to employ. Hers or his role was that of an overseer who guides the learning process and not the only one who knows everything.

1.12.*3 Social constructivist theory*: According to the constructivists view, education is a process whereby learners construct and acquire new knowledge, skills and attitudes in a social interaction with others. They believe that the activity must be meaningful to both the learner and the teacher. Learners are the main instigators and designers of the learning processes. Learning is seen to be a social practice rather than the result of individual interventions. The learning process is viewed as interaction or observation in social contexts and also movements from the periphery to the centre of a community of practice. Learning is in relationship between people and environment (Farrell, 2004). According to Dembo, (1994); and Glasersfeld, (1995) the social constructivist theory involves the necessity of the social set up and interactions of the learners.

Having summarized learning theories, it was evident that teaching and learning activities can be designed and implemented to take principles of learning into account. It was worth noting to think about individual differences among learners and to work towards including activities that have variety and interest for all the learners in educational programmes. Reflective teaching was one such strategy that can be useful in meeting the needs of both the learner and the teacher as the strategy accords both the learner and teacher opportunities to interact in the teaching and learning process. The teacher was not the champion of knowledge; rather they were seen as facilitators in

the process. Reflective teachers engaged in subjective learning which wasa type of learning situation where each student processes his/her thinking based on own thought or idea usually to a given problem. This helped both the teacher and learner reflect on the teaching and learning process. Subjective learning fosters; thinking skills that is theoretical, critical and systematical, processing skills that is organising and strategising.It also fosters expressing skills especially summarizing and writing. Communication skills that are listening, presenting and self-reliance where learners reflect and take responsibility of their learning are enhanced.

1.12.4 Contribution of Theoretical Framework to the Study

This research is conceptualised within the theoretical base of social constructivism. The focus was on learner's needs and the learners ware seen as unique beings. The proponents of constructivism argued that children were active thinkers who construct their own understanding of the events in the world around them Glasersfeld, (1995). Piaget postulates that constructivism enhances the chances for children to build their own knowledge in their own environments. This encourages reflection, group based and cooperative work, while acknowledging that knowledge acquisition is different for each individual which a teacher ought to bear in mind. In this study classroom processes were seen as central to understanding the reflective practice. Hence instead of simply focusing on the practitioner that is the teacher, the researcher decided to include observations of the classroom processes.

1.12.5 Organisation of Dissertation

The dissertation is organised into six chapters. The *First Chapter* outlines the topic, background of the dissertation and statement of the problem. It highlights the purpose of the study, specific research objectives, research questions, significance of the study, scope, delimitation of the study and limitations. Operational definitions as well as theoretical framework on which the study is based are given. The contribution of theoretical framework to the study and summary of the introduction are given. The *Second Chapter* reviewed literature that discusses the concepts of reflective teaching methods. The *Third Chapter* outlines the methodology adopted in the study. It discusses the research design, population, methods and techniques applied in data collection and analysis The ethical consideration as well as the summary of the chapter is given.The *Fourth*

Chapter specifically deals with an account of the findings of the study which were presented in the form of tables and figures. The *Fifth Chapter* presents the discussion of the findings on reflective teaching methods. The forms, implementation of reflective teaching methods in selected primary schools and the factors that influence the implementation of reflective teaching are explored through analysing available literature. Chapter six concludes the study and recommendations of the study are drawn

.

1.12.6 Summary of introduction

This chapter provided the background information to the study, statement of the problem, purpose of the study, main objective as well as the specific objectives after the rational of reflection in the practice was given. The research questions were highlighted and the significance of the study was presented after which delimitation of the study and the limitations were stated. The next section highlights various literatures relevant to the topic under study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

In this chapter, literature that was reviewed on the analysis of reflective teaching methods is presented. The chapter provides a synopsis of theories of learning, after which the theoretical base of the study is given. Literature on reflective teaching methods is presented in the following order; the concept of reflective teaching, the genesis of reflective teaching, augment of reflective teaching methods, the implementation process of reflective teaching methods, significance of reflective teaching, forms of reflective teaching methods, characteristics of environments and activities that support reflective thinking, factors influencing the implementation of reflective teaching methods, reflective teaching methods in Zambia major issues arising from literature and finally conclusion was drawn. The researcher has provided her own analysis of literature by providing issues arising from the literature.

2.2 The Concept of reflective teaching

It seems that approximately once a decade, a new approach to learning or teaching appears, and it captures the imagination of practitioners so much that it comes to dominate the thinking and research going on ground that time. Reflection and reflective teaching are not exceptional. These are related approaches that have been captured in teacher and adult education circles for the past decade in many countries. Defining what actually constitutes reflective teaching or reflective practices is fraught with difficulty, and this major problem of definition has been recognised for some very considerable period of time. It may therefore be argued that this problem of definition has a bearing on how the reflective teaching methodologies are implemented. This study finds it necessary to focus briefly on the problems of definition and competing paradigms as regards reflective teaching.

Most Literature shows that there are criticisms of the definitions of reflective teaching like those highlighted by Zeichner and Liston (1996) and Hatton and Smith (1995). These point out that there is confusion regarding the meaning of reflective teaching. Even among those who embrace the model, there are vast differences in perspectives about teaching, learning, and schooling. Further, it is argued that the term is vague and ambiguous, and there are many

misunderstandings as to what is involved with teaching reflectively. Scholars have shown that an examination of these criticisms shows that the difficulty with the model rests in its conceptualisation, the underlying and varied beliefs, values, and assumptions embraced by those employing it, and not in its usefulness as a model of teaching. Coyle (2002), responding to these and other criticisms, points in the right direction when she calls upon educators to make explicit, their interpretation of reflective teaching, rooted in their particular political and social context.

The materials reviewed in this study showed that focus upon reflective teaching and increased reflection will translate into action and result in improvements in teaching and learning (Cruickshank and Metcalf, 1990). Despite a common generic base and ideals of action to bring about educational change, the terminology used by different writers reflects different epistemological positions and traditions that result in the expression of often radically different theoretical ideals. Tom (1985) has drawn attention to the range of ideal types of teachers incorporating reflective or inquiry orientated qualities. These include proposals for the development of self-monitoring teachers, reflective teachers, teachers as continuous experimenters, adaptive teachers, teachers as action researchers, teachers as applied scientists, teachers as moral craftsmen, teachers as problem solvers, teachers as hypothesis makers, teachers as clinical inquirers, self-analytic teachers, teachers as radical pedagogues, teachers as political craftsmen and scholar teachers.

There is competition between various positions and ideals of reflective teaching, which can only be resolved through close comparison and evaluation of practical outcomes from teacher education programmes based on recommended strategies and stated objectives for each philosophical position. In fact one would have anticipated that there would have been concerted efforts to evaluate the practical effectiveness of these various approaches using empirical methods but this had not occurred to any appreciable degree at the time of the study. Failure to do this had in part reflected serious lack of agreement among individuals supposedly implementing the same paradigm. Therefore this study was aimed at providing the empirical data on implementation of reflective teaching.

Without adequate definition, and agreement on ideals and meanings of reflectivity, it becomes difficult to operationalise a paradigm and translate it into practice. Furthermore, without adequate definition, there is little chance of agreement upon objectives or desired outcomes as teacher educators strive to select course and subject content. Authors like Morgan, (1998) believe despite the failure to compare experimentally the different paradigms and results from implementation of the paradigm, numerous qualitative or case studies on reflective practices have been widely disseminated through publication. Many of the studies on reflective practices had reported the enthusiasm of trainee teachers and lecturers using reflective approaches, and had explored methods or processes to encourage reflection in student teachers.

Cornford's(1991),work in fact closely parallels the initial responses to micro-teaching, where there was much premature attention to relatively minor processes and 'nut tightening' before the establishment of the fact that the approach produced superior results to conventional training. Micro-teaching later fell from favour in initial teacher education because of failure to demonstrate advantages when subjected to empirical scrutiny Cornford (1991) further points out that in addition, there have been numbers of reflection articles that have attempted to categories the diversity of views on the essential nature of reflective practices in teaching into some neat taxonomy, either on the basis of underlying philosophy or types of processes employed to achieve objectives. These articles, attempting categorisation do not appear to have resulted in further agreement, or a greater inclination to examine the differential effectiveness of different paradigms or processes when they are implemented.

Literature however shows thatdefinitions, explanations, and realisations of reflection, reflective teaching and reflective practices are provided to put this issue into perspective and to prove that reflection really means so many things to so many people(Reed, Davis, and Nyabanyaba, 2002). According to Hoover (1994), reflection is a carefully planned set of experiences that foster a sensitivity to ways of looking at and talking about previously unarticulated beliefs concerning teaching(Farrell,2001:36).Hoover seems to believe that reflection is a systematic practice that can be learned from the past experiences one has had (Farrell, 2001). Hoover's understanding of reflection is very much similar to that of Gebhard

who believes that Reflection includes thoughtful persistent consideration of beliefs or practices (Gebhard, 2005). El-Dib, (2007) defines reflection as the process by which teachers engage in aspects of critical thinking such as careful deliberation and analysis, making choices, and reaching decisions about a course of action related to teaching. However, El-Dib reminds the readers that not all thinking about teaching constitutes reflective teaching as even conventional teaching or technical teaching some thinking is done. The difference between reflective teaching and technical teaching is highlighted by Zeichner and Liston (1996).

Zeichner and Liston (1996) elucidate the contrast between reflective teaching and technical teaching believing that if a teacher never questions the goals and the values that guide his or her work, the context in which he or she teaches, or never examines his or her assumptions, then this individual is not engaged in reflective teaching. LaBoskey (1994) provides a definition of reflection which is somehow similar to that of Dewey (1910). She believes that reflective thinking is a "careful reconsideration of a teacher's beliefs and actions in light of information from current theory and practice, from feedback from the particular context, and from speculation as to the moral and ethical consequences of their results" (LaBoskey, 1994: cited in LaBoskey, 1997: 153). She further argues that one cannot draw a border line between reflective and no reflective individuals. Her position concurs with that of Akbari (2007) that teachers have always been reflecting on what they have been doing in their classes and it is impossible to imagine a context in which we have human interaction on a cognitive level and no reflection going on. Again citing LaBoskey (1997), it is the extent, level, and depth of reflection that can distinguish Alert Novices, i.e. those who reflect more, from Commonsense and have their own voice in order to think about the particularities of their troublesome situations (Burns, 2005; Farrell, 2004; Zeichner and Liston, 1996).

Further, Farrell (2004) identifies seven general phases of the reflective practice in action;
 a) Research as diagnosing the problematic situation
 b) finding a plan to examine the predicament identified at first
 c) talking to colleagues and reading the related literature to know what is there regarding that particular situation

d) employing different procedures such as observation and diary keeping to come up with more tangible data

e) interpreting and evaluating the obtained data,

f) reframing the predicament and trying out the solutions that have been arrived at, and

g) Keeping on the same procedure to know whether those solutions have been consequential or not.

Dewey (1933) establishes seven major characteristics of the reflective practice:

a) Reflective teaching implies an active concern with aims and consequences, as well as means and technical efficiency

b) Reflective teaching is applied in a cyclical or spiraling process, in which teachers monitor, evaluate and revise their own practice continuously

c) Reflective teaching requires competence in methods of evidence-based classroom enquiry, to support the progressive development of higher standards of teaching

d)Reflective teaching requires attitudes of open-mindedness, responsibility and wholeheartedness

e) Reflective teaching is based on teacher judgment, informed by evidence-based enquiry and insights from other research

f) Reflective teaching, professional learning and personal fulfillment are enhanced through collaboration and dialogue with colleagues

g) Reflective teaching enables teachers to creatively mediate externally developed frameworks for teaching and learning (cited in Pollard *et al,* 2006)**.**

2 .2.3 Genesis of Reflection and Reflective Teaching

When it comes to the notion of reflection, historically John Dewy, is generally recognised as the most renowned American educator of the twentieth century(Apple and Teitelbaum, 2001), is considered the ground-breaker in the field of teacher education (Griffiths, 2000). According to pollard, (2002: 4) Dewey's distinction of routinised and reflective teaching is fundamental to the conception of professional development through reflection A more profound look at the literature on reflective teaching, however, reveals that the idea of reflection has run the whole range of all disciplines to the effect that it can be traced back to the works of descartes (Fendler, 2003, Kant, Wittgenstein, and the pragmatists Pierce and Popper; 1999). One can see a plethora of writings about reflection under the veil of self-analysis discussions in the

works of Aristotle, Plato, and Socrates, who established 'educational thinking' philosophy (Cornford, 2002).

Despite all these scholars' contributions to the development of reflection, Dewey's works on reflective practice seem to be more relevant even to the Zambian situation. As a pragmatist, Dewey introduced three different types of action; impulsive action, routine action, and reflective action; 'trial and error' features impulsive action, and routine action as authority, tradition, preconception, and prejudice as its indispensable components; the two actions have inactive and tactless behaviour in common (Griffiths, 2000; Pollard *et al* 2006).

According to Johnstone (2006) reflective teaching has been put forward as a way out of the teachers' predicament and as a counteraction against the influences of bureaucracy, centralisation, and control in which teachers are seen simply as deliverers of a fixed curriculum and are not valued as reflective professionals who frame and re-frame problems and test out their interpretations and solutions. Other scholars (Kumaravadivelu, 1994, Prabhu, 1990, and,Osterman and Kottkamp, 2004), explain that, it can be regarded as a corollary of the post method condition which acts as an empowerment and motivational process because it responds to basic human needs for competence, autonomy, and relatedness and allows individuals to assume greater responsibility for their own performance and learning. Fendler (2003) points out four trends as underlying streams that have been, to a great extent, conducive to the recognition of reflection: Cartesian rationality, which assumes that in reflection (self-awareness will provide knowledge and understanding about teaching) Schon's professional reflection, which is generally understood to be artistic and practiced based as opposed to positivistic and science based and feminist anti-establishment interventions. Citing Akbari (2007), Reflection on knowledge generation mechanisms and subverting those mechanisms to give more voice to women, or more feminine approaches, can be viewed as a force behind the rise of reflective movement in education.

Some scholars believe that the cornerstone of reflective teaching and thinking critically originated from critical thinking (Cornford, 2002, Hillier, 2005). According to Jackson (2006), critical thinking implies that we are open to all aspects, and willing to see issues from

a multitude of views, always questioning and challenging the current state. Along similar lines Brookfield (1993) believes that it is quite possible to liberate ourselves from the confinements of our classroom by questioning and then replacing or reframing an assumption which is accepted as representing dominant common sense by a majority (cited in Hillier, 2005).

Ronald Schon's ideas on reflective teaching have contributed a lot to the development and expansion of reflection (Farrell, 2004; Reed, Davis, and Nyabanyaba, 2002; Stanley, 1998; Zeichner and Liston, 1996). Reflection-in-action includes visions, understandings and awareness teachers capture in the moment of teaching; reflection-on-action includes considerations, interpretations, deliberations and thoughts given to what happened in the classroom in the moment of teaching (Reed, Davis and Nyabanyaba, 2002). As Farrell (1998) puts it, Reflection-in-action is concerned with thinking about what we are doing. Reflection-on-action deals with thinking back on what we have done to discover how our knowing-in-action may have contributed to an unexpected action. For Stanley, Such reflective thinking and examination either during or after the fact can lead to greater awareness on classroom teachers' part in relation to their knowledge-in-action, or the theories, ideas, metaphors, and images they use as criteria for decision making in their teaching practice (Farrell, 1998).

There is also a possibility that reflective practice might have been derived from some religious beliefs. Cornford (2002), for instance, believes that reflective teaching is very much in accordance with Protestant religious values where truth is seen as emerging from within, from a revelation. From the literature reviewed, reflective practice was seen as by many authors and scholars as an essential component in the professional development of teachers. Therefore it was vital to understand the genesis of reflection and reflective teaching.

2.2.4 The argument of reflective teaching

According to Akbari, (2007), the argument of reflective teaching was a consequence of the need to harmonise the discord between educational theoreticians and practitioners. Amidst this clash between the two camps, reflective teaching was introduced because it promised to be the solution to the dilemma. There have been many qualitative or case studies on reflective practices whose findings have been infused with enthusiasm on the part of trainee teachers

and lecturers in favour of reflective approaches (Cornford, 2002). One reason lies in the fact that teachers do not find much in conventional approaches in terms of ways to tackle their practical problems (Richards and Lockhart, 1999), and reflective teaching has emerged as a response to the call for a substitute for the concept of method.

According to Gimenez (1999) the heyday of reflection in teacher education was in the 1990 and it continues to be significantly dominant so that today nobody engaging in the field of teacher education can deny its ubiquitous role in this field. In effect, reflection has been of great importance and has received noticeable attention in teacher education and teachers' educational development in recent years and is a key component of teacher development (Clarke and Otaky, 2006; Griffiths, 2000; Jay and Johnson, 2002; Johnson and Johnson, 1999; Richards, 2000; Vieira and Marques, 2002).According to Jay and Johnson, (2002), reflection has become an integral part of teacher education and as Zeichner (2002) put it that there is not a single teacher educator who would say that he or she is not concerned about preparing teachers who are reflective.

Reflection, in the words of a layman, simply means thinking about something, but for some, it is a well-defined and crafted practice that carries very specific meaning and associated action (Loughran, 2002). To begin with, reflective teaching at a very general level involves thinking about one's teaching and the cogitation involved can take place before the event of teaching and manifest itself as planning, after the event as evaluation and simultaneous to the teaching as reflection in action involving adjustments to or accommodation of some of the contingencies which arise (Parker,1997). In defining reflective teaching, however, one important point should be kept in mind and that is there does not seem to be any clear-cut definition with respect to the concept of reflective teaching. In turn this has bred a situation where various approaches have found their way into teacher education programs (Akbari, 2007; Cornford, 2002; Farrell, 1998, 2004; Freese, 1999; Ixer,1999; Jay and Johnson, 2002; Pollard, 2002), which has led to a kind of ambiguity in this area, and as Gimenez (1999) puts it, the meanings of reflection are not clear cut there is such a variety of uses for this word that it is imperative to specify what one really means when referring to reflection.

Akbari (2007) draws attention between the concepts of reflection given by the most referred to scholar, Dewey, in the works of reflective teaching and reflective practice and that of schon another influential scholar in reflective teaching. Farrell, 2004; Hillier, 2005; Pacheco, 2005) with that of Schon, another influential authority on reflective teaching (Griffiths, 2000; Ixer, 1999; Tsui, 2003). His argument pivots on the fact that reflection for Dewey is equal to professionalism and knowledge is based on scientific approaches, whereas Schon believes that reflection is an intuitive, personal, non-rational activity and knowledge is the direct result of practice. It is noteworthy that this distinction is of paramount significance since the literature seems to have taken it for granted that Dewey and Schon concurred on the notion of reflection. Despite the existence of an abundant number of definitions for the term, Jay and Johnson (2002) provide a somehow comprehensive definition of reflective teaching proposed by a group of teaching assistants who engaged in teaching the reflective seminars in their teacher education programme. Reflection is a process, both individual and collaborative, involving experience and uncertainty. It is comprised of identifying questions and key elements of a matter that has emerged as significant, and then taking one's thought into dialogue with oneself and with others. One evaluates insights gained from that process with reference to;

(1) Additional perspectives

(2) One's own values, experiences, and beliefs

(3) The larger context within which the questions are raised. Through reflection, one reaches newfound clarity, on which one base changes in action or disposition. New questions naturally arise, and the process spirals onward, Jay and Johnson (2002).

Reflection has gained momentum over the years in mainstream education despite ambiguity in relation to its definition. It has gained in popularity in almost all facets of teacher education encompassing adult and vocational education Cornford, (2002), and it is now reaching epidemic proportions in other professions such as nursing and social work Ixer, (1999). Reflective teaching has contributed to furthering the field of education as a whole in a number of ways. In this connection, Farrell (2004) states that teachers can become more empowered decision makers, engaging in systematic reflections of their work by thinking, writing, and talking about their teaching; observing the acts of their own and others' teaching; and by

17

gauging the impact of their teaching on their students' learning. In these ways, teachers can begin to locate themselves within their profession and start to take more responsibility for shaping their practice. This is called reflective teaching. Reflective practice, as mentioned above, has remarkably influenced the whole field of education (Farrell, 1999).

2.2.5 Reflective Teaching; The implementation Process of Reflective Teaching.

Cunningham (2001) revealed that there were benefits and challenges to implementing reflective practice. The following were the four benefits of the reflective practice as postulated by him: flexibility, practicality, professionalism, and sustainability. Along the same lines, Pacheco (2005) claims that "through reflection, professionals can react, examine and evaluate their teaching to make decisions on necessary changes to improve attitudes, beliefs and teaching practices. Reflection-driven exploration of teaching can have many merits. It can facilitate the process of gaining better insights into teaching from both a theoretical and a practical perspective; it can enrich teaching and learning processes; it can act as a springboard for self-appraisal and consequently is extremely crucial when it comes to professional development (Richards and Lockhart, 1999). Cornford (2002) drawing on Kuhn (1970) elucidates that the success of any paradigm in replacing another is contingent upon its superiority to existing or competing paradigms. However, if it fails to prove to be superior, then it would not be acknowledged by practitioners or at best its proven parts will be absorbed into other theories or paradigms. According to Pollard (2004), the lack of any empirical methods for the assessment of new approaches or paradigms renders it very difficult to prove its practical effectiveness.

With this end in mind, only a few studies have been published to look into the practical effectiveness of reflective teaching. While it is self-evident that reflective approaches are theoretically rich, the hitch lies in their inability to translate into practice. In this regard, there is not any empirical evidence that reflective teaching approaches have culminated in better teaching or learning for novice teachers. In the same vein, Akbari (2007) states that teacher educators are instrumental in enhancing reflective teaching practices in the classroom; moreover, one way to empower teachers and place them on equal footing with their academic counterparts is through reflection. Akbari further argues that though research indicates that

reflection can bring about an increase in teacher job satisfaction, an improvement in interpersonal relationship with colleagues and students, and an improvement in teachers' sense of self-efficacy, there is very little evidence that reflection will necessarily lead to higher students 'achievements and better teacher performance. He notes that if teachers engage in reflective practice, it doesn't necessarily mean that students will achieve better results (ibid). Therefore, one might come to the conclusion that in spite of all the praise, there is no real hard evidence to link reflective teaching to actual learning outcomes and improved teacher practice and this, in its own right, can be considered a big flaw to this approach.

Scholars suggests that adequate classroom space and access to other areas in a school's building, for example, the gym, kitchen, computer, or multimedia facility are vital to lesson planning. In his separate studies Eraut (2002; 2004) found out that the strategies help teachers to include in their plans, large-group activities requiring a large space, or the use of specialised instruments, such as computers.

2.6 Significance of Reflective Teaching Method.

On the significance of reflective teaching, Zeichner and Liston, (1996) highlighted the importance of reflective teaching and summarised the significance in five key features that characterise the reflective teacher:

A. Examines, frames, and attempts to solve the dilemmas of classroom practice.
B. Is aware of and questions the assumption and values he or she brings in the teaching.
C. Is attentive to the institution and cultural contexts in which he or she teachers.
D. Takes part in curriculum development and is involved in school change and efforts and
E. Takes responsibility for his and her own professional development, Zeichner and Liston, (1996).

Pollard (2006) adds on the significance of reflective teaching and states that reflective teaching lead to a steady increase in the quality of education provided to children. However, he posits that this form of teaching should also be fulfilling for teachers .This

observation is also made by Zeichner and Liston (1996) who see reflective teaching as an activity that can develop teachers.

Literature reviewed in this study confirms that reflective teaching is evidence-based and supports new and experienced professionals in satisfying performance standards and competences; Tom (1985). In this study, quality teaching, and thus learner achievements is dependent on the type of methodology used. Reflection then is a fundamental process in enhancing professional development as well as personal fulfilment Pollard (2006).

Having reviewed the literature on the concept of reflective teaching, in this study reflective teaching was perceived to be an important human activity in which teachers recapture their experience, think about it and evaluate it.Reflectionwas seen to be an important human activity more so for teachers. This in line with what Pollard (2006) states that reflective teaching should be fulfilling for teachers, but also lead to a steady increase in the quality of education provided to children. Indeed, because it is evidence based, reflective practice supports new and experienced professionals in satisfying performance standards and competences. The concept of reflective teaching draws particular attention to the aims, values and social consequences of education. Quality teaching, and thus learner achievements is dependent on the type of methodology used. Reflection then is a fundamental process in enhancing professional development as well as personal fulfilment. Reflective teaching can help teachers to view the classroom as a kind of laboratory where they can relate teaching theory to teaching practice, thereby improving the delivery of quality education

According to Pollard (2004),reflective practice enhances professional judgment and creates an enjoyable and personally fulfilling experience. It also enhances learning; especially that learning requires the active and thoughtful engagement of the learner, underpinned by positive learning dispositions. Learning involves the development of understanding and the transformation of information into new knowledge through application. Prior learning is a powerful determinant of the learners' capacity to learn new things. Learning proceeds successfully if barriers and affordances, often shared by groups of learners, are elicited and taken into account. Reflective practice contributes to institutional improvement as well as

strengthening teachers' contributions to policy evaluation and development. Eraut (2002) has likened this to pulling the practitioner out of 'auto pilot' and causing them to focus on some part of their teaching. This realisation may be caused by an unexpected experience or outcome or just a sense that something is not quite right.

Bartlett (1990) points out that becoming a reflective teacher involves moving beyond a primary concern with instructional techniques and how to phrase questions and asking what and why questions that regards instructions and managerial techniques not as ends in themselves, but as part of broader educational purposes. Asking questions what and why gives certain power over individuals teaching resulting in the emergence of autonomy and responsibility in the work of teachers. In reflecting on the above kind of questions, teachers begin to exercise control and open up the possibility of transforming every day classroom life. (Lieberman and Miller, 2000) point out that the practice of reflective teaching, reflective inquiry, and reflection-on practice, results in gaining of the personal and professional knowledge that is so important to being an effective teacher and in shaping children's learning. Han (1995) stated that, the process element of reflection emphasises how teachers make decisions; the content stresses the substance that drives the thinking and reflective inquiry may set the stage for learning how to be a good teacher, (Day and Galvez-Martin 2000) proposed reflective teaching as the act of creating a mental space in which to contemplate a question or idea, such as, What do I know now about teaching young children? This repeated questioning leads to mental transformation to a time and a situation that leads to a deeper perspective helping Students.

The researcher sees reflective teaching as a process in which teachers become aware, or are supported to become aware, of the theory and motives behind their own teaching, to reflect and to take some deliberate steps to develop. This reflective process is triggered by the acknowledgement that there is some aspect of teachers' teaching that requires special attention. It is also worth noting that in this research, reflective practice is seen as a cornerstone in the teaching and learning process for learner performance. Since there is no 'teaching template' competent academics continually reflect on their teaching, critically

analysing and evaluating their own practices, taking the opportunity to learn from each teaching session (Gibbs, 1996).

Reflective teachers should help students be reflective thinkers for instance when students are faced with a perplexing problem, reflective thinking helps them to become more aware of their learning progress, choose appropriate strategies to explore a problem, and identify the ways to build the knowledge they need to solve the problem. The lesson plans therefore should:

a) Provide teacher questions designed to prompt students to identify and clarify overall and subordinate problems.

b) Provide many opportunities to engage students in gathering information to look for possible causes and solutions.

c) Provide ideas and activity sheets to help students evaluate the evidence they gather.

d) Provide questions that prompt students to consider alternatives and implications of their ideas.

e) Provide questions and activities that prompt students to draw conclusions from the evidence they gathered and pose solutions.

f) Provide opportunities for students to choose and implement the best alternative. Encourage students to monitor and reevaluate their results and findings throughout the entire unit.

2.7 Forms of Reflection and reflective teaching

Literature shows that there were many forms of reflection and reflective teaching methods among them reflective learning journals, autobiography, portfolios, mentoring, quiz, critical incident analysis, drama, role play, mind mapping, programme reviews workshops, seminars, action research, action learning, self accounting professionals, course and unit reviews, clinical supervision, reflective teaching practice and engaging a critical friend Mcgrill and Beatty (1992).Dewey (1933) was among the first to identify reflection as a specialised form of thinking. He considered reflection to stem from doubt, hesitation or perplexity related to a directly experienced situation. For him, this prompted purposeful inquiry and problem resolution. Dewey also argued that reflective thinking moved people away from routine

thinking/action (guided by tradition or external authority) towards reflective action (involving careful, critical consideration of taken-for-granted knowledge). This way of conceptualizing reflection crucially starts with experience and stresses how we learn from doing that is practice. Specifically Dewey argued that we think the problem out towards formulating hypotheses in trial and error reflective situations and then use these to plan action, testing out our ideas.

Dewey's ideas provided a basis for the concept of 'reflective practice; which gained influence with the arrival of Schon's (1983), the reflective practitioner: how professionals think inaction. Schon identified ways in which professionals could become aware of their implicit knowledge and learn from their experience. His main concern was to facilitate the development of reflective practitioners rather than describe the process of reflection *per se*. However, one of his most important and enduring contributions were to identify two types of reflection: *reflection-on-action* (after-the-event thinking) and *reflection-in-action*(thinking while doing). In the case of reflection-on-action, professionals are understood consciously to review, describe, analyse and evaluate their past practice with a view to gaining insight to improve future practice. With reflection in action, professionals are seen as examining their experiences and responses as they occur. In both types of reflection, professionals aim to connect with their feelings and attend to relevant theory. For Schön, reflection in action was the core of professional artistry, a concept he contrasted with the technical-rationality demanded by the (still dominant) positivist paradigm whereby problems are solvable through the rigorous application of science. Both reflection-in and on -actions allow teachers to revise, modify and refine their expertise. Schon believed that as professionals become more expert in their practice, they developed the skill of being able to monitor and adapt their practice simultaneously, perhaps even intuitively.

In the education field, Grushka, Hinde-McLeod and Reynolds(2005) distinguish between reflection for action, reflection in action and reflection on action; they offer a series of technical, practical and critical questions for teachers to engage with. For example, under reflection for action teachers are advised to consider their resources and how long the lesson will take (technical), how to make the resources relevant to different learning styles (practical)

and to question why they are teaching this particular topic (critical). Zeichner and Liston(1996) differentiate between five different levels at which reflection can take place during teaching; rapid reflection, immediate, ongoing and automatic action by the teacher, repair, in which a thoughtful teacher makes decisions to alter his or her behaviour in response to students' cues, review, when a teacher thinks about, discusses or writes about some element of his or her teaching, research .When a teacher engages in more systematic and sustained thinking overtime, perhaps by collecting data or reading research and retheorising and reformulating the process by which a teacher critically examines his or her own practice and theories in the light of academic theories.

While Schon's work has inspired many such models of reflection and categories of reflective practice, it has also drawn criticism. Eraut (2004) faults the work for its lack of precision and clarity. Boud and Walker (1998) argue that Schon's analysis ignores critical features of the *context* of reflection. Usher *et al,*(1997) find Schon's account and methodology un reflexive, while Smyth (1989) deplores the theoretical and apolitical quality of his conceptions. Greenwood (1993), meanwhile, targets Schön for downplaying the importance of reflection-before-action. Moon (1999) regards Schon's pivotal concept of reflection-in-action as unachievable. Van Manen proposed a hierarchical representation of three levels, namely technical, practical, and critical reflection. Schön distinguished between reflectionin action, or simultaneous with action, and reflection on action, looking back on and learning from experience or action. He posited that it may be too challenging to reflect in the moment given the multiple demands teachers juggle and that reflection often requires a perspective of a 'meta-position,' a looking back after the action has taken place. For instance, focusing attention on completing a lesson may distract from paying attention to the way a teacher interacts with students. Based on an extensive review of the literature, the various definitions evolving over several decades most commonly depict three distinct levels of reflection (Farrell, 2004; Handal andLauvas, 1987; Jay and Johnson, 2002; van Manen, 1977). The three levels are: an initial level focused on teaching functions, actions or skills, generally considering teaching episodes as isolated events, a more advanced level considering the theory and rationale for current practice; and a higher order where teachers examine the ethical, social and political consequences of their teaching, grappling with the ultimate

purposes of schooling. Also, because much of the literature contrasts reflective practitioners with non-reflective (pre-reflective) teachers, four levels of reflection were defined, adopting the terminology of pre-reflection, surface reflection, pedagogical reflection, and critical reflection (Larrivee, 2004).

Eraut's (2004) study revealed that administrative requirements and policies did not only make demands on teachers' time, but also dictated some functions. These forms were similar to those advanced by Greenwood (1993), Usher *et al* (1998), and Schön (1983) who all believed that post-lesson evaluation was an integral part of lesson development, and not an addendum. They also believed that evaluation should be an ongoing process.

At the pre-reflective or non-reflective level, developing teachers react to students and classroom situations automatically, without conscious consideration of alternative responses. They operate with knee-jerk responses attributing ownership of problems to students or others, perceiving themselves as victims of circumstances. They take things for granted without questioning and do not adapt their teaching based on students' responses and needs. Unfortunately, there are those pursuing teaching careers that fall into this category. It is especially important to find ways to facilitate the teachers' development of reflective practice.

At surface reflection level, teachers' reflections focus on strategies and methods used to reach predetermined goals. Teachers are concerned with what works rather than with any consideration of the value of goals as ends in themselves. For this level, the term technical has been most used (Day, 1993; Farrell, 2004; Hatton and Smith, 1995 Schön, 1983; Valli, 1997). It has also been referred to as descriptive (Jay and Johnson, 2002).The term surface was chosen to depict a broader scope rather than technical concerns while connoting that values, beliefs, and assumptions that lie 'beneath the surface' are not being considered at this level of reflection.

At pedagogical reflection level, practitioners apply the field's knowledge base and current beliefs about what represents quality practices. This level has probably, the least consensus in the literature asto its composition and label. It has been variously labeled practical (van Manen, 1977),theoretical (Day, 1993), deliberative (Valli, 1997), comparative (Jay and

Johnson, 2002), and conceptual (Farrell, 2004). The term pedagogical was selected as a more inclusive term, merging all of the other concepts to connote a higher level of reflection based on application of teaching knowledge, theory, and/or research. At the level of pedagogical reflection, teachers reflect on educational goals, the theories underlying approaches, and the connections between theoretical principles and practice. Teachers engaging in pedagogical reflection strive to understand the theoretical basis for classroom practice and to foster consistency between espoused theory (what they say they do and believe) and theory in use (what they actually do in the classroom).

At Critical reflection level, teachers reflect on the moral and ethical implications and consequences of their classroom practices on students. Critical reflection involves examination of both personal and professional belief systems. Teachers who are critically reflective focus their attention both inwardly at their own practice and outwardly at the social conditions in which these practices are situated. They are concerned about issues of equity and social justice that arise in and outside the classroom and seek to connect their practice to democrat ideals. Acknowledging that classroom and school practices cannot be separated from the larger social and political realities, critically reflective teachers strive to become fully conscious of the range of consequences of their actions.

The term critical reflection has the most consensuses in the literature as a level of reflection, examining the ethical, social, and political consequences of one's practice. While some definitions fail to acknowledge this dimension, others consider it to be embedded in the category of critical reflection. And others conceptualise self-reflection as a separate entity. Hatton and Smith (1995) referred to this type of reflection as dialogic, Valli (1997) as personality, and Day (1999) as intrapersonal, all highlighting the aspect of dialogue with oneself. Similarly, Cole and Knowles (2000) distinguished between reflective and reflexive inquiry. Underpinning reflective inquiry is the notion that assumptions behind all practice are subject to questioning. Reflexive inquiry is tantamount to self-reflection and is defined as reflective inquiry situated within the context of personal histories in order to make connections between personal lives and professional careers and to understand personal (including early) influences on professional practice. Based on the presumption that

understanding oneself is a prerequisite to understanding others, self-reflection is conceptualised here as a crucial dimension of critical reflection. Hence, the category labeled critical reflection includes both democratic principles as well as self-reflection. Self-reflection involves examining how one's beliefs and values, expectations and assumptions, family imprinting, and cultural conditioning impact on students and their learning Larrivee, (2005).Self reflection entails deep examination of values and beliefs, embodied in the assumptions teachers make and the expectations they have of students. Beliefs about students' capacity and willingness to learn, assumptions about the behaviour of students, especially those from different ethnic and social backgrounds, and expectations formulated on the basis of the teacher's own value system drive teacher behaviour.

The three levels described in van Manen's representation might also be thought of as paralleling the growth of an individual from novice to expert to master. They can also be characterised as falling along an efficiency value worth continuum. At the first level the concern is mainly with means rather than ends, entailing selection and use of instructional strategies, primarily for their expediency. The second level adds questioning the assumptions as well as consequences of particular strategies. Here teachers apply criteria to assess classroom practices to make individual and independent decisions about pedagogy. Teaching choices are based on a value commitment to a particular interpretive framework. The teacher analyses and clarifies individual and cultural experiences, meanings, assumptions, prejudgments and presuppositions for the purpose of making instructional decisions based on an interpretive understanding of what represents quality educational experiences.

At the highest level of deliberation the worth of knowledge is in question. The teacher pursues worthwhile educational ends of self-determination based on the principles of justice and equality. Hence, decisions at the surface level of reflection are made for efficiency. Decisions at the pedagogical level are based on a value judgment, and decisions made at the critical level are based on a worthy judgment. Teachers move from initially asking 'Am I doing it right?' to eventually asking is this the right thing to do? Many advocates of reflective practice take the position that teachers should not only reflect on behaviors and events within the confines of the classroom but should include the influence of the larger social and political

contexts. The advocates deem teaching as ultimately a moral pursuit concerned with both means and end and therefore consider critical reflection to be imperative for teaching in a democratic society. Teaching is first and foremost an ethical enterprise where teachers are called on daily to confront issues of goodness and truth (Many believe that taking this broader view will enable teachers to become change agents who both understand what is and work to create what might be (Bartlett, 1990; Cole and Knowles, 2000; Schön, 1987). Although the developmental span for both prospective and practicing teachers will vary considerably, it is important for teachers to progress through the levels of reflective practice to ultimately become critically reflective teachers who pose the important questions of practice Larrivee, 2006).

Some scholars have identified dialogical and critical reflection as vital elements in reflective teaching and practice. Hatton and Smith (1995) distinguish between dialogical, critical reflection and the level of engagement associated with each. The two posit that dialogical reflection refers to a less intensive approach that involves discourse with the self to explore a given event or incident. It involves considering the decision and judgments made and possible reasons for these. An example of dialogic reflection is the basic model proposed by Brockbank and McGill (2000) According to this model, individuals think about what they are going to do in their lesson, about the information they would like to convey, the level of engagement in advance of the class. Afterwards they consider how well they achieved their intended goals and which aspects require further attention.

According to Moon (2004), as with all forms of reflection, the approach was couched in construction and required individuals to re-evaluate their own personal view of education, teaching and learning. While this was an important first step, and mighty lead to increased confidence or sense of pride, awareness alone would not necessarily result in an improvement of the situation. Critical reflection facilitates transformational learning that can either gradually from a sudden or critical incident and alters the way people see themselves and their world (Baumgartner, 2001).

Some scholars have listed the following forms as shown on table one below:

Table 1: **Forms of reflection**

Action learning	Mind mapping
Action research	Peer observation
Course and unit reviews	Programme reviews
Clinical supervision	Reflective teaching practice
Critical incident analysis	Workshops/seminars
Engaging a critical friend	Self-accounting professionals
Drama /role play	Storytelling
Journal keeping	Teaching portfolios
Mentoring	Teaching/learning networks

Mcgill and Beatty, (1992)

2.8 Characteristics of Teaching Environments and Activities that Support Reflective Thinking

The following are some of the characteristic exhibited by reflective practitioners

(1) Provide enough wait-time for students to reflect when responding to inquiries

Provide emotionally supportive environments in the classroom encouraging reevaluation of conclusions.

(2) Prompt reviews of the learning situation, what is known, what is not yet known, and what has been learned.

(3) Provide authentic tasks involving ill-structured data to encourage reflective thinking during learning activities.

(4) Prompt students' reflection by asking questions that seek reasons and evidence. • Provide some explanations to guide students' thought processes during explorations.

(5) Provide a less-structured learning environment that prompts students to explore what they think is important.

(6) Provide social-learning environments such as those inherent in peer-group works and small group activities to allow students to see other points of view.

(7) Provide reflective journal to write down students' positions, and give reasons to support what they think, also show awareness of opposing positions and the weaknesses of their own positions.

2.9 Characteristics of reflective Teachers

Reflective teachers have the following characteristics:

i)   They attempt to solve classroom problems.

ii)   Generally, teachers' reflections arise from classroom problems they face.

iii) The teachers begin by identifying classroom problems. Then they solve a

Particular problem by gathering information that will help them deal with this problem.

iv)   They are aware of the beliefs and values they bring to teaching. As was

pointed out earlier, teachers bring to the classroom beliefs they have about teaching and learning based on their own educational experiences, their knowledge of educational practices, and their personal values.

v)   They recognize their own values and educational assumptions.

vi)   They take part in curriculum development and are involved in school effort.

vii) They realize that what they do is part of a larger educational context. Hence,

they participate in overall curriculum planning, and they are involved in school changes that will lead to more effective teaching and learning.

Viii) They take responsibility for their own professional development.

v) They realise that becoming a more effective teacher involves continually learning more about the content they teach and about effective pedagogical practices. Because of this, they attend lectures and workshops and read relevant books and materials. They also contribute to the process of professional development by sharing their reflections.

According to McKay (1990), it is important to prompt reflective thinking in children to support them in their transition between childhood and adulthood. During this period, adolescents experience major changes in intellectual, emotional, social, and physical development. They begin to shape their own thought processes and are at an ideal time to begin developing thinking, learning, and Meta cognitive strategies. Therefore, reflective thinking provides middle level students with the skills to mentally process learning experiences, identify what they learned, modify their understanding based on new information

and experiences, and transfer their learning to other situations. Scaffolding strategies should be incorporated into the learning environment to help students develop their ability to reflect on their own learning. For example pupils questioning during the learning and teaching process. Teachers should model meta cognitive and self-explanation strategies on specific problems to help students build an integrated understanding of the process of reflection.

(b) Study guides or advance organiser should be integrated into classroom materials to prompt students to reflect on their learning.

Questioning strategies should be used to prompt reflective thinking, specifically getting students to respond to *why, how,* and *what* specific decisions are made. Social learning environments should prompt collaborative work with peers, teachers, and experts. Learning experiences should be designed to include advice from teachers and co learners. Classroom activities should be relevant to real-world situations and provide integrated experiences. Classroom experiences should involve enjoyable, concrete, and physical learning activities whenever possible to ensure proper attention to the unique cognitive, affective, and psychomotor domain development of middle school students.

2.10 Factors influencing the Implementation of Reflective Teaching Methods

The development of students' creativity has been a subject that the education sector always gives considerable thought on. Students need to be provided with relevant learning experiences and opportunities in order to learn to observe the world from a variety of angles and to analyse, categorise, and really delve into the problems they encounter in learning as well as in lives. In addition to using a microscopic view to analyse the characteristics of students' memory representations, educators should also adopt the macroscopic perspective to help build a creative learning environment and to advocate the importance of the development of higher-order cognition in students (Smith, 2000). Not only do students need to participate in activities in order to understand the diverse nature of knowledge, but they need a diverse range of activities to help stimulate their general and critical thinking abilities.

Teachers' professional growth is already a slow process that takes a long time (Chin, Leu,and Lin, 2000), and the obstacles preventing them from implementing reflective/creative teaching

are even greater. A school principal once commented, "In terms of application and selection of teaching methods, the majority of teachers still rely heavily on classroom lectures and blackboard demonstrations; most of them lack either the ability or the will to develop and utilise diversified, innovative ways of teaching" (Chen, Ting, and Hong, 1996). This gives us some indication of how much creative teaching is neglected in the system of school education. Therefore, it is of utmost importance to investigate and understand how reflective teaching can be more widely adopted and effectively used by ordinary teachers in order to help promote the development of higher-order thinking skills in students, thereby giving them an edge for tomorrow's global competition. Soh (2000) argued that for a long time now, experimental research on reflective thinking has been largely using students as subjects while teachers' creative teaching behaviours are rarely studied, and attributed this to the lack of a comprehensive construct or knowledge on teachers' creative teaching behaviours.

Therefore, understanding the factors influencing teachers' creative teaching behaviours is not only necessary for the enhancement of creative teaching effectiveness, but also an essential issue that deserves the attention of every decision maker responsible for the promotion of creative teaching and of all creative teaching practitioners when designing learning activities. For successful implementation of creative teaching, the environmental factors that need to be taken into consideration include expectations and interactions as well as teachers' teaching experience and beliefs (Hart, 2000; King, 2001). Alderman (1999) pointed out that teachers' self-beliefs are the single biggest influential factor of students' learning effects. Despite constant changes in student-teacher interaction and continuous innovations in teaching methods, some obstacles remain for the implementation of reflective teaching. Tiberius (1999) for instance, named six major problems relating to creative teaching. These are; curriculum, subject matter, creativity of an individual, internal and external support Csikszentmihalyi (1996) also pointed out that the provision of a congenial environment by teachers and parents is of great importance to students' learning, and that the environment should not be built for the cultivation of highly creative geniuses but rather to allow every individual leaner to generate some ideas. In other words, in this new era of creative teaching, teachers too must adjust their knowledge and attitude towards teaching (Cropley, 2001)

In addition, social interaction, creative performance, and creative living experiences can all influence teachers' creative teaching behaviours. Simplicio (2000), pointed out idea sharing, knowledge sharing, and experience as the key factors for the enhancement of teachers' creativity.

In this research other factors influencing the implementation of reflective teaching methodologies will be identified.

Hatton and Smith (1995); Sparks-Langer *et al*.1990; Tsang, (2003), Valli (1997), Veenman (1984) and Wunder (2003) found out that novice teachers gave importance to teaching and evaluation of teaching by focusing on issues such as classroom management. The act of self-directed critical thinking about teaching or aspects of one's teaching are characteristics of a reflective teacher as pointed out by Cole (1997), Coyle (2002), Hyrkas, Tarkka and llmonen (2001), and Calderhead (1992)

2.11 Major issues arising from literature

From the literature reviewed in this study regarding reflective teaching, the importance of reflection and reflective practice were frequently noted. Many authors regard reflective capacity as an essential characteristic for professional competence. Reflective practice among teachers was seen as an increasing influential referent in professional development of teachers despite its rather elusive which make it difficult to define. Scholars like Rodgers, (2002) caution that without a shared definition and view of reflection, several problems emerge. It is unclear how systematic reflection is different from other types of thought. It is difficult to assess a skill that is vaguely defined: without a clear picture of what reflection looks like. It has lost its ability to be seen and therefore has begun to lose its value. And finally, it is difficult to research the effects of reflective education and professional development on teacher's practice and students learning.

What was clear from the authors on reflective teaching methods is that there was ambiguity in the definition of the term some authors further argued that the term possessive on student learning and period was vague and ambiguous, and there were many misunderstandings as to what was involved with teaching reflectively. This was as a result of the term meaning so many things to so many people.Scholars have shown that an examination of these criticisms

shows that the difficulty with the model rests in its conceptualisation, the underlying and varied beliefs, values, and assumptions embraced by those employing it, and not in its usefulness as a model of teaching. Dewey helped to understand that the process by which we define and solve problems becomes the context for most learning. What was important was to make explicit the differences involved in reflecting on the content, process or premises of problem solving.However it was evident that reflection and reflective teaching were related approaches and that have been the in thing in teacher and adult education circles for the past decade in many countries.

Selections of content, and provision of teaching experiences likely to foster understanding of the links between teaching and learning, thus remain as an important issue in teacher education courses. Thus, with diverse information reviewed in literature, it is important that a study, more so in the Zambian context is carried out to analyse the implementation of reflective teaching methods in Zambia.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter is divided into the following; summary of data collection, research design, study area, population, sample size, sampling procedures, research instruments and the analysis of data, data quality and ethical consideration. Furthermore, the chapter presents the demographic profile of the respondents to allow readers appreciate the background information and understand the methodology in a definite context.

3.2 Research Design

According to Kombo 2006), a research design can be thought of as the structure of research. It is the glue that holds all the elements in a research project together. Orodho (2003) defines it as the scheme, outline or plan that is used to generate answers to the research problems. It is the conceptual structure within which research is conducted. It constitutes the blue print for collection of, measurement and analysis of data (Kothari, 2003)**.**Matafwali (2012) urges that research designs are considered as constructed plans and strategies developed to seek, explore, and discover answers to research questions.

Descriptive research seeks to provide an accurate description of observations of a phenomenon.Using this design, the study examined full context and interactions with participants while collecting most data face- to- face from participants.

In this research a descriptive survey was used. Orodho and Kombo, (2002) posits that a descriptive survey can be used when collecting information about peoples' attitudes, opinions, habits or any of the variety of education or social issues. Ghosh, (1992) on surveys postulates that it helps describe the state of affairs as it existed. Kerlinger (1969) points out that descriptive studies are not only restricted to fact findings, but may often result in the formulation of important principles of knowledge and solution to significant problems. They are more than just collection of data. They involve measurements, classification, analysis, comparison and interpretation of data. Therefore in this study, a descriptive survey was used.

3.3 Population

This is defined by Castillo (2009) as the entire group of individuals or objects in which researchers are interested in generalising the conclusions. Borg and Gall (1979) view population as all the members of the hypothetical set of people, events or objects to which generalising results of a research study could be made.

The study had three (3) sets of population. The first was that of School administrators of primary schools then teachers and pupils of the same schools. The school administrators comprised of head teachers, deputy head teachers and senior teachers. Ideally at each of the six (6)targeted schools, one (1)head teacher, one (1)deputy head teacher and one (1) senior teacher fell in this population bringing the total to eighteen(18) in this population.

The second population comprised teachers. For this population a sampling frame that listed two hundred and sixty (260) trained teachers was obtained from the district resource centre. This frame included the eighteen (18) head teachers, deputy head teachers, and senior teachers. This brought the estimated population of teachers only to two hundred and forty two (242) from the sampled schools.

The third population was that of pupils in upper grades at the selected primary schools who were being taught by trained teachers in the quality education project. The total population for pupils was those pupils in grades 7 to 9 taught by trained teachers in quality education project from the six (6) selected primary schools. When planning for the research, it was not established how many pupils were being taught by trained teachers. Assuming that the two hundred and forty two (242) trained teachers were handling grades seven (7) to nine(9), the targeted population would have been nine thousand six hundred and forty (9640) pupils using an average class size of 40 pupils per class. There was a possibility that all the teachers would have been handling grades 1 to 6 in which case there would have been no pupil respondent. The population of the study was drawn from the in-service teachers who were trained by Save the Children Norway Quality Education Project (QEP).

3.4 Sample and Sampling Procedure

A sample is a small proportion of the entire population selected for observation and analysis, Kulbir (2006). He further defines sampling as a process of selecting a subset of or sample from the entire population.

No sampling was carried out from the population of eighteen (18) administrators. Every administrator who was found in the field was selected for the research and the total came to twelve (12) administrators. These were purposefully targeted as respondents.

A sample of sixty (60) teachers was planned to be drawn from the population of two hundred and forty two (242) teachers using a simple random selection of ten teachers per each of the six schools. However during the study, the number of teachers fell below ten (10) per school which meant that all the trained teachers found at the schools participated in the research. The total number came to forty two (42) teachers.

A population of ten (10) pupils per teacher was planned for the sixty (60) teachers. Assuming that all the sixty (60) were handling grades 7 to 9, this population would have been six hundred (600) pupils .On the other hand if the sixty (60) teachers were handling grades 1to 6 there would have been no sample for pupils. Out of the forty (42) teachers, only 4 teachers were handling grades 7 to 9.From the firth teacher, only six (6) pupils were mobilised instead of ten (10). The total number of pupils was forty six (46). The total number of respondents was 100.

These participants were selected purposively because they are major stakeholders in the practice and experience in reflective teaching methods in the study area. The researcher chose the respondents who provided valuable information for the study (Polite and Beck 2010).

In choosing this sampling method, the researcher focused on the question she was interested in answering as of utmost importance, which in effect determined who the potential right participant for the study was. The main goal of purposive sampling in this study was to focus on particular characteristics of a population that were of interest in relation to implementation of reflective teaching methodologies in Zambia, which enabled the researcher to answer the research questions. The sample studied was not representative of the population, but for

researchers pursuing qualitative or mixed methods of research designs, this was not considered to be a weakness but rather a strength based on choice.

Attached to this, there were three primary reasons why the researcher used purposive sampling;
a) It is a wide range of sampling techniques that can be used across such qualitative research designs
b) Purposive sampling techniques that range from homogeneous sampling through to critical case sampling, expert sampling, and more.
c) It provides researchers with the justification to make generalisations from the sample that is being studied, whether or not such generalisations are theoretical, analytic and or logical in nature Singleton (1998).

3.4.1 Profile of the Respondents

The study also included the bio-data of the respondents as it gives an overview of the giver of information. The bio data is presented in terms of gender, educational level, and number of years in service.

3.4.2 Gender Profile of Respondents

There were 100 participants who were involved in the study. The participants were evenly represented in terms of sex (42 males and 58 females), and they were drawn from different categories as illustrated in the table below. This was meant to collect balanced views on the study and at the same time increase the credibility of the study.

Figure 1: Gender Profile of Respondents
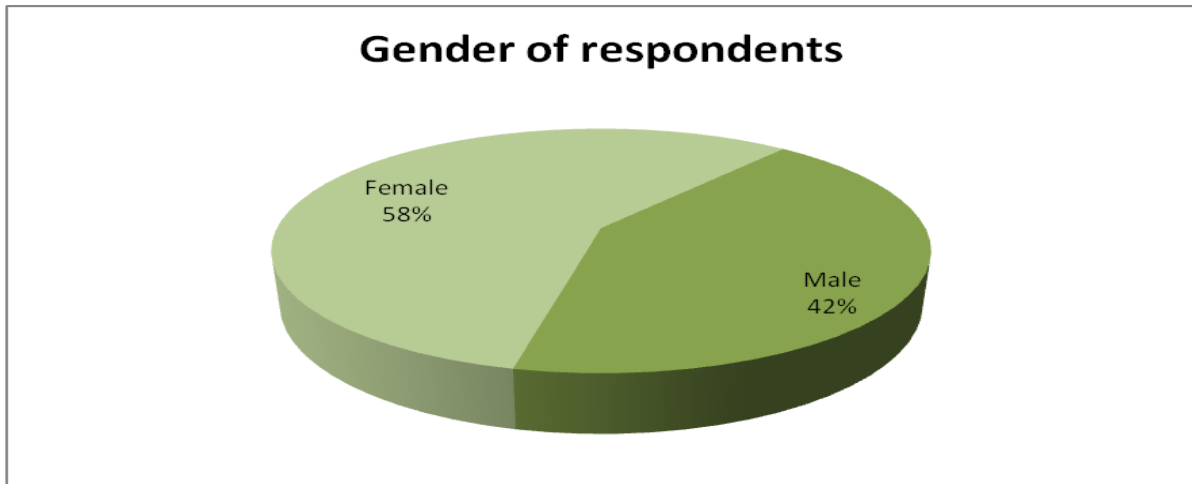
3.4.3. Educational Level Profile of Respondents

The levels of education were as follows: 26 Primary Certificate, 20 Diploma, 8 Degree and 46 pupils. The administrators were part of the profile.

Table 2:Educational Level Profile of Respondents

Qualification of respondents	*Number of respondents*
Degree	8
Diploma	20
Certificate	26
Pupils	46
Total	**100**

3.5 Categories of Respondents

The total number of respondents in the study was 100. Out of this sample size, there were 12 administrators, 42 class teachers and 46 pupils as illustrated in the figure below.

Figure 2: Categories of Respondents
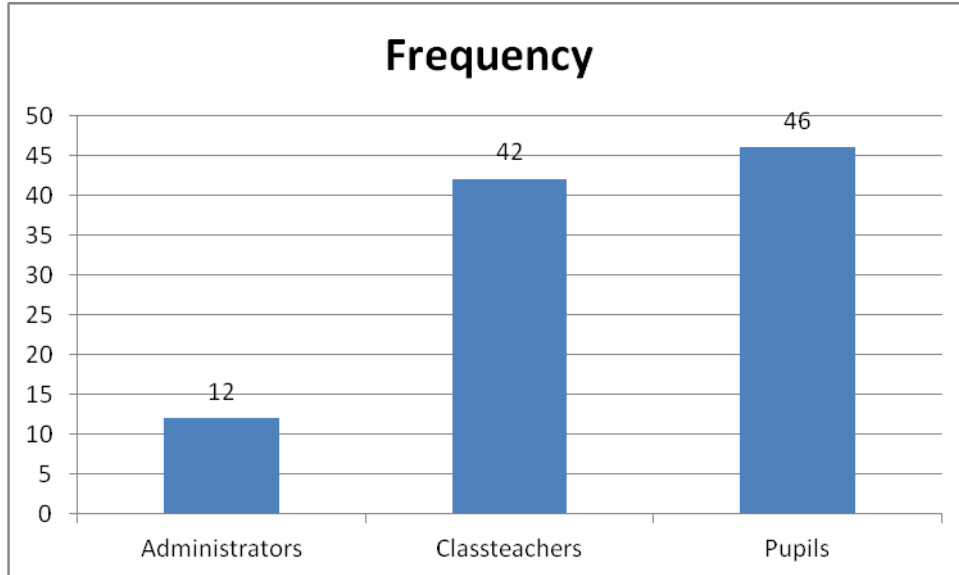
3.6 Types of Data

The study relied on both primary and secondary data. Primary data were collected from study participants while secondary data were collected from teachers working documents that are schemes of work, lesson plans and records of work. Data were also collected in published articles, journals, books, reports and other relevant sources of information.

Primary data information was collected by the researcher specifically for the research assignment. In other words, primary data are information that this researcher must gather because no one has compiled and published the information in a forum accessible to the public. These types of data have a merit in that they are original in nature and directly related to the issue or problem and current data. Secondary data are the data collected by a party not related to the research study but were collected for some other purpose and at different times in the past Singleton (1998). If the researcher uses these data then these become secondary data for the current users. These are advantageous as they may be available in many forms for instance written, typed or in electronic forms. Secondary data are also used to gain initial insight into the research problem. Secondary data are classified in terms of their source – either internal or external. Internal, or in-house data, is secondary information acquired within the organization where research is being carried out. External secondary data is obtained from outside sources. There are various advantages and disadvantages of using secondary data.

Keeping in view the advantages and disadvantages of sources of data for the research study and time factor, both sources of data that is, primary and secondary data were selected. These were used in combination to give proper coverage to the research questions.

3.7. Data Collection Techniques

Data were collected using in-depth semi structured interviews for administrators and teachers, Questionnaires for teachers, observation for teachers and Document review analysis. Owing to its nature and the diversity of participants in the study, the researcher used different types of data collection techniques.

3.7.1 Questionnaire

Questionnaire is a set of questions prepared to collect answers from respondents relating to the research topic Buchi (1974). The use of the questionnaire was justified on the grounds that the researcher was dealing with a literate population and that the questionnaires were administered to a relatively large group of teachers and pupils almost at the same time. In this study, semi structured questionnaires with open and closed ended questions were used to collect information from 42 teachers. The semi-structured questionnaires were self administered to teachers while the questionnaires for the pupils were researcher administered. The researcher read out some questions from the semi-structured questionnaire to the pupils.

3.7.2 Semi Structured Interviews

In this method, the interviewer personally meets the informants and asks necessary questions to them regarding the subject of enquiry. These interviews are based on the use of an interview guide. This is a written list of questions or topics that need to be covered by the interviewer Kombo (2009). The major advantages of this technique was that there were no chances of no-response as the interviewer personally collected data and allowed for probing in order to get in-depth information. Further, data collected from interviews was so reliable that the interviewer tactfully collected the data by cross examining the responders. This technique was used to collect data from Head teachers, deputy head teachers, senior teachers and class teachers as key informants. For the class teachers, the semi-structured interview was a follow up on some question from the questionnaires. This was conducted when teachers submitted the questionnaires.

3.7.3 Focus Group Discussion

Focus group discussion can be defined as the group discussion in which six to nine participants talk about a topic under study under the guidance of the researcher who plays a role of a moderator.'' Sometimes (FGD) can be an observation group that com to the researcher to discuss views and observations'' Matiure, (2011).

Focus group discussion is a good way to gather together people from similar backgrounds or experiences to discuss a specific topic of interest (Morgan, 1998). The group of participants is guided by a moderator (or group facilitator) who introduces topics for discussion and helps the group to participate in a lively and natural discussion amongst them. In this study the researcher facilitated the discussion using semi-structured questions. FGD was used to collect information from teachers on the implementation of reflective teaching methodology.

The strength of FGD in this study was that it allowed the participants to agree or disagree with each other provided an insight into how a group thought about reflective teaching, about the range of opinion and ideas, and the inconsistencies and variation that existed in the implementation of reflective teaching methodologies in relation to their experiences and practices. All the class teachers found at each of the six schools were engaged in the FGDs. This was done during the submission of questionnaires. In total there were six FGDs which translated to one group per school. Out of the 6 groups 4 had six members each while two had nine members each. The time of discussion ranged from 40 minutes to one hour ten minutes. Authority was sought to record prior to the FGDs.

3.7.4 Observation Checklist

Using observations checklist, specific skills, behaviours, or dispositions of an individual in a given situation were monitored. The research used this data collection tool during lesson observations, focussing on the specific characteristics of reflection and reflective teaching. Non participant (overt) observation was used to collect data. The researcher was a spectator and observed lesson delivery by the class teachers and pupil participation. Out of 42 teacher respondents, twenty 20 were observed. The researcher sat at the back of the classroom and recorded all the proceedings during the lesson using the checklist. This tool was also used as lesson evaluation to gather data from pupils on what they said constituted reflective teaching

and from teachers on how they demonstrated reflectivity during the teaching and learning process.

3.7.5 Document Review

Document review was used in the report through the use of written document relevant to the study for the collection of data. This made the data have strong validity. Documents relevant to reflective teaching methods were analysed.

3.8 Data Analysis and Interpretation

3.8.1 Numerical Data

Numerical data, mainly from questionnaires, and where appropriate, were analysed by the use of data analysis computer software called Statistical Package for Social Sciences(SPSS). The reason for choice of this software was because it is easy to operate and user friendly and can as well take many quantitative data thereby being less time consuming. The researcher checked the data from questionnaires for consistency and accuracy before subjecting it to the data analysis package. The researcher used basically two views of the SPSS. These are the data view (also called data editor) and the variable view. The data view allowed the researcher to see the existing data base as well as enter data. The researcher used the variable view to secure information such as variable type, labels and others.

Once all the data had been entered, the researcher used the frequency command by selecting the menu analyse, descriptive statistics, frequencies to generate a report on the frequency distribution of the data, and produce graphical output such as bar charts and pie charts. The other command used by the researcher was descriptive statistics to describe features of some data set as a whole. This command was also used as a typical case in distribution of data such as measures of central tendency and measures of dispersion. The researcher also used descriptive statistics command on two variables such as the number of years served by the respondents and use of certain reflective teaching methodologies like lesson plans and mental outlines. This was done by selecting the menu analyse by putting the independent variable number of years serviced in the columns for example, against the dependent variable form of reflective teaching used in rows.

3.8.2 Qualitative Data

Qualitative data was analyzed thematically. This entailed that the recorded interviews and field notes were the main data sources, and that they were organized according to the types of responses. The interviews and data from FGDs were transcribed as accurately as possible by listening to the recorded interviews and discussions again and comparing them with the transcriptions. Data analysis involved an ongoing process of continual reflection about the data as well as asking analytical questions. However, this was not sharply divided from other activities in the process such as collecting data. The process therefore was marked by following activities using the frame provided by Keith (2010), as described below:

i.   Transcribing
ii.   Organising and preparing data for analysis
iii.   Reading through all the data with the objective of obtaining a general sense of the information and to reflect on its overall meaning.
iv.   Making a detailed analysis with coding which involves organising the material into thematic chunks or categories.

3.9 Data quality

Validity and reliability are vital for every research project. The researcher allowed the researched to feel free and express themselves in the way they ordinarily would and through the use of multiple sources of evidence, that is direct observation, interviews, documentation, data recording sheets (Yin, 1989). Validity deals with the question of whether or not the data collection process is really measuring what it is intended for. In the context of this study, the researcher ensured that there was a response to the research questions to validity in every detail possible. The conclusions that were generated responded to the objectives of the study.

3.10 Ethical Considerations

Babbies (2003) asserts that social science researchers often come into contact with their subjects. Hence, ethical considerations are cardinal in all social science research. On the basis of what Babbies states, ethical principles will be adhered to in this study. This will involve upholding confidentiality, getting consent from the respondents, respecting and being honest with the respondents. The researcher will also ensure that the data collected will solely be used for the purpose of this study.

The researcher observed the University of Zambia's (UNZA) ethical standards when reporting the research findings. The researcher was also mindful of UNZA's code of ethics concerning the respect accorded to the autonomy of participants, including cultural differences and participants' rights. This report was forwarded for approval to the Ethics Committee. To ensure informed consent, the researcher asked for authorisation to carry out the study from Livingstone District Education Board. The topic under investigation was discussed with participants before they participated in the study. The researcher ensured that participants knew exactly what was expected from them together with the costs and benefits before participating in the study.

3.11 Summary of the Chapter

The chapter discussed the methodology employed in the study. Descriptive design was used to enable the researcher collect information about teachers as well as pupil's attitudes, opinions and many other regarding reflective teaching. This helped the researcher gain an understanding of the implementation of reflective teaching methodology. Both qualitative and quantitative methods were used to enhance triangulation. Semi-structured questionnaires, semi-structured interviews FDGs and observation were used to collect the data. A sample size of 100 respondents was drawn from the population. Ethical considerations were classified to all the respondents beforehand.

CHAPTER FOUR

PRESENTATION OF RESEARCH FINDING

4.1 Introduction.

This chapter presents the research findings of the study that sought to analyse the implementation of reflective teaching methods in selected primary schools of Livingstone District. The research findings were as a response to the three research questions. Therefore forms of reflection and reflective teaching methods, implementation of reflective teaching methods and factors influencing implementation of reflective teaching methods underpinned the presentation.

The findings presented in this chapter were based on responses of respondents from the Head teachers and deputy head teachers, senior teachers, class teachers and pupils. Observations and interviews were used to supplement and strengthen information collected by use of questionnaires. Furthermore tables, bar charts, and circular graphs were used.

4.2 Forms of Reflection and Reflective Teaching Methods.

The study identified the forms of reflection and reflective teaching methods and found that the following were being used by the teachers: Role play, mentoring, dairies, Peer observation, CPD meetings, Storytelling, mind mapping and action research as shown in the table below:

Table 3: Forms of reflective teaching methods used by teachers

Form of Reflective Teaching Method	Number of Teachers Citing the form out of 42	Percentage of Teachers
Role play	35	83
Mentoring	33	78
Diaries	30	71
Peer Observation	35	83
CPD Meetings,	38	90
Story Telling	32	76
Mind Mapping	25	59
Action Research	25	59

As indicated intable3 above, the study established that there were eight (8) forms of reflective teaching methods commonly used by the teachers. The teachers attributed their use of the forms of reflective teaching methods above to the training they received during the quality education project by Save the Children Norway (SCN).The programme assisted teachers to be reflective practitioners and the study found out that thirty eight (38) out forty two (42) used CPD as a form of reflective teaching. Continuing professional development (CPD)through teacher group meetings was the most commonly used form of reflective teaching method. Through this form, teachers met to plan and prepare for lessons together. They attested to the fact that CPD was an important tool for enhancing knowledge and reflective skills.

Thirty five (35) out of forty two (42) teachers used role play as it allowed learners to use concepts and problems that had been introduced through reflection. According to teachers role play was a hands on approach to learning as opposed to more abstract forms of learning and that learning took place through active involvement of teachers and learners in the teaching and learning process. In role playing, teachers facilitated their learners more in group work. Through observation done by the researcher, it was evident those teachers gave individualised help to the learners and that the lessons were learner centred. This fostered subjective learning

in which teachers and learners reflected on the learning and teaching process. Through role play, pupils were more eager to learn and developed their reflective skills.

Peer observation was used by 35 out of 42 class teachers as a form of reflective teaching method. The teachers who used the form said that peer observation was a basic part of learning and that it provided an opportunity for recently graduated teachers to see what other more experienced teachers did. These teachers attested to the fact that peer observation developed awareness about a variety of instructional aspects. They recognised and identified good practices in others and identified their own professional developmental needs. Teachers' professionalism was enhanced as well as good practices, innovation in teaching and learning were promoted. They net worked with their colleagues and discussed various learning and teaching issues which increased their sense of collaboration, enhanced trust through. Colleagues were allowed to comment upon each other's teaching. One teacher had this to say;

" After my fellow teacher observed my lesson and then the discussion, I realised the power of having another pair of eyes in the room to help me see better".

Experienced teachers see how others deal with many of the same problems teachers face on a daily basis and this was what one teacher had to say:

> "Sometimes I can find out that my friend has effective teaching methods which I have never used. Observing a fellow teacher may activate reflections about my very own teaching. Interactions are also developed and it is only through peer observations that teachers can come together and have a chance to interact with one another and share ideals. Advice on how best i can teach is provided immediately after the lesson."

Further it was found out that thirty five (35) out of forty two (42) teachers or 83 percentages used mentoring as a form of reflective teaching method. According to teachers this method facilitated the development of reflective skills of both the mentors and mentees. Mentoring developed self reflective and self directed teachers and learners. The study found out that when mentees and mentors talked, shared discussion and solved problem and jointly

constructed knowledge and meaning, both learnt how to reflect ultimately transforming the learning and teaching process.

Regarding dairies, some teachers viewed them as a daily record of their professional experiences. Thirty (30) teachers out of forty two (42) representing Seventy one (71) percent of the teachers indicated that they used dairies. This is in line with some scholars who view dairies to be the easiest way to begin the process of reflection on ideas, personal thoughts and experiences, as well as reflections and insights on the learners. However the need to have discipline when using diaries was echoed since diaries took up some time though it was time well spent as it helped teachers to clarify their thinking. It was evident that teachers included in their diaries not only the events that occurred during the lesson, but also their own thoughts and feelings as well as students' reactions and responses.

Regarding Storytelling, the thirty two (32) teachers out of forty two (42) said that it was used as both a verbal and a written form of reflective teaching practice. The research further reviewed that story telling provided teachers a formal means of engaging in the reflection process. Most teachers were able to recall their thoughts, feelings and actions regarding a significant event during teaching using stories by responding to specific thought provoking questions which gave them insight regarding the importance of reflection. The teachers attested to the fact that story telling placed more emphasis on reflection and was viewed as a collaborative process as there was someone to listen to and value their stories:

"I like it to tell a story than to write everything on the board."

Mind mapping and action research were the list used forms reflective teaching method. Out of forty teachers (42) teachers, twenty two (22) teachers representing fifty nine (59) percent of the teachers viewed used mind mapping as a form of reflective teaching. This is in with loughran (2002) who said that mind mapping and action as a form of reflective teaching is a visual and a good way to organise ideas, an innovative way to take notes, an interesting way to plan essays, projects and assignments, an effective revision technique, a more structured approach to brainstorming.

The number of teachers employing action research was the same as those engaged in mind mapping. Action research was seen to have involved inquiring into one's own practice through a cyclical process. This vital cycle involved planning, acting, observing and reflecting. Both teachers and administrators stated that action research benefited them as they were able to reflect on their practices in the classroom, find solutions to problems that affected the learners in the classroom. Action research enhanced teacher's professionalism in that, as they sought for solutions to problems that affected learners, they also sharpened their pedagogical skills ultimately improving the learning outcomes. Learners were also involved in finding solutions to problems that affected them in class for example in setting class rules. One teacher had this to say:

"Action research brings about improvements in my practice as is able to analyse what I do during the teaching and learning process. The whole process is founded on the gathering of evidence on which to make informed decision rather than judgements".

It was evident that the whole process of action research was so enriching and enhanced teachers' professional development.

4.3 Application of Reflection-in-Action and on action

 All the eight forms of reflective teaching methods which the teachers used applied either reflection in action or reflection on action. When asked if teachers were applying reflection-in-action during lesson delivery, the responses were as shown in table 4 below.

Table 4: Application of Reflection in Action by Teachers

Application of reflection in action	Number of teachers	Percentage of teachers
Applied	34	80
Did not apply	3	7
Not sure	05	1

The researcher enquired on the means in which teachers were reflecting after an action. According to the teachers, the following were found to be the means of reflection after action: lesson evaluation, revision of lesson, and marking of pupils books.

Table 5: Type of Reflection on Action used by Teachers

Type of reflection after action	*Lesson evaluation*	*Lesson revision*	*Making of pupils books*
Number of teachers using the form	14	18	10
Percentages	33	42	23

4.4 The Implementation of Reflective Teaching Methods

Sixty nine (69) percent of respondents chose a written outline (lesson notes) as their tool for implementing reflective teaching methods. Only a respondents indicated that they preferred a written detailed outline (lesson plans) as an instrument in the implementation of reflective teaching methodology. However when subjected to a lesson observation checklist, it was found that most respondents had no written detailed outline such as a lesson plans instead they used mental outlines. See table six (6) for details.

Table 6: Implementation of Reflective Teaching Methods

Teaching task	Number of teachers out of 42	percentage of teachers out of 42
Lesson notes	29	69
Lesson plans	13	31
Mental outline	0	0

1. The study found out that the recently graduated teachers used lesson plans more than their experienced counter parts. They attributed this contrast to lack of experience which leads to rely heavily on the lesson plans. See table seven (7) for details.

Table 7: Use of Reflective Teaching by Recently Graduated teachers

Recently graduated teachers and Use of reflective teaching				
	Number of recently graduated teachers	percentage	Number of other teachers	Percentage
Used	18	90	5	23
Did not use	2	10	17	77
Total	20	100	22	100

Of the recently graduated teachers, 90 percent used the lesson plans while 23 percent of other teachers used lesson plans. The former were actually in possession of a written detailed outline in form of a lesson plan and tended to pay greater attention to technical issues of reflective teaching and learning.

Teachers used short term planning, long term planning and other Reflective Teaching as shown on the table below.

Table8: Use of Reflective Teaching.

	Frequency	*Percent*
Short term planning	21	5
Long term planning	10	24
Others	11	26
Total	42	100.0

4. 5Factors that Influence the Implementation of Reflective Teaching Strategy.

Most respondents' ranked pupils needs as the main factor or reason for the implementation of reflective teaching strategy, followed by administrative support, then availability of space in the classroom followed. Subject matter and belief about teaching were the least factor. The figure three (3) below illustrates illustrates the factors that influence implementation of reflective teaching strategies..

Figure 3: Factors for Implementing Reflective Teaching
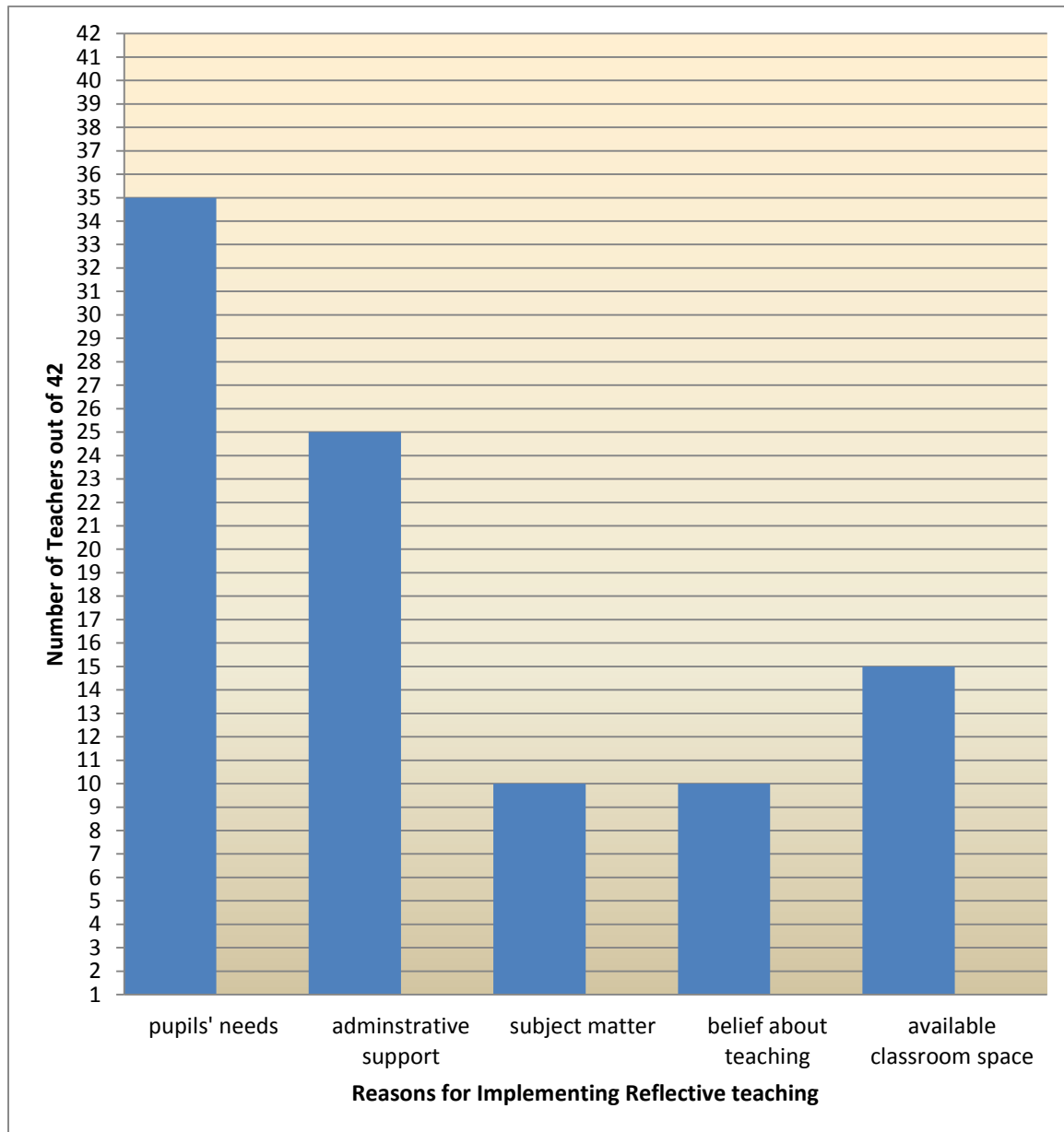
As regards to views of pupils on teacher's adherence to reflective teaching, a variety of responces ranging from yes,not sure to not adhering were given See table 9 for details.

Table 9: Pupils' views regarding teachers' adherence to reflective teaching.

Reflective Teaching practices	Yes	Not sure	No	Total
Fair treatment of pupils in class	35	6	5	46
Ensuring that pupils have understood	16	9	21	46
Linking previous lesson to new lesson	13	14	19	46
Consideration of pupils needs during the lesson	9	7	30	46
Pupils' freedom to ask questions during lessons	27	8	11	46
Change of teaching method to suit pupils' needs	10	2	30	46
Deterring pupils unwanted behaviour during less lessons	32	8	6	46

From the above analysis, it was clear that most pupils said that their teachers were already practising some form of reflective teaching in areas such as dealing with pupils who misbehaved and disturbed others in class, teachers having good memory whereby they were able to remember what pupils did and connect with what must be done, pupils being free to ask their teacher when they did not understand something, and their ability to give clear explanations and instructions. However when asked whether they would both want their teachers to change the way they taught and give them more time to participate during the lesson, most pupils answered in affirmation.

4.6 Summary of Findings

The chapter presented findings of the study on the implementation of reflective teaching methods in schools in Livingstone district. The findings were presented according to the research questions in relation to the study. The first major finding was related to forms of reflectivity used by teachers. The forms of reflective teaching methods used by teachers were role play, mentoring, diaries, peer observation, continuing professional development

meetings, storytelling, action research and mind mapping. The second finding was on the issue of the implementation of reflective teaching. Though most respondents indicated that they used written outline as opposed to mental outlines in the data collected using questionnaires, the data collected using observation showed the opposite as many used mental outlines. The third finding was on factors influencing implementation of reflective teaching. Pupils' needs, administrative support, availability of space in the classroom, subject matter, and belief about teaching were the reasons teachers gave for implementing reflective teaching. The study found out that some factors hindered the implementation of reflective teaching methods. These were time limitations, curriculum needs and class size. Although teachers were aware of the importance and relevance of reflective teaching, observations showed that they had difficulties to practice the same in their classes due to limited time, curriculum needs, and class size. Finally, the majority of students said that though their teachers exhibited some forms of reflective teaching, they would want them to change the way they taught and give them more time to participate during lessons

CHAPTER FIVE

DISCUSSION OF FINDINGS,

5.1. Introduction.

This chapter discussed the themes that emerged from the findings that analysed the implementation of reflective teaching methods in selected primary Schools of Livingstone district. Discussions of the findings were presented following a number of issues that arose in the study as: forms of reflection and reflective teaching methods; implementation of reflective teaching methods in schools and factors that influence the implementation of reflective teaching methods.

5.2. Forms of Reflection and Reflective Teaching Strategy

The forms of reflective teaching identified in the study were just but a fraction of forms of reflective teaching cited in literature.Mcgill and Beatty, (1992) gave a list that includeaction learning, Course and unit reviews, Clinical supervision, Critical incident analysis engaging a critical friend, Drama Journal keeping, Programme reviews, reflective teaching practice workshops/seminars, self-accounting professionals, teaching portfolios and Teaching or learning networks which were not found in this study. The fact that the study was limited to only six (6) months, data collection may explain why only a small fraction were identified during the research period.

The findings of the study regarding the forms showed that reflective teachers employed role play, mentoring, diaries, peer observation, continuing professional development meetings, storytelling, mind mapping and action research as forms of reflective teaching. They identified CPD meetings, role play and peer observations as the most commonly used forms of reflective teaching. CPD meetings were commonly used by teachers as an avenue for sharing of knowledge, values and skills. Teacher group meetings were held three to four times in a term. This is in line with the Ministry of Education Master Plan for strategic expansion and implementation of School based continuing professional development 2010 -2023 which recognises the fact that CPD was birthed by a desire to fulfil or attain quality education for development and innovations to help teachers reflect on the teaching and learning process. In

direct response to the provision of quality education, efforts have focused on designing strategies to promote CPD through the establishment of a system of in-service called School programme of in-service for the term (SPRINT).Because CPD was important in helping teachers becoming reflective practitioners, it was reflected in the National implementation framework (NIF) and it was embedded in the Fifth National development plan (FNDP) .Its objective was to strengthen the systems for CPD, MOE (2010).

CPD meetings were conducted through Lesson study. Lesson study was an approach that teachers used to collaborate, develop and design lessons while examining successful teaching strategies which enhance pupil learning. In lesson study one teacher implements the lesson plan that was generated by a group of teachers in a real classroom while others observe and take notes on the quality of the lesson. The group then comes together to discuss their observations so that the improved lesson can be re-taught in another class. Finally a teacher produces a report of what they have learnt from the lesson particularly with respect to their observation focus. The development of an ideal lesson is not the main aim in lesson study but the focus is on student learning and professional collaboration. Teachers discussed pedagogical issues and reflected on how best they would improve. They engaged in lesson study circles where they identified difficult questions, planned together and one person demonstrated the lesson while the others observed. Then together as a team the teachers analysed the lesson. Suggestions on how best the lesson would be taught were given. This helped teachers to reflect on the learning and teaching process. Evaluation of lesson study showed that collaboration of teachers through the use of study group increased learner achievements and decreased teacher isolation. MOE plan (2010). CPD is conceptualised as consisting of reflective activity designed to improve an individual's needs and improve professional practice. Pedagogical knowledge and skills of the teachers are sharpened.

In high performing education systems, teachers have a central role to play in improving educational outcomes and are at the centre of the improvements efforts themselves.CPD helped in creating a lifelong framework for teacher respondents. It provided opportunities for them to work together on issues of instructional planning and to learn from one another

through mentoring or peer coaching and by conducting action research on the outcomes of classroom practices to collectively guide curriculum and professional learning decisions

It was evident that role play helped teachers to analyse lessons which ultimately improved the lesson delivery as the teachers made adjustments to some aspects of the lesson delivery. This helped teachers as they reflected on their lessons to enhance the learning and teaching process. Through role play, teachers enhanced their professionalism, got highly motivated especially where they were directly involved and felt ownership of activities to implement the school programmes. Teachers readily shared ideas which made them more reflective practitioners and built up confidence and skills. The pupils too became part of the lesson hence the lessons became more interesting. The teachers and learners were given opportunity to ask questions and find solutions together (Kimmis (1990).

The study established that for peer observation to be a positive experience, it needed to be carefully planned for and implemented by the observer and the observed. The nature of observation was in some cases self evident, yet the process of observation was more complex than it appeared. It was noted that lessons were dynamic and to some extent unpredictable events occurred. This therefore called for planning where a number of issued were to be ironed out. Among such issues to be ironed out were, the kind of material to be taught, the nature of class to be observed, the kinds of learners in the class, patterns of interactions and class participation, focus for the observations and the procedure. It was postulated by Yiend *et al (2012)*that peer observation of teaching if carried out, support was required for instance in terms of resource mobilisation, time, knowledge, gathering resources and any other. Without prior development in the delivery of critical feedback it could lead to an inability to provide critical feedback to the observed and they acknowledged that the potential for using peer observation to foster reflection on teaching practice was inherently limited if the process failed to generate critical comments.

School administrators had an important role to play when implementing and encouraging peer observation. Morran (1995) posits that administrative Peer observation helped teachers to become more aware of the issues they confront in the classroom and how these could be resolved. It helped to narrow the gap between teachers imagined view of teaching and what went on in the classroom. It was clear that no evaluative classroom observations involved others in the

professional development as well as the teachers. Since observation involved an intrusion into a colleague's classroom, procedure was to be followed. The most successful aspect of class room observation was that it allowed experienced teachers to serve as valued mentors to their less experience colleagues. The fact that the experienced teachers were willing to go through the same process of critical reflection as the novice teachers, gave them great credibility in the eyes of the novice teachers. The experienced teachers became more thoughtfully about their own teaching and became more reflective practitioners (Morran1995).

Blackwell and McLean (1996) outlined a number of potential benefits for teachers who use peer observations in reflective teaching. They posit that new and inexperienced teachers may feel uncertain about their teaching ability. Positive feedback from a peer or mentor can provide re assurance, allay anxiety and increase their confidence. Teaching staff can use peer observation to help them evaluate innovations in their teaching. They may have strengths of which they are unaware of and observation revealed these. A teacher may have a general sense of uneasiness about a course, without beingable to pinpoint the problem or even be sure that there was one sure way. These scholars urge that an observer may help toidentify the source of uneasiness and can discuss with the colleague possible courses of action.For those who observe, watching others always provokes reflection on one's own teaching. Teachers mentioned that peer observations, increased the sense of collaboration and enhanced trust through allowing colleagues to observe and comment upon each other's teaching. It increased awareness of what material colleagues were covering. Teachers got good ideas from practice and encouraged discussion and dissemination of good practice. Teachers addressed practical issues such as suitability of facilities and maintained and enhanced a quality learning experience.

Recently graduated teachers used mentoring to gain teaching experience. These teachers were assigned experienced teachers to help them prepare lessons, learning and teaching materials. Pedagogical concerns and decisions on the curriculum, instructional strategies, rules and organisation of the classroom were also major areas of concentration for the mentors. The mentees observed lessons and engaged in a continuous process of learning and reflection, supported by the mentor with an intention of getting things done. Through mentoring, individuals learned from each other by working on real problems and reflected on their own experience.

It was apparent that both the mentor and the mentee became reflective practitioners. Teachers confirmed developing deeper understanding of the teaching, the institutional as well as cultural issues. They were able to solve problems in the classroom as mentors sought professional development to sharpen their skills.This was in conformity with Moran and Dallart (1995) who said that mentors in teaching facilitate the development of reflective skills by both modelling reflection on their practice and affirming the critical thinking process in the mentee. Hine (2000) attests to this fact when she suggests that one of the prime benefits of mentoring is the development of more self-reflective, meta- cognitively aware and self-directed learner. She further posits that talking, sharing discussing and problem solving and jointly constructing knowledge, and means both the mentors and mentees are learning to reflect in ways that will ultimately transform teaching practice. The mentor teachers explained that they became more reflective in their quest to provide the best orientation to the new teachers while the mentees also put in their very best thereby improved in lesson delivery. These findings are in line with Schön (1987) who introduced the concept of reflective practice as a critical process in refining one's artistry or craft in a specific discipline. Schön recommended reflective practice as a way for beginners in a discipline to recognise consonance between their own individual practices and those of successful practitioners. As defined by Schön (1996), reflective practice involves thoughtfully considering one's own experiences in applying knowledge to practice while being coached by professionals in the discipline (Schön, 1996).

Regarding storytelling, the study established that it promotes reflective teaching and employed the use of critical thought, self-direction and problem solving, as well as nourishing personal knowledge and self-awareness. Dinkelman, (2000) contend that storytelling offered the potential to animate the idea of teaching as reflection, generate knowledge about reflection, practice model an inquiry-based approach to pedagogy, and provided opportunities for novice teachers to reflect on learning to teach, generate rich understanding that can be used to facilitate growth and improvement. Meadam (2000) appreciated storytelling when he said that people are the total sum of the stories they tell themselves and those stories are necessarily rooted in our experience and by how we choose to interpret the experiences of others.

The power of storytelling could be utilized in teacher's reflection as a strategy for making connections between theory and practice in authentic classroom environments and enabling pre service teachers to actively develop plans for growth. A narrative approach, or storytelling, serves as an alternative approach to reflection for student teachers to understand and make meaning of their field experiences in an unobtrusive and connective way. Yet, while this trend has generated excitement in the education community, there is still much to learn about the nature of storytelling and its value in teacher education and the use of storytelling in teacher preparation programs as a means to promote teacher reflection.

Diaries on the other hand promoted active learning, reflection and encouraged teachers to take the initiative to be active during the lesson became self-driven; allowed individual learners to explore concepts and ideas in relation to their thoughts and feelings from different perspectives. Mcgil attests to the fact that learners became independent thinkers through the practice and enabled them to solve various problems on their own. Reflective diaries provided good opportunities for teachers to gain better understanding about how the learners thought and felt about the subject, and the learning progress throughout the lesson, which eventually enhanced the learning process. Writing reflective diaries involved learners in a new form of writing which they may not have had a chance to experience in the past. This exposure brought out improvement in the learners' writing skills. Learners freely expressed personal views and criticised one-self. The reflective diaries provided the platform for students to freely express what they thought and felt about the course and their learning process, and also promoted their expression of ideas, personal experiences and opinions. This provided an ideal place for learners who were generally not willing to speak up in the classes to express themselves. The study found out that diaries enhanced the process of self-reflection and the development of critical thinking skills among students when they related their knowledge to real world issues. It helped students develop their creativity and a questioning attitude towards different issues and problems as cited in Mcgil (1995).

Mind mapping dates back to before the use of written language when human beings used pictorial and diagrammatic representation as a means of recording important things. Ancient Egyptians conveyed their message through a series of small pictures, cave paintings, which archaeologists dated as far back as 30,000 BC, It was from such paintings that information

regarding their way of life was generated Mucklewhite (1995). Mind mapping was a form of a graphic organiser which scallforded meaning for learners. This was in line with Buzan, T, 1983 in Hogan, C (1994) who said:

Mind mapping is a process by which the connected ideas surrounding a particular concept or problem are drawn in a map fashion so as to enable the practitioner to reflect on them and to clarify and or reshape them and move onwards.

Indeed mind mapping was used as a device for helping students and teachers reflect on their learning and teaching, respectively. This was the more reason why teachers today still used this form of reflectivity. It was a useful way to encourage learners to reflect on their suggestions usually put on a paper in form of diagram or picture. It was seen by teachers as an approach that could be easily adapted to suit the needs of reflective learners. This form enhanced both teachers and pupils' creativity, planning, problem solving, recording information,presenting information, learning and revisionin all subject areas.

This study established that action research was another form of reflection and reflective teaching methods. It was becoming a more accepted tool for teachers to assess their own teaching strategies and reflect upon their effectiveness. This was in line with McNiff (1999) who defined action research as the name given to an increasingly popular movement in educational research that encourages teachers to be reflective of their own practices in order to enhance the quality of education for themselves and their students. McNiff continued to say that action research was a form of self-reflective inquiry that can be used in school-based curriculum development, professional development, and school-improvement schemes. Schmuck (1997:8)extended on teacher self-reflection and stated that:

"*When educators strive to reflect on their past, present, and future actions and engage in solitary dialogue, their perspectives of work mature."*

McNiff (1999) concluded that action research actively involves teachers as participants in their own educational improvement. Indeed the study established that action research provided teachers with the opportunity to systematically reflect and became reflective practitioners,

examined a practical problem within a classroom or school setting, considered options, implemented and evaluated potential solutions. Action research differs from day to day decision making that teachers do. It had potential to greatly enhance both teachers' professional development and school improvement initiative which resulted in enhanced personal awareness improved practice and new learning. This is in line with Hamilton (1997) who said that action research was a process of systematic inquiry into a self –identified teaching or learning problem to better understand its complex dynamic and to develop strategy geared towards the problems improvement.

It was evident that action research process led to a spiral of cycles with the researcher reflecting on each stage of the process. Carson, (1989) said that when the results of the first action were studied, the researcher then planed the next series of actions. In each case each reflective stage yielding more information about the issue and increases the researchers' understanding. The information gained leads the researcher to refine the question with a different focus. Reflection was seen as the most important skill the researcher needed to engage in action research. Reflection moved the practitioner from one stage to the next; thus action was based on reflection. Using action research was seen as a practical way for teachers to discover the nature of their practice and to improve it. Action research encouraged practitioners to become knowledge-makers, rather than merely knowledge-users, Elliot, (1991).Action research used action as a means of research; planned change was implemented, monitored and analysed .

Regarding reflection in action and on action, all the eight (8) forms of reflective teaching methods used either reflection in action, reflection on action or both. The respondents explained further that the forms of Lesson evaluations employed were   reflection-in-action, which was conducted when teachers were in the classroom teaching in their everyday routine knowledge. Given that teachers carry out such actions every day, they have to employ a kind of knowing-in-action as suggested by Schön (1983). On the other hand, teachers indicated that if something wrong happened in class like a faulty application, they employed reflection-in-action which underwent a certain process. When reflection-on-action was employed it was seen to be less problematic since it was viewed as a teacher's thoughts and a retrospective study of

their presentation. Reflection-for-action was another method used though it was different from the other two types since it was proactive. According to schon (1983)reflection in action acknowledges the tacit process of thinking which accompany doing and which constantly interact with and modify ongoing practice in such a way that learning takes place. Much of this may remain unconscious tacit and unverbalised (Clark and yinger, 1997), though loughran (1996) suggests that in meeting an anticipated problem situations, reflection in action comprises reframing the problem and improving on the spot so that the experience will be viewed differently.

Reflection on action on the other hand was viewed as teachers' thoughtful consideration and retrospective analysis of their performance in order to gain knowledge from experience. According to schon these two processes form the core professional artistry of a reflective practitioner. Critical theorists have extended schon's categories adding reflection about action as a means of ensuring that teachers reflect on the social, economic and political purposes and conditions of teaching and learning as well as the school and the classroom context (Zeichner, 1993).These notions continue to form the basis of much of the thinking about the nature of reflection and the development of effective reflective practitioners in the teaching profession. Reflective practice in these terms entail making conscious and explicit the dynamic interplay between thinking and action what shuman, (1987) terms the wisdom of teaching so that teachers may become thoughtful and learn from their work in the light of purposes and principles which are moral (Socket, 1993).

The findings were in line with Dewey (1933) who considered reflection in practice as having a moral base, where professional actions would be treated as experimental, and the individual would reflect on both their actions and their consequences. Thus while a reflective practitioner may be concerned to improve practice and to develop additional competence, what defines the reflective teaching was more a set of attitudes towards practice based upon broader understanding of self, society and moral purposes than those which sought simply to increase efficiency in reflection to delivery and narrowly conceived achievement targets.

It was evident that reflective practice was increasing being recognised as being essential to good teaching and having a central role in the learning life of the effective teacher (Day, 1993). This was so due to the assumption that teaching and learning are complex processes and since

there was not necessarily one right approach (Lougran, 1996), deliberately among competing versions of good teaching and recasting understanding and current practices (Grimment *et al 1990*) are likely to lead to improvement. Without the capacity to evaluate, teachers would be more inclined to remain prisoners of their programmes. (Argyris and schon, 1976) ,cited in Day, 1985) and as a result their professional effectiveness in circumstances which inevitably change over time would be decreased.

Engaging in reflective practice was a means of helping individual teachers towards greater self knowledge and self challenge which was a useful way of achieving personal development and that personal development may be through for example an analysis of the personal values and theories that underline teaching. He further posits that reflective practice was considered to be central to growth of teachers as inquirers who engaged in collaborative research with others from and outside the school in generating knowledge of practice rather than finding themselves as objects whose role was to implement existing theories in practice.

Teachers may reflect in differing ways at different times. It was important, therefore to recognize the impact of teachers' positions in their career in which they work if opportunities for their professional growth were to be maximised, Johnston and Badly1996.

5.3Implementation Process of Reflective Teaching Methods

The act of self-directed critical thinking about teaching or aspects of one's teaching are characteristics of a reflective teacher as pointed out by Pollard (2004), Akbari (2002), Cunningham (2001) and Cornford (2002).The current study found that all respondents engaged in long or short-term lesson planning, that is, per week, or a couple of weeks, or long term planning, which included planning for six months to a year. In addition, they all used the national or school curriculum as a guide to lesson planning. However, when it came to actual delivery of lessons, most respondents who were observed did not have lessons. Instead they used mental outlines.

Most pupils indicated that their teachers were in some way practising reflective teaching in terms of class discipline, giving clear explanations and instruction as well as allowing pupils to ask questions on areas they did not understand. Reflective teachers were helped to analyse their own classroom behaviour and looked at problems that existed and came up with solutions

as they evaluated the outcomes of their actions and those of the learners. However, the majority of pupils said that they would want their teachers to change the way they taught and give them more time to participate during the lesson time One pupil said she wanted her teachers to give her more time to talk to her classmates and to the (teachers) during the lessons.

Lesson observations showed that all respondents used either post-lesson evaluation or ongoing lesson evaluation that took the form of mental or written notes. These forms were similar to those advanced by Lieberman and Miller (2000) and Han (1995), and Handal and Lauvas (1987), who all believed that post-lesson evaluation was an integral part of lesson development, not an addendum, and that evaluation should be an ongoing process. The few lesson plans that were examined also supported this proposition. On the issue of recently graduated teachers using or applying reflective teaching methods in Schools, the findings of this study confirmed the results obtained in similar research (Hatton and Smith, 1995; Usher *et al*. 1998; Farrell, 2003 and Han, 1995). In these studies, it was found out that novice teachers gave importance to teaching and evaluation of teaching by focusing on issues such as Class room management. These findings are in agreement with the current study's findings where recently graduated teachers were found to be more likely to use lesson plans more than their seasoned counterparts. Similarly, these studies (Han, 1995; Hatton and Smith, 1995; and Farrell, 2003) also found that seasoned teachers were more likely to use mental outlines. For example, most of the participants in the study of Hatton and Smith (1995) attended to technical aspects of teaching. As a result of this study, the researchers concluded that recently graduated teachers tended to reflect on technical issues in the initial phase of their developmental process of reflection.

5.4Factors Influencing the Implementation of Reflective teaching methods

In this study 83 percentage viewed pupils needs as the main factor influencing the implementation of reflective teaching methods. The other factors included administrative support, availability of space in the classroom, subject matter and belief about teaching were the other factors indentified. It was observed that there was need for teachers to always consider pupils' needs (not only in theory but in practice also), in both their planning and delivery of lessons. Controlled freedom that allows pupils to freely participate during lessons must be considered a vital component of reflective teaching. The literature suggests that

adequate classroom space and access to other areas in a school's building, for example, computer, or multimedia facility are vital to lesson planning. In his separate studies Eraut (2002; 2004) found out that facility help teachers to include in their plans, large-group activities requiring a large space, or the use of specialised instruments, such as computers.

Contrary, the current study found that most respondents ranked pupils needs as very frequent reasons for the implementation of reflective teaching strategy, administrative support was ranked as a frequent reason, subject matter followed and availability of space in the classroom as the least frequent reason. The study also found out other aspects of schools' context that affected lesson planning as being schools' policies, for these made additional demands on how the respondents planned lessons. For instance respondents complained that they were engaged in schemes of work or weekly focus planning and expecting them to write individual lesson plans on a daily basis was asking too much. Curriculum needs, class size and time limitations were some of factors that influenced the implementation of reflective teaching methods. These findings are in agreement with those of Eraut (2002 and 2004)'s studies, where administrative requirements and policies did not only make demands on teachers' time, but also dictated some functions.

CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

6.1. Introduction.

The previous chapter discussed the findings of the study. This chapter presents the conclusions and recommendations. These were made based on the research findings and discussions of the study. The conclusions were presented as they were aligned to each of the objectives that were set for the study followed by recommendations.The main objective of the study was analyse the implementation of reflective teaching methods in Livingstone District of Zambia.

6.2The study conceptualised the implementation of reflective teaching methods in relation to reflective teaching. The findings were explicit to an extent that forms of reflective teaching methods, the implementation of reflective teaching methods and the factors influencing the implementation of reflective teaching methods were identified. The study was guided by three (3) research objectives and research questions which were discussed in relation to Literature related to reflective teaching. These were to identify the forms of reflective teaching, determine the implementation of reflective teaching methods and to identify the factors that influenced the implementation of reflective teaching methods.

Regarding the first objective, eight (8) forms of reflective teaching were identified and these were CPD meetings, Peer observations, Role play, mentoring, diaries, storytelling, action research and mind mapping. The forms had different benefits to both the teachers and pupils the major one being that of making them reflective practitioner which ultimately improved learner achievements. All the eight (8) forms of reflectivity identified either reflection in action, or on reflection on action. The forms of reflective teaching used by teachers in this study all mean looking at what the teacher does in the classroom, thinking about why it is done and thinking about if it works a process of self observation and self-evaluation. It was found out that when teachers collect information about what goes on in the classroom and analyse and evaluate the information, they identified and explored their own practices and underlying beliefs which may lead to changes and improvements in their teaching. For the teachers who used the forms above, reflective teaching to them implied a more systematic process of collecting, recording and analysing their thoughts and observations as well as those of their

students, and then going on to making changes. When lessons went on well, the teachers described and thought about why the lessons were successful unlike jumping into conclusion about why things happened that way. Action research was a classroom dynamic that married theory to practice and that also converted teachers into researchers who systematically reflects on his or her own practice with sole purpose of improving that practice. The teachers became authors of change to their practice. Teachers ceased to rely on conventional theories of behaviour and practice, but became creators or modifiers of theories of that guided in their own practice. the focus was on changing the practitioners 's values and practices in the context of their own work environment.

The second objective was to establish the implementation of reflective teaching methods. Lesson notes, Lesson plans and mental outlines were the ways of implementing of reflective teaching. Though most respondents indicated that they used written outline as opposed to mental outlines in the implementation, the data collected using observation showed the opposite as many used mental outlines. The third finding was on factors influencing implementation of reflective teaching. The following were the factors; pupils' needs, administrative support, availability of space in the classroom, subject matter, and belief about teaching were the reasons teachers gave for implementing reflective teaching.

The study found out that some factors hindered the implementation of reflective teaching methods. These were time limitations, curriculum needs and class size. Although teachers were aware of the importance and relevance of reflective teaching, observations showed that theyhad difficulties to practice the same in their classes due to limited time, curriculum needs, and class size. Finally, the majority of students said that though their teachers exhibited some forms of reflective teaching, they wanted them to change the way they taught and give them more time to participate during lessons.

In light of the findings and the literature in the field of reflective teaching, the following conclusions were drawn for the development of reflective practicum courses in teacher education:

Reflection is a developmental process, and it can be improved through continuing reflection and on-going guidance. Within this context, reflection at technical level and the consideration of best practices of teaching is a natural early phase in the developmental process. Novice teachers' awareness towards contextual, and moral and ethical factors can be enhanced through constant and deliberate guidance and promotion. The detailed lesson plans used by recently graduated teachers provided the necessary tool for support for them as well as a necessary monitoring tool for their supervisors. However absolute use of these detailed plans may hinder reflection in action as teachers would not be creative. The outlines used by experienced teachers encourage reflection

Collaborative atmosphere is essential in a reflective course. Having a constructive, non-threatening, harmonious, and friendly atmosphere encourages pre-service teachers to participate, share opinions, and exchange experiences and feedback

6.2. RECOMMENDATIONS

This study was conducted within an academic term, which is a limited time for the promotion of reflection among teachers. Thus, a longitudinal study could be carried out to analyze the developmental process of reflection further. This will provide more in-depth insight into reflection and its developmental process in further stages.

A) In this study, the reflective developmental process of teachers was analysed from a holistic perspective. In other words, the focus was not on the progressive development of each individual teacher. Further study on individual teacher development in reflection will provide immense contribution to the literature.

B) Although there is literature on the roles of instructor/supervisor in the promotion of reflectivity, still, there is a need for more empirical research so that teacher educators are provided with more data and guidance with regard to their roles concerning teachers' needs.

Teacher Educators should provide short courses on reflective learning (subjective learning) and action research to be taught in colleges of Education. All teacher training colleges to include action research in the curriculum to help teachers find solutions to problems that they faced in the classroom.

REFERENCES.

Alderman, M. K., (1999).*Motivation for Achievement: Possibilities for Teaching and Learning*. London: Routlege.

Akbari, R. (2007). "Reflections on Reflection**:** A Critical Appraisal of Reflective Practices." In*Teacher Education System.Vol...35 No. 2*. (192-207).

Apple, M. W., Teitelbaum, K. (2001) "John Dewey 1859-1952". In J. A. Palmer, (Eds.*), Fifty Major Thinkers on Education: From Confucius to Dewey*.(177-182)New York: Routlege.

Argyris,M.and Schon, D. (1974).*Theory in Practice. Increasing Professional Effectiveness.*San Francesco: Jossey-Bass.

Babbie, E. (2003). *The Practice of Social Research.*Boston: Wardsworth Publishing Company.

Bartlett, L. (1997). "Teacher Development through Reflective Teaching." In J.C. Richards, and D. Nunan. (Eds.), *Second Language Teacher.* New York: Cambridge University Press.

Borg, W.R. and Gall, M. (1979*).Educational Research: An Introduction to Research*. London: Longman.

Boud,D. and Walter, D. (1985) "Promoting Reflection in Learning: A model" In Boud,D.Keogh,R. and Walter,D. (Eds.) (1985). *Reflection: Turning Experience Into Learning.* London:Kogan page Ltd.

Brockbank,A. and Mcgill,A. (1998). *Facilitating Reflective Learning in Higher Education.* Buckingham: Open University press.

Brooks, J.(1995).*Training and Development Competence: a practical Guide*. London: Kogan Page.

Brookfield, S. D. (1995). *Becoming a Critically Reflective Teacher*.San Francisco:Jossey-Bass. Bright, B. (1996). "Reflecting on Reflective Practice."In *Studies in the Education of Adults, Vol.28 No. 2*.(162-184).

Brown, H. D. (2000). *Principles of Language Learning and Teaching*. New York: Longman.

Burns, R. (1995).*The Adult Learner at Work and Business.* Sydney: Professional Publishing Company.

Bullough, R., Knowles, J. G. and Crow, N. (1992). *Emerging as a Teacher.*London: Routlege.

Busla,S. (1968). *Purposeful Education Research for Africa.* Amsterdam: Mouton and Company.

Calderhead,J.(1993). "The Contribution of Research on Teachers'Thinkingto the Professional Development of Teachers," In Day C, Alderhead.J. and P. Dekolo,(Eds.) *Research on Teacher Thinking Understanding Professional Development,*London: Falmer Press.

Carson, T. B *et*al, (1989), *Creating Possibilities, an Action Research Handbook:* Edmonton: University of Alberta.

Chin, C., Leu,Y. C. and Lin, F. L. (2000). "Pedagogical Values, Mathematics Teaching and Teacher Education: A Case Study of Two Experienced Teachers." In L. Fou-Lai and C. Thomas (Eds.), *Making Sense ofMathematics Teacher Education.*Norwell: Kluwer Academic Publishers.

Chilisa, B.and Preece, J. (2005). *Research Methods for Adult Educators in Africa*: Berlin: UNESCO Institute for Education.

Clarke,M. and Otkay,D.,(2006) "Reflection On and In Teacher Education in the United Arab Emirates". *International Journal of Education Development.Vol.10.No.26.*(111-122).

Cole,W. and Knowles, J.G.(2000).*Researching Teaching Exploring teacher Development through Reflective Inquiry*. Boston: Allyn and Bacon.

Cole,A.L.(1997)."Impediments to reflective Practice," In *Teachers and Teaching Theory and Practice.Vol.3 No.1.*(7-27).

Collins, M. A., and Amabile, T. M. (1999). "Motivation and Creativity." In R. J. Sternberg (Ed.), *Handbook of Creativity*. New York: Cambridge University Press.

Clive, H. and Stephens, D., (2009*). From Shouters to Supporters: Quality Education Project: Final Report.*Oslo: Save the Children Norway.

Cropley, A. J. (2001). *Creativity in Education and Learning: A guide for Teachers and Educators.* London: Kogan Page.

Csikszentmihalyi, M. (1996). *Creativity: Flow and the Psychology of Discovery and Invention.* New York: Harper.

Cornford, I. (2002). "Reflective Teaching: Empirical Research Findings and some Implications for Teacher Education."In *Journal of Vocational Education and Training, Vol.54, No.2*, (219-235).

Crandall, J. A. (2000). "Language Teacher Education." In *Annual Review of Applied Linguistics, Vol.20, No.4.*(34-55).

Cruickshank, D. and Metcalf, K. (1990). "Training within Teacher Preparation." In W. Houston (Ed.) *Handbook of Research on Teacher Education*. New York: Macmillan.

Cunningham, F. M. (2001). "Reflecting Teaching Practice in Adult ESL Settings". *ERIC Digest,* (1-7).

Cruickshank, D.R., Holton, J., Fay, D., Williams, J., Kennedy, J., Myers, B. and Hough, J. (1981).*Reflective Teaching: Instructor's Manual.* Bloomington: Phi Delta Kappa.

Day, C.(1985)."Professional Learning and Researcher Intervention: An action Research Perspectives." *British Educational Research Journal.Vol.11.No.2.*(133-151).

Dembo, M. H., (1994) , Applying education psychology: New York: Allan and Becon Co

Ei-Dib, M.A.B (2007). Levels of Reflection in Action Research .An overview and an Assessment Tool. *Teaching and Teacher Education.* Vol.10 No.23. (24-35).

Dewey,J. (1933). *How do we think*? New York: D.C.Heath.

Erant,M. (1994). *Developing Professional Knowledge andCompetences*. London: Falmer press.

Farrell,T. (1998). "Reflective Teaching: The Principles and Practices."*English Teaching Forum.* (10-17).

Freese, A. (1999). *Developing Reflective Practice Centre for Teaching and Learning*. Colorado:ColoradoState University.

Freire, P. (1970). *Pedagogy of the Oppressed*. NewYork : Penguin Books.

Fendler, L. (2003). "Teacher Reflection in a Hall of Mirrors: Historical Influences and Political Reverberations".*Educational Researcher, No.32 Vol. 3*. (16-25).

Feiman-Nemser, S. (1990)."Teacher Preparation: Structural and Conceptual Alternatives." In W. Houston (Ed.) *Handbook of Research on Teacher Education*.New York: Macmillan.

Gebhard,J.G.(2005). "Teacher Development through Exploration: Principles, ways and Examples". *TESL-EJ. Vol.9 No.2*. (1-5).

Gemenzi, T (1999). "Reflective Teaching and Teacher Education: Contribution from Teacher Training" In *Linguagem and Ersino.Vol.23.No.2*. (129-143).

Gibbs,G.(1998) *Learning by doing: A Guide to Teaching and Learning Methods*. Oxford: Brookes University.

Glasersfeld,E .(1995).Radical Constructivism: A way of knowing and learning. *In Studies in Mathematics Education Series.Vol.6. No. 3*.231.

Gore, J. (1987)."Reflecting on Reflective Teaching". In*Journal of Teacher Education. Vol.2.No.3*(33-38).

Gore, J.M. & Zeichner, K.M. (1991)."Action Research and Reflective Teaching in Pre service Teacher Education: a Case study from the United States". *Teaching and Teacher Education. Vol.7. No.2*. (119-136).

Ghosh, B.N. (1992). *Scientific Method and Social Research.* New Delhi: Sterling Publishers Private Ltd

Greenwood, J. (1993). "Reflective Practice a Critique of the work of Argyris and schon".*Journal of Advanced Nursing.".Vol.5.No.19*. (1183-1187).

Griffin, M.L.(2003) ."Using reflective practice to link personal and public theories". *Journal of Education of Education for teaching. Vol.18.No.1*. (69-84).

Grushka,K.Mcleod,Hinde,J. Reynolds R. (2005)."Reflecting upon Reflection: Theory and Practice in one Australia University Teacher Programme". *Reflective Practice.Vol.6.No.2*(239-246).

Habermas, J. (1974). *Theory and Practice.* London: Heinemann.

Hamilton,D.and Zaretsky, L. (1997),"Building Professional Communities of Inquiry in Schools. " *Orbit.No.28:Vol 3. (*44-47).

Hart, S. (2000). *Thinking through Teaching: A Framework for Enhancing Participation and Learning*. London: Penguin Books.

Han (1995). "Issues in Education , Reflection is essential in Teacher Education". In *Childhood Education , Vol.1 No.*71, (228-230).

Handal,G.and Lauvas,P.(1987). *Promoting Reflective Teaching*. Milton Keynes: Open University Press.

Hatton,N. and Smith,D.(1995) "Reflection in Teacher Education: Towards definition and implementation." In *Teaching and Teacher Education.Vol.11.No.3 (*22-49).

Hay.D., Kinchin,I. and Lygo-Baker,S. (2008)."Making LearningVisible: The Role of Concept Mapping in Higher Education*". In Studies in Higher Education.Vol. 1. No.33*(295-311).

Henderson, J.A. (1992). *Reflective Teaching: Becoming an Inquiring Educator*. New York: Macmillan.

Hine,A.(2000). "Mirroring effective Education through Mentoring, Meta-cognition andSelf Reflection". Paper Presented to Australia Association for Researchers, Sydney.

Hillier, Y. (2005). *Reflective Teaching in Further and Adult Education*: London. Continuum.

Hogan,C. and Down, B.(2000)."Critical Reflection Practice and Workplace Learning: Impediments and Possibilities in Teacher Education." In *Australia Journal of Teacher Education.Vol.25.No.2*(2).

Ixer, G. (1999)."There is no such thing as reflection". In *British Journal of Social Work.Vol.29.No. 4*. (513-527).

Jay,I.K. and Johnstone, N. (2002).*Quality Teaching: Reflection as the Hart of Practice*. Lanham: Scarecrow Press.

Johnson and John, H. (1999).*Encyclopaedia Dictionary of Applied Linguistics,* Oxford: Blackwell Publishers.

Johnstone,R.(2006).Language Teacher Education, In A. Davies and Elder ,C. (Eds.). *The Handbook of Applied Linguistics.* (649- 671).Oxford: Blackwell Publishing Ltd.

Kerlinger, F.N. 0(1993). *Foundations of Behavioural Research*. New York: Holt, Reinhart and Winston Inc.

Kemmis, S. and Mctaggart, (1990),*The Action Research Planner*. Victoria: Deakin University.

King, K. (2001). "Science Education in an Urban Elementary School: Case Studies of Teacher Beliefs and Classroom Practices."*Science Education, Vol.2, No.85.* (89-110).

Kolb, D. A. (1984). *Experiential Learning: Experience as the Source of Learning and Development*. Englewood: Prentice Hall Inc.

Kombo, D.K. and Tromp, D.L.A. (2006). *Proposal and Thesis Writing: An Introduction.* Nairobi: Pauline's Publications Africa.

Knowles, M.S. (1973).*The Morden Practice of Adult Education*. Houston: Gulf Publishing Company, Book Division.

Knowles, M.S. (1990*). The Adult Learner: A Neglected Species (4th edition*), Houston: Gulf Publishing Company, Book Division.

Kuhn, T. (1970).*The Structure of Scientific Revolutions, (2nd edition).* Chicago: University of Chicago Press.

Kumaravadivelu, B.(2003).*Beyond Methods: Macro strategies for Language Teaching.* New Haven: Yale University Press.

LaBoskey, V. K. (1997). "Teaching to Teach with Purpose and Passion: Pedagogy for Reflective Practice". In J. Loughran, and T. Russell. (Eds.),*Teaching about Teaching: Purpose, Passion and Pedagogy in Teacher Education,*(150-163). London: Falmer Press.

Laird,D. (1985). *Approaches to Training and Development.* Reading: .Addison Wesley

Larrivee, D. (2000) "Transforming Teaching practice: Becoming the Critically Reflective Teacher."*Reflective practice. Vol.1.No.3*(293-307).

Leedy, P.D. and Ormrod, J.E. (2005). *Practical Research: Planning and Design (8th Edition*.).New York: Pearson Education.

Lieberman,A. and Miller, L. (1999). *Teachers: Transforming their World and their Work*. New York: Teachers College Press.

Little, J. "Inside Teacher Community: Representations of Classroom Practice."*Teachers College Record. Vol.105 No.6.* (913-945).

Loughran, J. J. (2002). "Effective Reflective Practice: In Search of Meaning in Learning about Teaching".In *Journal of Teacher Education, No.53, Vol.1*. (33-43).

Matafwali, B. (2012) Qualitative and Quantitative Research (Unpublished). Lecture Notes. Lusaka: University of Zambia.

Mbozi, E. (2013). Participatory Approaches to Development (Unpublished) Institute for Distance Education Study Materials. Lusaka: University of Zambia.

Mbozi, E. (2008). Classroom Factors that affect the quality of Education in selected Basic Schools of Livingstone and Kazungula District in the Southern Province of Zambia. Lusaka: University of Zambia.

McGill, I. and Beaty, L (1995).*Action Learning,: a Guide for Professional, Management and Educational Development (2ⁿᵈ Edition.)*London: Kogan Page.

Ministry of Education plan (1995)*Education Statistics Bulletin*, Lusaka: Ministry of Education

Moon, J.A. (1999). Reflection in Learning and Professional Development: Theory and Practice. London: Kogan Page.

Osterman, K.P. and Kottkamp, R.B. (1993/2004). *Reflective Practice for Educators, Improving Schooling through Professional Development*. Thousand Oaks,: Corwan Press.

Pacheco,A.Q. (2005). "Reflective Teaching and its Impact on Foreign Language Teaching". *Teaching Numero Extraordinario. Vol.5.No.1*. (1-19).

Pogson, P. and Tennant, M. (1995)."Understanding Adults." In Foley, G. (Ed.)*Understanding Adult Education and Training*, St. Leonards: Allen and Unwin (20-30).

Pollard ,A. (2006).*Reflective Teaching*. London: Continuum.

Pollard,A. (2000). *Readings for Reflective Teaching* New York: Continuum.

Prabhu, N.(1990). "There is no best method-why?" In *TESOL Quarterly- Vol.24.No.2* (161-176).

Reed, Y. Davis H.,and Nyabanyaba, T. (2002). "Investigating Teacher: Taking-up of Reflective Practice from an In-Service Professional Development Teacher Education Programme in South Africa." In *Educational Action Research .Vol.2 No. 2*(253-274).

Richards, J.C.(2000).*Beyond Training*. Cambridge: Cambridge University Press.

Richards, J.G., and Lockhart, C.1999.*Reflective Teaching in Second Language Classroom*. New York: Cambridge University Press.

Schmuck,R.A.(1997).*Practical action Research for Change*.Arlington Heights: IRI Skylight Training and Publishing Inc.

Schön, D. (1983). *The Reflective Practitioner*. New York: Basic Books.

Schön, D. (1983). *The Reflective Practitioner: How Professionals Think in Action*. San Francisco: Jossey-Bass.

Schön, D. (1987). *Educating the Reflective Practitioner*. San Francisco: Jossey-Bass.

Shulman, L.S. (1986). "Those who Understand: Knowledge Growth in Teaching".In *Educational Researcher Vol. 15 No.1* (4-14).

Shulman, L.S. (1987). "Knowledge and Teaching: Foundations of the New Reform". *Harvard Educational Review,Vol. 57 No.1*(1-22).

Sinclair,B. Mcarath,I and Lamb, T.(Eds). *Learner Anatomy: Future Directions*. London: Longman.

Smith, R.(2000). "Starting with Ourselves: Teacher and Learner Anatomy in Language Learning." In Smyth, J. (1987). *Educating Teachers*. London: Falmer Press.

Soh,K.(2011)."Indexing Creativity Forestry Teacher Behaviour: Preliminary Validation Study".In*The Journal of Creative Behaviour.Vol.34.No.2*(118-134).

Stanely,C. (1998)."A Framework for Teachers Reflectivity".In *TESOL Quarterly, Vol.32.No.2*(584-591).

Simplicio, J. S. C. (2000). "Teaching classroom educators how to be more effective and creative teachers".In*Education Journal. No. 120.Vol.4,*(675-680).

Sternberg, R. J. (Ed.). (1988). *The Nature of Creativity: Contemporary Psychological Perspectives.* New York: Cambridge University Press.

Stoiber, K. (1991)"The Effect of Technical and Reflective Instruction on Pedagogical Reasoning and Problem Solving", *In Journal of Teacher Education, Vol.42.No.2* (131-139)

Tabachnik,R. and Zeichner,K. (2002). "Reflection on Reflective Teaching." In A. Pollard (Ed.) *Readings for Reflective Teaching*. London: Continuum.

Tsui, A.B.M. (2003). *Understanding Expertise in Teaching: Case Studies of ESL Teacher*. New York: Cambridge University Press.

McNiff, J. (1999). *Action Research: Principles and Practice*. London: Routledge.

Mettetal, G. (2001)."The What, Why and How of Classroom Action Research". *In The Journal of Scholarship of Teaching and Learning, Vol.2.No.1*(6-13).

Nagel, T. (2008) What is 'Quality of Education' and what is wrong with it? A paper presented at a concferenc on quality eduactio in Lusaka,Zambia.June 2008

Tiberius, R. G. (1999). *Small Group Teaching: A Trouble-Shooting Guide*. London: Kogan Page.

Torrance, E. P.and Goff, K. (1990). "Foster Academic Creativity in Gifted Students". In *ERIC Digest(E484), ED 321486.*

Tom, A. (1985). "Inquiring into Inquiry Oriented Teacher Education." *In Journal of Teacher Education, Vol.36.No.5* (35-44).

Tom, A. and Valli, L.(1990). "Professional Knowledge for Teachers." In W. Houston (Ed.) *Handbook of Research on Teacher Education*. New York: Macmillan.

Wildman, T.and Niles, J. (1987) "Reflective Teachers: Tensions between Abstractions and Realities."In *Journal of Teacher Education. Vol.38.No.4*(25-31).

Van Manen,M. (1995). "On the Epistemology of Reflective Practice, Teachers and Teaching". In *Theory and Practice: Vol.1.No.1* (33-50).

Vieira,F.and Marquez,1.(2002)."Supervising Reflective Teacher Development Practices."*ELTED Vol.6.No.4*(1-18).

Winitzky, N.and Arends R. (1991). "Translating Research into Practice: the Effects of Various Forms of Training and Clinical Experience on Pre-Service Students' Knowledge, Skill and Reflectiveness", In *Journal of Teacher Education*, *Vol.42.No.2*(52-65).

Wubbels, T. Korthagen, F. (1990). "The Effects of a Pre-service Teacher Education Program for the Preparation of Reflective Teachers", In *Journal of Education for Teaching*, *Vol.16, No.2*(29-43).

Yiend,J. (2012). "Peer observation of Teaching. The interaction between peer review and developmental models of practice". In Journal of Further Education and Higher Education.Vol.10.No.1 (34.56).

Zeichner, K. and Liston, D. (1987). "Teaching students teachers to reflect". *Harvard University Educational Review .Vol. 57.No.1*(23-48).

Zeichner,K. And Liston, D. (1996). *Reflective Teaching, an Introduction*. New York: Lawrence Erlbaum Associates Inc.

APPENDIX 1

QUESTIONAIRE FOR HEAD OF DEPARTMENT

Thank you for taking time to participate in this questionnaire. My name is Sifuniso Mary. I am a Master of education student with the University of Zambia, School of Education .As part of my final project I am analysing the implementation of Reflective Teaching Methods in Livingstone district of Southern Province.**.** I want you to know that the purpose of this is just to collect information on the implementation of reflective Teaching Methodologies at your school. Therefore the information generated will purely be used for academic purposes and that it will be treated with anonymity and confidentiality. Please do not write your name on the questionnaire and you are requested to respond to the questions truthfully by putting a tick in the brackets provided against your answer or write down your answer(s) where spaces are provided. Once again thank for your cooperation.

1. Number of teachers: [ ]
2. Sex: Female [ ] Male [ ]
3. Qualification: Degree [ ] Diploma [ ]Certificate [ ] Untrained [ ]

4. Teacher /Pupil ratio [ ] Teaching load [ ]

5. Service Years: 0-5 [ ]. 6-10 [ ]   11-15 [ ]16-20 [ ] above 20 [ ]

6. Are you in-service or pre-service trained [   ] teaching strategy (RTS) more than old graduates)

……………………………………………………………………………………………..

Explain what Reflection is.

……………………………………………………………………………………………..

7 What is reflective teaching? Please explain

………………………………………………………………………………………………

7. Some people might argue that teaching is too demanding to expect a teacher to be reflective about their work. What do you think ?

………

………

……….

8. In your opinion can the performance of pupils be affected by the teachers' teaching method(s)(

i. Strongly agree [ ]

ii. Agree [ ]

iii. Undecided [ ]

iv. Disagree [ ]

v. Strongly disagree [ ]

9. Which method(s) of teaching do teachers usually use during teaching?

I .Lecture [ ]

ii. Discussion [ ]

iii. Demonstration [ ]

v. Exploratory discovery [ ]

vi. Free discovery [ ]

vii. Experimentation [ ]

viii. Question and answer [ ]

ix. others

Specify……………………………..............……………………………………………………………..

………

10.Which method(s) of teaching in question 9 do you like most? (RTM)

………

11. Which method(s) do you enjoy least in your learning? (RTM)

……..

12. Mention the teaching method(s) under which pupils understand better?(RTM)

………

………

13. Which of the teaching method(s) in question11 would you classify under reflective teaching

methodologies?(RTM)…………………………………………………………………………………

………

14. In your opinion do teachers in your department use reflective teaching strategy?

i. yes [ ]

ii. Sometimes [ ]

iii. No [ ]

15. Which factors influence the implementation of the reflective teaching strategy in your department?

....

………………….....................…………………………………………………………………

16. How do the factors influence in the implementation of the reflective teaching strategy.

………

………………………………………………........……………………..

17. What do teachers in your department use to aid the implementation of reflective teaching strategy.

18. Name the teaching aids which teachers use during the teaching and learning.

……………………………………….........……………………………….........………………

……………………………………….........…………………………………….......…………..

19. How do they encourage in reflection?

………

………

20. What pupil's needs are not addressed by the use of reflective teaching strategy.

………

21.How might these needs be different?

………

………

22. Think about the last lesson you had with your pupils. Please **outline the process** which you took as you taught. For example you could have started with helping the learners to recall information from previous lesson ,then you carried out a short activity that focused their attention etc

……………………………………………………………………………………………………..

………

23. Do you carry out all your lessons in this way?

………

……………………………………………………………………………………………………

24. How do you question the way teachers go about planning for their lessons?

………………………………………………………………………………………………

………………………………………………………………………………………………

25. During the lesson, did you make unplanned changes to the subject matter being taught or learning activities according to the situation?

………………………………………………………………………………………………

………………………………………………………………………………………………

……………………………………………………………………………………………..

26. Did you go over the lesson to look for possible difficulties that you faced with the learners? Outline the steps of evaluation you took

……………………………………………………………………………………

27. Do teachers in your department go over their lessons to look for possible difficulties that they could have faced with the learners?

Expain…………………………………………………………………………………

………………………………………………………………………………………………

……………………………………………………………………………………………….

28. Do teachers in the department encourage student participation in the learning?

……………………………………………………………………………………………

29. During lessons which activities do teachers engage their pupils in during the learning and teaching process in the class?

i. Asking pupils questions…..
ii. Answering questions from students …..
iii.Explaining facts

iv. Giving instructions to pupils

v. commenting on student questions… …

vi. Listening to students explanations

vii.working out questions on the board….

Others (specify)

30. Which activities do pupils engage in during the teaching and learning in order to make decisions.

i. Listening to pupils explanations [ ]

ii. Answering pupils questions [ ]

iii. Answering fellow pupils' questions [ ]

iv. Asking the you questions [ ]

v. Asking fellow pupils' questions [ ]

vi. Listening to fellow students explanation [ ]

vii. Caring out your instructions [ ]

viii. Coping work from the chalk board to exercise book [ ]

ix. Working out questions from on the chalk board [ ]

x. Working out questions on the chalkboard [ ]

xi. Working out problems in groups [ ]

xii. others specify

………………………………………………………………………………………………….

31. What activities are pupils not allowed doing during teaching and learning?

…………………………………………………………………………………………………..

……

32. Are you motivated to make decisions?

a) If yes how [ ]

b) If no why [ ]

33. Are learners motivated to make decisions?

I. yes [ ]

ii. No [ ]

iii. Sometimes [ ]

34. What ideas about how children learn are reflected in your
organization?………………………………………………………………………………………
……..………………………………………………………………………………………………

35. How do the following factors affect teaching and learning in this school?

a. Students learning needs

………………………………………………………………………………………………………
……

b. Availability and use of learning and teaching needs.

………………………………………………………………………………………………………
……

c. Subject matter

…………………………………………………………………………………………………

d. Available space in the classroom

…………………………………………………………………………………………………

e. Initial teacher training

……………………………………………………………………………………………………

f. Qualification and experience of the teacher

……………………………………………………………………………………………………

g. Teachers beliefs about teaching

……………………………………………………………………………………………………

h. Administrative support

……………………………………………………………………………………………………

i.National curriculum

………………………………………………………………………………………………

36. What are the major problems you face in your learning at school? (Factors which hinder)

……………………………………………………………………………………………………

37. How do you think these problems can be solved and by who? (Factors/ Reflection)

…………………………………………………………………………………………………….3

8. Any other comments you would like to make concerning the learning and teaching in this school…………………………………………………………………………………………………

APPENDIX 2

QUESTIONAIRE FOR CLASS TEACHERS

Thank you for taking time to participate in this questionnaire. My name is Mary Sifuniso. I am a Master of education student with the University of Zambia, School of Education .As part of my final project I am analyzing the implementation process of Reflective Teaching Methodologies in Zambian Schools and in particular in Livingstone district of Southern Province.. I want you to know that the purpose of this is just to collect information on the implementation of reflective Teaching Methodologies at your school. Therefore the information generated will purely be used for academic purposes and that it will be treated with anonymity and confidentiality. Please do not write your name on the questionnaire and you are requested to respond to the questions truthfully by putting a tick ()….. In the brackets ()……provided against your answer or write down your answer(s) where spaces are provided. Once again thank for your cooperation.

1. Number of teachers: [ ]

2. Sex: Female [ ] Male [ ]

3. Qualification: Degree [ ] Diploma [ ]Certificate [ ] Untrained [ ]

4. Teacher /Pupil ratio [ ] Teaching load [ ]

5. Service Years: 0-5 [ ]. 6-10 [ ]   11-15 [ ]16-20 [ ] above 20 [ ]

6. Are you in-service or pre-service trained [ ]

7.Some people might argue that teaching is too demanding to expect a teacher to be reflective about their work. What do you think

……………………………………………………………………………………………………

………………………………………………………………………………………………

8. In your opinion can the performance of pupils be affected by the teachers' teaching method(s)(RTM)

I. Strongly agree [ ]

ii. Agree [ ]

iii. Undecided [ ]

iv. Disagree [ ]

v. Strongly disagree [ ]

9. Which method(s) of teaching do teachers usually use during teaching?

I .Lecture [ ]

ii. Discussion [ ]

iii. Demonstration [ ]

v. Exploratory discovery [ ]

vi. Free discovery [ ]

vii. Experimentation [ ]

viii. Question and answer [ ]

ix. Others specify…………………………………..

10.Which method(s) of teaching in question 9 do you like most? (RTM)

………………………………………………………………………………………………

11. Which method(s) do you enjoy least in your learning? (RTM)

………………………………....................................…………………………………………..

12. Mention the teaching method(s) under which pupils understand better?(RTM)

………………………………………………………………………………………………

13. Which of the teaching method(s) in question12 would you classify under reflective teaching methodologies?……………………………………………………………………

14 Which form (s) of reflective teaching methods do you use?

....

....

14. In your opinion do teachers in your department use reflective teaching strategy?

I. yes [ ]

ii. Sometimes [ ]

iii. No [ ]

15. Which factors influence the implementation of the reflective teaching strategy in your department?

....

……………………………………………………………………………………(Factors).

16. How do the factors influence in the implementation of the reflective teaching strategy. (RTM)

………………………………………………………………………………………………

……………………………………………………………………………………..

17. What do you use to aid the implementation of reflective teaching strategy………………………………………………………….……………………

……………………………………………...................…………………………………………

18. Name the teaching aids which use during the teaching and learning.

…………………………………………...........……………………………………………….

…………………………………………………............…………………………………….

19. How do they encourage in reflection?

………………………………………………………………………………………………………

………………………………………………………………………………………………………

20. What pupil's needs are not addressed by the use of reflective teaching strategy

(Implementation, forms of reflection)

………………………………………………………………………………………………..………………

………………………………………………………………………………………………………

21. How might these needs be different?

………………………………………………………………………………..…………..……………………

22. Think about the last lesson you had with your pupils. Please **outline the steps** which you took as you taught. For example you could have started with helping the learners to recall information from previous lesson ,then you carried out a short activity that focused their attention etc……………………………………………………...................……………

………………………………………………………………………………………………………

23. Do you carry out all your lessons in this way?(Implementation / forms of reflection)

I Always [ ]

ii sometimes [ ]

24.How do you question the way you go about planning for your lessons?

………………………………………………………………………………………………………

………………………………………………………………………………………………………

…………

25. During the lesson, did you make unplanned changes to the subject matter being taught or learning activities according to the situation?

………………………………………………………………………………………………………..

26. Did you go over the lesson to look for possible difficulties that you faced with the learners? **Outline the process** of evaluation you took.!

…………………………………………………………………………………………

27. Do you go over your lessons to look for possible difficulties that you could have faced with the learners?

Explain……………………………………………………………………………………

…………………………………………………………………………………………

28. Do teachers in the department encourage student participation in the learning?

……………………………………………………………………………………………

29. During lessons which activities do teachers engage their pupils in during the learning and teaching process in the class?

I. Asking pupils questions [ ]
ii. Answering questions from students [ ]
iii. Explaining facts [ ]
iv. Giving instructions to pupils [ ]
v. commenting on student questions [ ]
vi. Listening to students explanations [ ]
vii.working out questions on the board [ ]
Others (specify)
……………………………………………………………………………………………
…..
30. Which activities do pupils engage in during the teaching and learning in order to make decisions (Classroom practices) ?

i. Listening to pupils explanations [ ]

ii. Answering pupils questions [ ]

iii. Answering fellow pupils' questions [ ]

iv. Asking the you questions [ ]

v. Asking fellow pupils' questions [ ]

vi. Listening to fellow students explanation [ ]

vii. Caring out your instructions [ ]

viii. Coping work from the chalk board to exercise book [ ]

ix. Working out questions from on the chalk board [ ]

x. Working out questions on the chalkboard [ ]

xi. Working out problems in groups [ ]

xii. others specify

…………………………………………………………………………………………………….

31. What activities are pupils not allowed doing during teaching and learning?

……………………………………………………………………………………………………..

32. Are you motivated to make decisions?

a) yes [ ]

b) No [ ]

c) Sometimes [ ]

d) Not sure [ ]

33. Do you motivate learners to make decisions?

I. yes [ ]

ii. No [ ]

iii. Sometimes [ ]

If answer for 35 is yes how?

……..

34. What ideas about how children learn are reflected in your organization?…………………..

……..

35. How do the following factors affect teaching and learning in this school? (Factors hindering and enhancing

a. Students learning needs

……

b. Availability and use of learning and teaching needs.

……

c. Subject matter

……

d. Available space in the classroom

……
……

e. Initial teacher training

……
…..

f. Qualification and experience of the teacher

……
……

g. Teachers beliefs about teaching

……
……

h. Administrative support

……
…

I National curriculum

………………………………………………………………………………………………

35. What are the major problems you face in your teaching at school? (Factors which hinder)

……………………………………………………………………………………………………

36. How do you think these problems can be solved and by who? (Factors/ Reflection)

……………………………………………………………………………………………………

37. Any other comments you would like to make concerning the learning and teaching in this school……………………………………………………………………………………………

APPENDIX 3

OBSERVATION CHECKLIST FOR TEACHERS

1 SCHOOL PROFILE

Name of the School……………………………………………………….......…………

Date of observation……………………………………………………………………

Condition of the School……………………………………………………………….

Condition of the classroom…………………………………………………………

2 TEACHER PROFILE

Number of teachers: ………………………….

Sex: Female …..Male…..

Qualification of teachers: Degree……Diploma……Certificate……..Untrained………….

Teacher /Pupil ratio……………Teaching load…………………….

Service Years: 0-5……..6-10………11-15………….16-20……………above 20………..

In-service or pre-service trained………………………………....................…………

3 CLASSROOM PROFILE

Name of grade: …………………………………………………………………………

Number of pupils: Girls……………………….Boys………………………………………

Desk/Pupil Ratio: ……………………………………………………....……………

Classroom arrangement: ………………………………………………..……………

Condition of the classroom: ……………………………………………....…………

Subject: …………………………………………………………………………………

Pupil text Book Ratio: ……………………………………………………………..

Topic: ……………………………………………………………………………………

Language of instruction: ………………………………………………………………

Time allocated to the lesson: ………………………………………………....………

4   Teaching /Learning methodology: ……………………………………………....……

What activities is the teacher engaged in …………………………………………......

What activities are pupils engaged in ……………....…………………………………

Pupil (child) participation: ……………………………………………………………

Teacher /pupil interaction including how discipline and motivation are addressed: …

…………………………………………………………………………………………

Pupil/pupil interaction: ………………………………………………………………

Use of time……………………………………………………………………………….

Voice: ……………………………………………………………………………………..

Follow ups: ………………………………………………………………………………..

Use of Chalkboard: ………………………………………………………………………..

Classroom Management: ………………………………………………………………….

Knowledge of subject matter: ……………………………………………………………..

Presentation of subject Matter: ……………………………………………………………….

Evaluation: ………………………………………………………………………………..

Use of the lesson plan: ……………………………………………………………………..

Availability and use LTMs: …………………………………………………………………

Pupils learning needs……………………………………………………….

Availability and use of learning and teaching aids…………………………………………

c. Subject matter……………………………………………….

d. Available space in the classroom…………

e. Initial teacher training

f. Qualification and experience of the teacher………………………

. Teachers beliefs about teaching

h. Administrative support…………………………………

I National curriculum…………………

5. Any other relevant observation or comments on the teacher or pupils......................

APPENDIX 4

FOCUS GROUP DISCUSSION WITH THE PUPILS

1. What do you like about this school? (Rapour)

2. What don't you like about this school?(Rapour)

3. What things do you think should be changed in order to improve learning in this school. (Rapour)

4. Think about the last lesson you had with the last teacher .Please outline the steps which your teacher took (implementation)

5. Are all lessons carried out like that? (Implementation)

6. If now how would others differ?

7. If answer is yes, how is the frequency and whether or not it is their practice?

8. During the lesson do your teachers make unplanned changes to the subject matter being taught or learning activities according to the situation? (Reflection- in-action)

9. Which teaching methodologies do your teachers use during lessons?(implementation/forms)

10Which method(s) of teaching in question 5 do you like most? (RTM)

11. Which method(s) do you enjoy least in your learning? (RTM)

12. Mention the teaching method(s) under which you understand better? (RTM)

13. Which of the teaching method(s) in question 5 would you classify under reflective teaching methodologies? (RTM)

14. In your opinion can the performance of pupils be affected by the teachers' teaching method(s) (RTM)

15. What do teachers use to aid the implementation of reflective teaching strategy.

16. Name the teaching aids which teachers use during the teaching and learning.....................

17. Do your teachers encourage pupil participation in the learning?....................................

18. Do you go over the lesson to look for possible difficulties that you face with the teacher?

19. In your opinion do teachers use reflective teaching strategy?...........................

20. If the answer is yes how is their performance?............

21. How would you rate your performance when reflective teaching strategy is used?

22. Which factors influence you in the implementation of the reflective teaching strategy?

23. Please tell me how the factors influence in the implementation of the reflective teaching strategy.

24. Which activities do you engage in as pupils during the learning and teaching process in the class?

25. Which activities do your teachers engage you in during the teaching and learning in order to make decisions?...

26. Are you motivated to make decisions?

If yes how...

If no why...

27. What activities are you not allowed doing during teaching and learning?

28. Which factors affect your learning in this school?

29. How do these affect your learning?

30. What are the major problems you face in your learning at school?

31. How do you think these problems can be solved and by who?

32. Any other comments you would like to make concerning the learning and teaching in this school.

APPENDIX 5

HEAD TEACHERS QUESTIONAIRE

Thank you for taking time to participate in this questionnaire. My name is Sifuniso Mary I am a Master of education student with the University of Zambia, School of Education .As part of my final project I am analyzing the implementation process of Reflective Teaching Methodologies in Zambian Schools and in particular in Livingstone district of Southern Province.. I want you to know that the purpose of this is just to collect information on the implementation of reflective Teaching Methodologies at your school. Therefore the information generated will purely be used for academic purposes and that it will be treated with anonymity and confidentiality. Please do not write your name on the questionnaire and you are requested to respond to the questions truthfully by putting a tick ()….. In the brackets ()……provided against your answer or write down your answer(s) where spaces are provided. Once again thank for your cooperation.

1. Number of teachers: [ ]

2. Sex: Female [ ] Male [ ]

3. Qualification: Degree [ ] Diploma [ ] Certificate [ ] Untrained [ ]

4. Teacher /Pupil ratio [ ] Teaching load [ ]

5. Service Years: 0-5 [ ]. 6-10 [ ]   11-15 [ ] 16-20 [ ] above 20 [ ]

6. Are you in-service or pre-service trained [   ] (Do recent college graduates use reflective teaching strategy (RTS) more than old graduates)

7. Some people might argue that teaching is too demanding to expect a teacher to be reflective about their work. What do you think?

………………………………………………………………………………………………

………………………………………………………………………………………………

………………………………………………………………………………………………

………………………………………………………………………………………………

8. In your opinion can the performance of pupils be affected by the teachers' teaching method(s).

I. Strongly agree [ ]

ii. Agree [ ]

iii. Undecided [ ]

iv. Disagree [ ]

 v.   Strongly disagree [ ]

9. Which method(s) of teaching do teachers usually use during teaching?

I .Lecture [ ]

ii. Discussion [ ]

iii. Demonstration [ ]

v. Exploratory discovery [ ]

vi. Free discovery [ ]

vii. Experimentation [ ]

viii. Question and answer [ ]

ix. others

Specify……………………...............……………………………………………………..

…………………………………………………………………………………………

10. Which method(s) of teaching in question 9 do you like most? (RTM)

………………………………………………………………………………………………
….

11. Which method(s) do you enjoy least in your learning? (RTM)

…………………………………………………………………………..

12. Mention the teaching method(s) under which pupils understand better?(RTM)

…………………………………………………………………………………………………

…………………………………………………………………………………………………

13. Which of the teaching method(s) in question11 would you classify under reflective teaching

methodologies?(RTM)……………………………………………………………………………
…………………………………………………………………………………………………
…….

14. In your opinion do teachers in your department use reflective teaching strategy?

i. yes [ ]

ii. Sometimes [ ]

iii. No [ ]

15. Which factors influence the implementation of the reflective teaching strategy in your department?
....

…………………………………………………………………………………….(Factors)

17. How do the factors influence in the implementation of the reflective teaching strategy. (RTM)

………………………………………………………………………………………………………

………………………………………………………………………………………………………

………………………………………………………………………………………………………

18. What do teachers in your department use to aid the implementation of reflective teaching strategy(Implementation/Factors   classroom practices)……………………………………………………………….…………………

……………………………………………………...............……………………………

19. Name the teaching aids which teachers use during the teaching and learning.(classroom practices)

…………………………………………………………………………………………….

…………………………………………………………………………………………..

20. How do they encourage in reflection? (implementaion)

………………………………………………………………………………………………

………………………………………………………………………………………………

…………..……………………………………………………………………………………

………………………………………………………………………………………………

………………..

21.What pupil's needs are not addressed by the use of reflective teaching strategy(Implementation, forms of reflection)

………………………………………………………………………………………………

…………………………………………………………………………………………..

22. How might these needs be different?

………………………………………………………………………………………………

………………………………………………………………………………………………

(Factors)

23. Think about the last lesson you had with your pupils. Please **outline the process** which you took as you taught. For example you could have started with helping the learners to recall information from previous lesson ,then you carried out a short activity that focused their attention etc (implementation/ reflection on action)………………………………………….

……………………………………………………………………………………………………..

………………………………………………………………………………………………………..

24.Do you carry out all your lessons in this way?(Implementation / forms of reflection)

……

……

25.How do you question the way teachers go about planning for their lessons?

……

……

26. During the lesson, did you make unplanned changes to the subject matter being taught or learning activities according to the situation? (forms reflection/Reflection- in-action)

……

……

………………………………………………………………………………………………………..

27. Did you go over the lesson to look for possible difficulties that you faced with the learners? Out line the steps of evaluation you took.(Implementation of RTM)?

………………………………………………………………………………………………………...

28. Do teachers in your department go over their lessons to look for possible difficulties that they could have faced with the learners? (Implementation of RTM /CP)?

Expain……………………………………………………………………………………

……………………………………………………………………………………………

……………………………………………………………………………………………….

29. Do teachers in the department encourage student participation in the learning? (classroom practices CP)

……………………………………………………………………………………………

……………………………………………………………………………………………

30. During lessons which activities do teachers engage their pupils in during the learning and teaching process in the class? (CP)

i. Asking pupils questions [ ]

ii. Answering questions from students [ ]

iii.Explaining facts [ ]

iv. Giving instructions to pupils [ ]

v. commenting on student questions [ ]

vi. Listening to students explanations [ ]

vii.working out questions on the board [ ]

Others (specify)

31. Which activities do pupils engage in during the teaching and learning in order to make decisions (Classroom practices)?

i. Listening to pupils explanations [ ]

ii. Answering pupils questions [ ]

iii. Answering fellow pupils' questions [ ]

iv. Asking the you questions [ ]

v. Asking fellow pupils' questions [ ]

vi. Listening to fellow students explanation [ ]

vii. Caring out your instructions [ ]

viii. Coping work from the chalk board to exercise book [ ]

ix. Working out questions from on the chalk board [ ]

x. Working out questions on the chalkboard [ ]

xi. Working out problems in groups [ ]

xii. others specify

………………………………………………………………………………………………….

32. What activities are pupils not allowed doing during teaching and learning? (CP)

…………………………………………………………………………………………………..

………………………………………………………………………………………………….

33. Are you motivated to make decisions? (Classroom practices ,forms of reflection and RTS.)

a) If yes how [ ]

b) If no why [ ]

34. Are learners motivated to make decisions?(CP)

i. yes [ ]

ii. No [ ]

iii. Sometimes [ ]

35.What ideas about how children learn are reflected in your organization?()……………………………………………………………………………

36. How do the following factors affect teaching and learning in this school? (Factors hindering and enhancing (Factors/RTS)

a. Students learning needs

……………………………………………………………………………………………

b. Availability and use of learning and teaching needs.

……………………………………………………………………………………………

c. Subject matter

……………………………………………………………………………………………

d. Available space in the classroom

……………………………………………………………………………………………

e. Initial teacher training

……………………………………………………………………………………………

f. Qualification and experience of the teacher

……………………………………………………………………………………………

g. Teachers beliefs about teaching

……………………………………………………………………………………………

h. Administrative support

……………………………………………………………………………………………

i. National curriculum

…………………………………………………………………………………………

37. What are the major problems you face in your learning at school? (Factors which hinder)

……………………………………………………………………………………………………

38. How do you think these problems can be solved and by who? (Factors/ Reflection)

……………………………………………………………………………………………………

39. Any other comments you would like to make concerning the learning and teaching in this school……………………………………………………………………………………………………

Appendix 6

Work Plan for research Study Analyzing the implementation of reflective teaching methodologies in Zambian schools: a Case of Livingstone District.

Activity	Place	Months 2013-2014				SE	OC		NO	DE	JA	FE	MA	AP	MAY
		JU	JU	AU		SE	OC		NO	DE	JA	FE	MA	AP	MAY
Review of literature and existing data on reflective teaching methodologies proposal writing	Lusaka Itezhitezhi	███	███	███	███										
Preparation of references/ research tools like questionnaires, interview guides, etc submission of final proposal	Lusaka				███	**									
Collection of data.	Livingstone					███	███								

Analysis of Draft of collected Data	Itezhi-tezhi									█						
Writing-up of Draft Report	Itezhi-tezhi										█					
Completion of Draft Report	Itezhi-tezhi											█				
Corrections and Submission of final reports	Lusaka												█	█	██	

Appendix 7

A Budget for analyzing the implementation of reflective teaching methodologies in Zambian schools

Item	Description of work	Total cost (kwacha)
1	**Transportation**: Transportation to and from the study @100/per day x 120ltr fuel or taxi hire Hiring of field guides/Assistances @400.00 x2	3000 800
2	**Stationary** Pens, papers, books, flash discs	900
3	printing and binding the drafts	1500
4	**Internet**	600
5	Buying of poster	400
6	Making of the poster	200
7	Meals	1500
Total		**8900**

APPENDIX 7

INFORMED CONSENT FORM

Dear Respondent,

This serves to give you an understanding of the purpose of this research and procedures that will be followed. Further implications for your participation are explained. Finally, you are asked to sign this form to indicate that you have agreed to participate in this exercise without being coerced.

Thank you in advance.

1. **Description:** This exercise is an education research. The researcher is a postgraduate student at the University of Zambia pursuing a Master of Education in Adult Education. This research is requirement for the student to complete the programme. Thus this exercise is purely academic.
2. **Purpose:** The research wishes to analyse of the impact of transformative learning on community participation.
3. **Consent:** Your participation in this exercise is dependent on your consent.
4. **Confidentiality:** All data collected for this research will be treated with ultimate confidentiality. Participants are assured that they will remain anonymous and untraceable
5. **Rights of Respondents:** All efforts will be taken to ensure that the rights of participants are protected and respected. You are assured that you will suffer no harm as a result of participating in the exercise. You are free to ask for any clarification at any point of the exercise and to inform the researcher if you feel uncomfortable about any procedure in the research.
6. **Declaration:** I have read and fully understood this document contents of this document have been explained to me. I therefore agree to participate in the exercise

………………………….   …………………………….

SIGNATURE   **DATE**